Full wwPDB EM Validation Report (i)

May 5, 2024 – 07:37 PM EDT

PDB ID	:	4V6S
EMDB ID	:	EMD-5360
Title	:	Structural characterization of mRNA-tRNA translocation intermediates (class 3 of the six classes)
Authors	:	Agirrezabala, X.; Liao, H.; Schreiner, E.; Fu, J.; Ortiz-Meoz, R.F.; Schulten, K.; Green, R.; Frank, J.
Deposited on	:	2011-12-09
Resolution	:	13.10 Å(reported)
Based on initial model	:	2I2V

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 (i) 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 (i)) were used in the production of this report:

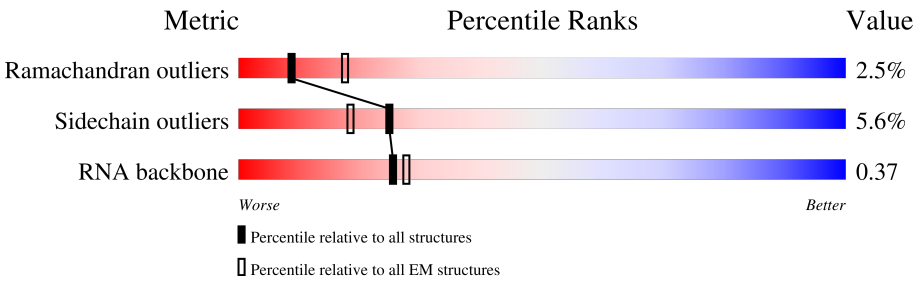
EMDB validation analysis	:	0.0.1.dev92
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36.2

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 13.10 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 <=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	120	37% 48% 15%
2	AB	2904	34% 54% 12%
3	AC	234	• 85% 14% •
4	AD	272	73% 24% •
5	AE	209	78% 18% •
6	AF	201	77% 20% •
7	AG	178	72% 25% •
8	AH	176	75% 22% • •

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Mol	Chain	Length	Quality of chain
9	AI	149	19% 81% 16%
10	AJ	164	12% 78% 18%
11	AK	141	85% 13%
12	AL	142	75% 21%
13	AM	123	76% 20%
14	AN	144	86% 11%
15	AO	136	79% 17%
16	AP	127	78% 19%
17	AQ	117	75% 20% 5%
18	AR	114	76% 18% 5%
19	AS	117	70% 29%
20	AT	103	73% 23%
21	AU	110	75% 22%
22	AV	100	74% 25%
23	AW	103	81% 19%
24	AX	94	71% 27%
25	AY	84	73% 24%
26	AZ	77	60% 36%
27	A0	63	79% 14% 6%
28	A1	58	74% 19% 7%
29	A2	70	6% 81% 16%
30	A3	56	77% 18%
31	A4	54	80% 17%
32	A5	46	61% 39%
33	A6	64	83% 12% 5%

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Mol	Chain	Length	Quality of chain
34	A7	38	68% 29%
35	BA	1542	33% 54% 13%
36	BB	47	26% 23% 47% 30%
37	BC	77	38% 53% 9%
38	BD	240	7% 82% 15%
39	BE	232	76% 20%
40	BF	205	78% 20%
41	BG	166	80% 17%
42	BH	135	72% 25%
43	BI	178	76% 21%
44	BJ	129	77% 19%
45	BK	129	78% 17% 5%
46	BL	103	75% 19% 6%
47	BM	128	5% 80% 17%
48	BN	123	72% 24%
49	BO	117	78% 18%
50	BP	100	75% 22%
51	BQ	88	82% 15%
52	BR	82	65% 34%
53	BS	83	75% 20% 5%
54	BT	74	74% 20% 5%
55	BU	91	70% 27%
56	BV	86	86% 13%
57	BW	70	66% 27% 6%

2 Entry composition (i)

There are 57 unique types of molecules in this entry. The entry contains 150700 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 5S ribosomal RNA.

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

- Molecule 2 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
2	AB	2904	62351	27824	11469	20155	2903	0	0

- Molecule 3 is a protein called 50S ribosomal protein L1.

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

- Molecule 4 is a protein called 50S ribosomal protein L2.

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

- Molecule 5 is a protein called 50S ribosomal protein L3.

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

- Molecule 6 is a protein called 50S ribosomal protein L4.

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

- Molecule 7 is a protein called 50S ribosomal protein L5.

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

- Molecule 8 is a protein called 50S ribosomal protein L6.

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

- Molecule 9 is a protein called 50S ribosomal protein L9.

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

- Molecule 10 is a protein called 50S ribosomal protein L10.

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

- Molecule 11 is a protein called 50S ribosomal protein L11.

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

- Molecule 12 is a protein called 50S ribosomal protein L13.

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

- Molecule 13 is a protein called 50S ribosomal protein L14.

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

- Molecule 14 is a protein called 50S ribosomal protein L15.

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

- Molecule 15 is a protein called 50S ribosomal protein L16.

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

- Molecule 16 is a protein called 50S ribosomal protein L17.

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

- Molecule 17 is a protein called 50S ribosomal protein L18.

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

- Molecule 18 is a protein called 50S ribosomal protein L19.

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

- Molecule 19 is a protein called 50S ribosomal protein L20.

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

- Molecule 20 is a protein called 50S ribosomal protein L21.

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

- Molecule 21 is a protein called 50S ribosomal protein L22.

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

- Molecule 22 is a protein called 50S ribosomal protein L23.

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

- Molecule 23 is a protein called 50S ribosomal protein L24.

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

- Molecule 24 is a protein called 50S ribosomal protein L25.

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

- Molecule 25 is a protein called 50S ribosomal protein L27.

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

- Molecule 26 is a protein called 50S ribosomal protein L28.

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

- Molecule 27 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
27	A0	63	509	313	99	95	2	0	0

- Molecule 28 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
28	A1	58	449	281	87	79	2	0	0

- Molecule 29 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
29	A2	70	549	339	104	100	6	0	0

- Molecule 30 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
30	A3	56	444	269	94	80	1	0	0

- Molecule 31 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
31	A4	54	441	284	81	76	0	0

- Molecule 32 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
32	A5	46	377	228	90	57	2	0	0

- Molecule 33 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
33	A6	64	504	323	105	74	2	0	0

- Molecule 34 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
34	A7	38	302	185	65	48	4	0	0

- Molecule 35 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
35	BA	1542	33089	14767	6064	10717	1541	0	0

- Molecule 36 is a RNA chain called mRNA.

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

- Molecule 37 is a RNA chain called P site tRNA.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	N	O	P	S		
37	BC	77	1641	734	297	533	76	1	0	0

- Molecule 38 is a protein called 30S ribosomal protein S2.

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

- Molecule 39 is a protein called 30S ribosomal protein S3.

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

- Molecule 40 is a protein called 30S ribosomal protein S4.

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

- Molecule 41 is a protein called 30S ribosomal protein S5.

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

- Molecule 42 is a protein called 30S ribosomal protein S6.

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

- Molecule 43 is a protein called 30S ribosomal protein S7.

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

- Molecule 44 is a protein called 30S ribosomal protein S8.

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

- Molecule 45 is a protein called 30S ribosomal protein S9.

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

- Molecule 46 is a protein called 30S ribosomal protein S10.

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

- Molecule 47 is a protein called 30S ribosomal protein S11.

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

- Molecule 48 is a protein called 30S ribosomal protein S12.

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

- Molecule 49 is a protein called 30S ribosomal protein S13.

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

- Molecule 50 is a protein called 30S ribosomal protein S14.

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

- Molecule 51 is a protein called 30S ribosomal protein S15.

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

- Molecule 52 is a protein called 30S ribosomal protein S16.

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

- Molecule 53 is a protein called 30S ribosomal protein S17.

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

- Molecule 54 is a protein called 30S ribosomal protein S18.

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

- Molecule 55 is a protein called 30S ribosomal protein S19.

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

- Molecule 56 is a protein called 30S ribosomal protein S20.

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

- Molecule 57 is a protein called 30S ribosomal protein S21.

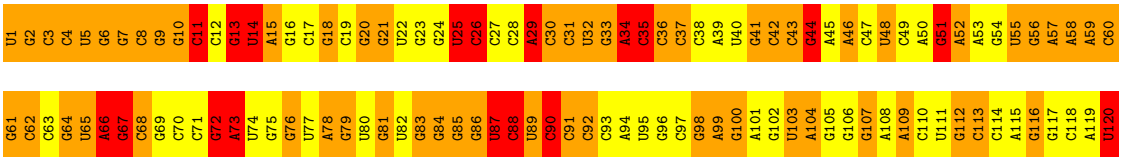
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
57	BW	70	590	366	125	98	1	0	0

3 Residue-property plots (i)

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

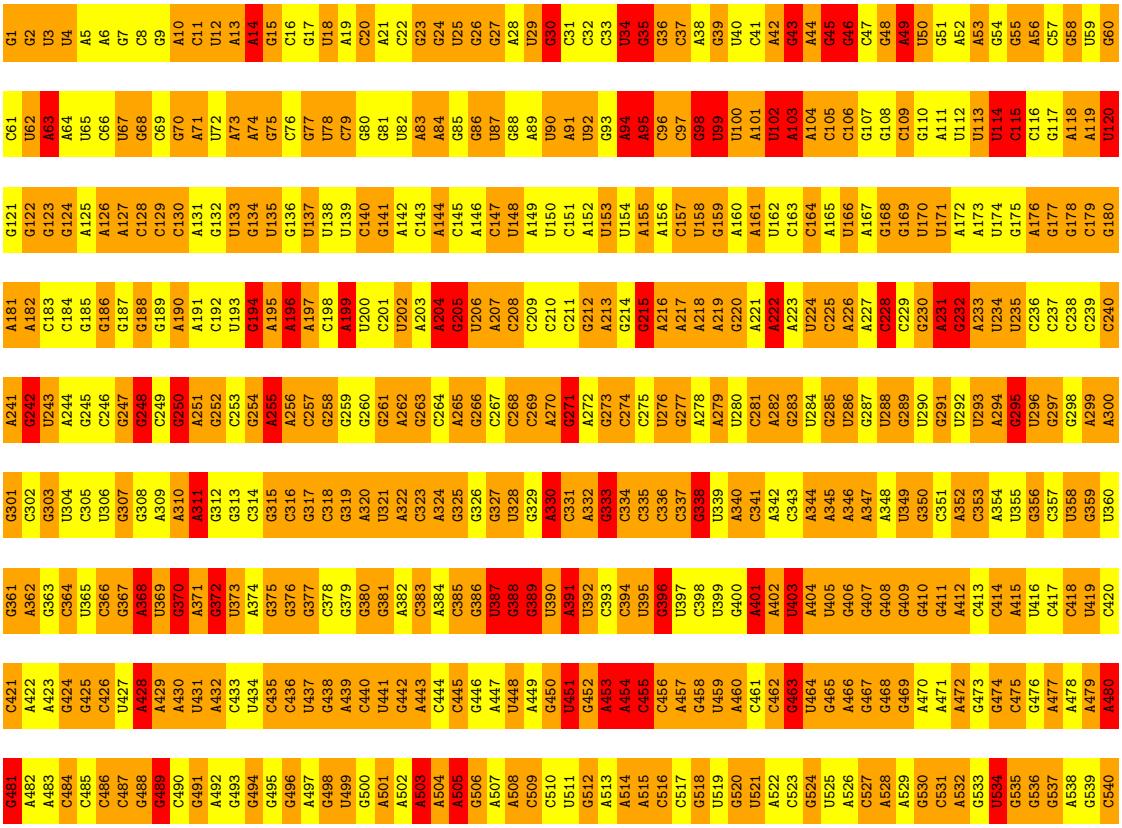
- Molecule 1: 5S ribosomal RNA

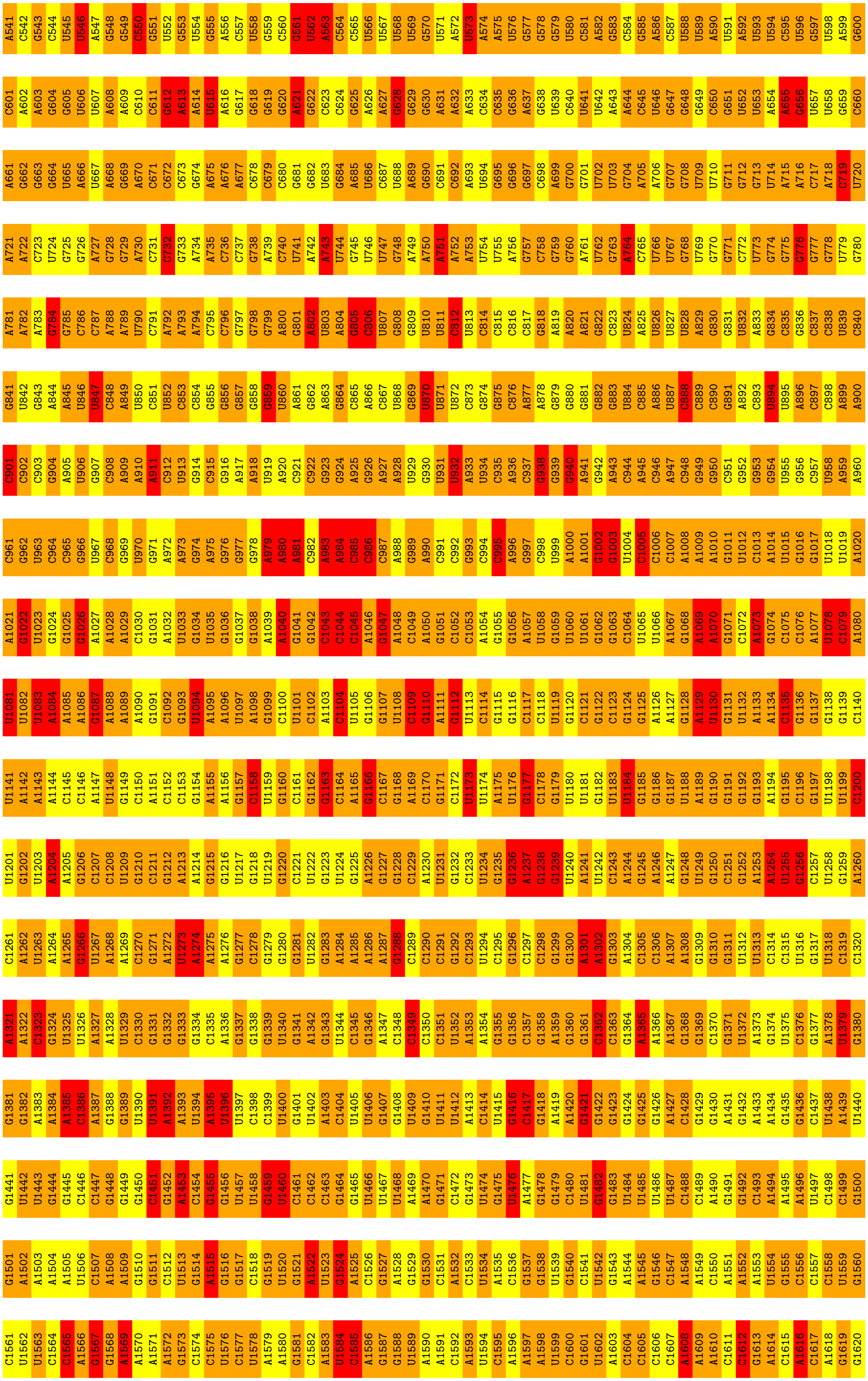
Chain AA: 37% 48% 15%



- Molecule 2: 23S ribosomal RNA

Chain AB: 34% 54% 12%





A541 C542 G543 C544 U545 U546 A547 G548 G549 C550 G551 U552 G553 U554 G555 A556 C557 U558 G559 C560 G561 U562 A563 C564 C565 U566 U567 U568 U569 G570 U571 A572 U573 A574 A575 U576 G577 G578 G579 U580 C581 A582 G583 C584 G585 A586 C587 U588 U589 A590 U591 A592 U593 U594 C595 U596 G597 U598 A599 G600

C601 A602 A603 G604 G605 U606 U607 A608 A609 C610 C611 G612 A613 A614 U615 A616 G617 G618 G619 G620 A621 G622 C623 C624 G625 A626 A627 G628 G629 G630 A631 A632 A633 C634 G635 G636 A637 G638 U639 C640 U641 U642 A643 A644 C645 U646 G647 G648 G649 C650 G651 U652 U653 A654 A655 G656 U657 U658 G659 C660

A661 G662 G663 G664 U665 A666 U667 A668 G669 A670 C671 C672 C673 G674 A675 A676 A677 C678 C679 C680 G681 G682 U683 G684 A685 U686 C687 U688 A689 G690 C691 C692 A693 U694 G695 G696 G697 C698 A699 G700 G701 U702 U703 G704 A705 A706 G707 G708 U709 U710 G711 G712 G713 U714 A715 A716 C717 A718 C719 U720

A721 A722 C723 U724 G725 G726 A727 G728 G729 A730 C731 C732 G733 A734 A735 C736 G737 G738 A739 C740 U741 A742 A743 U744 G745 U746 U747 G748 A749 A750 A751 A752 A753 U754 U755 A756 G757 C758 G759 G760 A761 U762 G763 A764 C765 U766 U767 G768 U769 G770 G771 C772 U773 G774 G775 G776 G777 G778 U779 G780

A781 A782 A783 G784 G785 C786 C787 A788 A789 U790 C791 A792 A793 A794 C795 C796 G797 G798 G799 A800 G801 A802 U803 A804 G805 C806 U807 G808 G809 U810 U811 C812 U813 C814 C815 C816 C817 G818 A819 A820 A821 G822 C823 U824 A825 U826 U827 U828 A829 G830 G831 U832 A833 G834 C835 G836 C837 C838 U839 C840

G841 U842 G843 A844 A845 U846 U847 C848 A849 U850 C851 U852 C853 C854 G855 G856 G857 G858 G859 U860 A861 G862 A863 G864 C865 A866 C867 U868 G869 U870 U871 C872 C873 G874 G875 C876 A877 A878 G879 G880 G881 G882 G883 U884 C885 A886 U887 C888 C889 C890 G891 A892 C893 U894 U895 A896 C897 C898 A899 A900

C901 C902 C903 G904 A905 U906 G907 C908 A909 A910 A911 C912 U913 G914 C915 G916 A917 A918 U919 A920 C921 C922 G923 G924 A925 G926 A927 A928 U929 G930 U931 U932 A933 U934 C935 A936 C937 G938 G939 G940 A941 G942 A943 C944 A945 C946 A947 C948 G949 G950 C951 G952 G953 G954 U955 G956 C957 U958 A959 A960

C961 G962 U963 C964 C965 G966 U967 C968 G969 U970 G971 A972 A973 G974 A975 G976 G977 G978 A979 A980 A981 C982 A983 A984 C985 C986 C987 A988 G989 A990 C991 C992 G993 C994 C995 A996 G997 C998 U999 A1000 A1001 G1002 G1003 U1004 C1005 C1006 C1007 A1008 A1009 A1010 G1011 U1012 C1013 A1014 U1015 G1016 G1017 U1018 U1019 A1020

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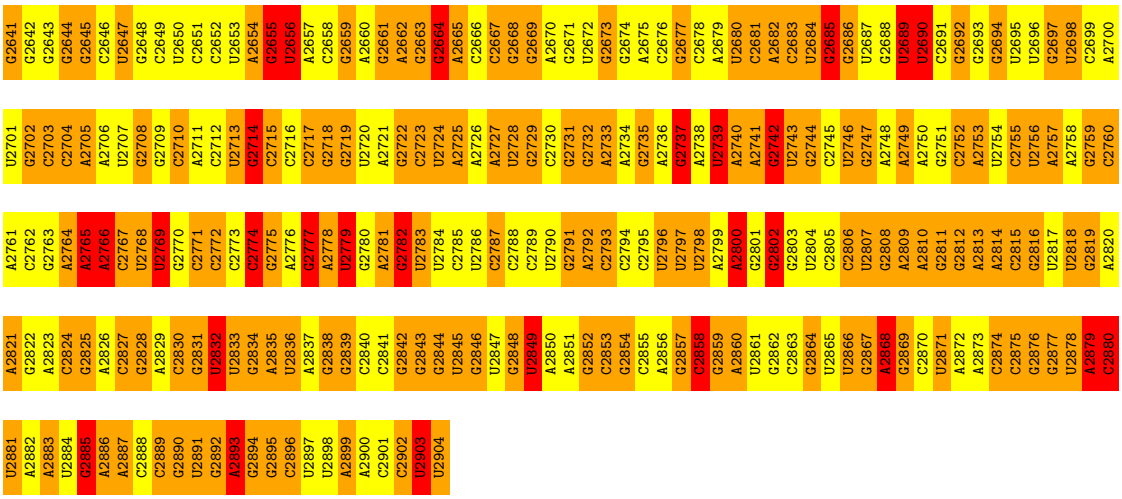
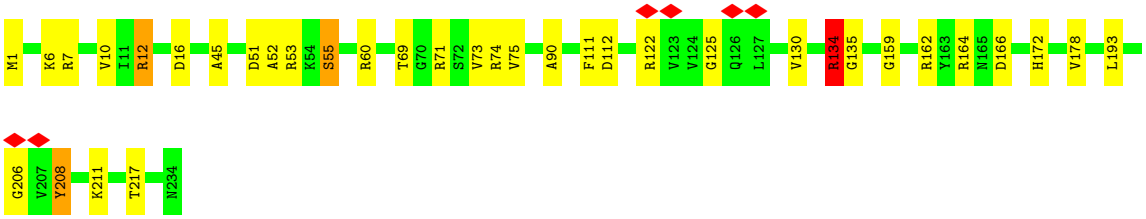


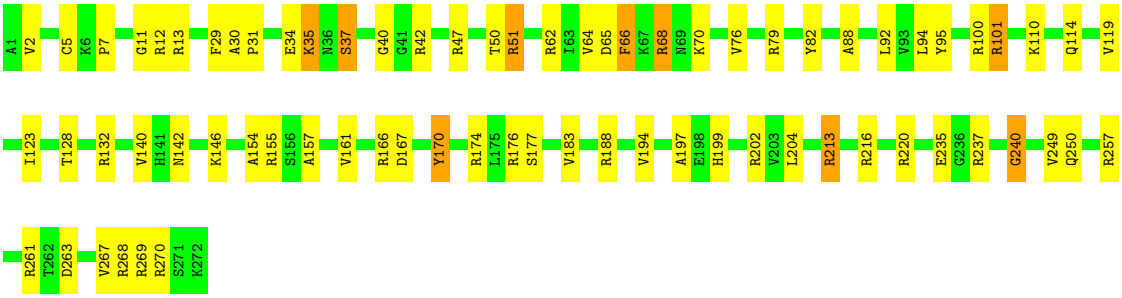
- Molecule 3: 50S ribosomal protein L1

Chain AC:



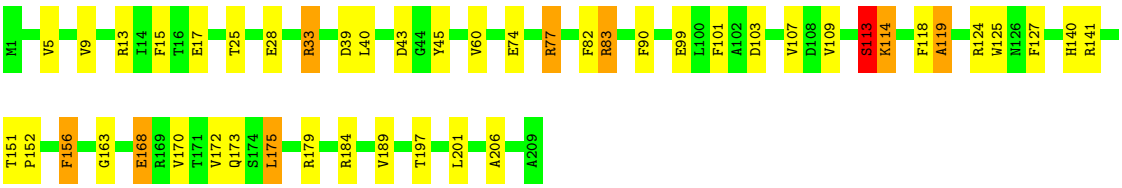
- Molecule 4: 50S ribosomal protein L2

Chain AD:



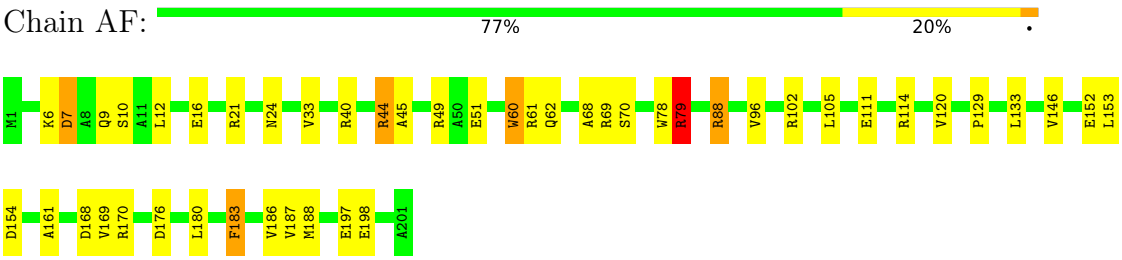
- Molecule 5: 50S ribosomal protein L3

Chain AE:



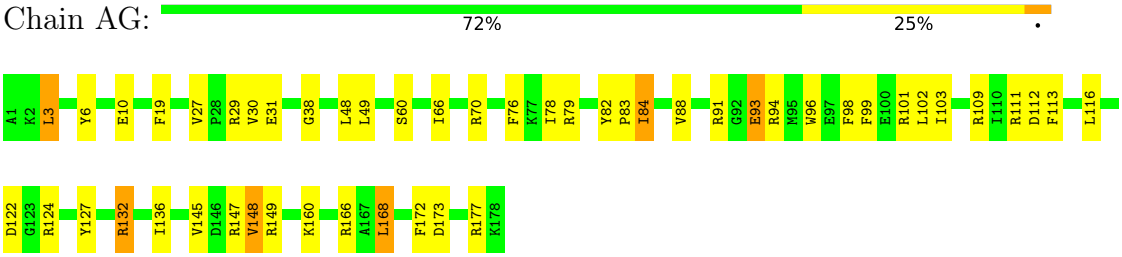
- Molecule 6: 50S ribosomal protein L4

Chain AF:



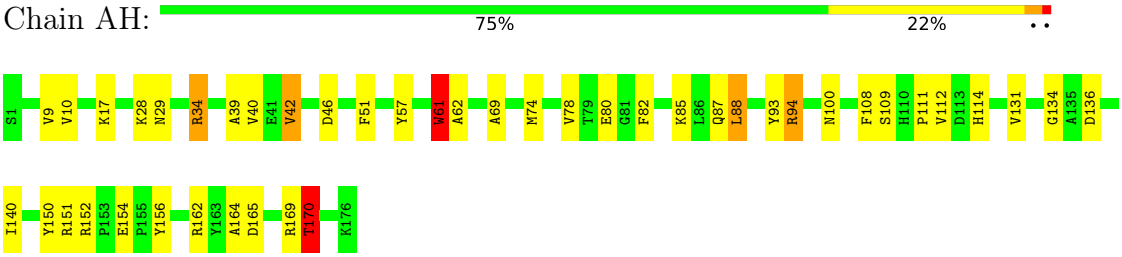
- Molecule 7: 50S ribosomal protein L5

Chain AG:



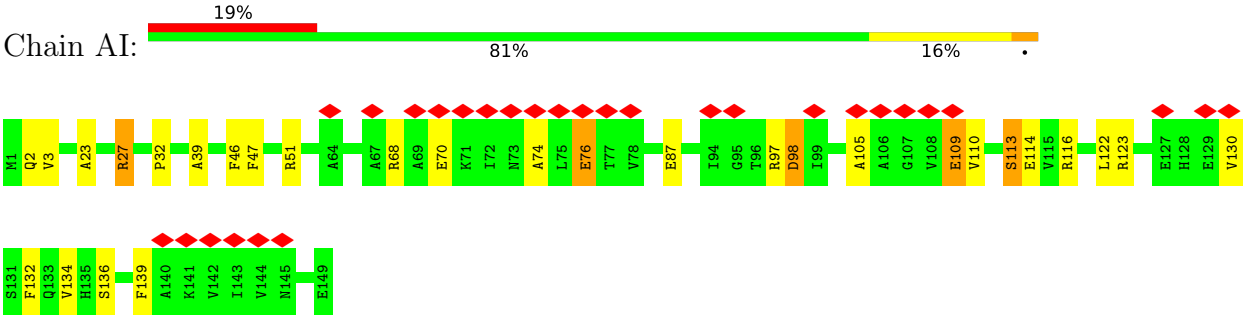
- Molecule 8: 50S ribosomal protein L6

Chain AH:



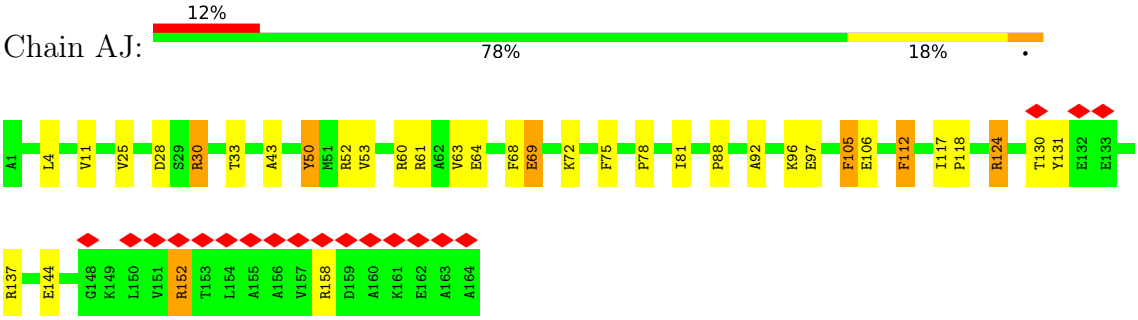
- Molecule 9: 50S ribosomal protein L9

Chain AI:



- Molecule 10: 50S ribosomal protein L10

Chain AJ:



• Molecule 11: 50S ribosomal protein L11

Chain AK: 85% 13%

A1 K2 Y7 G15 G28 F37 P53 I54 P55 I58 T59 V60 Y61 A62 D63 R64 S65 P73 S87 N93 K94 D95 S101 R102 E107 E122 R126 R133 D141

• Molecule 12: 50S ribosomal protein L13

Chain AL: 75% 21%

M1 T5 P8 D14 W15 Y16 V17 R27 R34 R35 L36 R37 E43 Y44 T45 P46 Y53 L57 D60 K61 T65 G66 N67 K68 R69 Y75 G79 H80 I81 K85 E98 R99 K106 P113 R120 K123 V124 Y125 E129 D141 I142

• Molecule 13: 50S ribosomal protein L14

Chain AM: 76% 20%

M1 T6 M7 L8 N13 R17 R18 H29 R30 R31 Y32 D37 I38 I39 E45 A46 R49 V63 R64 R70 R71 R78 F79 D80 E92 Q93 P94 F100 R105 F112 I115 I116 S117 L118 A119 P120 E121 V122 L123

• Molecule 14: 50S ribosomal protein L15

Chain AN: 86% 11%

M1 R2 L3 L19 R33 R41 G45 Y46 R47 E51 M55 Y58 R59 R60 L61 F64 R69 R78 F107 T117 T118 P119 R123 R132 E144

• Molecule 15: 50S ribosomal protein L16

Chain AO: 79% 17%

M1 R6 R16 N17 R18 G19 L20 A21 F28 F31 V36 G37 R38 G39 R40 A43 R50 R51 R55 R59 R66 V67 F68 L78 R81 Y91 W92 V93 Y103 D106 R114 E115 F130 M136

• Molecule 16: 50S ribosomal protein L17

Chain AP: 78% 19%

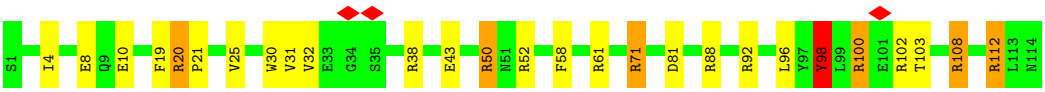
M1 G7 R8 N11 R12 R17 F21 I34 P39 R45 R46 V47 V48 A55 R63 R64 F67 A68 R69 T70 R71 F80 L83 R86 R90 A91 D106 N107 Y112 R118 S119 A125 A126 E127

• Molecule 17: 50S ribosomal protein L18

Chain AQ: 75% 20% 5%

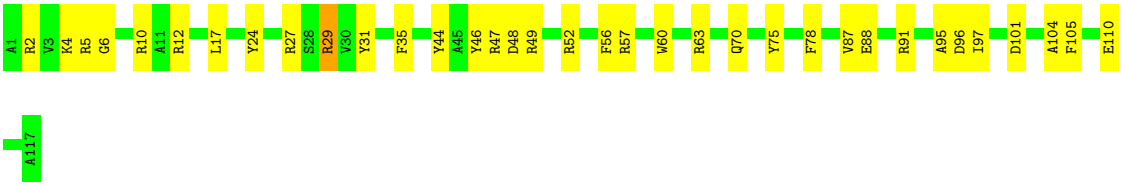
• Molecule 18: 50S ribosomal protein L19

Chain AR:



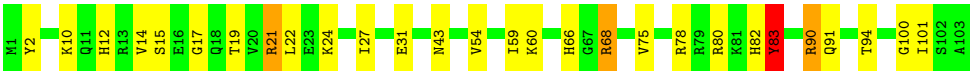
• Molecule 19: 50S ribosomal protein L20

Chain AS:



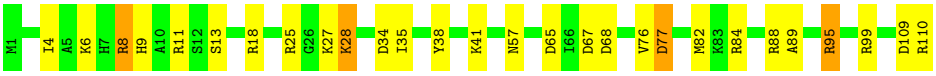
• Molecule 20: 50S ribosomal protein L21

Chain AT:



• Molecule 21: 50S ribosomal protein L22

Chain AU:

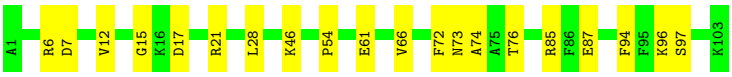


• Molecule 22: 50S ribosomal protein L23

Chain AV:

• Molecule 23: 50S ribosomal protein L24

Chain AW:

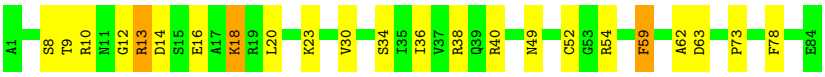


• Molecule 24: 50S ribosomal protein L25

Chain AX:

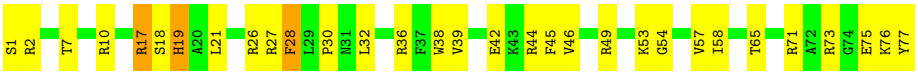
• Molecule 25: 50S ribosomal protein L27

Chain AY:



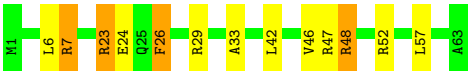
• Molecule 26: 50S ribosomal protein L28

Chain AZ:



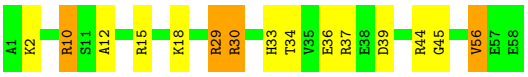
• Molecule 27: 50S ribosomal protein L29

Chain A0:



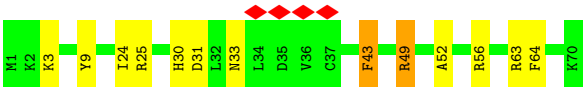
• Molecule 28: 50S ribosomal protein L30

Chain A1:



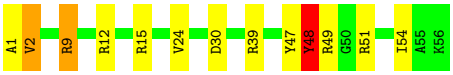
• Molecule 29: 50S ribosomal protein L31

Chain A2:



• Molecule 30: 50S ribosomal protein L32

Chain A3:



• Molecule 31: 50S ribosomal protein L33

Chain A4: 80% 17% •

A1 R5 E6 K7 T16 Y20 T23 R27 L35 F38 I47 Y48 K52 I53 K54

• Molecule 32: 50S ribosomal protein L34

Chain A5: 61% 39%

M1 K2 R3 T4 F5 Q6 P7 K11 R12 N13 R14 S15 F18 R19 A20 R21 R33 R34 R35 R39 A40 R41 V44 S45 K46

• Molecule 33: 50S ribosomal protein L35

Chain A6: 83% 12% 5%

P1 R7 R12 G19 H23 A26 I31 K35 R39 K40 R41 S50 Y63 A64

• Molecule 34: 50S ribosomal protein L36

Chain A7: 68% 29% •

M1 R4 A5 S6 I16 R19 D20 G21 V22 I23 R24 S28 A29 E30 P31 R36 Q37 G38

• Molecule 35: 16S ribosomal RNA

Chain BA: 33% 54% 13%

A1 A2 A3 U4 U5 G6 A7 A8 G9 A10 G11 U12 U13 U14 G15 A16 U17 C18 A19 U20 G21 G22 C23 U24 C25 A26 G27 A28 U29 U30 G31 A32 A33 C34 G35 C36 U37 G38 G39 C40 G41 G42 C43 A44 G45 G46 C47 C48 U49 A50 A51 C52 A53 C54 A55 U56 G57 C58 A59 A60

G61 U62 C63 G64 A65 A66 C67 G68 G69 U70 A71 A72 C73 A74 G75 G76 A77 A78 G79 A80 A81 G82 C83 U84 U85 G86 C87 U88 U89 C90 U91 U92 U93 G94 C95 U96 G97 A98 C99 G100 A101 G102 U103 G104 G105 C106 G107 G108 A109 C110 G111 G112 G113 U114 G115 A116 G117 U118 A119 A120

U121 G122 U123 C124 U125 G126 G127 G128 A129 A130 A131 C132 U133 G134 C135 C136 U137 G138 A139 U140 G141 G142 A143 G144 G145 G146 G147 G148 A149 U150 A151 A152 C153 U154 A155 C156 U157 G158 G159 A160 A161 A162 C163 G164 G165 U166 A167 G168 C169 U170 A171 A172 U173 A174 C175 C176 G177 C178 A179 U180

A181 A182 C183 G184 U185 C186 G187 C188 A189 A190 G191 A192 C193 C194 A195 A196 A197 G198 A199 G200 G201 G202 G203 G204 A205 C206 C207 U208 U209 C210 G211 G212 G213 C214 C215 U216 C217 U218 U219 G220 C221 A222 A223 U224 C225 G226 G227 A228 U229 G230 U231 G232 C233 C234 C235 A236 G237 A238 U239 G240

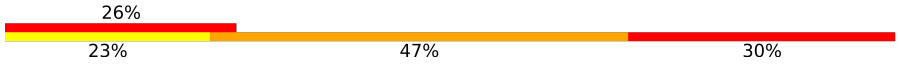
G241 G242 A243 U244 U245 A246 G247 C248 U249 A250 G251 U252 A253 G254 G255 U256 G257 G258 G259 G260 U261 A262 A263 C264 G265 G266 C267 U268 C269 A270 C271 C272 U273 A274 G275 G276 C277 G278 A279 C280 G281 A282 U283 C284 C285 C286 U287 A288 G289 C290 U291 G292 G293 U294 C295 U296 G297 A298 G299 A300

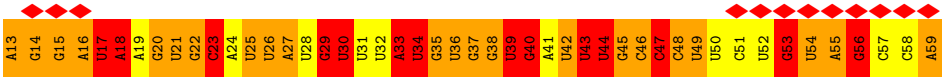
G301 G302 A303 U304 G305 A306 C307 C308 A309 G310 C311 C312 A313 C314 A315 C316 U317 G318 G319 A320 A321 C322 U323 G324 A325 G326 A327 C328 A329 C330 G331 G332 U333 C334 C335 A336 G337 A338 C339 U340 C341 C342 U343 A344 C345 G346 G347 G348 A349 G350 G351 C352 A353 G354 C355 A356 G357 U358 G359 G360

G361 G362 A363 A364 U365 A366 U367 U368 G369 C370 A371 C372 A373 A374 U375 G376 G377 G378 C379 G380 G381 A382 A383 G384 C385 C386 U387 G388 A389 U390 G391 C392 A393 G394 C395 C396 A397 U398 G399 C400 C401 G402 C403 G404 U405 G406 U407 A408 U409 G410 A411 A412 G413 A414 A415 G416 G417 C418 C419 U420

- Molecule 36: mRNA

Chain BB:



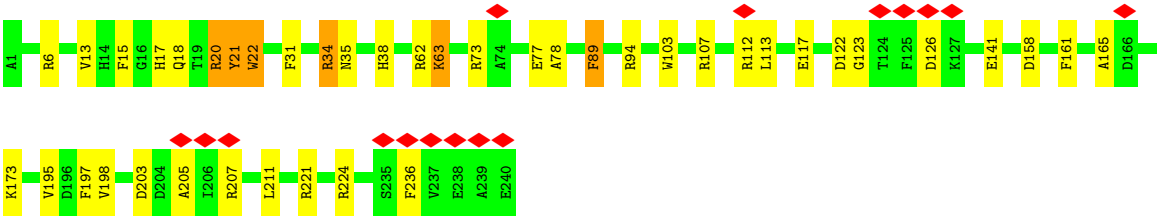


- Molecule 37: P site tRNA

Chain BC:

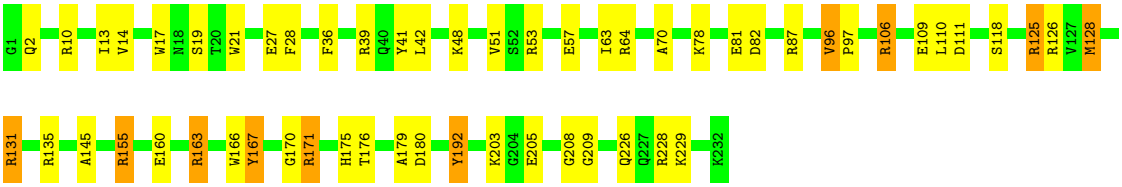
- Molecule 38: 30S ribosomal protein S2

Chain BD:



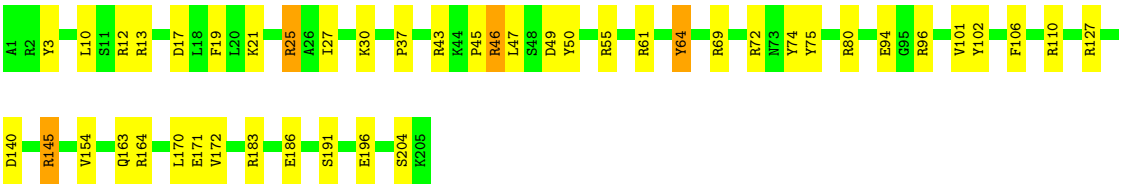
- Molecule 39: 30S ribosomal protein S3

Chain BE:



- Molecule 40: 30S ribosomal protein S4

Chain BF:



• Molecule 41: 30S ribosomal protein S5

Chain BG: 80% 17%

A1 A16 R19 V20 T23 G26 G27 R28 I29 F30 G39 R44 F47 G48 Y49 R53 P56 K61 R68 V73 N77 Q81 H82 R92 A109 M110 R111 V116 V122 K125 T130 N131 P132 R137 M146 K155 R156

V160 K166

• Molecule 42: 30S ribosomal protein S6

Chain BH: 72% 25%

M1 M9 R24 Y25 W42 G43 R44 R45 Q46 Y49 L54 H55 Y59 V60 V64 E65 E69 L74 E75 T76 T77 F78 R79 F80 V84 V89 K93 H94 E98 M102 V103 K106 D107 E108 R109 R110 E111 R112 R113 D114 D115 F116 A117 N118 E119

D128 S129 E130 E135

• Molecule 43: 30S ribosomal protein S7

Chain BI: 76% 21%

P1 R2 R3 R4 V5 I6 P13 D14 V26 V42 Y43 R52 F61 V74 R77 R78 V79 G80 Y84 Q85 V86 P87 V88 E89 V90 R91 R94 R95 N96 A97 R108 K109 R110 K113 R118 D125 R137 E138 D139 V140 H141 R142 F150 Y153

R154 W155 R159 S162 Y176 L177 N178

• Molecule 44: 30S ribosomal protein S8

Chain BJ: 77% 19%

S1 R12 I13 R14 A18 A19 N20 M26 V33 F44 F48 K55 E59 Y64 K68 A69 R76 V77 S78 R79 P80 G81 L82 R83 R87 E90 V94 L98 G99 I100 S104 V109 M110 T111 D112 R113 R116 Y127 V128 A129

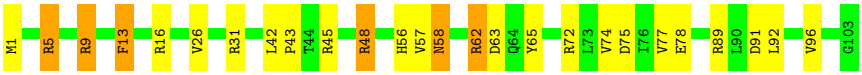
• Molecule 45: 30S ribosomal protein S9

Chain BK: 78% 17% 5%

A1 Y6 A16 R17 N24 Q31 Y37 R40 R44 M45 R48 E52 L60 Y63 R79 R84 E88 Y89 D90 R94 R98 R105 D106 A107 R108 A120 R121 R122 R123 F126 S127 K128 R129

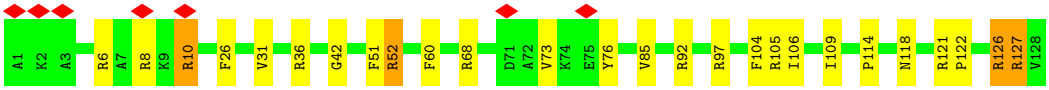
• Molecule 46: 30S ribosomal protein S10

Chain BL: 75% 19% 6%



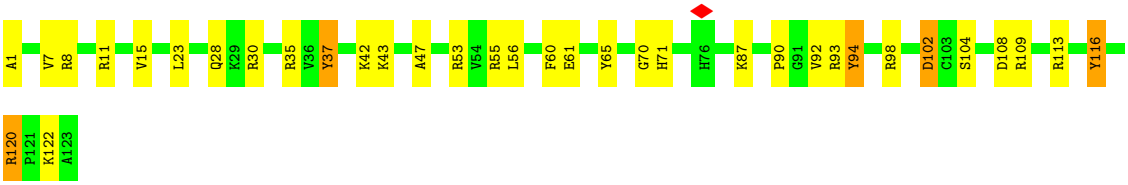
• Molecule 47: 30S ribosomal protein S11

Chain BM:



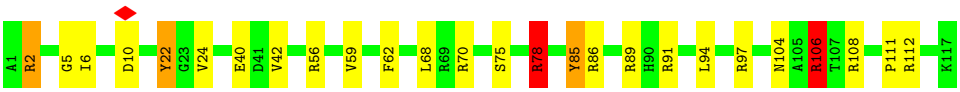
• Molecule 48: 30S ribosomal protein S12

Chain BN:



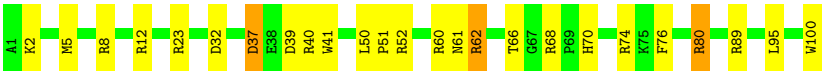
• Molecule 49: 30S ribosomal protein S13

Chain BO:



• Molecule 50: 30S ribosomal protein S14

Chain BP:



• Molecule 51: 30S ribosomal protein S15

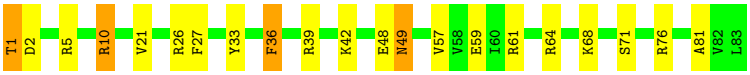
Chain BQ:

• Molecule 52: 30S ribosomal protein S16

Chain BR:

• Molecule 53: 30S ribosomal protein S17

Chain BS: 75% 20% 5%

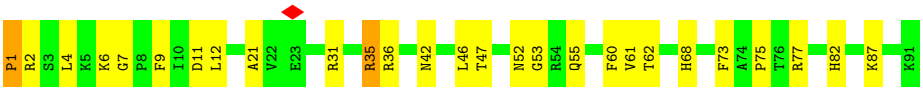


• Molecule 54: 30S ribosomal protein S18

Chain BT: 74% 20% 5%

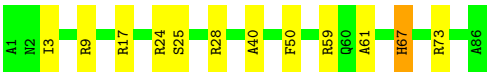
• Molecule 55: 30S ribosomal protein S19

Chain BU: 70% 27%



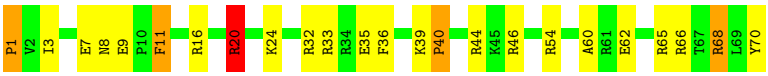
• Molecule 56: 30S ribosomal protein S20

Chain BV: 86% 13%



• Molecule 57: 30S ribosomal protein S21

Chain BW: 66% 27% 6%



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	21000	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Volumes were CTF-corrected in defocus groups	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	25	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	58269	Depositor
Image detector	TVIPS TEMCAM-F415 (4k x 4k)	Depositor
Maximum map value	1.443	Depositor
Minimum map value	-0.456	Depositor
Average map value	0.028	Depositor
Map value standard deviation	0.182	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	375.0, 375.0, 375.0	wwPDB
Map dimensions	250, 250, 250	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.5, 1.5, 1.5	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: 5MC, 2MA, H2U, OMU, 4OC, UR3, 5MU, OMG, MA6, OMC, PSU, 7MG, 2MG, 3TD, 4SU, 6MZ, CH, 1MG

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	3.07	298/2869 (10.4%)	3.56	669/4474 (15.0%)
2	AB	3.08	7422/69257 (10.7%)	3.52	15483/108040 (14.3%)
3	AC	1.42	3/1748 (0.2%)	1.86	30/2355 (1.3%)
4	AD	1.56	11/2131 (0.5%)	2.03	60/2863 (2.1%)
5	AE	1.49	5/1586 (0.3%)	1.92	39/2134 (1.8%)
6	AF	1.52	7/1571 (0.4%)	1.92	42/2113 (2.0%)
7	AG	1.53	3/1444 (0.2%)	2.02	45/1937 (2.3%)
8	AH	1.53	6/1343 (0.4%)	1.96	35/1816 (1.9%)
9	AI	1.45	3/1122 (0.3%)	1.94	25/1515 (1.7%)
10	AJ	1.52	5/1247 (0.4%)	1.94	27/1679 (1.6%)
11	AK	1.44	5/1046 (0.5%)	1.86	18/1410 (1.3%)
12	AL	1.50	6/1152 (0.5%)	2.08	30/1551 (1.9%)
13	AM	1.53	5/956 (0.5%)	1.95	25/1279 (2.0%)
14	AN	1.52	5/1062 (0.5%)	1.89	20/1413 (1.4%)
15	AO	1.49	3/1093 (0.3%)	2.07	38/1460 (2.6%)
16	AP	1.48	5/1021 (0.5%)	2.09	28/1364 (2.1%)
17	AQ	1.57	4/910 (0.4%)	1.90	27/1219 (2.2%)
18	AR	1.54	2/929 (0.2%)	1.95	26/1242 (2.1%)
19	AS	1.52	6/960 (0.6%)	2.20	39/1278 (3.1%)
20	AT	1.60	5/829 (0.6%)	1.89	18/1107 (1.6%)
21	AU	1.49	1/864 (0.1%)	1.96	21/1156 (1.8%)
22	AV	1.54	3/794 (0.4%)	1.90	17/1060 (1.6%)
23	AW	1.44	2/797 (0.3%)	1.90	13/1062 (1.2%)
24	AX	1.49	5/766 (0.7%)	1.79	15/1025 (1.5%)
25	AY	1.48	2/642 (0.3%)	1.92	14/848 (1.7%)
26	AZ	1.50	3/635 (0.5%)	2.21	25/848 (2.9%)
27	A0	1.37	1/510 (0.2%)	1.90	12/677 (1.8%)
28	A1	1.52	2/453 (0.4%)	2.11	13/605 (2.1%)
29	A2	1.55	3/559 (0.5%)	1.96	12/745 (1.6%)
30	A3	1.49	1/450 (0.2%)	2.05	15/599 (2.5%)
31	A4	1.46	1/448 (0.2%)	1.82	7/594 (1.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
32	A5	1.53	1/380 (0.3%)	2.15	14/498 (2.8%)
33	A6	1.55	4/513 (0.8%)	1.80	7/676 (1.0%)
34	A7	1.57	2/303 (0.7%)	1.98	6/397 (1.5%)
35	BA	3.07	3871/36769 (10.5%)	3.53	8462/57354 (14.8%)
36	BB	3.23	131/1108 (11.8%)	3.61	262/1724 (15.2%)
37	BC	3.09	176/1721 (10.2%)	3.61	392/2683 (14.6%)
38	BD	1.43	2/1904 (0.1%)	1.86	32/2565 (1.2%)
39	BE	1.55	11/1852 (0.6%)	1.94	38/2490 (1.5%)
40	BF	1.51	8/1665 (0.5%)	1.96	51/2227 (2.3%)
41	BG	1.54	5/1239 (0.4%)	2.01	27/1664 (1.6%)
42	BH	1.50	3/1121 (0.3%)	1.92	27/1509 (1.8%)
43	BI	1.54	5/1422 (0.4%)	2.05	48/1908 (2.5%)
44	BJ	1.49	3/989 (0.3%)	2.00	23/1326 (1.7%)
45	BK	1.55	5/1048 (0.5%)	2.08	34/1394 (2.4%)
46	BL	1.47	1/835 (0.1%)	2.19	25/1127 (2.2%)
47	BM	1.52	7/982 (0.7%)	2.02	28/1323 (2.1%)
48	BN	1.52	4/969 (0.4%)	2.10	39/1300 (3.0%)
49	BO	1.51	8/919 (0.9%)	1.98	30/1226 (2.4%)
50	BP	1.53	1/817 (0.1%)	2.02	23/1088 (2.1%)
51	BQ	1.43	1/724 (0.1%)	1.93	16/966 (1.7%)
52	BR	1.53	2/659 (0.3%)	2.14	25/884 (2.8%)
53	BS	1.55	6/681 (0.9%)	1.99	18/913 (2.0%)
54	BT	1.60	6/637 (0.9%)	2.07	18/851 (2.1%)
55	BU	1.53	3/744 (0.4%)	1.84	16/995 (1.6%)
56	BV	1.39	1/676 (0.1%)	1.86	14/895 (1.6%)
57	BW	1.46	5/598 (0.8%)	2.19	23/792 (2.9%)
All	All	2.69	12105/162469 (7.5%)	3.17	26586/242243 (11.0%)

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	69
2	AB	0	1654
3	AC	0	3
4	AD	0	11
5	AE	0	7
6	AF	0	2
7	AG	0	1
8	AH	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
9	AI	0	3
10	AJ	0	8
11	AK	0	1
12	AL	0	3
13	AM	0	3
14	AN	0	2
15	AO	0	3
16	AP	0	5
17	AQ	0	4
18	AR	0	6
19	AS	0	3
20	AT	0	5
21	AU	0	5
22	AV	0	1
24	AX	0	5
25	AY	0	4
26	AZ	0	2
27	A0	0	4
28	A1	0	4
29	A2	0	3
30	A3	0	1
31	A4	0	2
32	A5	0	2
33	A6	0	2
34	A7	0	2
35	BA	0	882
36	BB	0	30
37	BC	0	41
38	BD	0	4
39	BE	0	9
40	BF	0	3
41	BG	0	3
42	BH	0	9
43	BI	0	3
44	BJ	0	7
45	BK	0	5
46	BL	0	2
47	BM	0	1
48	BN	0	6
49	BO	0	4
50	BP	0	1
51	BQ	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
52	BR	0	2
53	BS	0	1
54	BT	0	2
55	BU	0	4
57	BW	0	4
All	All	0	2857

All (12105) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	504	A	N3-C4	18.22	1.45	1.34
2	AB	2682	A	N3-C4	18.21	1.45	1.34
2	AB	744	U	C2-N3	17.97	1.50	1.37
35	BA	1484	C	N1-C6	16.21	1.46	1.37
2	AB	2829	A	P-O5'	15.96	1.75	1.59
2	AB	2521	C	N1-C6	15.72	1.46	1.37
35	BA	116	A	N3-C4	15.56	1.44	1.34
2	AB	501	A	N3-C4	15.50	1.44	1.34
2	AB	2096	C	P-O5'	15.41	1.75	1.59
2	AB	2661	G	N7-C5	-15.38	1.30	1.39
2	AB	693	A	N3-C4	15.24	1.44	1.34
37	BC	77	A	N3-C4	14.72	1.43	1.34
2	AB	616	A	N9-C4	14.64	1.46	1.37
35	BA	562	U	P-O5'	14.60	1.74	1.59
2	AB	1214	A	N7-C5	-14.53	1.30	1.39
2	AB	2474	U	C2-N3	14.53	1.48	1.37
2	AB	2525	G	C6-N1	14.49	1.49	1.39
2	AB	366	C	N1-C6	14.46	1.45	1.37
2	AB	1576	U	C2-N3	14.45	1.47	1.37
35	BA	968	A	N3-C4	14.29	1.43	1.34
35	BA	1411	C	N1-C6	14.27	1.45	1.37
2	AB	2308	G	P-O5'	14.20	1.74	1.59
36	BB	37	G	N7-C5	14.19	1.47	1.39
2	AB	1567	G	N7-C5	-14.08	1.30	1.39
2	AB	472	A	N3-C4	14.07	1.43	1.34
2	AB	156	A	N3-C4	14.05	1.43	1.34
2	AB	770	G	N7-C5	14.05	1.47	1.39
35	BA	1147	C	N1-C6	13.97	1.45	1.37
35	BA	298	A	N7-C5	13.92	1.47	1.39
35	BA	437	U	P-O5'	13.91	1.73	1.59
2	AB	1392	A	N3-C4	13.89	1.43	1.34
2	AB	1664	A	N3-C4	13.85	1.43	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	170	U	C2-N3	13.83	1.47	1.37
2	AB	1300	G	C8-N7	13.83	1.39	1.30
35	BA	350	G	C2-N3	13.81	1.43	1.32
2	AB	1787	A	N7-C5	13.76	1.47	1.39
35	BA	1047	G	C2-N3	13.72	1.43	1.32
2	AB	705	A	N3-C4	13.71	1.43	1.34
2	AB	689	A	N7-C5	13.71	1.47	1.39
2	AB	160	A	N3-C4	13.63	1.43	1.34
2	AB	172	A	C8-N7	-13.55	1.22	1.31
35	BA	901	A	N3-C4	13.53	1.43	1.34
2	AB	1290	C	N1-C6	13.50	1.45	1.37
35	BA	366	A	N3-C4	13.36	1.42	1.34
2	AB	448	U	C2-N3	13.30	1.47	1.37
2	AB	1495	A	N7-C5	13.26	1.47	1.39
35	BA	900	A	N7-C5	13.25	1.47	1.39
2	AB	1707	G	N7-C5	13.24	1.47	1.39
35	BA	666	G	C8-N7	-13.18	1.23	1.30
35	BA	217	C	N1-C6	13.16	1.45	1.37
2	AB	1734	G	N7-C5	-13.16	1.31	1.39
35	BA	1293	C	N3-C4	13.14	1.43	1.33
35	BA	493	A	N3-C4	13.09	1.42	1.34
2	AB	1925	C	N1-C6	13.08	1.45	1.37
2	AB	2313	C	N1-C6	13.04	1.45	1.37
2	AB	5	A	N9-C4	13.04	1.45	1.37
35	BA	867	G	C8-N7	-12.99	1.23	1.30
35	BA	344	A	N9-C4	-12.97	1.30	1.37
35	BA	1368	A	N3-C4	12.92	1.42	1.34
2	AB	460	A	P-O5'	12.90	1.72	1.59
35	BA	263	A	N7-C5	-12.85	1.31	1.39
2	AB	1522	A	N3-C4	12.85	1.42	1.34
2	AB	2367	G	N7-C5	12.79	1.47	1.39
2	AB	1583	A	N7-C5	-12.79	1.31	1.39
37	BC	2	G	C6-N1	12.77	1.48	1.39
2	AB	1231	U	C2-N3	12.75	1.46	1.37
2	AB	2831	G	O3'-P	12.74	1.76	1.61
2	AB	1188	U	P-O5'	12.72	1.72	1.59
2	AB	2273	A	N3-C4	12.69	1.42	1.34
35	BA	849	G	N7-C5	12.69	1.46	1.39
2	AB	1491	G	N3-C4	12.68	1.44	1.35
36	BB	17	U	C4-C5	12.67	1.54	1.43
2	AB	2826	A	N7-C5	-12.63	1.31	1.39
2	AB	244	A	N3-C4	12.63	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	122	G	N3-C4	12.62	1.44	1.35
2	AB	2543	G	P-O5'	12.57	1.72	1.59
1	AA	59	A	N3-C4	12.57	1.42	1.34
2	AB	2812	G	P-O5'	12.56	1.72	1.59
2	AB	1934	C	N1-C6	12.55	1.44	1.37
35	BA	758	C	P-O5'	12.55	1.72	1.59
1	AA	15	A	N3-C4	12.54	1.42	1.34
2	AB	323	C	N1-C6	12.53	1.44	1.37
2	AB	251	A	N9-C4	-12.52	1.30	1.37
35	BA	306	A	N7-C5	-12.49	1.31	1.39
2	AB	1754	A	N3-C4	12.48	1.42	1.34
35	BA	1177	G	N7-C5	-12.46	1.31	1.39
2	AB	1499	C	P-O5'	12.45	1.72	1.59
2	AB	1317	G	N1-C2	12.45	1.47	1.37
2	AB	947	A	N7-C5	12.44	1.46	1.39
35	BA	128	G	N7-C5	-12.42	1.31	1.39
36	BB	38	G	P-O5'	12.41	1.72	1.59
35	BA	107	G	C4'-C3'	12.39	1.66	1.53
2	AB	10	A	N7-C5	-12.38	1.31	1.39
2	AB	2594	C	N1-C6	12.37	1.44	1.37
2	AB	470	A	N3-C4	12.36	1.42	1.34
2	AB	1430	G	C6-N1	12.34	1.48	1.39
35	BA	1248	A	N3-C4	12.31	1.42	1.34
2	AB	1735	A	N3-C4	12.28	1.42	1.34
2	AB	2098	U	C2-N3	12.27	1.46	1.37
2	AB	1080	A	N3-C4	12.25	1.42	1.34
2	AB	965	C	P-O5'	12.18	1.72	1.59
2	AB	340	A	N3-C4	12.17	1.42	1.34
2	AB	2837	A	N3-C4	12.16	1.42	1.34
35	BA	1085	U	C4-C5	12.16	1.54	1.43
2	AB	976	G	P-O5'	12.10	1.71	1.59
2	AB	570	G	N3-C4	12.09	1.44	1.35
35	BA	1300	G	N7-C5	12.09	1.46	1.39
35	BA	195	A	N3-C4	12.08	1.42	1.34
2	AB	1047	G	N7-C5	12.08	1.46	1.39
1	AA	55	U	C2-N3	-12.07	1.29	1.37
2	AB	378	C	N1-C6	12.06	1.44	1.37
35	BA	675	A	P-O5'	12.06	1.71	1.59
35	BA	1072	G	N3-C4	12.04	1.43	1.35
35	BA	215	C	N1-C6	12.04	1.44	1.37
35	BA	349	A	N9-C4	12.04	1.45	1.37
35	BA	1082	A	N3-C4	12.03	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1465	A	N3-C4	12.03	1.42	1.34
2	AB	1396	U	P-O5'	12.02	1.71	1.59
2	AB	951	C	N1-C6	11.99	1.44	1.37
35	BA	338	A	N3-C4	11.98	1.42	1.34
2	AB	2181	U	P-O5'	11.95	1.71	1.59
2	AB	1919	A	N7-C5	11.94	1.46	1.39
35	BA	481	G	N7-C5	11.93	1.46	1.39
35	BA	1084	G	C6-N1	-11.93	1.31	1.39
35	BA	279	A	N3-C4	11.89	1.42	1.34
2	AB	805	G	P-O5'	11.88	1.71	1.59
2	AB	68	G	P-O5'	11.88	1.71	1.59
2	AB	1926	U	C2-N3	11.87	1.46	1.37
2	AB	1327	A	N7-C5	11.85	1.46	1.39
2	AB	1385	A	N3-C4	11.81	1.42	1.34
2	AB	1247	A	N9-C4	11.79	1.45	1.37
2	AB	2159	G	C8-N7	-11.78	1.23	1.30
1	AA	52	A	C5-C4	-11.74	1.30	1.38
35	BA	566	G	P-O5'	11.74	1.71	1.59
35	BA	700	G	N7-C5	-11.73	1.32	1.39
2	AB	2119	A	C8-N7	-11.72	1.23	1.31
2	AB	1388	G	P-O5'	11.72	1.71	1.59
35	BA	150	U	C2-N3	11.71	1.46	1.37
2	AB	1575	C	P-O5'	11.70	1.71	1.59
35	BA	33	A	C6-N1	11.70	1.43	1.35
2	AB	1644	C	P-O5'	11.69	1.71	1.59
35	BA	1096	C	C2-N3	11.69	1.45	1.35
2	AB	1546	G	C2-N3	11.68	1.42	1.32
35	BA	11	G	C2-N3	11.68	1.42	1.32
2	AB	981	A	N3-C4	11.67	1.41	1.34
2	AB	1666	G	P-O5'	11.66	1.71	1.59
2	AB	2220	U	C5-C6	11.66	1.44	1.34
2	AB	1813	G	P-O5'	11.65	1.71	1.59
35	BA	475	C	P-O5'	11.65	1.71	1.59
2	AB	138	U	C4-C5	11.65	1.54	1.43
2	AB	1491	G	C6-N1	11.64	1.47	1.39
2	AB	1995	U	C2-N3	11.63	1.45	1.37
2	AB	2053	G	P-O5'	11.63	1.71	1.59
2	AB	2161	C	C4'-C3'	11.63	1.66	1.53
2	AB	921	C	P-O5'	11.62	1.71	1.59
2	AB	1765	U	C2-N3	11.62	1.45	1.37
35	BA	596	A	N9-C4	11.62	1.44	1.37
35	BA	1458	G	N7-C5	11.62	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	539	A	N7-C5	11.59	1.46	1.39
35	BA	913	A	N3-C4	11.59	1.41	1.34
2	AB	2581	G	C8-N7	-11.58	1.24	1.30
2	AB	1372	U	C2-N3	11.58	1.45	1.37
35	BA	670	G	C8-N7	-11.57	1.24	1.30
35	BA	316	C	P-O5'	11.55	1.71	1.59
2	AB	513	A	N3-C4	11.55	1.41	1.34
2	AB	1135	C	P-O5'	11.54	1.71	1.59
35	BA	1067	A	N7-C5	11.54	1.46	1.39
1	AA	31	C	N1-C6	11.54	1.44	1.37
2	AB	222	A	N9-C4	11.53	1.44	1.37
35	BA	630	A	P-O5'	11.53	1.71	1.59
35	BA	215	C	P-O5'	11.52	1.71	1.59
2	AB	1806	C	C2-N3	11.51	1.45	1.35
2	AB	782	A	N3-C4	11.51	1.41	1.34
2	AB	2478	A	N7-C5	-11.51	1.32	1.39
2	AB	2587	A	N3-C4	11.50	1.41	1.34
2	AB	2811	G	C2-N3	11.49	1.42	1.32
35	BA	425	G	C2-N3	11.48	1.42	1.32
2	AB	2021	C	N1-C6	11.47	1.44	1.37
35	BA	590	U	C2-N3	11.46	1.45	1.37
2	AB	2077	A	N3-C4	11.45	1.41	1.34
2	AB	2099	U	O3'-P	11.44	1.74	1.61
2	AB	332	A	N7-C5	-11.44	1.32	1.39
35	BA	1263	C	N1-C6	11.43	1.44	1.37
2	AB	892	A	C6-N1	-11.43	1.27	1.35
2	AB	467	G	C2-N3	11.40	1.41	1.32
2	AB	2260	C	N1-C6	11.39	1.44	1.37
35	BA	496	A	P-O5'	11.38	1.71	1.59
2	AB	2076	U	P-O5'	11.38	1.71	1.59
2	AB	121	G	C6-N1	11.33	1.47	1.39
2	AB	2347	C	P-O5'	11.33	1.71	1.59
1	AA	31	C	P-O5'	11.33	1.71	1.59
1	AA	94	A	N7-C5	11.33	1.46	1.39
35	BA	1174	G	N3-C4	11.30	1.43	1.35
2	AB	1002	G	N3-C4	11.30	1.43	1.35
35	BA	6	G	N7-C5	11.29	1.46	1.39
2	AB	2706	A	N7-C5	11.28	1.46	1.39
35	BA	1370	G	C3'-C2'	11.28	1.65	1.52
35	BA	178	C	N3-C4	11.27	1.41	1.33
2	AB	2802	G	N7-C5	11.26	1.46	1.39
2	AB	1199	U	O3'-P	11.24	1.74	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1133	A	N9-C4	-11.22	1.31	1.37
2	AB	1339	G	C5-C4	11.21	1.46	1.38
35	BA	1436	U	C2-N3	11.21	1.45	1.37
1	AA	2	G	C5-C4	11.21	1.46	1.38
2	AB	2380	C	P-O5'	11.20	1.71	1.59
35	BA	1456	A	N3-C4	11.20	1.41	1.34
36	BB	52	U	C2-N3	11.20	1.45	1.37
2	AB	2447	G	N3-C4	11.20	1.43	1.35
35	BA	311	C	C2-N3	11.20	1.44	1.35
2	AB	2143	C	N1-C6	11.19	1.43	1.37
2	AB	2074	U	C2-N3	11.19	1.45	1.37
2	AB	2219	U	N1-C2	11.19	1.48	1.38
2	AB	869	G	P-O5'	11.18	1.71	1.59
2	AB	2883	A	N3-C4	11.16	1.41	1.34
2	AB	876	C	N3-C4	11.16	1.41	1.33
35	BA	78	A	N3-C4	11.14	1.41	1.34
35	BA	303	A	N7-C5	-11.14	1.32	1.39
2	AB	1477	A	N9-C4	11.13	1.44	1.37
2	AB	118	A	N3-C4	11.13	1.41	1.34
2	AB	669	G	N7-C5	11.12	1.46	1.39
2	AB	1122	G	P-O5'	11.12	1.70	1.59
2	AB	1368	G	N7-C5	11.12	1.46	1.39
35	BA	596	A	N3-C4	11.11	1.41	1.34
2	AB	910	A	N7-C5	11.11	1.46	1.39
2	AB	2010	G	N7-C5	11.10	1.46	1.39
2	AB	661	A	C8-N7	-11.09	1.23	1.31
2	AB	1894	C	P-O5'	11.09	1.70	1.59
2	AB	2105	U	P-O5'	11.09	1.70	1.59
2	AB	2740	A	N9-C4	11.08	1.44	1.37
2	AB	2775	G	N7-C5	-11.08	1.32	1.39
2	AB	1071	G	N3-C4	11.08	1.43	1.35
2	AB	2543	G	N3-C4	11.07	1.43	1.35
35	BA	545	C	O3'-P	11.07	1.74	1.61
2	AB	550	C	P-O5'	11.06	1.70	1.59
2	AB	2106	U	C2-N3	11.05	1.45	1.37
35	BA	1067	A	N3-C4	11.04	1.41	1.34
2	AB	461	C	O3'-P	11.03	1.74	1.61
2	AB	1533	C	N1-C6	11.01	1.43	1.37
2	AB	1111	A	N3-C4	11.00	1.41	1.34
2	AB	732	C	N3-C4	11.00	1.41	1.33
35	BA	98	A	N9-C4	10.99	1.44	1.37
35	BA	570	G	C6-N1	10.99	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	185	U	C2-N3	10.99	1.45	1.37
2	AB	2534	A	N3-C4	10.98	1.41	1.34
2	AB	2748	A	N3-C4	10.97	1.41	1.34
2	AB	2090	A	N3-C4	10.97	1.41	1.34
2	AB	2253	G	C8-N7	10.95	1.37	1.30
2	AB	2376	A	C5-C6	10.95	1.50	1.41
2	AB	463	G	C5'-C4'	10.94	1.64	1.51
35	BA	759	A	N9-C4	-10.94	1.31	1.37
36	BB	14	G	C5'-C4'	10.91	1.64	1.51
35	BA	454	G	N7-C5	-10.91	1.32	1.39
35	BA	753	A	P-O5'	10.91	1.70	1.59
2	AB	173	A	N3-C4	10.90	1.41	1.34
2	AB	1810	A	N3-C4	10.90	1.41	1.34
2	AB	2777	G	C6-N1	10.89	1.47	1.39
2	AB	2790	U	P-O5'	10.88	1.70	1.59
2	AB	2794	C	N1-C6	10.87	1.43	1.37
2	AB	1432	G	N7-C5	10.86	1.45	1.39
2	AB	1775	U	P-O5'	10.86	1.70	1.59
2	AB	945	A	N3-C4	10.85	1.41	1.34
2	AB	2857	G	N3-C4	10.85	1.43	1.35
37	BC	25	U	C2-N3	10.85	1.45	1.37
35	BA	1199	U	C5-C6	10.84	1.44	1.34
35	BA	54	C	N1-C6	10.83	1.43	1.37
35	BA	862	C	N1-C6	10.83	1.43	1.37
2	AB	903	C	P-O5'	10.81	1.70	1.59
2	AB	1505	A	N3-C4	10.81	1.41	1.34
2	AB	1572	A	P-O5'	10.81	1.70	1.59
2	AB	2119	A	N7-C5	-10.81	1.32	1.39
2	AB	2507	C	C5-C6	10.80	1.43	1.34
35	BA	520	A	N9-C4	-10.80	1.31	1.37
2	AB	356	G	P-O5'	10.79	1.70	1.59
2	AB	1378	A	C5-C4	-10.78	1.31	1.38
2	AB	1482	G	N9-C8	10.78	1.45	1.37
2	AB	1405	U	N3-C4	10.77	1.48	1.38
1	AA	7	G	N1-C2	10.77	1.46	1.37
35	BA	1441	A	C5-C4	-10.77	1.31	1.38
2	AB	71	A	N9-C4	-10.76	1.31	1.37
2	AB	2753	A	N7-C5	-10.76	1.32	1.39
2	AB	333	G	P-O5'	10.76	1.70	1.59
2	AB	824	U	C2-N3	10.75	1.45	1.37
2	AB	1848	A	C5-C6	10.75	1.50	1.41
2	AB	1382	G	C6-N1	10.74	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	909	A	N7-C5	10.73	1.45	1.39
2	AB	1667	G	C8-N7	10.73	1.37	1.30
35	BA	927	G	C5-C4	-10.72	1.30	1.38
2	AB	2003	A	N3-C4	10.71	1.41	1.34
2	AB	1949	G	N1-C2	10.70	1.46	1.37
35	BA	597	G	N7-C5	-10.70	1.32	1.39
35	BA	1337	G	N3-C4	10.70	1.43	1.35
35	BA	1324	A	N9-C4	-10.70	1.31	1.37
35	BA	1258	G	N7-C5	10.69	1.45	1.39
1	AA	109	A	N7-C5	-10.68	1.32	1.39
35	BA	1517	G	N3-C4	10.68	1.43	1.35
1	AA	28	C	N3-C4	10.66	1.41	1.33
35	BA	1514	G	C8-N7	-10.66	1.24	1.30
2	AB	2448	A	N7-C5	10.66	1.45	1.39
2	AB	2655	G	C8-N7	-10.66	1.24	1.30
2	AB	2009	A	N3-C4	10.64	1.41	1.34
2	AB	1128	G	N7-C5	-10.64	1.32	1.39
35	BA	1059	C	C4-C5	10.63	1.51	1.43
2	AB	1734	G	N3-C4	10.62	1.42	1.35
2	AB	2089	C	N3-C4	10.62	1.41	1.33
2	AB	1285	A	N3-C4	10.60	1.41	1.34
2	AB	206	U	O3'-P	10.59	1.73	1.61
1	AA	35	C	N3-C4	10.59	1.41	1.33
2	AB	445	C	C5-C6	10.58	1.42	1.34
35	BA	1285	A	N3-C4	10.58	1.41	1.34
2	AB	590	A	N9-C4	10.56	1.44	1.37
2	AB	1203	U	C2-N3	10.56	1.45	1.37
2	AB	2287	A	N3-C4	10.56	1.41	1.34
35	BA	399	G	N3-C4	10.55	1.42	1.35
2	AB	410	G	N7-C5	10.54	1.45	1.39
2	AB	2042	A	N3-C4	10.54	1.41	1.34
2	AB	891	G	N9-C4	10.54	1.46	1.38
2	AB	2463	C	N1-C6	10.53	1.43	1.37
35	BA	261	U	C2-N3	10.53	1.45	1.37
2	AB	233	A	C5-C4	-10.53	1.31	1.38
2	AB	238	C	N1-C6	10.52	1.43	1.37
35	BA	744	C	P-O5'	10.52	1.70	1.59
35	BA	970	C	N1-C6	10.52	1.43	1.37
2	AB	1853	A	C5-C4	-10.51	1.31	1.38
2	AB	71	A	N7-C5	10.51	1.45	1.39
35	BA	1366	C	P-O5'	10.50	1.70	1.59
35	BA	1479	C	N1-C6	10.50	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	673	A	N9-C4	10.49	1.44	1.37
2	AB	579	G	C6-N1	10.49	1.46	1.39
2	AB	1112	G	N7-C5	-10.48	1.32	1.39
35	BA	1464	U	N3-C4	10.48	1.47	1.38
2	AB	2490	G	N1-C2	10.48	1.46	1.37
1	AA	105	G	N1-C2	10.47	1.46	1.37
2	AB	144	A	N3-C4	10.47	1.41	1.34
35	BA	1328	C	C4-N4	10.47	1.43	1.33
2	AB	687	C	C5-C6	10.47	1.42	1.34
2	AB	790	U	P-O5'	10.46	1.70	1.59
2	AB	1359	A	N3-C4	10.45	1.41	1.34
2	AB	1495	A	N3-C4	10.45	1.41	1.34
2	AB	937	C	N1-C6	10.45	1.43	1.37
35	BA	66	A	P-O5'	10.44	1.70	1.59
2	AB	1432	G	N3-C4	10.44	1.42	1.35
35	BA	1172	C	C3'-C2'	-10.44	1.41	1.52
35	BA	1221	G	N7-C5	10.43	1.45	1.39
2	AB	21	A	N7-C5	-10.43	1.32	1.39
35	BA	1210	C	N1-C6	10.43	1.43	1.37
35	BA	454	G	N3-C4	10.43	1.42	1.35
35	BA	804	U	P-O5'	10.43	1.70	1.59
35	BA	1015	G	N7-C5	-10.43	1.32	1.39
35	BA	1273	C	C4'-C3'	10.43	1.64	1.53
2	AB	2327	A	C8-N7	-10.42	1.24	1.31
2	AB	2417	C	N1-C6	10.42	1.43	1.37
35	BA	290	C	P-O5'	10.41	1.70	1.59
35	BA	147	G	N7-C5	-10.40	1.33	1.39
2	AB	767	U	C4-C5	10.40	1.52	1.43
35	BA	563	A	C6-N1	10.40	1.42	1.35
2	AB	1098	A	N9-C4	10.39	1.44	1.37
2	AB	2566	A	N3-C4	10.39	1.41	1.34
2	AB	1450	G	N1-C2	10.39	1.46	1.37
35	BA	1311	A	N3-C4	10.38	1.41	1.34
1	AA	112	G	N3-C4	10.38	1.42	1.35
2	AB	1810	A	N1-C2	-10.38	1.25	1.34
2	AB	60	G	N3-C4	-10.37	1.28	1.35
2	AB	1681	G	C8-N7	-10.37	1.24	1.30
2	AB	2505	G	N7-C5	10.35	1.45	1.39
2	AB	320	A	C8-N7	-10.35	1.24	1.31
2	AB	1860	G	N1-C2	-10.35	1.29	1.37
2	AB	298	G	C6-N1	10.33	1.46	1.39
2	AB	1980	G	C2-N3	10.33	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1396	U	C2-N3	10.32	1.45	1.37
2	AB	2872	A	N7-C5	10.32	1.45	1.39
2	AB	2725	A	N7-C5	10.31	1.45	1.39
2	AB	2143	C	C5-C6	10.31	1.42	1.34
35	BA	416	G	N7-C5	10.31	1.45	1.39
2	AB	1164	C	C4-C5	10.31	1.51	1.43
35	BA	242	G	C8-N7	-10.31	1.24	1.30
2	AB	2522	U	C2-N3	10.30	1.45	1.37
37	BC	67	C	C2-N3	10.30	1.44	1.35
2	AB	1128	G	P-O5'	10.30	1.70	1.59
2	AB	205	G	C8-N7	10.29	1.37	1.30
2	AB	409	G	C2-N3	10.28	1.41	1.32
2	AB	1486	U	C2-N3	-10.28	1.30	1.37
2	AB	2677	G	C5-C4	-10.27	1.31	1.38
36	BB	20	G	N3-C4	10.27	1.42	1.35
35	BA	1319	A	N7-C5	10.27	1.45	1.39
2	AB	576	U	C4-C5	10.26	1.52	1.43
35	BA	1268	G	N1-C2	10.25	1.46	1.37
2	AB	1711	A	P-O5'	10.24	1.70	1.59
2	AB	1807	G	C6-N1	10.24	1.46	1.39
2	AB	2263	C	C4-C5	10.23	1.51	1.43
2	AB	2473	U	C2-N3	10.22	1.45	1.37
2	AB	788	A	N3-C4	10.22	1.41	1.34
35	BA	588	G	C6-N1	-10.22	1.32	1.39
35	BA	1507	A	N9-C4	10.22	1.44	1.37
35	BA	15	G	P-O5'	10.22	1.70	1.59
2	AB	1226	A	N3-C4	10.21	1.41	1.34
2	AB	2813	A	N3-C4	10.21	1.41	1.34
35	BA	749	A	N9-C4	10.21	1.44	1.37
35	BA	1216	A	N1-C2	-10.21	1.25	1.34
2	AB	1368	G	C2-N3	10.20	1.41	1.32
2	AB	896	A	N9-C4	-10.20	1.31	1.37
2	AB	2719	G	N7-C5	-10.20	1.33	1.39
2	AB	617	G	P-O5'	10.20	1.70	1.59
35	BA	348	G	N7-C5	10.19	1.45	1.39
35	BA	143	A	N3-C4	10.18	1.41	1.34
2	AB	2370	G	C8-N7	10.17	1.37	1.30
2	AB	383	C	O3'-P	10.17	1.73	1.61
35	BA	667	G	C6-N1	10.17	1.46	1.39
2	AB	1469	A	N3-C4	10.15	1.41	1.34
2	AB	1811	G	C6-N1	-10.15	1.32	1.39
2	AB	1362	C	C4-C5	10.14	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1622	G	N7-C5	10.13	1.45	1.39
35	BA	1180	A	N3-C4	10.13	1.41	1.34
35	BA	782	A	N7-C5	-10.13	1.33	1.39
2	AB	1988	G	N3-C4	10.13	1.42	1.35
2	AB	170	U	P-O5'	10.12	1.69	1.59
2	AB	1078	U	C2-O2	10.13	1.31	1.22
35	BA	156	C	C2-N3	10.12	1.43	1.35
35	BA	712	A	N3-C4	-10.12	1.28	1.34
2	AB	2740	A	N3-C4	10.12	1.41	1.34
2	AB	2167	U	N1-C2	10.11	1.47	1.38
2	AB	800	A	N7-C5	-10.11	1.33	1.39
35	BA	831	A	C6-N6	10.11	1.42	1.33
35	BA	633	G	N3-C4	10.10	1.42	1.35
2	AB	2609	U	P-O5'	10.10	1.69	1.59
37	BC	39	A	N3-C4	10.10	1.41	1.34
35	BA	929	G	N1-C2	10.09	1.45	1.37
2	AB	2102	G	N9-C8	10.09	1.45	1.37
2	AB	1814	G	N1-C2	10.08	1.45	1.37
2	AB	2888	C	N1-C6	10.08	1.43	1.37
35	BA	679	C	N1-C6	10.08	1.43	1.37
35	BA	698	G	N7-C5	10.08	1.45	1.39
35	BA	939	G	C6-N1	10.07	1.46	1.39
2	AB	542	C	N1-C6	-10.06	1.31	1.37
2	AB	2644	G	P-O5'	10.06	1.69	1.59
35	BA	1280	A	P-O5'	10.06	1.69	1.59
2	AB	2301	C	N1-C6	10.06	1.43	1.37
35	BA	113	G	C2-N3	10.06	1.40	1.32
2	AB	1780	A	P-O5'	10.04	1.69	1.59
2	AB	716	A	N9-C4	-10.04	1.31	1.37
2	AB	1449	G	C6-N1	10.04	1.46	1.39
35	BA	1403	C	N1-C6	10.03	1.43	1.37
2	AB	2309	A	N9-C4	10.03	1.43	1.37
35	BA	1285	A	N9-C4	-10.03	1.31	1.37
35	BA	875	U	C4'-C3'	-10.03	1.42	1.53
35	BA	1361	G	C2-N3	10.02	1.40	1.32
2	AB	27	G	C3'-C2'	10.02	1.64	1.52
2	AB	668	A	N9-C4	-10.02	1.31	1.37
35	BA	53	A	P-O5'	10.02	1.69	1.59
2	AB	247	G	C2-N3	10.01	1.40	1.32
35	BA	1015	G	C5-C6	10.01	1.52	1.42
35	BA	1310	G	O3'-P	10.01	1.73	1.61
2	AB	1042	G	C8-N7	-10.01	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1507	C	P-O5'	10.01	1.69	1.59
2	AB	357	C	N1-C6	10.01	1.43	1.37
2	AB	1520	U	C2-N3	10.01	1.44	1.37
2	AB	1274	A	P-O5'	10.00	1.69	1.59
35	BA	441	A	P-O5'	10.00	1.69	1.59
2	AB	606	U	P-O5'	9.99	1.69	1.59
37	BC	24	C	N1-C6	9.99	1.43	1.37
2	AB	301	G	N9-C8	9.99	1.44	1.37
35	BA	241	G	N7-C5	-9.99	1.33	1.39
2	AB	998	C	N1-C6	9.98	1.43	1.37
35	BA	908	A	N9-C4	9.98	1.43	1.37
2	AB	2398	U	N3-C4	9.98	1.47	1.38
36	BB	26	U	C4-C5	9.97	1.52	1.43
1	AA	84	G	P-O5'	9.97	1.69	1.59
2	AB	2319	G	C6-N1	9.97	1.46	1.39
35	BA	1264	U	C2-N3	9.97	1.44	1.37
2	AB	2376	A	P-O5'	9.96	1.69	1.59
2	AB	234	U	C4-C5	9.96	1.52	1.43
2	AB	2837	A	C8-N7	-9.95	1.24	1.31
2	AB	1489	C	C4'-O4'	-9.95	1.32	1.45
2	AB	1541	C	N1-C6	-9.95	1.31	1.37
2	AB	2760	C	N1-C6	-9.95	1.31	1.37
2	AB	1265	A	C8-N7	9.94	1.38	1.31
2	AB	613	A	N3-C4	9.93	1.40	1.34
2	AB	2844	G	N1-C2	9.93	1.45	1.37
2	AB	2874	C	N1-C6	9.93	1.43	1.37
35	BA	216	U	P-O5'	9.93	1.69	1.59
2	AB	324	A	P-O5'	9.93	1.69	1.59
35	BA	1069	C	P-O5'	9.92	1.69	1.59
2	AB	446	G	N3-C4	9.92	1.42	1.35
2	AB	1044	C	C2-N3	9.91	1.43	1.35
35	BA	932	C	N3-C4	9.91	1.40	1.33
37	BC	52	C	N1-C6	9.91	1.43	1.37
2	AB	1491	G	C8-N7	9.91	1.36	1.30
35	BA	61	G	N7-C5	-9.91	1.33	1.39
2	AB	87	U	N1-C2	9.90	1.47	1.38
2	AB	1556	C	N3-C4	-9.90	1.27	1.33
2	AB	83	A	N3-C4	9.89	1.40	1.34
2	AB	2178	C	N1-C2	9.89	1.50	1.40
35	BA	1234	C	C4'-O4'	-9.89	1.32	1.45
35	BA	1345	U	N3-C4	9.89	1.47	1.38
2	AB	110	G	P-O5'	9.89	1.69	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2393	U	C2-N3	9.89	1.44	1.37
2	AB	1700	A	C6-N1	9.88	1.42	1.35
35	BA	1514	G	P-O5'	9.88	1.69	1.59
2	AB	2020	A	N3-C4	9.88	1.40	1.34
35	BA	104	G	C6-N1	9.88	1.46	1.39
2	AB	2662	A	N7-C5	-9.88	1.33	1.39
35	BA	937	A	N7-C5	-9.88	1.33	1.39
35	BA	1480	A	N9-C4	9.87	1.43	1.37
2	AB	803	U	N1-C2	9.87	1.47	1.38
2	AB	2880	C	C4'-C3'	9.86	1.64	1.53
35	BA	1374	A	N3-C4	9.87	1.40	1.34
35	BA	1346	A	N3-C4	9.86	1.40	1.34
2	AB	1189	A	N9-C8	-9.85	1.29	1.37
1	AA	47	C	P-O5'	9.85	1.69	1.59
2	AB	1127	A	N3-C4	9.85	1.40	1.34
2	AB	1516	G	N7-C5	-9.85	1.33	1.39
2	AB	2443	C	C5-C6	9.84	1.42	1.34
2	AB	118	A	P-O5'	9.84	1.69	1.59
2	AB	2062	A	C4'-C3'	9.83	1.64	1.53
2	AB	495	G	N1-C2	9.83	1.45	1.37
35	BA	1177	G	P-O5'	9.83	1.69	1.59
2	AB	207	A	C5-C4	-9.82	1.31	1.38
2	AB	1947	C	N1-C2	9.82	1.50	1.40
35	BA	659	U	C2-N3	9.82	1.44	1.37
35	BA	819	A	N9-C4	9.82	1.43	1.37
2	AB	719	C	C2-N3	9.82	1.43	1.35
2	AB	2047	C	P-O5'	9.82	1.69	1.59
2	AB	2711	A	P-O5'	9.82	1.69	1.59
2	AB	1702	G	C2-N3	9.81	1.40	1.32
2	AB	356	G	N7-C5	9.81	1.45	1.39
35	BA	443	C	C4-C5	9.81	1.50	1.43
35	BA	1332	A	C5'-C4'	9.80	1.63	1.51
2	AB	1786	A	P-O5'	9.80	1.69	1.59
35	BA	1039	G	P-O5'	9.80	1.69	1.59
2	AB	2651	C	C5-C6	9.80	1.42	1.34
2	AB	2456	C	N1-C6	9.79	1.43	1.37
2	AB	2465	C	C2-N3	9.78	1.43	1.35
2	AB	1667	G	N3-C4	9.78	1.42	1.35
2	AB	1571	A	N9-C4	9.78	1.43	1.37
2	AB	2497	A	N3-C4	9.77	1.40	1.34
2	AB	2019	A	N7-C5	9.77	1.45	1.39
2	AB	142	A	N7-C5	-9.77	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	714	G	C2-N3	9.77	1.40	1.32
35	BA	807	A	N7-C5	9.77	1.45	1.39
2	AB	2831	G	N7-C5	-9.77	1.33	1.39
35	BA	258	G	N7-C5	-9.77	1.33	1.39
35	BA	303	A	P-O5'	9.76	1.69	1.59
35	BA	461	A	N9-C8	-9.76	1.29	1.37
2	AB	2539	C	N1-C6	9.76	1.43	1.37
37	BC	19	G	N7-C5	-9.76	1.33	1.39
1	AA	34	A	N3-C4	9.76	1.40	1.34
2	AB	636	G	C2-N3	9.76	1.40	1.32
2	AB	1954	G	C8-N7	-9.76	1.25	1.30
35	BA	636	U	C2-N3	9.76	1.44	1.37
35	BA	395	C	N3-C4	9.75	1.40	1.33
2	AB	311	A	N9-C4	9.75	1.43	1.37
2	AB	1948	G	N7-C5	-9.75	1.33	1.39
2	AB	400	G	N7-C5	-9.75	1.33	1.39
2	AB	691	C	C4-C5	9.75	1.50	1.43
35	BA	419	C	P-O5'	9.75	1.69	1.59
2	AB	1790	C	N3-C4	9.74	1.40	1.33
2	AB	760	G	N3-C4	9.74	1.42	1.35
2	AB	979	A	N9-C4	-9.74	1.32	1.37
35	BA	654	G	C2-N3	9.74	1.40	1.32
2	AB	39	G	N1-C2	9.74	1.45	1.37
2	AB	290	U	C2-N3	9.74	1.44	1.37
35	BA	1507	A	N7-C5	-9.74	1.33	1.39
35	BA	674	G	C8-N7	9.74	1.36	1.30
2	AB	850	U	C2-N3	9.73	1.44	1.37
2	AB	2792	A	N9-C4	9.73	1.43	1.37
2	AB	2732	G	N3-C4	9.73	1.42	1.35
2	AB	2274	A	C5-C4	-9.72	1.31	1.38
2	AB	2728	U	C2-N3	9.72	1.44	1.37
1	AA	3	C	C5'-C4'	9.72	1.63	1.51
2	AB	284	U	P-O5'	9.72	1.69	1.59
2	AB	1989	G	C6-N1	-9.72	1.32	1.39
35	BA	231	U	C4-C5	9.72	1.52	1.43
35	BA	510	A	N7-C5	9.71	1.45	1.39
35	BA	1314	C	N3-C4	9.71	1.40	1.33
35	BA	1404	C	N1-C6	9.70	1.43	1.37
2	AB	910	A	N3-C4	9.70	1.40	1.34
1	AA	5	U	P-O5'	9.69	1.69	1.59
2	AB	979	A	P-O5'	9.68	1.69	1.59
2	AB	1717	A	N7-C5	9.68	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1724	G	P-O5'	9.68	1.69	1.59
2	AB	1922	G	C2-N3	9.68	1.40	1.32
2	AB	2108	A	N3-C4	9.68	1.40	1.34
36	BB	19	A	N9-C4	9.68	1.43	1.37
2	AB	2789	C	P-O5'	9.67	1.69	1.59
35	BA	1201	A	P-O5'	-9.67	1.50	1.59
2	AB	1630	A	N9-C4	9.67	1.43	1.37
35	BA	392	C	N3-C4	9.66	1.40	1.33
2	AB	1757	A	C5-C4	-9.66	1.31	1.38
35	BA	1215	G	N1-C2	9.66	1.45	1.37
2	AB	1535	A	N9-C4	9.66	1.43	1.37
35	BA	177	G	N3-C4	9.66	1.42	1.35
2	AB	1963	U	N1-C2	9.64	1.47	1.38
35	BA	1251	A	C8-N7	-9.64	1.24	1.31
2	AB	195	A	N3-C4	9.64	1.40	1.34
2	AB	2365	G	O3'-P	9.64	1.72	1.61
35	BA	397	A	N3-C4	9.64	1.40	1.34
2	AB	971	G	N1-C2	9.63	1.45	1.37
2	AB	1361	G	C5-C4	9.63	1.45	1.38
2	AB	1526	C	C2'-C1'	9.63	1.64	1.53
2	AB	2608	G	P-O5'	9.63	1.69	1.59
2	AB	2468	A	P-O5'	9.63	1.69	1.59
2	AB	625	G	N7-C5	-9.63	1.33	1.39
35	BA	978	A	P-O5'	9.63	1.69	1.59
35	BA	739	C	N1-C6	9.62	1.43	1.37
35	BA	763	G	C4'-O4'	-9.62	1.33	1.45
35	BA	1232	U	C2-N3	9.61	1.44	1.37
35	BA	573	A	N7-C5	-9.60	1.33	1.39
2	AB	695	G	O3'-P	9.60	1.72	1.61
37	BC	9	G	N1-C2	9.60	1.45	1.37
35	BA	537	G	C5-C4	9.60	1.45	1.38
35	BA	934	C	C2-N3	9.60	1.43	1.35
2	AB	995	C	P-O5'	9.60	1.69	1.59
2	AB	965	C	N1-C6	-9.59	1.31	1.37
2	AB	809	G	C6-N1	9.59	1.46	1.39
2	AB	2135	A	N7-C5	9.59	1.45	1.39
35	BA	509	A	P-O5'	9.59	1.69	1.59
2	AB	1269	A	N3-C4	9.57	1.40	1.34
2	AB	2002	G	N7-C5	9.57	1.45	1.39
2	AB	595	C	N1-C6	9.56	1.42	1.37
2	AB	797	G	P-O5'	9.56	1.69	1.59
2	AB	65	U	C2-N3	9.56	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	912	C	P-O5'	9.56	1.69	1.59
2	AB	353	C	N3-C4	9.56	1.40	1.33
2	AB	1806	C	C4-C5	9.56	1.50	1.43
35	BA	185	U	C4-C5	9.55	1.52	1.43
2	AB	1884	G	C8-N7	9.55	1.36	1.30
35	BA	509	A	N3-C4	9.55	1.40	1.34
35	BA	155	A	N3-C4	9.55	1.40	1.34
35	BA	491	G	C8-N7	9.55	1.36	1.30
36	BB	40	G	N1-C2	9.55	1.45	1.37
35	BA	899	C	N1-C6	9.54	1.42	1.37
2	AB	2409	G	C2-N3	9.54	1.40	1.32
2	AB	2090	A	N9-C4	9.54	1.43	1.37
37	BC	27	G	N7-C5	-9.54	1.33	1.39
2	AB	1638	C	O3'-P	9.53	1.72	1.61
35	BA	485	U	C2-N3	9.53	1.44	1.37
35	BA	320	A	C5-C4	-9.53	1.32	1.38
35	BA	138	G	C6-N1	9.52	1.46	1.39
2	AB	2859	G	C6-N1	9.52	1.46	1.39
35	BA	448	A	C5-C4	-9.52	1.32	1.38
2	AB	1815	A	P-O5'	9.52	1.69	1.59
2	AB	2850	A	P-O5'	9.51	1.69	1.59
35	BA	572	A	N9-C4	-9.51	1.32	1.37
35	BA	944	G	C5-C4	-9.51	1.31	1.38
35	BA	515	G	N3-C4	9.51	1.42	1.35
35	BA	236	A	N9-C4	-9.51	1.32	1.37
2	AB	262	A	C8-N7	-9.50	1.25	1.31
2	AB	311	A	C8-N7	9.50	1.38	1.31
2	AB	2742	G	N7-C5	-9.50	1.33	1.39
2	AB	152	A	P-O5'	9.49	1.69	1.59
2	AB	541	A	N9-C4	9.49	1.43	1.37
2	AB	2771	C	C2-N3	9.49	1.43	1.35
2	AB	147	C	N1-C6	9.49	1.42	1.37
2	AB	358	U	C2-N3	9.49	1.44	1.37
2	AB	1024	G	N7-C5	-9.49	1.33	1.39
2	AB	2663	G	N1-C2	9.49	1.45	1.37
35	BA	817	C	N1-C6	9.49	1.42	1.37
2	AB	1603	A	N9-C4	9.49	1.43	1.37
2	AB	1842	G	C5'-C4'	9.49	1.62	1.51
2	AB	2422	C	N1-C6	9.49	1.42	1.37
2	AB	2256	G	N3-C4	9.48	1.42	1.35
35	BA	388	G	C2-N3	9.48	1.40	1.32
35	BA	1074	G	N3-C4	9.48	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	962	G	C6-N1	-9.47	1.32	1.39
2	AB	61	C	O3'-P	9.47	1.72	1.61
2	AB	742	A	N9-C4	9.47	1.43	1.37
2	AB	2115	G	C2-N3	9.47	1.40	1.32
35	BA	165	G	N7-C5	9.47	1.45	1.39
2	AB	629	G	N1-C2	9.47	1.45	1.37
2	AB	1985	C	N1-C6	9.47	1.42	1.37
35	BA	337	G	N7-C5	9.47	1.45	1.39
2	AB	2059	A	N7-C5	9.46	1.45	1.39
2	AB	190	A	N3-C4	9.46	1.40	1.34
2	AB	1250	G	N3-C4	9.46	1.42	1.35
2	AB	2116	G	P-O5'	9.46	1.69	1.59
35	BA	238	A	C5'-C4'	9.46	1.62	1.51
2	AB	2835	A	N3-C4	9.45	1.40	1.34
2	AB	884	U	C4-C5	9.45	1.52	1.43
2	AB	1586	A	N7-C5	9.45	1.45	1.39
2	AB	2119	A	N3-C4	9.45	1.40	1.34
37	BC	2	G	N1-C2	9.45	1.45	1.37
2	AB	2120	G	N9-C4	9.45	1.45	1.38
2	AB	1037	G	N9-C8	-9.45	1.31	1.37
2	AB	1346	G	N1-C2	9.44	1.45	1.37
1	AA	120	U	C4-C5	9.44	1.52	1.43
35	BA	90	C	C2'-C1'	9.44	1.63	1.53
2	AB	910	A	C8-N7	-9.44	1.25	1.31
2	AB	1385	A	C8-N7	-9.44	1.25	1.31
2	AB	1568	G	N3-C4	9.44	1.42	1.35
35	BA	19	A	N3-C4	9.44	1.40	1.34
2	AB	1537	G	N7-C5	-9.43	1.33	1.39
35	BA	677	U	P-O5'	9.43	1.69	1.59
35	BA	1508	A	N3-C4	9.43	1.40	1.34
2	AB	2173	A	N7-C5	9.43	1.45	1.39
1	AA	9	G	C2-N3	9.43	1.40	1.32
2	AB	2408	U	C2-N3	9.43	1.44	1.37
2	AB	2459	A	N3-C4	9.42	1.40	1.34
2	AB	723	C	C4-C5	9.42	1.50	1.43
2	AB	1196	C	N3-C4	9.42	1.40	1.33
2	AB	728	G	C2-N3	9.42	1.40	1.32
35	BA	1167	A	N3-C4	9.42	1.40	1.34
2	AB	1031	G	N1-C2	9.42	1.45	1.37
2	AB	614	A	N3-C4	9.41	1.40	1.34
37	BC	1	C	C4'-C3'	-9.41	1.42	1.53
2	AB	1690	A	O3'-P	9.41	1.72	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2365	G	N1-C2	9.40	1.45	1.37
35	BA	908	A	C5'-C4'	9.40	1.62	1.51
2	AB	880	G	C8-N7	9.40	1.36	1.30
2	AB	1787	A	N9-C4	9.40	1.43	1.37
35	BA	741	G	C6-N1	9.40	1.46	1.39
35	BA	143	A	N9-C4	9.40	1.43	1.37
2	AB	1106	G	C5'-C4'	-9.40	1.40	1.51
37	BC	10	G	C5'-C4'	9.40	1.62	1.51
2	AB	2095	A	P-O5'	9.40	1.69	1.59
35	BA	1130	A	N9-C8	9.40	1.45	1.37
35	BA	1329	A	N3-C4	9.40	1.40	1.34
2	AB	483	A	N3-C4	9.39	1.40	1.34
2	AB	891	G	C6-N1	9.39	1.46	1.39
2	AB	1265	A	N9-C4	9.39	1.43	1.37
35	BA	1525	G	C2-N3	9.39	1.40	1.32
2	AB	1912	A	C5-C4	-9.39	1.32	1.38
2	AB	2472	G	P-O5'	9.39	1.69	1.59
35	BA	275	G	N7-C5	-9.39	1.33	1.39
35	BA	570	G	N3-C4	9.39	1.42	1.35
35	BA	1475	G	C8-N7	-9.38	1.25	1.30
2	AB	1428	C	P-O5'	9.38	1.69	1.59
2	AB	1119	U	P-O5'	9.38	1.69	1.59
2	AB	1226	A	C6-N1	-9.38	1.28	1.35
2	AB	2883	A	O3'-P	9.38	1.72	1.61
35	BA	735	C	C5-C6	9.38	1.41	1.34
2	AB	1303	G	C5-C4	-9.37	1.31	1.38
2	AB	1620	G	C5-C4	-9.37	1.31	1.38
2	AB	2464	G	P-O5'	9.37	1.69	1.59
2	AB	2046	G	N7-C5	-9.37	1.33	1.39
2	AB	195	A	C5'-C4'	9.37	1.62	1.51
35	BA	530	G	C6-N1	9.37	1.46	1.39
2	AB	1773	A	N9-C8	-9.36	1.30	1.37
2	AB	1956	U	C2-N3	9.36	1.44	1.37
35	BA	381	C	N1-C6	9.36	1.42	1.37
2	AB	1927	A	P-O5'	9.36	1.69	1.59
35	BA	1146	A	N3-C4	9.36	1.40	1.34
35	BA	230	G	C8-N7	-9.36	1.25	1.30
35	BA	755	G	C2-N3	9.36	1.40	1.32
2	AB	1604	C	N1-C6	9.35	1.42	1.37
2	AB	1095	A	N9-C4	9.35	1.43	1.37
2	AB	1953	A	N9-C4	9.35	1.43	1.37
35	BA	706	A	N3-C4	9.35	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	978	G	N7-C5	9.34	1.44	1.39
2	AB	2141	G	C4'-C3'	9.34	1.63	1.53
2	AB	2702	G	C8-N7	-9.34	1.25	1.30
35	BA	535	A	C2'-C1'	-9.34	1.43	1.53
35	BA	1254	A	N3-C4	9.34	1.40	1.34
2	AB	1258	U	C4-C5	9.33	1.51	1.43
2	AB	1726	C	P-O5'	9.33	1.69	1.59
35	BA	403	C	C4-C5	9.33	1.50	1.43
2	AB	481	G	C6-N1	-9.33	1.33	1.39
35	BA	351	G	C2-N3	9.32	1.40	1.32
35	BA	1219	A	N3-C4	9.32	1.40	1.34
2	AB	631	A	N3-C4	9.32	1.40	1.34
35	BA	912	C	N1-C6	9.32	1.42	1.37
35	BA	1087	G	P-O5'	9.32	1.69	1.59
2	AB	637	A	N7-C5	9.32	1.44	1.39
2	AB	2111	U	C4-C5	9.32	1.51	1.43
2	AB	134	G	N1-C2	9.31	1.45	1.37
2	AB	2110	G	N3-C4	9.31	1.42	1.35
2	AB	1502	A	N3-C4	9.31	1.40	1.34
35	BA	693	G	P-O5'	9.31	1.69	1.59
2	AB	1139	G	N1-C2	9.31	1.45	1.37
2	AB	536	G	C6-N1	-9.30	1.33	1.39
37	BC	44	A	N3-C4	9.30	1.40	1.34
2	AB	1978	A	N3-C4	9.30	1.40	1.34
2	AB	1655	A	N7-C5	-9.30	1.33	1.39
35	BA	4	U	N1-C2	9.30	1.47	1.38
35	BA	1012	A	C4'-O4'	-9.30	1.33	1.45
2	AB	2448	A	N3-C4	9.30	1.40	1.34
2	AB	107	G	P-O5'	9.29	1.69	1.59
2	AB	1314	C	C5-C6	9.29	1.41	1.34
35	BA	2	A	N3-C4	9.29	1.40	1.34
2	AB	1082	U	N1-C2	9.29	1.47	1.38
2	AB	1222	U	C2-N3	9.29	1.44	1.37
2	AB	1405	U	C3'-C2'	9.29	1.63	1.52
35	BA	270	A	N3-C4	9.29	1.40	1.34
35	BA	620	C	N1-C6	9.29	1.42	1.37
2	AB	155	A	P-O5'	9.29	1.69	1.59
2	AB	1361	G	P-O5'	9.28	1.69	1.59
2	AB	2136	G	C5-C6	9.28	1.51	1.42
2	AB	2448	A	C5-C4	9.28	1.45	1.38
35	BA	25	C	N1-C6	9.28	1.42	1.37
2	AB	180	G	C2-N3	9.28	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	829	G	C6-N1	9.28	1.46	1.39
35	BA	924	C	N1-C6	9.27	1.42	1.37
36	BB	51	C	N1-C6	9.27	1.42	1.37
2	AB	2415	G	N7-C5	-9.27	1.33	1.39
1	AA	67	G	C8-N7	-9.27	1.25	1.30
2	AB	1548	A	C5'-C4'	9.27	1.62	1.51
2	AB	1953	A	N7-C5	-9.27	1.33	1.39
2	AB	1626	A	N3-C4	9.26	1.40	1.34
2	AB	1643	G	P-O5'	9.26	1.69	1.59
35	BA	979	C	C4-C5	9.26	1.50	1.43
35	BA	622	A	P-O5'	9.26	1.69	1.59
2	AB	1229	C	N1-C6	9.25	1.42	1.37
35	BA	1311	A	N9-C4	9.25	1.43	1.37
2	AB	210	C	C4-C5	9.25	1.50	1.43
35	BA	45	G	C6-N1	9.25	1.46	1.39
2	AB	2432	A	N3-C4	9.24	1.40	1.34
2	AB	2470	G	N1-C2	9.24	1.45	1.37
35	BA	610	U	C2-N3	9.24	1.44	1.37
2	AB	981	A	N7-C5	9.24	1.44	1.39
2	AB	2699	C	N1-C6	9.24	1.42	1.37
35	BA	572	A	N7-C5	-9.24	1.33	1.39
2	AB	194	G	C2-N3	9.23	1.40	1.32
2	AB	103	A	N3-C4	9.23	1.40	1.34
2	AB	2224	G	C2-N3	9.23	1.40	1.32
2	AB	819	A	P-O5'	9.23	1.69	1.59
2	AB	2627	G	P-O5'	9.23	1.69	1.59
2	AB	1244	A	P-O5'	9.23	1.69	1.59
2	AB	2303	G	N9-C4	-9.23	1.30	1.38
35	BA	1018	G	C5-C4	9.22	1.44	1.38
2	AB	836	G	N1-C2	9.22	1.45	1.37
2	AB	2518	A	N7-C5	9.22	1.44	1.39
2	AB	2755	C	C4-C5	9.22	1.50	1.43
35	BA	474	G	C2-N3	9.22	1.40	1.32
35	BA	1410	A	N7-C5	9.22	1.44	1.39
35	BA	222	C	N1-C6	9.22	1.42	1.37
2	AB	2407	A	N3-C4	9.22	1.40	1.34
36	BB	26	U	C2-N3	9.21	1.44	1.37
2	AB	2109	U	C2-N3	9.21	1.44	1.37
35	BA	1127	G	C3'-C2'	9.21	1.63	1.52
35	BA	1177	G	C5-C4	-9.21	1.31	1.38
2	AB	830	G	C6-N1	-9.21	1.33	1.39
35	BA	253	A	P-O5'	9.20	1.69	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2478	A	N9-C4	-9.20	1.32	1.37
2	AB	1065	U	P-O5'	9.20	1.69	1.59
2	AB	2556	C	C2-N3	9.20	1.43	1.35
35	BA	61	G	C6-N1	9.20	1.46	1.39
2	AB	5	A	P-O5'	9.19	1.69	1.59
35	BA	151	A	C6-N1	9.19	1.42	1.35
2	AB	1536	C	P-O5'	9.19	1.69	1.59
2	AB	906	U	O3'-P	9.18	1.72	1.61
2	AB	2757	A	N3-C4	9.18	1.40	1.34
2	AB	2848	G	C2-N3	9.18	1.40	1.32
35	BA	402	G	N9-C4	9.18	1.45	1.38
2	AB	1182	G	C8-N7	9.18	1.36	1.30
2	AB	2037	A	N3-C4	9.18	1.40	1.34
35	BA	1275	A	N3-C4	9.17	1.40	1.34
2	AB	1913	A	N7-C5	9.17	1.44	1.39
2	AB	1555	G	N3-C4	9.17	1.41	1.35
2	AB	1664	A	C6-N1	-9.17	1.29	1.35
35	BA	886	G	C4'-O4'	-9.17	1.33	1.45
35	BA	111	G	N9-C8	-9.16	1.31	1.37
35	BA	336	A	N3-C4	9.16	1.40	1.34
2	AB	1810	A	P-O5'	9.16	1.69	1.59
2	AB	868	U	C5-C6	9.16	1.42	1.34
35	BA	242	G	N7-C5	-9.16	1.33	1.39
2	AB	2775	G	C8-N7	9.16	1.36	1.30
35	BA	1411	C	C4-C5	9.16	1.50	1.43
35	BA	1422	G	C8-N7	-9.16	1.25	1.30
2	AB	849	A	C2-N3	9.15	1.41	1.33
35	BA	12	U	C2-N3	9.15	1.44	1.37
2	AB	1741	C	P-O5'	9.15	1.69	1.59
35	BA	1178	G	N3-C4	9.15	1.41	1.35
35	BA	447	G	O4'-C1'	9.15	1.53	1.41
35	BA	1227	A	N9-C4	-9.15	1.32	1.37
2	AB	320	A	C6-N1	9.15	1.42	1.35
2	AB	903	C	C5-C6	9.14	1.41	1.34
2	AB	300	A	N9-C4	9.14	1.43	1.37
2	AB	1014	A	N9-C4	9.14	1.43	1.37
2	AB	2312	U	C4-O4	-9.14	1.16	1.23
35	BA	1334	G	C2-N3	9.14	1.40	1.32
2	AB	2764	A	N9-C4	9.14	1.43	1.37
2	AB	2884	U	N3-C4	-9.14	1.30	1.38
35	BA	1351	U	P-O5'	9.14	1.68	1.59
35	BA	286	C	C2'-C1'	9.13	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1099	G	C2-N3	9.13	1.40	1.32
35	BA	1482	G	N1-C2	9.13	1.45	1.37
2	AB	1584	U	C2-N3	9.13	1.44	1.37
2	AB	804	A	O3'-P	-9.13	1.50	1.61
2	AB	1273	U	C4'-O4'	-9.13	1.33	1.45
2	AB	2737	G	N7-C5	9.13	1.44	1.39
2	AB	1216	G	C3'-C2'	9.12	1.62	1.52
2	AB	1265	A	C6-N1	-9.12	1.29	1.35
2	AB	1277	G	C8-N7	9.12	1.36	1.30
2	AB	2652	C	N3-C4	9.11	1.40	1.33
2	AB	590	A	N3-C4	9.11	1.40	1.34
35	BA	815	A	C2-N3	9.11	1.41	1.33
2	AB	2120	G	C2-N3	9.10	1.40	1.32
36	BB	21	U	P-O5'	9.10	1.68	1.59
35	BA	829	G	N7-C5	9.10	1.44	1.39
35	BA	1353	G	P-O5'	9.10	1.68	1.59
35	BA	947	G	P-O5'	9.10	1.68	1.59
2	AB	2144	G	N3-C4	9.09	1.41	1.35
35	BA	1270	G	N3-C4	9.09	1.41	1.35
2	AB	2807	U	C2-N3	9.09	1.44	1.37
35	BA	1453	G	N7-C5	9.09	1.44	1.39
2	AB	2415	G	C5-C4	9.09	1.44	1.38
2	AB	285	G	N7-C5	9.08	1.44	1.39
35	BA	263	A	N3-C4	9.08	1.40	1.34
35	BA	127	G	N9-C8	9.08	1.44	1.37
35	BA	784	A	P-O5'	9.08	1.68	1.59
2	AB	140	C	N3-C4	-9.08	1.27	1.33
2	AB	841	G	N3-C4	9.08	1.41	1.35
2	AB	990	A	N9-C4	9.08	1.43	1.37
35	BA	1238	A	N9-C4	-9.07	1.32	1.37
2	AB	864	G	N3-C4	-9.07	1.29	1.35
2	AB	1445	G	N3-C4	9.07	1.41	1.35
2	AB	802	A	C2'-C1'	9.07	1.63	1.53
2	AB	774	G	C6-N1	9.06	1.45	1.39
35	BA	720	C	P-O5'	9.06	1.68	1.59
35	BA	746	A	N9-C8	-9.06	1.30	1.37
2	AB	505	A	N9-C4	-9.06	1.32	1.37
2	AB	630	G	N1-C2	9.06	1.45	1.37
2	AB	1407	G	C8-N7	9.06	1.36	1.30
37	BC	9	G	C8-N7	9.06	1.36	1.30
2	AB	2461	A	N3-C4	9.05	1.40	1.34
35	BA	1144	G	O3'-P	9.05	1.72	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	481	G	N3-C4	9.04	1.41	1.35
2	AB	616	A	P-O5'	9.04	1.68	1.59
2	AB	1003	G	C2-N2	-9.04	1.25	1.34
2	AB	1857	G	P-O5'	9.04	1.68	1.59
35	BA	499	A	C8-N7	-9.04	1.25	1.31
2	AB	1531	C	C5-C6	9.04	1.41	1.34
2	AB	2142	A	C5-C4	-9.04	1.32	1.38
35	BA	118	U	P-O5'	9.04	1.68	1.59
2	AB	1542	U	C2-N3	9.03	1.44	1.37
2	AB	2761	A	C5-C6	9.03	1.49	1.41
2	AB	1895	C	P-O5'	9.03	1.68	1.59
2	AB	2687	U	N3-C4	9.03	1.46	1.38
2	AB	1935	G	N7-C5	9.03	1.44	1.39
35	BA	1241	G	C5-C4	9.03	1.44	1.38
35	BA	251	G	C5-C6	9.02	1.51	1.42
2	AB	1365	A	C5'-C4'	9.02	1.62	1.51
2	AB	2165	C	P-O5'	9.02	1.68	1.59
35	BA	199	A	N7-C5	-9.02	1.33	1.39
35	BA	240	G	C2-N3	9.02	1.40	1.32
35	BA	497	G	C5-C4	-9.02	1.32	1.38
2	AB	438	G	N3-C4	9.01	1.41	1.35
2	AB	1637	A	C5-C4	-9.01	1.32	1.38
35	BA	229	U	O3'-P	9.01	1.72	1.61
2	AB	81	G	C8-N7	9.01	1.36	1.30
35	BA	1134	G	P-O5'	9.01	1.68	1.59
2	AB	1814	G	C6-N1	9.00	1.45	1.39
2	AB	2388	A	N9-C4	-9.00	1.32	1.37
2	AB	2722	G	N7-C5	-9.00	1.33	1.39
35	BA	1068	G	P-O5'	9.00	1.68	1.59
2	AB	1578	U	C2-O2	9.00	1.30	1.22
2	AB	371	A	C6-N1	-8.99	1.29	1.35
2	AB	776	G	N7-C5	8.99	1.44	1.39
2	AB	1160	G	N7-C5	8.99	1.44	1.39
35	BA	4	U	P-O5'	8.99	1.68	1.59
2	AB	1088	A	N3-C4	8.99	1.40	1.34
2	AB	2892	G	C8-N7	8.99	1.36	1.30
2	AB	1269	A	N9-C4	8.99	1.43	1.37
35	BA	1050	G	N3-C4	8.99	1.41	1.35
35	BA	1431	A	N7-C5	8.99	1.44	1.39
2	AB	2334	U	C2'-C1'	-8.99	1.43	1.53
35	BA	1024	G	O3'-P	8.98	1.72	1.61
2	AB	1214	A	N3-C4	8.98	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	104	G	N7-C5	8.98	1.44	1.39
35	BA	561	U	O3'-P	-8.98	1.50	1.61
35	BA	1477	U	N1-C2	8.98	1.46	1.38
35	BA	145	G	C8-N7	8.97	1.36	1.30
35	BA	1327	C	C3'-C2'	8.97	1.62	1.52
2	AB	1451	C	P-O5'	8.97	1.68	1.59
2	AB	2134	A	C2-N3	-8.97	1.25	1.33
35	BA	1184	G	C4'-O4'	-8.97	1.33	1.45
35	BA	1206	G	N1-C2	8.97	1.45	1.37
2	AB	506	G	N7-C5	8.97	1.44	1.39
2	AB	2595	G	C5-C4	-8.97	1.32	1.38
35	BA	658	C	N1-C6	8.97	1.42	1.37
35	BA	665	A	N3-C4	8.97	1.40	1.34
2	AB	902	C	C2-N3	8.97	1.43	1.35
2	AB	1307	A	N3-C4	8.96	1.40	1.34
2	AB	2277	G	C8-N7	-8.96	1.25	1.30
35	BA	1277	C	N1-C6	8.96	1.42	1.37
2	AB	1695	G	C2-N3	8.96	1.40	1.32
2	AB	1287	A	N3-C4	-8.96	1.29	1.34
2	AB	1398	C	N3-C4	8.96	1.40	1.33
35	BA	1455	G	C6-N1	8.96	1.45	1.39
35	BA	641	U	C5-C6	8.96	1.42	1.34
35	BA	1529	G	C5'-C4'	8.96	1.62	1.51
35	BA	265	G	P-O5'	-8.96	1.50	1.59
2	AB	248	G	C6-N1	8.95	1.45	1.39
2	AB	1138	G	C2-N3	8.95	1.40	1.32
2	AB	2567	G	P-O5'	8.96	1.68	1.59
2	AB	183	C	P-O5'	8.95	1.68	1.59
2	AB	591	U	C2-N3	8.95	1.44	1.37
2	AB	1695	G	N3-C4	8.95	1.41	1.35
35	BA	571	U	C2-N3	8.95	1.44	1.37
2	AB	146	A	N3-C4	8.95	1.40	1.34
2	AB	2799	A	C6-N1	-8.95	1.29	1.35
2	AB	2433	A	N3-C4	8.95	1.40	1.34
1	AA	7	G	P-O5'	8.94	1.68	1.59
2	AB	1192	G	C6-N1	8.94	1.45	1.39
35	BA	883	C	C4-C5	8.94	1.50	1.43
35	BA	807	A	N3-C4	8.94	1.40	1.34
2	AB	386	G	C2-N3	8.94	1.40	1.32
2	AB	2194	U	N1-C2	8.94	1.46	1.38
35	BA	808	C	C5'-C4'	8.94	1.62	1.51
2	AB	1971	U	C4-C5	8.94	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2343	U	C4'-C3'	-8.94	1.43	1.53
35	BA	1334	G	N3-C4	8.94	1.41	1.35
2	AB	2119	A	N9-C8	8.93	1.44	1.37
35	BA	289	G	C2-N3	8.93	1.39	1.32
35	BA	408	A	N3-C4	8.93	1.40	1.34
2	AB	1363	C	C5-C6	8.93	1.41	1.34
35	BA	239	U	C2-N3	8.93	1.44	1.37
2	AB	2470	G	N3-C4	8.92	1.41	1.35
2	AB	1799	G	N7-C5	8.92	1.44	1.39
1	AA	17	C	C4-C5	8.92	1.50	1.43
2	AB	951	C	N3-C4	8.91	1.40	1.33
37	BC	74	A	C2-N3	8.91	1.41	1.33
2	AB	623	C	C2'-C1'	8.91	1.63	1.53
35	BA	348	G	O3'-P	8.91	1.71	1.61
35	BA	1423	G	N1-C2	8.91	1.44	1.37
35	BA	1525	G	P-O5'	8.91	1.68	1.59
2	AB	688	U	N3-C4	8.91	1.46	1.38
2	AB	475	C	C5-C6	8.91	1.41	1.34
2	AB	2150	C	P-O5'	8.90	1.68	1.59
35	BA	712	A	O3'-P	8.90	1.71	1.61
35	BA	111	G	N7-C5	-8.90	1.33	1.39
35	BA	1105	A	P-O5'	8.90	1.68	1.59
2	AB	2462	C	C4-C5	8.90	1.50	1.43
2	AB	2690	U	C5'-C4'	8.90	1.62	1.51
2	AB	2212	A	C5-C4	8.90	1.45	1.38
1	AA	106	G	N9-C8	8.89	1.44	1.37
2	AB	640	C	C4-C5	8.89	1.50	1.43
2	AB	2718	G	N7-C5	8.89	1.44	1.39
35	BA	570	G	N1-C2	8.89	1.44	1.37
35	BA	70	U	N3-C4	8.89	1.46	1.38
2	AB	1187	G	N7-C5	-8.89	1.33	1.39
35	BA	1538	C	N1-C6	8.89	1.42	1.37
2	AB	182	A	C5-C6	8.89	1.49	1.41
2	AB	791	C	C4-C5	-8.89	1.35	1.43
35	BA	529	G	N1-C2	8.88	1.44	1.37
35	BA	1460	C	C5'-C4'	8.88	1.62	1.51
35	BA	819	A	N7-C5	8.88	1.44	1.39
2	AB	1473	G	N7-C5	-8.88	1.33	1.39
2	AB	2115	G	N3-C4	8.88	1.41	1.35
35	BA	284	C	C4-C5	8.87	1.50	1.43
2	AB	1792	G	C6-N1	8.87	1.45	1.39
2	AB	2079	U	N1-C2	8.87	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	106	C	C2-N3	8.87	1.42	1.35
35	BA	898	G	C2'-C1'	8.87	1.63	1.53
2	AB	783	A	N9-C4	8.87	1.43	1.37
35	BA	1061	G	C2-N3	8.87	1.39	1.32
2	AB	168	G	N1-C2	8.87	1.44	1.37
35	BA	1140	C	P-O5'	8.86	1.68	1.59
35	BA	1159	U	C4'-C3'	8.86	1.62	1.53
2	AB	363	G	C6-N1	-8.86	1.33	1.39
2	AB	2343	U	C3'-C2'	8.86	1.62	1.52
1	AA	100	G	N7-C5	-8.86	1.33	1.39
2	AB	185	G	N1-C2	8.86	1.44	1.37
2	AB	1751	U	C2-N3	8.86	1.44	1.37
2	AB	1449	G	N1-C2	8.86	1.44	1.37
2	AB	1166	G	N3-C4	8.85	1.41	1.35
2	AB	2707	U	P-O5'	8.85	1.68	1.59
2	AB	2823	A	C4'-O4'	-8.85	1.34	1.45
2	AB	1672	A	P-O5'	8.85	1.68	1.59
35	BA	115	G	N9-C8	8.85	1.44	1.37
35	BA	299	G	C3'-C2'	-8.85	1.43	1.52
35	BA	777	A	N9-C4	8.85	1.43	1.37
35	BA	164	G	N7-C5	8.85	1.44	1.39
2	AB	1535	A	N9-C8	8.84	1.44	1.37
35	BA	985	C	P-O5'	8.84	1.68	1.59
1	AA	74	U	C4-C5	8.84	1.51	1.43
2	AB	45	G	N7-C5	8.84	1.44	1.39
2	AB	2528	U	P-O5'	8.84	1.68	1.59
35	BA	816	A	N3-C4	8.84	1.40	1.34
35	BA	1398	A	C6-N6	-8.84	1.26	1.33
2	AB	2534	A	C8-N7	-8.84	1.25	1.31
2	AB	2835	A	C4'-O4'	-8.84	1.34	1.45
35	BA	77	A	C6-N1	8.84	1.41	1.35
37	BC	42	C	C5-C6	8.84	1.41	1.34
35	BA	439	U	P-O5'	8.83	1.68	1.59
2	AB	1568	G	C6-N1	8.83	1.45	1.39
35	BA	326	G	N9-C8	8.83	1.44	1.37
35	BA	1106	G	N9-C8	-8.83	1.31	1.37
2	AB	1912	A	P-O5'	-8.83	1.50	1.59
35	BA	666	G	N1-C2	8.83	1.44	1.37
35	BA	481	G	C5-C4	8.83	1.44	1.38
35	BA	804	U	C2-N3	8.83	1.44	1.37
2	AB	980	A	N3-C4	8.82	1.40	1.34
35	BA	386	C	N3-C4	8.82	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	384	A	C2-N3	-8.82	1.25	1.33
2	AB	1088	A	C8-N7	-8.82	1.25	1.31
2	AB	1545	A	N3-C4	8.82	1.40	1.34
2	AB	1601	G	N9-C8	-8.82	1.31	1.37
2	AB	539	G	C3'-C2'	8.82	1.62	1.52
36	BB	29	G	C5'-C4'	8.82	1.61	1.51
2	AB	1840	G	C6-N1	8.81	1.45	1.39
2	AB	1157	G	N7-C5	8.81	1.44	1.39
2	AB	55	G	P-O5'	8.81	1.68	1.59
2	AB	219	A	N3-C4	8.81	1.40	1.34
35	BA	1300	G	C3'-C2'	8.81	1.62	1.52
35	BA	1459	G	C8-N7	8.81	1.36	1.30
35	BA	747	A	P-O5'	-8.81	1.50	1.59
35	BA	1056	U	C2-N3	8.81	1.44	1.37
2	AB	2048	G	N3-C4	8.80	1.41	1.35
35	BA	273	U	P-O5'	8.80	1.68	1.59
35	BA	696	A	C6-N6	-8.80	1.26	1.33
35	BA	996	A	C6-N6	8.80	1.41	1.33
1	AA	4	C	N3-C4	8.80	1.40	1.33
35	BA	953	G	C2-N3	8.80	1.39	1.32
35	BA	20	U	O3'-P	-8.80	1.50	1.61
35	BA	431	A	C6-N1	-8.80	1.29	1.35
35	BA	1454	G	N3-C4	8.80	1.41	1.35
2	AB	1813	G	N7-C5	8.79	1.44	1.39
2	AB	1819	A	C6-N1	-8.79	1.29	1.35
2	AB	30	G	C5'-C4'	8.79	1.61	1.51
2	AB	869	G	N7-C5	8.79	1.44	1.39
35	BA	867	G	C2-N3	8.79	1.39	1.32
2	AB	2144	G	N9-C8	8.79	1.44	1.37
35	BA	874	G	C8-N7	8.79	1.36	1.30
35	BA	488	C	O3'-P	8.78	1.71	1.61
2	AB	1108	U	C4-O4	8.78	1.30	1.23
2	AB	343	C	C4'-O4'	-8.78	1.34	1.45
2	AB	216	A	N7-C5	8.78	1.44	1.39
2	AB	2378	A	C5-C4	8.78	1.44	1.38
2	AB	1385	A	N7-C5	8.77	1.44	1.39
2	AB	851	C	N3-C4	-8.77	1.27	1.33
2	AB	2392	A	N9-C4	8.77	1.43	1.37
35	BA	1199	U	N1-C2	8.77	1.46	1.38
35	BA	1154	G	C5'-C4'	8.77	1.61	1.51
2	AB	304	U	C5'-C4'	8.76	1.61	1.51
2	AB	1559	U	C2-N3	8.76	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2267	A	O3'-P	-8.76	1.50	1.61
2	AB	918	A	N7-C5	8.76	1.44	1.39
2	AB	2542	A	N7-C5	-8.76	1.33	1.39
35	BA	1333	A	C5'-C4'	8.76	1.61	1.51
2	AB	1541	C	P-O5'	8.75	1.68	1.59
35	BA	401	C	C4-C5	8.75	1.50	1.43
2	AB	9	G	C6-N1	8.75	1.45	1.39
2	AB	1086	A	N9-C8	-8.75	1.30	1.37
2	AB	2759	G	N9-C8	-8.75	1.31	1.37
35	BA	395	C	C3'-C2'	8.75	1.62	1.52
35	BA	1480	A	C6-N6	8.75	1.41	1.33
1	AA	75	G	N9-C8	8.74	1.44	1.37
36	BB	33	A	N3-C4	8.74	1.40	1.34
2	AB	2802	G	C6-N1	8.74	1.45	1.39
2	AB	1115	G	C2-N3	8.74	1.39	1.32
35	BA	1041	G	N1-C2	8.73	1.44	1.37
2	AB	840	C	C2-N3	8.73	1.42	1.35
35	BA	1119	C	N3-C4	8.73	1.40	1.33
35	BA	579	A	N3-C4	8.73	1.40	1.34
35	BA	899	C	N1-C2	-8.73	1.31	1.40
35	BA	66	A	N9-C4	8.73	1.43	1.37
35	BA	403	C	N1-C6	8.73	1.42	1.37
35	BA	1349	A	P-O5'	8.73	1.68	1.59
35	BA	1218	C	P-O5'	8.73	1.68	1.59
2	AB	101	A	C5-C4	-8.72	1.32	1.38
2	AB	1024	G	N9-C8	-8.72	1.31	1.37
2	AB	1738	G	N7-C5	-8.72	1.34	1.39
35	BA	11	G	C3'-C2'	8.72	1.62	1.52
1	AA	117	G	N3-C4	8.72	1.41	1.35
2	AB	1589	U	O3'-P	8.72	1.71	1.61
2	AB	49	A	P-O5'	8.72	1.68	1.59
1	AA	69	G	N9-C8	8.72	1.44	1.37
2	AB	754	U	C2-N3	8.72	1.43	1.37
1	AA	10	G	C5-C4	8.71	1.44	1.38
2	AB	64	A	N7-C5	-8.71	1.34	1.39
35	BA	302	G	P-O5'	8.71	1.68	1.59
35	BA	1513	A	N9-C4	-8.71	1.32	1.37
2	AB	605	G	N7-C5	-8.71	1.34	1.39
2	AB	1209	U	C5'-C4'	8.71	1.61	1.51
2	AB	2608	G	C6-N1	8.71	1.45	1.39
2	AB	1224	U	C4'-C3'	8.70	1.62	1.53
2	AB	1914	C	N1-C6	8.70	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2093	G	P-O5'	-8.70	1.51	1.59
37	BC	66	C	P-O5'	8.70	1.68	1.59
2	AB	1245	G	N1-C2	8.70	1.44	1.37
35	BA	432	A	N7-C5	8.70	1.44	1.39
36	BB	43	U	C2-O2	8.70	1.30	1.22
2	AB	1395	A	C8-N7	8.69	1.37	1.31
35	BA	255	G	C4'-O4'	-8.69	1.34	1.45
35	BA	685	G	C2'-O2'	8.69	1.52	1.41
2	AB	204	A	P-O5'	8.69	1.68	1.59
1	AA	99	A	N3-C4	8.69	1.40	1.34
2	AB	1262	A	N7-C5	8.69	1.44	1.39
36	BB	54	U	O3'-P	8.69	1.71	1.61
2	AB	617	G	N9-C8	-8.68	1.31	1.37
2	AB	1695	G	N1-C2	8.68	1.44	1.37
2	AB	1856	U	C4'-O4'	-8.68	1.34	1.45
2	AB	231	A	N3-C4	8.68	1.40	1.34
2	AB	2591	C	C4-C5	8.68	1.49	1.43
35	BA	158	G	P-O5'	8.68	1.68	1.59
35	BA	455	G	N3-C4	8.68	1.41	1.35
35	BA	540	G	C2-N3	8.68	1.39	1.32
2	AB	972	A	C4'-O4'	-8.68	1.34	1.45
1	AA	93	C	C4-C5	8.67	1.49	1.43
2	AB	2763	G	N3-C4	8.67	1.41	1.35
35	BA	703	G	N3-C4	8.67	1.41	1.35
35	BA	913	A	C6-N6	8.67	1.40	1.33
35	BA	1082	A	N7-C5	8.67	1.44	1.39
2	AB	155	A	C4'-O4'	-8.67	1.34	1.45
35	BA	337	G	P-O5'	8.67	1.68	1.59
35	BA	543	U	C2-N3	8.67	1.43	1.37
2	AB	246	C	C4-C5	8.67	1.49	1.43
35	BA	1357	A	N3-C4	8.67	1.40	1.34
35	BA	1104	G	N9-C8	8.66	1.44	1.37
35	BA	1129	C	C2-O2	-8.66	1.16	1.24
2	AB	508	A	P-O5'	8.66	1.68	1.59
35	BA	1514	G	C2-N3	8.66	1.39	1.32
35	BA	356	A	C5-C6	8.66	1.48	1.41
35	BA	501	C	N3-C4	8.66	1.40	1.33
2	AB	69	C	P-O5'	8.65	1.68	1.59
2	AB	122	G	N7-C5	-8.65	1.34	1.39
2	AB	463	G	C6-N1	8.65	1.45	1.39
35	BA	371	A	C8-N7	-8.65	1.25	1.31
2	AB	1958	C	P-O5'	8.65	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1077	A	N3-C4	8.65	1.40	1.34
2	AB	515	A	N7-C5	8.64	1.44	1.39
35	BA	1311	A	N7-C5	-8.64	1.34	1.39
37	BC	14	A	N3-C4	8.64	1.40	1.34
2	AB	1400	U	C4-C5	8.64	1.51	1.43
2	AB	1791	A	C6-N1	-8.64	1.29	1.35
35	BA	20	U	C2-N3	8.64	1.43	1.37
2	AB	1387	A	N9-C4	8.64	1.43	1.37
2	AB	1428	C	C5-C6	8.64	1.41	1.34
35	BA	163	C	P-O5'	8.64	1.68	1.59
35	BA	1118	U	N1-C6	8.64	1.45	1.38
2	AB	1085	A	P-O5'	8.63	1.68	1.59
35	BA	1008	U	O3'-P	8.63	1.71	1.61
2	AB	932	U	N1-C2	8.63	1.46	1.38
35	BA	325	A	C8-N7	-8.63	1.25	1.31
2	AB	1867	G	C5-C4	8.63	1.44	1.38
35	BA	1496	C	N1-C6	8.63	1.42	1.37
2	AB	2375	G	O3'-P	8.62	1.71	1.61
2	AB	724	U	C4-O4	-8.62	1.16	1.23
2	AB	835	C	N1-C6	8.62	1.42	1.37
2	AB	350	G	N1-C2	8.62	1.44	1.37
35	BA	1215	G	C5'-C4'	8.62	1.61	1.51
35	BA	39	G	C4'-O4'	-8.62	1.34	1.45
2	AB	1436	G	C2-N3	8.61	1.39	1.32
2	AB	615	U	C2-N3	8.61	1.43	1.37
2	AB	617	G	N7-C5	-8.61	1.34	1.39
2	AB	2174	C	N1-C6	8.61	1.42	1.37
35	BA	55	A	N9-C4	8.61	1.43	1.37
35	BA	100	G	P-O5'	8.61	1.68	1.59
2	AB	1413	A	C5-C4	8.61	1.44	1.38
2	AB	2223	G	N3-C4	8.61	1.41	1.35
37	BC	43	G	N3-C4	8.61	1.41	1.35
2	AB	886	A	C6-N1	8.60	1.41	1.35
2	AB	1303	G	N7-C5	8.60	1.44	1.39
1	AA	60	C	N1-C6	8.60	1.42	1.37
2	AB	1426	G	N9-C8	8.60	1.43	1.37
2	AB	1953	A	N9-C8	-8.60	1.30	1.37
2	AB	2722	G	C6-N1	8.60	1.45	1.39
2	AB	1587	G	C2-N3	8.60	1.39	1.32
35	BA	233	C	N1-C6	8.60	1.42	1.37
35	BA	925	G	C8-N7	-8.60	1.25	1.30
2	AB	553	G	C2-N3	8.59	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	374	A	C4'-C3'	-8.59	1.43	1.53
35	BA	569	C	C2-N3	8.59	1.42	1.35
35	BA	697	U	P-O5'	8.59	1.68	1.59
35	BA	1027	C	C4-C5	8.59	1.49	1.43
2	AB	2389	G	N1-C2	8.59	1.44	1.37
35	BA	759	A	N3-C4	8.59	1.40	1.34
2	AB	874	G	C2-N3	8.58	1.39	1.32
2	AB	1108	U	C4'-O4'	-8.58	1.34	1.45
2	AB	686	U	N1-C2	8.58	1.46	1.38
2	AB	765	C	N3-C4	8.58	1.40	1.33
2	AB	2147	A	C5'-C4'	8.58	1.61	1.51
35	BA	473	U	P-O5'	8.58	1.68	1.59
35	BA	1520	C	C2-N3	8.57	1.42	1.35
2	AB	1628	G	C6-N1	8.57	1.45	1.39
35	BA	1400	C	C2-N3	8.57	1.42	1.35
2	AB	1097	U	P-O5'	8.57	1.68	1.59
35	BA	1153	G	N7-C5	8.57	1.44	1.39
2	AB	1082	U	P-O5'	8.57	1.68	1.59
2	AB	1545	A	P-O5'	8.56	1.68	1.59
2	AB	1002	G	N9-C8	8.56	1.43	1.37
35	BA	218	U	N1-C6	8.56	1.45	1.38
35	BA	343	U	C5'-C4'	8.56	1.61	1.51
35	BA	1302	C	N3-C4	8.56	1.40	1.33
2	AB	1336	A	C4'-C3'	8.56	1.62	1.53
2	AB	2211	A	N3-C4	8.56	1.40	1.34
2	AB	2410	G	C8-N7	-8.56	1.25	1.30
2	AB	868	U	N1-C2	8.55	1.46	1.38
35	BA	205	A	P-O5'	8.55	1.68	1.59
2	AB	1914	C	C4'-O4'	-8.55	1.34	1.45
2	AB	664	G	O3'-P	8.55	1.71	1.61
2	AB	958	U	C2-N3	8.55	1.43	1.37
35	BA	1210	C	P-O5'	8.55	1.68	1.59
2	AB	1655	A	C6-N1	8.55	1.41	1.35
2	AB	2311	A	C6-N6	-8.55	1.27	1.33
2	AB	2836	U	C5'-C4'	8.55	1.61	1.51
35	BA	384	G	C2-N3	8.55	1.39	1.32
2	AB	742	A	N7-C5	8.54	1.44	1.39
2	AB	2186	G	C2-N3	8.54	1.39	1.32
35	BA	128	G	N1-C2	8.54	1.44	1.37
35	BA	552	U	C2-N3	8.54	1.43	1.37
2	AB	529	A	N7-C5	8.54	1.44	1.39
35	BA	1394	A	C8-N7	-8.54	1.25	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2816	G	C2-N3	8.54	1.39	1.32
35	BA	379	C	C4-C5	8.54	1.49	1.43
37	BC	40	C	N1-C6	-8.54	1.32	1.37
2	AB	1165	A	C5-C4	-8.53	1.32	1.38
2	AB	1744	A	C4'-O4'	-8.53	1.34	1.45
2	AB	1892	C	N1-C6	-8.53	1.32	1.37
2	AB	1898	U	C2-N3	8.53	1.43	1.37
2	AB	1945	G	N1-C2	8.53	1.44	1.37
2	AB	2082	A	P-O5'	8.53	1.68	1.59
2	AB	2538	C	N1-C6	8.53	1.42	1.37
35	BA	614	C	P-O5'	8.53	1.68	1.59
2	AB	122	G	N9-C8	8.52	1.43	1.37
2	AB	1784	A	N3-C4	8.52	1.40	1.34
2	AB	934	U	P-O5'	8.52	1.68	1.59
2	AB	2753	A	C4'-O4'	-8.52	1.34	1.45
2	AB	1139	G	C5-C4	8.52	1.44	1.38
2	AB	395	U	P-O5'	8.52	1.68	1.59
2	AB	2319	G	C2-N3	8.52	1.39	1.32
35	BA	977	A	N9-C4	8.52	1.43	1.37
35	BA	8	A	N7-C5	-8.51	1.34	1.39
36	BB	25	U	N1-C2	8.51	1.46	1.38
2	AB	570	G	C6-N1	8.51	1.45	1.39
2	AB	1237	A	C4'-O4'	-8.51	1.34	1.45
2	AB	1545	A	C5-C4	-8.51	1.32	1.38
2	AB	889	C	N1-C6	8.51	1.42	1.37
2	AB	1676	A	P-O5'	8.51	1.68	1.59
1	AA	53	A	N9-C8	8.51	1.44	1.37
2	AB	1027	A	N7-C5	8.50	1.44	1.39
2	AB	2189	U	O3'-P	8.50	1.71	1.61
2	AB	1672	A	N7-C5	8.50	1.44	1.39
35	BA	51	A	N9-C8	8.50	1.44	1.37
35	BA	400	C	C2-N3	8.50	1.42	1.35
37	BC	66	C	N3-C4	8.50	1.39	1.33
2	AB	644	A	P-O5'	8.50	1.68	1.59
2	AB	750	A	N9-C4	8.50	1.43	1.37
35	BA	1309	G	P-O5'	8.49	1.68	1.59
2	AB	874	G	N1-C2	8.49	1.44	1.37
2	AB	2424	C	C2'-C1'	8.49	1.62	1.53
2	AB	693	A	C2'-C1'	-8.49	1.44	1.53
2	AB	1281	G	P-O5'	8.48	1.68	1.59
35	BA	202	G	N3-C4	8.48	1.41	1.35
2	AB	1813	G	C4'-O4'	-8.48	1.34	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1017	G	C8-N7	8.48	1.36	1.30
2	AB	2712	C	N1-C6	8.48	1.42	1.37
2	AB	1886	U	C3'-C2'	8.48	1.62	1.52
35	BA	1144	G	N9-C8	-8.48	1.31	1.37
35	BA	1187	G	C5'-C4'	8.48	1.61	1.51
2	AB	2193	G	P-O5'	8.47	1.68	1.59
2	AB	533	G	C6-N1	8.47	1.45	1.39
2	AB	1521	G	C2-N3	8.47	1.39	1.32
2	AB	1603	A	N3-C4	8.47	1.40	1.34
35	BA	624	C	N3-C4	8.47	1.39	1.33
35	BA	766	A	N7-C5	-8.47	1.34	1.39
1	AA	61	G	P-O5'	8.47	1.68	1.59
2	AB	204	A	N7-C5	-8.47	1.34	1.39
2	AB	333	G	C8-N7	8.47	1.36	1.30
2	AB	467	G	N3-C4	8.47	1.41	1.35
2	AB	1017	G	N9-C8	8.47	1.43	1.37
35	BA	1160	G	N7-C5	-8.47	1.34	1.39
2	AB	2650	U	C2-N3	8.47	1.43	1.37
2	AB	292	U	C2-O2	8.47	1.29	1.22
2	AB	551	G	N3-C4	8.47	1.41	1.35
2	AB	719	C	C5-C6	8.46	1.41	1.34
2	AB	2458	G	C5'-C4'	8.46	1.61	1.51
35	BA	1100	C	C2-N3	8.46	1.42	1.35
35	BA	1462	C	C2-N3	8.46	1.42	1.35
2	AB	363	G	C2-N3	8.46	1.39	1.32
35	BA	138	G	C4'-O4'	-8.46	1.34	1.45
35	BA	1432	G	N1-C2	8.46	1.44	1.37
2	AB	1027	A	C5'-C4'	8.46	1.61	1.51
2	AB	1586	A	C5'-C4'	8.46	1.61	1.51
2	AB	212	G	C5-C4	8.46	1.44	1.38
2	AB	1490	A	P-O5'	8.46	1.68	1.59
2	AB	1765	U	C2-O2	8.46	1.29	1.22
2	AB	1891	G	N3-C4	8.45	1.41	1.35
2	AB	1904	G	N9-C8	-8.46	1.31	1.37
2	AB	2589	A	N3-C4	8.46	1.40	1.34
2	AB	138	U	C2-N3	8.45	1.43	1.37
2	AB	2568	U	C5'-C4'	8.45	1.61	1.51
2	AB	142	A	N3-C4	8.45	1.40	1.34
2	AB	1674	G	C2-N3	8.45	1.39	1.32
2	AB	2157	G	C5'-C4'	8.45	1.61	1.51
2	AB	2781	A	C5-C4	-8.45	1.32	1.38
2	AB	1967	C	P-O5'	8.45	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	761	G	N1-C2	8.44	1.44	1.37
2	AB	936	A	P-O5'	8.44	1.68	1.59
2	AB	2448	A	P-O5'	8.44	1.68	1.59
35	BA	751	U	C5-C6	8.44	1.41	1.34
35	BA	956	U	C2-O2	8.44	1.29	1.22
35	BA	1287	A	N3-C4	8.44	1.40	1.34
2	AB	599	A	C5'-C4'	8.44	1.61	1.51
2	AB	981	A	P-O5'	8.44	1.68	1.59
35	BA	22	G	C5-C4	8.44	1.44	1.38
2	AB	333	G	N3-C4	8.44	1.41	1.35
2	AB	2688	G	P-O5'	8.44	1.68	1.59
35	BA	1540	U	C5'-C4'	8.44	1.61	1.51
2	AB	1805	A	N3-C4	8.43	1.40	1.34
2	AB	2051	A	P-O5'	8.43	1.68	1.59
2	AB	2400	G	P-O5'	8.43	1.68	1.59
2	AB	2369	A	N3-C4	8.43	1.40	1.34
2	AB	2127	G	C6-N1	8.43	1.45	1.39
2	AB	2312	U	P-O5'	8.43	1.68	1.59
35	BA	169	C	P-O5'	-8.43	1.51	1.59
1	AA	45	A	C5-C4	-8.42	1.32	1.38
35	BA	216	U	N1-C2	8.42	1.46	1.38
2	AB	2104	C	C4-C5	8.42	1.49	1.43
35	BA	649	A	C4'-O4'	-8.42	1.34	1.45
2	AB	1422	G	C4'-O4'	-8.42	1.34	1.45
2	AB	2092	U	N1-C2	8.42	1.46	1.38
35	BA	985	C	N1-C6	8.42	1.42	1.37
2	AB	100	U	N3-C4	-8.42	1.30	1.38
2	AB	284	U	C5'-C4'	8.42	1.61	1.51
2	AB	2631	G	C4'-O4'	-8.42	1.34	1.45
35	BA	390	U	C2-N3	8.42	1.43	1.37
2	AB	2721	A	N3-C4	8.42	1.39	1.34
35	BA	872	A	N3-C4	8.42	1.40	1.34
35	BA	885	G	N9-C4	-8.42	1.31	1.38
2	AB	48	G	N9-C8	-8.41	1.31	1.37
2	AB	1242	U	C2-N3	-8.41	1.31	1.37
2	AB	381	G	C2-N3	8.41	1.39	1.32
2	AB	1400	U	C2-N3	8.41	1.43	1.37
2	AB	2355	G	C8-N7	-8.41	1.25	1.30
35	BA	713	G	P-O5'	8.41	1.68	1.59
2	AB	2015	A	C8-N7	-8.41	1.25	1.31
2	AB	2765	A	N3-C4	8.41	1.39	1.34
35	BA	164	G	P-O5'	8.41	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	843	G	N7-C5	8.41	1.44	1.39
35	BA	627	G	N3-C4	8.41	1.41	1.35
35	BA	1274	A	N7-C5	-8.41	1.34	1.39
2	AB	1936	A	N7-C5	-8.41	1.34	1.39
35	BA	1399	C	C5-C6	8.41	1.41	1.34
2	AB	646	U	C5'-C4'	8.40	1.61	1.51
35	BA	383	A	N9-C4	8.40	1.42	1.37
2	AB	1652	A	N3-C4	8.40	1.39	1.34
2	AB	2098	U	C5'-C4'	8.40	1.61	1.51
2	AB	1	G	C2-N3	8.40	1.39	1.32
2	AB	286	U	O3'-P	8.40	1.71	1.61
2	AB	661	A	N3-C4	8.40	1.39	1.34
2	AB	2586	U	O3'-P	8.40	1.71	1.61
2	AB	2868	A	C4'-C3'	8.40	1.62	1.53
35	BA	1060	U	C5'-C4'	8.40	1.61	1.51
2	AB	484	C	O3'-P	8.39	1.71	1.61
35	BA	83	C	N1-C6	8.39	1.42	1.37
35	BA	1530	G	N3-C4	8.39	1.41	1.35
2	AB	2648	G	C4'-O4'	-8.39	1.34	1.45
2	AB	48	G	N7-C5	-8.39	1.34	1.39
2	AB	926	G	C5'-C4'	8.39	1.61	1.51
2	AB	519	U	C4-C5	8.38	1.51	1.43
2	AB	1501	G	N3-C4	-8.39	1.29	1.35
2	AB	2186	G	N7-C5	8.38	1.44	1.39
35	BA	132	C	N1-C6	8.39	1.42	1.37
2	AB	2654	A	P-O5'	8.38	1.68	1.59
2	AB	1325	U	O3'-P	8.38	1.71	1.61
2	AB	1381	G	P-O5'	8.38	1.68	1.59
35	BA	1342	C	C4-C5	8.38	1.49	1.43
35	BA	1485	U	P-O5'	8.38	1.68	1.59
35	BA	329	A	C5'-C4'	8.38	1.61	1.51
2	AB	442	G	N3-C4	8.38	1.41	1.35
2	AB	1525	A	N9-C8	8.38	1.44	1.37
35	BA	777	A	P-O5'	8.38	1.68	1.59
2	AB	792	A	O3'-P	8.38	1.71	1.61
2	AB	2731	G	C2-N3	8.38	1.39	1.32
35	BA	428	G	C5-C6	8.38	1.50	1.42
1	AA	25	U	C3'-C2'	-8.37	1.43	1.52
2	AB	385	C	C5-C6	8.37	1.41	1.34
2	AB	2692	G	N3-C4	-8.37	1.29	1.35
35	BA	102	G	C2-N3	8.37	1.39	1.32
35	BA	1487	G	C5-C6	8.37	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	671	G	P-O5'	8.37	1.68	1.59
35	BA	40	C	P-O5'	-8.37	1.51	1.59
35	BA	640	A	N3-C4	8.37	1.39	1.34
35	BA	1302	C	N1-C6	8.37	1.42	1.37
35	BA	651	C	P-O5'	8.37	1.68	1.59
35	BA	1496	C	P-O5'	8.37	1.68	1.59
2	AB	513	A	P-O5'	8.36	1.68	1.59
2	AB	535	G	N9-C8	8.37	1.43	1.37
35	BA	408	A	N7-C5	8.37	1.44	1.39
2	AB	2327	A	N9-C4	8.36	1.42	1.37
35	BA	1375	A	N9-C4	8.36	1.42	1.37
2	AB	185	G	C8-N7	-8.36	1.25	1.30
2	AB	360	U	C5'-C4'	8.36	1.61	1.51
2	AB	592	A	C2'-C1'	8.36	1.62	1.53
2	AB	981	A	N9-C8	8.36	1.44	1.37
2	AB	1084	A	C5'-C4'	8.36	1.61	1.51
2	AB	1675	C	N1-C6	8.36	1.42	1.37
2	AB	1907	G	C5-C4	-8.36	1.32	1.38
2	AB	2579	C	C4-C5	8.36	1.49	1.43
35	BA	189	A	N3-C4	8.36	1.39	1.34
35	BA	900	A	P-O5'	8.36	1.68	1.59
2	AB	1577	C	C4-C5	8.36	1.49	1.43
2	AB	119	A	N3-C4	8.36	1.39	1.34
35	BA	874	G	N9-C4	8.36	1.44	1.38
2	AB	911	A	C5-C4	8.35	1.44	1.38
2	AB	558	U	O3'-P	8.35	1.71	1.61
2	AB	2400	G	C6-N1	8.35	1.45	1.39
2	AB	2484	G	C6-N1	-8.35	1.33	1.39
1	AA	20	G	C4'-O4'	-8.35	1.34	1.45
2	AB	1769	U	N3-C4	8.35	1.46	1.38
2	AB	2383	G	C2-N3	8.35	1.39	1.32
2	AB	2513	A	N7-C5	8.35	1.44	1.39
2	AB	119	A	P-O5'	8.35	1.68	1.59
2	AB	2162	G	N7-C5	8.35	1.44	1.39
35	BA	401	C	N1-C6	-8.35	1.32	1.37
2	AB	313	G	C8-N7	-8.34	1.25	1.30
2	AB	2228	G	N9-C4	8.34	1.44	1.38
35	BA	1261	A	P-O5'	8.34	1.68	1.59
35	BA	50	A	N9-C4	8.34	1.42	1.37
2	AB	286	U	C2'-C1'	8.34	1.62	1.53
2	AB	1543	G	N7-C5	-8.34	1.34	1.39
2	AB	2008	C	N1-C6	-8.34	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1507	A	C6-N1	8.34	1.41	1.35
2	AB	1476	U	C2-N3	8.34	1.43	1.37
2	AB	2541	A	N3-C4	8.34	1.39	1.34
35	BA	1018	G	N7-C5	-8.34	1.34	1.39
2	AB	583	G	O3'-P	-8.33	1.51	1.61
35	BA	393	A	C5-C4	8.33	1.44	1.38
35	BA	791	G	N3-C4	8.33	1.41	1.35
2	AB	123	G	C6-N1	-8.33	1.33	1.39
2	AB	700	G	P-O5'	8.33	1.68	1.59
2	AB	721	A	C8-N7	-8.33	1.25	1.31
35	BA	108	G	C4'-O4'	-8.33	1.34	1.45
2	AB	1793	C	C4-C5	8.32	1.49	1.43
2	AB	2571	U	C4-C5	8.32	1.51	1.43
2	AB	2705	A	N7-C5	-8.32	1.34	1.39
2	AB	39	G	O3'-P	8.32	1.71	1.61
2	AB	1211	C	C4-N4	8.32	1.41	1.33
2	AB	1552	A	N7-C5	-8.32	1.34	1.39
2	AB	424	G	C2-N3	8.32	1.39	1.32
35	BA	1488	G	C3'-C2'	8.32	1.62	1.52
2	AB	2900	A	N9-C8	-8.31	1.31	1.37
35	BA	1107	C	N3-C4	8.31	1.39	1.33
35	BA	1332	A	C8-N7	-8.31	1.25	1.31
2	AB	124	G	C4'-O4'	-8.31	1.34	1.45
2	AB	464	U	C2-N3	8.31	1.43	1.37
2	AB	1237	A	C5-C6	-8.31	1.33	1.41
2	AB	1318	U	P-O5'	8.31	1.68	1.59
2	AB	2299	U	P-O5'	8.31	1.68	1.59
35	BA	1034	G	C6-N1	-8.31	1.33	1.39
2	AB	621	A	C5-C4	-8.30	1.32	1.38
2	AB	1620	G	N9-C4	8.30	1.44	1.38
2	AB	2599	G	C8-N7	8.30	1.35	1.30
2	AB	301	G	C8-N7	-8.30	1.25	1.30
2	AB	1506	U	C2-N3	8.30	1.43	1.37
2	AB	727	A	P-O5'	8.30	1.68	1.59
2	AB	245	G	N7-C5	-8.30	1.34	1.39
2	AB	1046	A	O3'-P	8.30	1.71	1.61
2	AB	1668	A	C5'-C4'	8.30	1.61	1.51
1	AA	89	U	P-O5'	8.29	1.68	1.59
2	AB	629	G	C8-N7	-8.29	1.25	1.30
2	AB	781	A	N7-C5	8.29	1.44	1.39
2	AB	875	G	C4'-O4'	-8.29	1.34	1.45
2	AB	245	G	C5-C4	-8.29	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	16	G	N3-C4	8.29	1.41	1.35
2	AB	67	U	P-O5'	8.29	1.68	1.59
2	AB	1097	U	C2-N3	8.29	1.43	1.37
2	AB	1224	U	N1-C2	8.29	1.46	1.38
2	AB	682	G	C6-O6	-8.29	1.16	1.24
2	AB	1639	C	O3'-P	8.29	1.71	1.61
35	BA	322	C	N1-C6	8.29	1.42	1.37
2	AB	984	A	O3'-P	8.28	1.71	1.61
2	AB	320	A	N3-C4	8.28	1.39	1.34
2	AB	1504	A	N3-C4	8.28	1.39	1.34
2	AB	1952	A	C2'-C1'	-8.28	1.44	1.53
2	AB	2724	U	C2-N3	-8.28	1.31	1.37
35	BA	260	G	C8-N7	8.28	1.35	1.30
35	BA	118	U	N3-C4	-8.28	1.31	1.38
35	BA	382	A	C5'-C4'	8.28	1.61	1.51
35	BA	400	C	C5-C6	8.28	1.41	1.34
2	AB	1395	A	N7-C5	-8.27	1.34	1.39
2	AB	1494	A	N7-C5	8.27	1.44	1.39
2	AB	1772	A	C6-N6	8.27	1.40	1.33
2	AB	2250	G	N3-C4	-8.27	1.29	1.35
2	AB	2358	A	C4'-O4'	-8.27	1.34	1.45
2	AB	2697	G	C4'-O4'	-8.27	1.34	1.45
2	AB	2877	G	P-O5'	8.27	1.68	1.59
2	AB	969	G	C8-N7	-8.27	1.25	1.30
35	BA	900	A	C6-N6	8.27	1.40	1.33
2	AB	1644	C	N3-C4	8.27	1.39	1.33
2	AB	637	A	N3-C4	8.27	1.39	1.34
2	AB	2722	G	O3'-P	8.27	1.71	1.61
37	BC	48	U	C5-C6	8.27	1.41	1.34
2	AB	553	G	N1-C2	8.26	1.44	1.37
2	AB	789	A	C5'-C4'	8.26	1.61	1.51
2	AB	1239	G	N9-C4	8.26	1.44	1.38
35	BA	984	C	C4-C5	8.26	1.49	1.43
2	AB	648	G	C2-N3	8.26	1.39	1.32
2	AB	849	A	C2'-C1'	-8.26	1.44	1.53
2	AB	1171	G	N7-C5	-8.26	1.34	1.39
2	AB	387	U	C2'-O2'	8.26	1.52	1.41
35	BA	23	C	N1-C6	8.26	1.42	1.37
1	AA	21	G	C6-N1	8.26	1.45	1.39
2	AB	149	A	N3-C4	8.26	1.39	1.34
2	AB	1954	G	C2-N3	8.26	1.39	1.32
2	AB	2393	U	N3-C4	8.26	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1439	A	N3-C4	8.26	1.39	1.34
2	AB	2100	G	N9-C4	8.26	1.44	1.38
2	AB	223	A	C6-N1	8.25	1.41	1.35
2	AB	759	G	N1-C2	8.25	1.44	1.37
2	AB	915	C	P-O5'	8.25	1.68	1.59
2	AB	1784	A	P-O5'	8.25	1.68	1.59
2	AB	409	G	N1-C2	8.25	1.44	1.37
2	AB	1203	U	C5'-C4'	8.25	1.61	1.51
2	AB	572	A	N3-C4	8.25	1.39	1.34
2	AB	1293	C	C4-C5	8.25	1.49	1.43
2	AB	2778	A	C5'-C4'	8.25	1.61	1.51
35	BA	743	A	N3-C4	8.25	1.39	1.34
2	AB	1963	U	P-O5'	8.25	1.68	1.59
2	AB	2083	G	N3-C4	8.25	1.41	1.35
2	AB	2506	U	N1-C2	8.25	1.46	1.38
2	AB	170	U	O3'-P	8.24	1.71	1.61
2	AB	2139	U	P-O5'	8.24	1.68	1.59
35	BA	819	A	N9-C8	-8.24	1.31	1.37
35	BA	1082	A	C6-N6	8.24	1.40	1.33
35	BA	1513	A	N3-C4	8.24	1.39	1.34
2	AB	2072	C	N3-C4	8.24	1.39	1.33
2	AB	2033	A	N3-C4	8.24	1.39	1.34
35	BA	17	U	N3-C4	8.24	1.45	1.38
2	AB	1150	C	N1-C6	8.24	1.42	1.37
2	AB	2088	A	N3-C4	8.24	1.39	1.34
35	BA	1422	G	N9-C4	8.24	1.44	1.38
2	AB	2818	U	P-O5'	8.24	1.68	1.59
2	AB	265	A	P-O5'	8.23	1.68	1.59
2	AB	513	A	N9-C4	8.23	1.42	1.37
2	AB	1521	G	N1-C2	8.23	1.44	1.37
35	BA	695	A	N7-C5	-8.23	1.34	1.39
35	BA	71	A	P-O5'	8.23	1.68	1.59
35	BA	409	U	C2-N3	8.23	1.43	1.37
35	BA	533	A	N7-C5	-8.23	1.34	1.39
35	BA	821	G	N3-C4	8.23	1.41	1.35
2	AB	1271	G	C2-N3	8.23	1.39	1.32
35	BA	219	U	C2-N3	8.23	1.43	1.37
35	BA	617	G	N7-C5	8.23	1.44	1.39
2	AB	680	C	P-O5'	8.23	1.68	1.59
2	AB	2057	G	N7-C5	-8.23	1.34	1.39
2	AB	2241	A	N7-C5	-8.23	1.34	1.39
35	BA	1354	U	C4-O4	-8.23	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	658	U	P-O5'	8.22	1.68	1.59
2	AB	1299	G	N7-C5	-8.22	1.34	1.39
2	AB	2325	G	C5-C4	8.22	1.44	1.38
36	BB	26	U	C5-C6	8.22	1.41	1.34
35	BA	405	U	C2-N3	8.22	1.43	1.37
2	AB	2000	C	P-O5'	8.22	1.68	1.59
35	BA	1213	A	N9-C4	-8.22	1.32	1.37
36	BB	34	U	N3-C4	8.22	1.45	1.38
2	AB	117	G	N1-C2	8.21	1.44	1.37
2	AB	392	U	N1-C2	8.22	1.46	1.38
2	AB	1262	A	P-O5'	8.22	1.68	1.59
35	BA	510	A	N9-C4	8.22	1.42	1.37
2	AB	812	C	N3-C4	8.21	1.39	1.33
35	BA	723	U	C2-N3	8.21	1.43	1.37
35	BA	306	A	P-O5'	8.21	1.68	1.59
2	AB	1389	G	C2-N3	8.21	1.39	1.32
2	AB	1931	U	P-O5'	8.21	1.68	1.59
2	AB	2737	G	C6-N1	8.21	1.45	1.39
35	BA	947	G	C8-N7	8.21	1.35	1.30
35	BA	1338	G	C3'-C2'	-8.21	1.43	1.52
36	BB	35	G	N1-C2	8.21	1.44	1.37
2	AB	1746	A	N3-C4	8.21	1.39	1.34
2	AB	133	U	C2-N3	8.20	1.43	1.37
2	AB	873	C	O3'-P	8.20	1.71	1.61
2	AB	1107	G	C8-N7	8.21	1.35	1.30
35	BA	280	C	P-O5'	8.20	1.68	1.59
35	BA	1424	U	C4-O4	-8.21	1.17	1.23
2	AB	1302	A	C4'-O4'	-8.20	1.34	1.45
35	BA	844	G	N9-C8	-8.20	1.32	1.37
2	AB	1078	U	C5'-C4'	8.20	1.61	1.51
2	AB	2120	G	O3'-P	8.20	1.71	1.61
35	BA	345	C	P-O5'	8.20	1.68	1.59
2	AB	351	C	N1-C6	-8.20	1.32	1.37
2	AB	1979	U	C4-O4	8.20	1.30	1.23
1	AA	26	C	C4-N4	8.19	1.41	1.33
35	BA	1038	C	C4-C5	8.19	1.49	1.43
2	AB	1259	G	P-O5'	8.19	1.68	1.59
35	BA	19	A	C8-N7	-8.19	1.25	1.31
37	BC	57	C	C3'-C2'	8.19	1.61	1.52
36	BB	14	G	N9-C4	8.19	1.44	1.38
2	AB	504	A	C6-N6	8.19	1.40	1.33
35	BA	385	C	C4-C5	8.19	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	894	U	C2-N3	8.18	1.43	1.37
2	AB	2750	A	N9-C8	8.18	1.44	1.37
2	AB	2758	A	C5'-C4'	8.18	1.61	1.51
35	BA	177	G	N7-C5	-8.18	1.34	1.39
2	AB	675	A	N7-C5	-8.18	1.34	1.39
2	AB	1745	A	C6-N6	8.18	1.40	1.33
35	BA	1159	U	N1-C2	8.18	1.46	1.38
35	BA	1460	C	P-O5'	8.18	1.68	1.59
2	AB	1292	G	N3-C4	8.18	1.41	1.35
2	AB	1549	A	P-O5'	8.18	1.68	1.59
35	BA	187	G	C5'-C4'	8.18	1.61	1.51
35	BA	1539	C	C2-N3	8.18	1.42	1.35
2	AB	1946	U	C2-N3	8.17	1.43	1.37
2	AB	1268	A	N9-C4	-8.17	1.32	1.37
2	AB	1253	A	C8-N7	-8.17	1.25	1.31
2	AB	2053	G	C4'-C3'	-8.17	1.44	1.53
35	BA	270	A	C5'-C4'	8.17	1.61	1.51
35	BA	1139	G	C5'-C4'	8.17	1.61	1.51
35	BA	138	G	N9-C8	8.16	1.43	1.37
2	AB	266	G	C2-N3	8.16	1.39	1.32
2	AB	1266	G	C6-N1	8.16	1.45	1.39
35	BA	3	A	N9-C4	8.16	1.42	1.37
35	BA	249	U	P-O5'	8.16	1.68	1.59
2	AB	1130	U	C2-N3	8.16	1.43	1.37
35	BA	1027	C	P-O5'	8.16	1.68	1.59
1	AA	102	G	N3-C4	8.16	1.41	1.35
2	AB	1013	C	N3-C4	8.16	1.39	1.33
2	AB	186	G	N1-C2	8.15	1.44	1.37
2	AB	482	A	C5-C4	8.15	1.44	1.38
2	AB	738	G	N9-C8	-8.15	1.32	1.37
2	AB	1107	G	C5'-C4'	8.15	1.61	1.51
35	BA	1117	A	C2-N3	-8.15	1.26	1.33
35	BA	1361	G	O3'-P	8.15	1.71	1.61
2	AB	762	U	C5-C6	8.15	1.41	1.34
2	AB	803	U	P-O5'	8.15	1.68	1.59
2	AB	1940	U	P-O5'	8.15	1.68	1.59
2	AB	1350	C	N1-C6	8.15	1.42	1.37
35	BA	165	G	N3-C4	8.15	1.41	1.35
2	AB	992	C	C2'-C1'	8.15	1.62	1.53
2	AB	2127	G	N3-C4	8.15	1.41	1.35
35	BA	957	U	O4'-C1'	8.15	1.52	1.41
2	AB	2775	G	N9-C8	-8.14	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	415	A	O3'-P	8.14	1.71	1.61
35	BA	772	U	C4-C5	8.14	1.50	1.43
2	AB	1600	C	N1-C6	8.14	1.42	1.37
2	AB	2681	C	P-O5'	8.14	1.67	1.59
35	BA	242	G	O3'-P	-8.14	1.51	1.61
35	BA	268	U	C5-C6	8.14	1.41	1.34
2	AB	1282	U	N3-C4	8.13	1.45	1.38
2	AB	1433	A	C5-C4	-8.13	1.33	1.38
2	AB	1595	C	N1-C6	8.13	1.42	1.37
35	BA	243	A	C4'-O4'	-8.13	1.34	1.45
35	BA	377	G	C8-N7	8.13	1.35	1.30
35	BA	1038	C	P-O5'	8.13	1.67	1.59
2	AB	536	G	C5'-C4'	8.13	1.61	1.51
2	AB	1314	C	C2-N3	8.13	1.42	1.35
37	BC	54	G	C6-N1	8.13	1.45	1.39
2	AB	2269	G	N3-C4	8.13	1.41	1.35
2	AB	152	A	N9-C8	-8.13	1.31	1.37
2	AB	2133	G	P-O5'	8.13	1.67	1.59
2	AB	2295	C	C5-C6	8.13	1.40	1.34
35	BA	752	G	C2-N3	8.13	1.39	1.32
2	AB	1753	G	C5-C4	-8.13	1.32	1.38
35	BA	586	C	N1-C6	8.12	1.42	1.37
2	AB	639	U	C2-N3	8.12	1.43	1.37
2	AB	771	G	N7-C5	8.12	1.44	1.39
2	AB	2025	C	C5'-C4'	8.12	1.61	1.51
35	BA	10	A	C5-C4	8.12	1.44	1.38
35	BA	240	G	N7-C5	-8.12	1.34	1.39
2	AB	197	A	C3'-C2'	8.12	1.61	1.52
35	BA	216	U	C5-C6	8.12	1.41	1.34
35	BA	800	G	C5'-C4'	8.12	1.61	1.51
35	BA	803	G	C5-C4	-8.12	1.32	1.38
2	AB	1983	G	C2'-C1'	8.12	1.62	1.53
1	AA	30	C	C4-N4	8.11	1.41	1.33
1	AA	41	G	O3'-P	8.11	1.70	1.61
2	AB	1500	G	N7-C5	-8.11	1.34	1.39
35	BA	104	G	C5'-C4'	8.11	1.61	1.51
2	AB	1366	A	N3-C4	8.11	1.39	1.34
2	AB	2271	G	C8-N7	8.11	1.35	1.30
2	AB	85	G	C5-C4	-8.11	1.32	1.38
2	AB	2271	G	N7-C5	8.11	1.44	1.39
35	BA	722	G	C5'-C4'	8.11	1.61	1.51
35	BA	219	U	N1-C6	8.11	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	530	G	C6-N1	8.11	1.45	1.39
2	AB	2734	A	C8-N7	-8.11	1.25	1.31
36	BB	20	G	N9-C8	8.11	1.43	1.37
1	AA	88	C	P-O5'	8.10	1.67	1.59
35	BA	148	G	P-O5'	8.10	1.67	1.59
2	AB	1042	G	N7-C5	8.10	1.44	1.39
2	AB	2462	C	C3'-C2'	8.10	1.61	1.52
35	BA	1430	A	C2-N3	-8.10	1.26	1.33
2	AB	1127	A	C6-N1	-8.10	1.29	1.35
2	AB	571	U	C2-N3	8.10	1.43	1.37
35	BA	71	A	N9-C4	8.10	1.42	1.37
1	AA	109	A	C4'-O4'	-8.09	1.35	1.45
2	AB	1838	C	C2'-C1'	-8.09	1.44	1.53
2	AB	1914	C	C4-N4	8.09	1.41	1.33
35	BA	446	G	P-O5'	8.09	1.67	1.59
35	BA	749	A	C8-N7	-8.09	1.25	1.31
35	BA	982	U	P-O5'	8.09	1.67	1.59
2	AB	1894	C	C4-C5	8.09	1.49	1.43
35	BA	1178	G	N7-C5	8.09	1.44	1.39
2	AB	170	U	C4-C5	8.09	1.50	1.43
35	BA	328	C	O3'-P	8.09	1.70	1.61
2	AB	2393	U	N1-C2	8.09	1.45	1.38
36	BB	50	U	P-O5'	8.09	1.67	1.59
2	AB	1103	A	C6-N6	8.09	1.40	1.33
2	AB	1456	G	C5-C4	-8.09	1.32	1.38
2	AB	1475	G	O4'-C1'	-8.09	1.31	1.41
35	BA	1392	G	C2-N3	8.09	1.39	1.32
35	BA	1395	C	P-O5'	8.09	1.67	1.59
37	BC	61	U	C2-N3	8.09	1.43	1.37
2	AB	1800	C	N3-C4	8.08	1.39	1.33
35	BA	1255	G	N9-C8	8.08	1.43	1.37
35	BA	1271	A	N9-C8	8.08	1.44	1.37
2	AB	83	A	P-O5'	8.08	1.67	1.59
35	BA	245	U	N1-C2	8.08	1.45	1.38
2	AB	1769	U	O3'-P	8.08	1.70	1.61
2	AB	1772	A	O3'-P	8.08	1.70	1.61
2	AB	2138	G	C4'-O4'	-8.08	1.35	1.45
35	BA	1003	G	N1-C2	8.08	1.44	1.37
1	AA	8	C	N1-C6	8.08	1.42	1.37
2	AB	404	A	N3-C4	8.08	1.39	1.34
35	BA	502	A	C5-C4	-8.08	1.33	1.38
2	AB	963	U	C4'-C3'	8.08	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2505	G	C2-N3	8.08	1.39	1.32
35	BA	1152	A	N9-C4	8.08	1.42	1.37
35	BA	563	A	C5-C4	-8.07	1.33	1.38
2	AB	638	G	N1-C2	8.07	1.44	1.37
2	AB	1270	C	P-O5'	8.07	1.67	1.59
35	BA	1048	G	C4'-O4'	-8.07	1.35	1.45
35	BA	9	G	P-O5'	8.07	1.67	1.59
2	AB	27	G	P-O5'	8.07	1.67	1.59
35	BA	83	C	C2-N3	-8.07	1.29	1.35
35	BA	1066	C	N1-C6	8.07	1.42	1.37
2	AB	246	C	C2-N3	8.07	1.42	1.35
2	AB	550	C	N1-C6	8.07	1.42	1.37
2	AB	2161	C	C4-C5	8.07	1.49	1.43
37	BC	58	A	C4'-C3'	8.07	1.62	1.53
2	AB	217	A	C6-N1	-8.06	1.29	1.35
2	AB	338	G	N3-C4	8.06	1.41	1.35
2	AB	1607	C	P-O5'	8.06	1.67	1.59
35	BA	578	C	N1-C6	8.06	1.42	1.37
35	BA	1391	U	C2-N3	8.06	1.43	1.37
35	BA	506	G	N9-C8	-8.06	1.32	1.37
2	AB	1582	C	N1-C6	8.06	1.42	1.37
2	AB	1876	A	N9-C8	8.06	1.44	1.37
2	AB	2494	G	C8-N7	8.06	1.35	1.30
2	AB	316	C	N1-C6	-8.06	1.32	1.37
2	AB	422	A	N9-C4	8.06	1.42	1.37
35	BA	238	A	N3-C4	8.06	1.39	1.34
2	AB	200	U	N1-C2	8.05	1.45	1.38
2	AB	2375	G	N3-C4	8.05	1.41	1.35
2	AB	2447	G	P-O5'	8.05	1.67	1.59
35	BA	126	G	C5'-C4'	8.05	1.61	1.51
2	AB	63	A	C5'-C4'	8.05	1.61	1.51
2	AB	1269	A	N9-C8	-8.05	1.31	1.37
1	AA	46	A	N7-C5	8.05	1.44	1.39
2	AB	472	A	N7-C5	8.05	1.44	1.39
2	AB	1540	G	C2-N3	8.05	1.39	1.32
2	AB	2116	G	C6-N1	8.05	1.45	1.39
2	AB	1082	U	C4-C5	8.04	1.50	1.43
35	BA	8	A	C4'-O4'	-8.04	1.35	1.45
2	AB	985	C	C5-C6	8.04	1.40	1.34
2	AB	1195	G	N1-C2	8.04	1.44	1.37
35	BA	849	G	N9-C4	8.04	1.44	1.38
35	BA	927	G	P-O5'	8.04	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1532	U	C2-N3	8.04	1.43	1.37
2	AB	665	U	C2-N3	8.04	1.43	1.37
35	BA	1403	C	C2-N3	8.04	1.42	1.35
2	AB	147	C	C4-C5	8.04	1.49	1.43
36	BB	21	U	C4-O4	-8.04	1.17	1.23
1	AA	73	A	C5-C4	-8.03	1.33	1.38
2	AB	151	C	C4'-O4'	-8.03	1.35	1.45
2	AB	1271	G	C6-O6	-8.03	1.17	1.24
2	AB	2709	G	C2-N3	8.04	1.39	1.32
35	BA	553	A	C6-N1	8.04	1.41	1.35
36	BB	49	U	P-O5'	8.04	1.67	1.59
2	AB	738	G	C5-C6	8.03	1.50	1.42
2	AB	1450	G	C8-N7	8.03	1.35	1.30
2	AB	1872	A	C5-C4	-8.03	1.33	1.38
2	AB	902	C	O4'-C1'	8.03	1.52	1.41
2	AB	347	A	N3-C4	8.03	1.39	1.34
2	AB	1293	C	N3-C4	-8.03	1.28	1.33
2	AB	2581	G	C4'-C3'	8.03	1.61	1.53
2	AB	1256	G	C2-N3	8.03	1.39	1.32
2	AB	2264	C	N1-C6	8.03	1.42	1.37
2	AB	2451	A	N3-C4	8.03	1.39	1.34
35	BA	528	C	C2-N3	8.03	1.42	1.35
2	AB	455	C	P-O5'	8.02	1.67	1.59
2	AB	2838	G	C2-N3	8.02	1.39	1.32
2	AB	2890	G	C5'-C4'	8.02	1.60	1.51
35	BA	1317	C	C5-C6	8.02	1.40	1.34
2	AB	1258	U	C5-C6	8.02	1.41	1.34
2	AB	1641	A	P-O5'	8.02	1.67	1.59
35	BA	649	A	N9-C4	8.02	1.42	1.37
35	BA	254	G	O3'-P	8.02	1.70	1.61
2	AB	1977	A	P-O5'	8.02	1.67	1.59
2	AB	2662	A	N3-C4	8.02	1.39	1.34
35	BA	816	A	N9-C4	-8.02	1.33	1.37
2	AB	153	U	N1-C2	8.01	1.45	1.38
35	BA	1527	U	C4'-O4'	-8.01	1.35	1.45
2	AB	618	G	C6-O6	-8.01	1.17	1.24
2	AB	2872	A	C5-C4	-8.01	1.33	1.38
35	BA	81	A	C8-N7	-8.01	1.25	1.31
35	BA	642	A	N7-C5	8.01	1.44	1.39
35	BA	1368	A	C6-N6	8.01	1.40	1.33
2	AB	482	A	C4'-O4'	-8.01	1.35	1.45
2	AB	802	A	C5-C6	8.01	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	918	A	N3-C4	8.01	1.39	1.34
2	AB	1836	C	N1-C6	8.01	1.42	1.37
35	BA	384	G	C8-N7	-8.01	1.26	1.30
35	BA	1398	A	N3-C4	8.01	1.39	1.34
35	BA	432	A	C8-N7	-8.01	1.25	1.31
2	AB	39	G	C2-N3	8.00	1.39	1.32
2	AB	632	A	N3-C4	8.00	1.39	1.34
2	AB	2549	G	N1-C2	8.00	1.44	1.37
35	BA	579	A	N9-C4	8.00	1.42	1.37
1	AA	80	U	C5-C6	8.00	1.41	1.34
35	BA	868	C	N3-C4	8.00	1.39	1.33
2	AB	1030	C	N1-C6	8.00	1.42	1.37
35	BA	467	U	N1-C6	8.00	1.45	1.38
35	BA	887	G	N9-C8	-8.00	1.32	1.37
2	AB	2058	A	C3'-C2'	-7.99	1.44	1.52
35	BA	794	A	O4'-C1'	7.99	1.52	1.41
2	AB	488	G	N1-C2	7.99	1.44	1.37
2	AB	1902	C	C4-N4	-7.99	1.26	1.33
2	AB	987	C	C5'-C4'	7.99	1.60	1.51
2	AB	619	G	N1-C2	7.99	1.44	1.37
35	BA	56	U	C2-N3	7.99	1.43	1.37
2	AB	1657	U	O3'-P	7.99	1.70	1.61
2	AB	1759	A	C3'-C2'	7.99	1.61	1.52
35	BA	414	A	N3-C4	7.99	1.39	1.34
35	BA	1504	G	N7-C5	7.99	1.44	1.39
2	AB	2181	U	C4-O4	-7.98	1.17	1.23
35	BA	51	A	N7-C5	-7.98	1.34	1.39
1	AA	106	G	C2-N3	7.98	1.39	1.32
2	AB	1297	C	N3-C4	7.98	1.39	1.33
2	AB	2522	U	P-O5'	7.98	1.67	1.59
2	AB	1030	C	N3-C4	7.98	1.39	1.33
37	BC	9	G	N9-C4	7.98	1.44	1.38
2	AB	769	U	C2-N3	7.97	1.43	1.37
2	AB	1163	G	O3'-P	7.97	1.70	1.61
2	AB	1387	A	C6-N6	7.97	1.40	1.33
2	AB	2207	C	N3-C4	-7.97	1.28	1.33
35	BA	439	U	N1-C2	7.97	1.45	1.38
35	BA	1455	G	C5-C4	-7.97	1.32	1.38
35	BA	972	C	N3-C4	7.97	1.39	1.33
2	AB	1769	U	C5-C6	7.97	1.41	1.34
35	BA	8	A	P-O5'	7.97	1.67	1.59
2	AB	408	G	N9-C8	7.97	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1115	G	N1-C2	7.97	1.44	1.37
2	AB	1692	U	C2-N3	7.96	1.43	1.37
2	AB	1164	C	P-O5'	7.96	1.67	1.59
2	AB	1191	G	P-O5'	7.96	1.67	1.59
2	AB	2630	G	C5'-C4'	-7.96	1.41	1.51
35	BA	1014	A	N3-C4	7.96	1.39	1.34
2	AB	2050	C	C4-C5	7.96	1.49	1.43
2	AB	2355	G	N9-C4	7.96	1.44	1.38
35	BA	1144	G	C2-N3	7.96	1.39	1.32
2	AB	2493	U	C4-C5	7.96	1.50	1.43
35	BA	134	G	C4'-O4'	-7.96	1.35	1.45
35	BA	1300	G	O3'-P	7.96	1.70	1.61
1	AA	46	A	C8-N7	-7.96	1.25	1.31
2	AB	2555	U	N1-C2	7.96	1.45	1.38
2	AB	824	U	C2'-C1'	7.96	1.62	1.53
2	AB	2588	G	P-O5'	7.96	1.67	1.59
2	AB	1458	U	N1-C2	7.95	1.45	1.38
2	AB	2862	G	P-O5'	7.95	1.67	1.59
35	BA	1144	G	N1-C2	7.95	1.44	1.37
35	BA	53	A	N9-C4	7.95	1.42	1.37
35	BA	238	A	C2-N3	7.95	1.40	1.33
2	AB	1800	C	C2-O2	-7.95	1.17	1.24
35	BA	1182	G	N3-C4	7.95	1.41	1.35
2	AB	1187	G	C2-N3	7.95	1.39	1.32
2	AB	1202	G	C6-O6	-7.95	1.17	1.24
2	AB	2193	G	N1-C2	7.95	1.44	1.37
2	AB	1651	G	N3-C4	7.95	1.41	1.35
35	BA	28	A	C6-N1	7.95	1.41	1.35
2	AB	822	G	P-O5'	7.94	1.67	1.59
2	AB	461	C	C4-C5	7.94	1.49	1.43
2	AB	1922	G	C8-N7	7.94	1.35	1.30
35	BA	35	G	C8-N7	-7.94	1.26	1.30
35	BA	718	A	N3-C4	7.94	1.39	1.34
35	BA	1159	U	C4'-O4'	-7.94	1.35	1.45
2	AB	104	A	N3-C4	7.94	1.39	1.34
2	AB	170	U	C5'-C4'	7.94	1.60	1.51
35	BA	242	G	N3-C4	7.94	1.41	1.35
35	BA	1109	C	C4-C5	7.94	1.49	1.43
2	AB	190	A	P-O5'	7.94	1.67	1.59
2	AB	278	A	C5'-C4'	7.94	1.60	1.51
2	AB	2060	A	N9-C4	-7.94	1.33	1.37
35	BA	446	G	C8-N7	-7.94	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	52	A	N3-C4	-7.94	1.30	1.34
2	AB	1134	A	N3-C4	7.94	1.39	1.34
35	BA	1515	G	N9-C8	7.94	1.43	1.37
2	AB	2618	G	N7-C5	7.94	1.44	1.39
35	BA	64	G	C2-N3	7.94	1.39	1.32
2	AB	226	A	N9-C4	7.93	1.42	1.37
2	AB	191	A	N3-C4	7.93	1.39	1.34
37	BC	12	G	C2-N3	7.93	1.39	1.32
35	BA	1286	U	C5'-C4'	7.93	1.60	1.51
35	BA	370	C	C4'-C3'	7.93	1.61	1.53
35	BA	1496	C	C2-O2	-7.93	1.17	1.24
35	BA	698	G	C5'-C4'	7.92	1.60	1.51
2	AB	654	A	N9-C8	7.92	1.44	1.37
35	BA	694	A	N7-C5	7.92	1.44	1.39
2	AB	1112	G	C2-N3	7.92	1.39	1.32
35	BA	466	A	C5-C6	7.92	1.48	1.41
35	BA	789	U	C4-C5	7.92	1.50	1.43
37	BC	24	C	C2-N3	7.92	1.42	1.35
37	BC	5	G	N9-C8	7.91	1.43	1.37
2	AB	876	C	C3'-C2'	-7.91	1.44	1.52
2	AB	2016	U	N3-C4	7.91	1.45	1.38
35	BA	371	A	O3'-P	7.91	1.70	1.61
35	BA	803	G	P-O5'	7.91	1.67	1.59
35	BA	818	G	C2-N3	7.91	1.39	1.32
35	BA	1260	G	N7-C5	-7.91	1.34	1.39
36	BB	36	U	C2-N3	7.91	1.43	1.37
2	AB	453	A	N3-C4	7.91	1.39	1.34
2	AB	923	G	C8-N7	-7.91	1.26	1.30
35	BA	370	C	C4'-O4'	-7.91	1.35	1.45
2	AB	2279	G	N7-C5	-7.91	1.34	1.39
35	BA	1297	G	N3-C4	7.91	1.41	1.35
2	AB	1235	G	C4'-O4'	-7.90	1.35	1.45
2	AB	472	A	C8-N7	7.90	1.37	1.31
2	AB	744	U	P-O5'	7.90	1.67	1.59
2	AB	1193	G	N3-C4	7.90	1.41	1.35
35	BA	557	G	N9-C8	-7.90	1.32	1.37
2	AB	100	U	O3'-P	7.90	1.70	1.61
2	AB	1542	U	N1-C2	7.90	1.45	1.38
2	AB	2063	C	P-O5'	7.90	1.67	1.59
2	AB	2893	A	N9-C4	7.90	1.42	1.37
35	BA	760	G	P-O5'	7.90	1.67	1.59
35	BA	1202	U	C4-C5	7.90	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2112	G	C5-C6	7.90	1.50	1.42
2	AB	2253	G	N1-C2	7.90	1.44	1.37
2	AB	731	C	C2-N3	7.89	1.42	1.35
2	AB	1086	A	N9-C4	7.89	1.42	1.37
2	AB	2644	G	C8-N7	7.89	1.35	1.30
35	BA	129	A	N3-C4	7.89	1.39	1.34
2	AB	227	A	C5'-C4'	7.89	1.60	1.51
2	AB	245	G	P-O5'	7.89	1.67	1.59
1	AA	53	A	C2-N3	7.89	1.40	1.33
2	AB	1440	U	P-O5'	7.89	1.67	1.59
2	AB	2599	G	C6-N1	7.89	1.45	1.39
35	BA	838	G	O3'-P	7.89	1.70	1.61
2	AB	2058	A	N7-C5	7.89	1.44	1.39
35	BA	329	A	C5-C4	7.89	1.44	1.38
35	BA	923	A	N3-C4	7.89	1.39	1.34
2	AB	502	A	N3-C4	7.89	1.39	1.34
2	AB	2330	G	P-O5'	7.89	1.67	1.59
2	AB	14	A	N1-C2	-7.88	1.27	1.34
2	AB	91	A	N3-C4	7.88	1.39	1.34
35	BA	113	G	C3'-C2'	7.88	1.61	1.52
35	BA	1058	G	N7-C5	-7.88	1.34	1.39
2	AB	386	G	C8-N7	-7.88	1.26	1.30
35	BA	36	C	N1-C6	7.88	1.41	1.37
35	BA	403	C	O3'-P	7.88	1.70	1.61
2	AB	276	U	C5'-C4'	7.88	1.60	1.51
2	AB	1547	C	O3'-P	7.88	1.70	1.61
2	AB	2475	C	C4-C5	7.88	1.49	1.43
35	BA	894	G	C2-N2	7.88	1.42	1.34
35	BA	1119	C	C2-N3	7.88	1.42	1.35
35	BA	879	C	C4-C5	7.88	1.49	1.43
1	AA	85	G	C2-N3	7.88	1.39	1.32
2	AB	2297	A	N9-C4	7.87	1.42	1.37
2	AB	998	C	P-O5'	7.87	1.67	1.59
2	AB	297	G	C8-N7	-7.87	1.26	1.30
35	BA	1496	C	C2-N3	7.87	1.42	1.35
2	AB	332	A	C5-C4	-7.87	1.33	1.38
35	BA	216	U	C2-N3	7.87	1.43	1.37
35	BA	763	G	N3-C4	7.87	1.41	1.35
35	BA	1020	G	C5-C4	-7.87	1.32	1.38
36	BB	25	U	O3'-P	7.87	1.70	1.61
2	AB	809	G	C2-N3	7.87	1.39	1.32
2	AB	2152	G	C2-N2	-7.87	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2319	G	N7-C5	-7.87	1.34	1.39
35	BA	371	A	C6-N1	7.87	1.41	1.35
2	AB	1114	C	P-O5'	7.86	1.67	1.59
2	AB	1505	A	C8-N7	-7.86	1.26	1.31
2	AB	2535	G	C4'-C3'	7.86	1.61	1.53
35	BA	761	G	C2-N3	7.86	1.39	1.32
2	AB	295	G	C4'-C3'	7.86	1.61	1.53
35	BA	354	G	N1-C2	7.86	1.44	1.37
2	AB	1308	A	N9-C4	-7.86	1.33	1.37
35	BA	888	G	N3-C4	7.86	1.41	1.35
2	AB	730	A	N3-C4	7.86	1.39	1.34
36	BB	59	A	C5'-C4'	7.86	1.60	1.51
2	AB	1531	C	P-O5'	7.86	1.67	1.59
35	BA	646	G	N3-C4	7.86	1.41	1.35
2	AB	69	C	N1-C6	7.86	1.41	1.37
2	AB	397	U	N1-C6	7.86	1.45	1.38
2	AB	452	G	N9-C8	-7.86	1.32	1.37
35	BA	463	U	C4'-O4'	-7.86	1.35	1.45
35	BA	798	U	N1-C6	-7.86	1.30	1.38
2	AB	320	A	N1-C2	-7.85	1.27	1.34
35	BA	430	A	N3-C4	7.85	1.39	1.34
35	BA	1196	A	P-O5'	7.85	1.67	1.59
35	BA	1269	A	C4'-O4'	-7.85	1.35	1.45
2	AB	1369	G	C5-C4	-7.85	1.32	1.38
35	BA	634	C	C4'-O4'	-7.85	1.35	1.45
35	BA	1432	G	C5-C4	-7.85	1.32	1.38
2	AB	1718	G	C4'-O4'	-7.85	1.35	1.45
2	AB	1764	C	N1-C6	7.85	1.41	1.37
2	AB	236	C	C5'-C4'	7.85	1.60	1.51
2	AB	487	C	C4-C5	7.85	1.49	1.43
35	BA	1033	G	N1-C2	7.85	1.44	1.37
35	BA	1096	C	C4'-C3'	-7.85	1.44	1.53
35	BA	895	G	O3'-P	7.85	1.70	1.61
35	BA	1420	U	N1-C2	7.85	1.45	1.38
2	AB	760	G	N9-C8	-7.84	1.32	1.37
35	BA	374	A	C6-N6	7.84	1.40	1.33
35	BA	962	C	C4-C5	7.84	1.49	1.43
35	BA	1019	A	N3-C4	7.84	1.39	1.34
2	AB	2402	U	C3'-O3'	7.84	1.53	1.42
2	AB	2347	C	C2'-C1'	-7.84	1.44	1.53
1	AA	104	A	C6-N1	7.84	1.41	1.35
2	AB	1933	G	N7-C5	7.84	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2467	C	N1-C6	7.84	1.41	1.37
2	AB	2501	C	C4-C5	-7.84	1.36	1.43
35	BA	1	A	N9-C4	7.84	1.42	1.37
35	BA	781	A	N7-C5	-7.84	1.34	1.39
2	AB	1351	C	O3'-P	7.83	1.70	1.61
35	BA	391	G	C8-N7	7.83	1.35	1.30
1	AA	23	G	N9-C8	7.83	1.43	1.37
2	AB	399	U	C4-O4	-7.83	1.17	1.23
2	AB	1097	U	N1-C6	-7.83	1.30	1.38
2	AB	2103	C	N1-C6	7.83	1.41	1.37
2	AB	2277	G	N3-C4	7.83	1.41	1.35
35	BA	1405	G	C6-N1	7.83	1.45	1.39
2	AB	1177	G	C6-N1	7.83	1.45	1.39
2	AB	1200	C	C5'-C4'	7.83	1.60	1.51
2	AB	1317	G	C2-N3	7.83	1.39	1.32
35	BA	963	G	C8-N7	-7.83	1.26	1.30
35	BA	606	G	C5-C6	7.83	1.50	1.42
35	BA	839	C	P-O5'	7.83	1.67	1.59
2	AB	2385	C	C5-C6	7.83	1.40	1.34
2	AB	516	C	C5-C6	7.83	1.40	1.34
2	AB	466	A	N3-C4	7.83	1.39	1.34
2	AB	2845	U	C4'-C3'	7.83	1.61	1.53
2	AB	90	U	N3-C4	7.82	1.45	1.38
2	AB	853	C	C2-N3	7.82	1.42	1.35
2	AB	2670	A	N9-C4	7.82	1.42	1.37
2	AB	2813	A	N7-C5	7.82	1.44	1.39
2	AB	606	U	C4-C5	7.82	1.50	1.43
2	AB	1098	A	C6-N6	7.82	1.40	1.33
2	AB	471	A	N9-C4	7.82	1.42	1.37
2	AB	1506	U	C2-O2	7.82	1.29	1.22
2	AB	2194	U	O3'-P	7.82	1.70	1.61
2	AB	2732	G	C6-N1	7.82	1.45	1.39
2	AB	575	A	N1-C2	-7.82	1.27	1.34
2	AB	1511	G	N1-C2	7.82	1.44	1.37
2	AB	2087	G	N1-C2	7.82	1.44	1.37
35	BA	3	A	N3-C4	7.82	1.39	1.34
35	BA	565	U	P-O5'	7.82	1.67	1.59
2	AB	156	A	C5-C4	-7.81	1.33	1.38
2	AB	1291	C	C5'-C4'	7.81	1.60	1.51
2	AB	2297	A	C4'-O4'	-7.81	1.35	1.45
35	BA	1236	A	N3-C4	7.81	1.39	1.34
2	AB	1495	A	C5-C4	-7.81	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1954	G	N1-C2	7.81	1.44	1.37
2	AB	2872	A	N9-C4	7.81	1.42	1.37
2	AB	237	C	C2'-C1'	-7.81	1.44	1.53
2	AB	609	A	P-O5'	7.81	1.67	1.59
2	AB	794	A	C8-N7	7.81	1.37	1.31
2	AB	2074	U	C2'-C1'	7.81	1.61	1.53
2	AB	2550	G	N7-C5	7.81	1.44	1.39
35	BA	903	G	N3-C4	7.81	1.41	1.35
35	BA	1343	G	P-O5'	7.81	1.67	1.59
35	BA	1481	U	N1-C2	7.81	1.45	1.38
2	AB	222	A	C6-N1	7.81	1.41	1.35
2	AB	44	A	P-O5'	7.81	1.67	1.59
35	BA	1434	A	N3-C4	7.81	1.39	1.34
2	AB	979	A	C4'-C3'	7.80	1.61	1.53
2	AB	1928	A	C5'-C4'	7.80	1.60	1.51
2	AB	337	C	C5-C6	7.80	1.40	1.34
2	AB	1205	A	C5-C4	-7.80	1.33	1.38
2	AB	39	G	C5'-C4'	7.80	1.60	1.51
2	AB	1828	G	N9-C4	7.80	1.44	1.38
2	AB	2625	G	N7-C5	-7.80	1.34	1.39
35	BA	1485	U	C2-O2	7.80	1.29	1.22
2	AB	378	C	C5-C6	7.80	1.40	1.34
2	AB	2076	U	C5-C6	7.80	1.41	1.34
2	AB	387	U	C4-O4	-7.80	1.17	1.23
2	AB	2863	C	C5-C6	7.80	1.40	1.34
2	AB	1217	U	C2-O2	7.80	1.29	1.22
2	AB	1666	G	C2-N3	7.80	1.39	1.32
35	BA	1508	A	C5-C4	-7.80	1.33	1.38
2	AB	794	A	N9-C4	7.79	1.42	1.37
2	AB	1710	G	C6-N1	7.79	1.45	1.39
1	AA	116	G	N1-C2	7.79	1.44	1.37
2	AB	964	C	P-O5'	7.79	1.67	1.59
35	BA	29	U	C2-N3	7.79	1.43	1.37
35	BA	1137	C	C2-N3	7.79	1.42	1.35
2	AB	159	G	N3-C4	7.79	1.41	1.35
2	AB	1508	A	C2'-O2'	7.79	1.51	1.41
35	BA	867	G	N7-C5	-7.79	1.34	1.39
2	AB	343	C	C5-C6	7.79	1.40	1.34
2	AB	620	G	N9-C8	7.79	1.43	1.37
2	AB	993	G	N9-C4	7.79	1.44	1.38
2	AB	2519	U	C4'-C3'	7.79	1.61	1.53
2	AB	2522	U	N1-C2	7.79	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	58	C	N3-C4	7.79	1.39	1.33
35	BA	201	G	N7-C5	-7.79	1.34	1.39
2	AB	476	G	N9-C8	7.79	1.43	1.37
35	BA	52	C	P-O5'	7.79	1.67	1.59
2	AB	1349	C	O3'-P	7.79	1.70	1.61
2	AB	2409	G	N3-C4	-7.79	1.29	1.35
36	BB	17	U	O3'-P	-7.79	1.51	1.61
1	AA	36	C	C4'-C3'	7.78	1.61	1.53
2	AB	1642	G	N1-C2	7.78	1.44	1.37
2	AB	2198	A	C6-N1	-7.78	1.30	1.35
35	BA	389	A	P-O5'	7.78	1.67	1.59
2	AB	1050	A	C8-N7	-7.78	1.26	1.31
2	AB	2831	G	C4'-C3'	-7.78	1.44	1.53
35	BA	507	C	C5-C6	7.78	1.40	1.34
2	AB	460	A	C4'-C3'	-7.78	1.44	1.53
2	AB	232	G	N3-C4	7.78	1.40	1.35
2	AB	1016	G	C5'-C4'	7.78	1.60	1.51
35	BA	64	G	C8-N7	7.78	1.35	1.30
35	BA	123	U	C5-C6	7.78	1.41	1.34
35	BA	1517	G	C8-N7	-7.78	1.26	1.30
2	AB	2016	U	P-O5'	7.78	1.67	1.59
35	BA	1068	G	O3'-P	-7.78	1.51	1.61
2	AB	2732	G	N7-C5	7.77	1.44	1.39
2	AB	1134	A	N9-C4	7.77	1.42	1.37
35	BA	1003	G	N9-C8	7.77	1.43	1.37
2	AB	2696	U	C4-C5	7.77	1.50	1.43
35	BA	1533	C	C4-C5	7.77	1.49	1.43
2	AB	1566	A	N9-C4	7.77	1.42	1.37
2	AB	933	A	C6-N6	-7.76	1.27	1.33
2	AB	1478	G	C2-N3	7.76	1.39	1.32
2	AB	1821	A	C8-N7	-7.76	1.26	1.31
35	BA	725	G	N9-C8	-7.76	1.32	1.37
1	AA	1	U	C3'-C2'	7.76	1.61	1.52
2	AB	2112	G	P-O5'	7.76	1.67	1.59
2	AB	2405	G	P-O5'	7.76	1.67	1.59
2	AB	2803	G	P-O5'	7.76	1.67	1.59
35	BA	184	G	O3'-P	7.76	1.70	1.61
1	AA	67	G	C6-N1	7.76	1.45	1.39
35	BA	217	C	P-O5'	7.76	1.67	1.59
2	AB	1646	C	N1-C6	7.76	1.41	1.37
2	AB	2144	G	C6-N1	7.76	1.45	1.39
2	AB	2444	G	N9-C8	7.76	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	655	A	N3-C4	7.75	1.39	1.34
2	AB	808	G	N7-C5	-7.75	1.34	1.39
2	AB	883	G	C6-N1	7.75	1.45	1.39
2	AB	2352	A	C5'-C4'	7.75	1.60	1.51
35	BA	72	A	P-O5'	7.75	1.67	1.59
35	BA	172	A	O3'-P	7.75	1.70	1.61
35	BA	399	G	C2-N3	7.75	1.39	1.32
35	BA	473	U	C5'-C4'	7.75	1.60	1.51
2	AB	2370	G	O3'-P	7.75	1.70	1.61
2	AB	13	A	N9-C4	7.75	1.42	1.37
2	AB	1001	A	C6-N1	-7.75	1.30	1.35
2	AB	2546	U	N1-C2	7.75	1.45	1.38
35	BA	1216	A	N7-C5	7.75	1.43	1.39
2	AB	1525	A	P-O5'	7.75	1.67	1.59
2	AB	2382	G	O3'-P	7.75	1.70	1.61
2	AB	2400	G	O3'-P	7.75	1.70	1.61
2	AB	290	U	C4-C5	7.75	1.50	1.43
2	AB	497	A	C8-N7	-7.75	1.26	1.31
2	AB	2253	G	C4'-O4'	-7.75	1.35	1.45
35	BA	750	C	C5'-C4'	7.75	1.60	1.51
2	AB	1173	U	C4-C5	7.74	1.50	1.43
35	BA	262	A	C5'-C4'	7.74	1.60	1.51
35	BA	1388	C	N1-C6	7.74	1.41	1.37
2	AB	1736	U	C2-N3	-7.74	1.32	1.37
2	AB	2001	C	C4-C5	7.74	1.49	1.43
2	AB	1329	U	C4-C5	7.74	1.50	1.43
2	AB	2579	C	N1-C6	7.74	1.41	1.37
2	AB	572	A	C5'-C4'	7.74	1.60	1.51
35	BA	124	C	N1-C6	-7.74	1.32	1.37
35	BA	139	A	N7-C5	-7.74	1.34	1.39
35	BA	539	A	N3-C4	7.74	1.39	1.34
35	BA	1142	G	N7-C5	-7.73	1.34	1.39
2	AB	1510	G	N3-C4	7.73	1.40	1.35
35	BA	157	U	C4'-C3'	7.73	1.61	1.53
35	BA	181	A	N9-C4	7.73	1.42	1.37
35	BA	1437	A	N3-C4	7.73	1.39	1.34
35	BA	1533	C	O4'-C1'	7.73	1.51	1.41
2	AB	118	A	N9-C4	-7.73	1.33	1.37
35	BA	1086	U	O3'-P	-7.73	1.51	1.61
1	AA	80	U	C2-N3	7.72	1.43	1.37
2	AB	1347	A	N3-C4	7.72	1.39	1.34
2	AB	1216	G	C2'-C1'	-7.72	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1309	G	C2-N3	7.72	1.39	1.32
2	AB	1504	A	C5-C6	7.72	1.48	1.41
2	AB	1631	G	O3'-P	7.72	1.70	1.61
35	BA	880	C	C2-N3	7.72	1.42	1.35
35	BA	1150	A	N7-C5	-7.72	1.34	1.39
35	BA	1333	A	P-O5'	7.72	1.67	1.59
37	BC	65	G	C8-N7	7.72	1.35	1.30
2	AB	2138	G	C6-N1	7.72	1.45	1.39
35	BA	519	C	O3'-P	7.72	1.70	1.61
2	AB	47	C	C4'-O4'	-7.72	1.35	1.45
2	AB	614	A	N9-C4	7.72	1.42	1.37
37	BC	35	C	C2-N3	7.72	1.42	1.35
2	AB	560	C	C2-N3	7.71	1.42	1.35
2	AB	954	G	C8-N7	-7.71	1.26	1.30
2	AB	1106	G	N3-C4	-7.71	1.30	1.35
2	AB	339	U	C2-N3	7.71	1.43	1.37
2	AB	492	A	P-O5'	7.71	1.67	1.59
35	BA	1329	A	C5-C6	7.71	1.48	1.41
2	AB	163	C	N1-C6	7.71	1.41	1.37
2	AB	2234	G	N7-C5	-7.71	1.34	1.39
2	AB	1036	G	N3-C4	7.71	1.40	1.35
2	AB	1089	A	N7-C5	7.71	1.43	1.39
35	BA	31	G	C5'-C4'	7.71	1.60	1.51
36	BB	30	U	N1-C2	7.71	1.45	1.38
2	AB	739	A	N7-C5	7.71	1.43	1.39
2	AB	1311	G	P-O5'	7.71	1.67	1.59
2	AB	2858	C	C4-C5	7.71	1.49	1.43
2	AB	1192	G	O3'-P	7.70	1.70	1.61
35	BA	577	G	N1-C2	7.70	1.44	1.37
37	BC	14	A	C6-N1	7.70	1.41	1.35
2	AB	968	C	N1-C6	7.70	1.41	1.37
2	AB	1152	C	C4-C5	7.70	1.49	1.43
2	AB	1359	A	C6-N1	-7.70	1.30	1.35
37	BC	71	G	N3-C4	-7.70	1.30	1.35
2	AB	1511	G	C4'-O4'	-7.70	1.35	1.45
35	BA	1160	G	C2-N3	7.70	1.39	1.32
2	AB	2053	G	C6-N1	-7.70	1.34	1.39
2	AB	592	A	C3'-C2'	-7.70	1.44	1.52
2	AB	2862	G	N3-C4	7.70	1.40	1.35
2	AB	1674	G	C5-C6	7.69	1.50	1.42
2	AB	1771	C	C5'-C4'	7.69	1.60	1.51
2	AB	2896	C	C2-N3	7.69	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2245	U	C4-C5	7.69	1.50	1.43
35	BA	21	G	P-O5'	7.69	1.67	1.59
1	AA	65	U	C2-N3	7.69	1.43	1.37
2	AB	1733	G	C8-N7	7.69	1.35	1.30
2	AB	1801	A	N9-C8	7.69	1.44	1.37
1	AA	106	G	C8-N7	-7.69	1.26	1.30
2	AB	1122	G	C6-N1	7.69	1.45	1.39
2	AB	1893	C	P-O5'	7.69	1.67	1.59
35	BA	1121	U	N1-C2	7.69	1.45	1.38
35	BA	1526	G	N7-C5	7.69	1.43	1.39
1	AA	94	A	C4'-C3'	7.69	1.61	1.53
35	BA	35	G	N9-C8	-7.69	1.32	1.37
35	BA	1542	A	N3-C4	7.69	1.39	1.34
2	AB	1709	U	C4'-O4'	-7.68	1.35	1.45
2	AB	2800	A	N3-C4	7.68	1.39	1.34
35	BA	215	C	C4'-O4'	-7.68	1.35	1.45
35	BA	729	A	C5-C6	7.68	1.48	1.41
2	AB	66	C	N3-C4	7.68	1.39	1.33
2	AB	631	A	O3'-P	7.68	1.70	1.61
35	BA	654	G	N1-C2	7.68	1.43	1.37
2	AB	2499	C	C4-N4	7.68	1.40	1.33
2	AB	2724	U	C5'-C4'	7.68	1.60	1.51
2	AB	231	A	P-O5'	7.68	1.67	1.59
2	AB	934	U	C4-C5	7.68	1.50	1.43
2	AB	2639	A	N9-C4	7.68	1.42	1.37
2	AB	631	A	N9-C4	7.68	1.42	1.37
2	AB	2063	C	C2'-C1'	7.68	1.61	1.53
2	AB	2364	C	N3-C4	7.68	1.39	1.33
35	BA	461	A	C2'-C1'	7.68	1.61	1.53
2	AB	950	G	N9-C8	7.67	1.43	1.37
2	AB	1776	G	C5-C4	7.67	1.43	1.38
2	AB	239	C	P-O5'	7.67	1.67	1.59
2	AB	990	A	N7-C5	-7.67	1.34	1.39
35	BA	204	G	C5'-C4'	7.67	1.60	1.51
35	BA	1371	G	C5-C4	-7.67	1.32	1.38
37	BC	40	C	P-O5'	7.67	1.67	1.59
2	AB	22	C	C5'-C4'	7.67	1.60	1.51
2	AB	2101	A	C8-N7	-7.67	1.26	1.31
35	BA	530	G	N7-C5	7.67	1.43	1.39
35	BA	687	A	C6-N6	7.67	1.40	1.33
35	BA	1315	U	C4-C5	7.67	1.50	1.43
35	BA	332	G	N1-C2	7.67	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	509	C	N1-C6	7.66	1.41	1.37
2	AB	2538	C	C4'-O4'	-7.66	1.35	1.45
2	AB	1534	U	C4-C5	7.66	1.50	1.43
35	BA	369	G	C2-N2	7.66	1.42	1.34
2	AB	49	A	N3-C4	7.66	1.39	1.34
2	AB	647	G	C4'-C3'	-7.66	1.44	1.53
2	AB	2621	G	C6-N1	-7.66	1.34	1.39
35	BA	1059	C	C4'-O4'	-7.66	1.35	1.45
2	AB	114	U	C4-O4	7.66	1.29	1.23
2	AB	2250	G	C2-N2	-7.66	1.26	1.34
2	AB	2466	C	N1-C2	7.65	1.47	1.40
2	AB	1624	U	C4-O4	7.65	1.29	1.23
2	AB	1970	A	N3-C4	7.65	1.39	1.34
37	BC	18	U	C4'-O4'	-7.65	1.35	1.45
2	AB	1094	U	C2-N3	7.65	1.43	1.37
2	AB	1762	A	C8-N7	7.65	1.36	1.31
2	AB	1988	G	C2'-C1'	7.65	1.61	1.53
35	BA	1049	U	C2-N3	7.65	1.43	1.37
2	AB	1496	A	N9-C8	7.65	1.43	1.37
35	BA	703	G	C5'-C4'	7.65	1.60	1.51
35	BA	685	G	N9-C4	-7.65	1.31	1.38
36	BB	22	G	C8-N7	7.64	1.35	1.30
2	AB	463	G	P-O5'	7.64	1.67	1.59
2	AB	924	G	P-O5'	7.64	1.67	1.59
35	BA	1477	U	C2-N3	-7.64	1.32	1.37
2	AB	764	A	N7-C5	-7.64	1.34	1.39
2	AB	1253	A	N3-C4	7.64	1.39	1.34
2	AB	1548	A	N3-C4	7.64	1.39	1.34
2	AB	2439	A	N9-C4	7.64	1.42	1.37
22	AV	84	TYR	CE2-CZ	7.64	1.48	1.38
35	BA	902	G	P-O5'	7.64	1.67	1.59
35	BA	994	A	N9-C4	7.64	1.42	1.37
35	BA	1382	C	C5'-C4'	7.64	1.60	1.51
2	AB	663	G	N7-C5	7.64	1.43	1.39
35	BA	461	A	C4'-O4'	-7.64	1.35	1.45
2	AB	921	C	N1-C6	7.64	1.41	1.37
35	BA	935	A	N3-C4	7.64	1.39	1.34
2	AB	160	A	C5-C4	-7.63	1.33	1.38
2	AB	388	G	C2-N3	7.63	1.38	1.32
35	BA	729	A	N9-C4	7.63	1.42	1.37
35	BA	1081	A	N9-C8	-7.63	1.31	1.37
2	AB	128	C	O3'-P	7.63	1.70	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1110	A	N3-C4	-7.63	1.30	1.34
2	AB	112	U	C2'-C1'	-7.63	1.45	1.53
35	BA	1534	A	N3-C4	-7.63	1.30	1.34
35	BA	631	C	C4'-C3'	-7.63	1.44	1.53
2	AB	1614	A	C6-N1	7.63	1.40	1.35
35	BA	666	G	N3-C4	7.63	1.40	1.35
35	BA	887	G	C6-O6	-7.63	1.17	1.24
2	AB	134	G	C5-C4	-7.63	1.33	1.38
2	AB	2235	G	N3-C4	7.63	1.40	1.35
2	AB	2386	A	P-O5'	7.63	1.67	1.59
35	BA	623	C	P-O5'	7.63	1.67	1.59
35	BA	1174	G	P-O5'	7.63	1.67	1.59
2	AB	2657	A	N3-C4	7.62	1.39	1.34
35	BA	794	A	N7-C5	7.62	1.43	1.39
35	BA	1097	C	C4'-O4'	-7.62	1.35	1.45
35	BA	1373	G	C2'-C1'	-7.62	1.45	1.53
37	BC	7	G	C4'-C3'	7.62	1.61	1.53
2	AB	932	U	C2'-C1'	7.62	1.61	1.53
2	AB	2879	A	N7-C5	7.62	1.43	1.39
35	BA	227	G	P-O5'	7.62	1.67	1.59
35	BA	405	U	C2-O2	7.62	1.29	1.22
35	BA	513	C	P-O5'	7.62	1.67	1.59
35	BA	1483	A	N9-C4	-7.62	1.33	1.37
35	BA	84	U	N1-C2	7.62	1.45	1.38
35	BA	1110	A	N7-C5	-7.62	1.34	1.39
2	AB	482	A	C8-N7	-7.62	1.26	1.31
37	BC	7	G	P-O5'	7.62	1.67	1.59
2	AB	740	C	C4'-O4'	-7.62	1.35	1.45
2	AB	633	A	N3-C4	7.61	1.39	1.34
2	AB	2332	C	C4-C5	7.61	1.49	1.43
2	AB	2439	A	C5'-C4'	7.61	1.60	1.51
2	AB	2896	C	C5-C6	7.61	1.40	1.34
35	BA	498	A	N9-C8	-7.61	1.31	1.37
2	AB	349	U	P-O5'	7.61	1.67	1.59
2	AB	2767	C	N1-C6	-7.61	1.32	1.37
2	AB	2850	A	N3-C4	7.61	1.39	1.34
35	BA	453	G	N3-C4	7.61	1.40	1.35
2	AB	436	C	C4-C5	7.61	1.49	1.43
2	AB	1031	G	C8-N7	-7.61	1.26	1.30
2	AB	1078	U	C5-C6	7.61	1.41	1.34
2	AB	2052	A	C5-C4	-7.61	1.33	1.38
35	BA	183	C	P-O5'	7.61	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	124	G	P-O5'	-7.61	1.52	1.59
2	AB	1655	A	C8-N7	-7.61	1.26	1.31
2	AB	2646	C	P-O5'	7.61	1.67	1.59
36	BB	55	A	C5-C4	-7.61	1.33	1.38
2	AB	85	G	N3-C4	7.61	1.40	1.35
35	BA	228	A	C4'-O4'	-7.61	1.35	1.45
35	BA	1367	C	P-O5'	7.61	1.67	1.59
2	AB	2017	U	C2'-C1'	7.61	1.61	1.53
35	BA	711	G	C4'-O4'	-7.61	1.35	1.45
2	AB	132	G	N3-C4	7.60	1.40	1.35
2	AB	403	U	N1-C6	7.60	1.44	1.38
2	AB	989	G	P-O5'	7.60	1.67	1.59
2	AB	743	A	P-O5'	7.60	1.67	1.59
2	AB	1086	A	N3-C4	7.60	1.39	1.34
2	AB	1444	G	C3'-C2'	7.60	1.61	1.52
2	AB	2033	A	C6-N6	7.60	1.40	1.33
35	BA	895	G	C2-N3	7.60	1.38	1.32
2	AB	2582	G	P-O5'	-7.60	1.52	1.59
35	BA	919	A	N7-C5	-7.60	1.34	1.39
35	BA	1052	U	C2-N3	7.60	1.43	1.37
2	AB	350	G	C2-N3	7.60	1.38	1.32
2	AB	1975	G	P-O5'	7.60	1.67	1.59
2	AB	2344	U	N1-C2	7.60	1.45	1.38
2	AB	2779	U	N3-C4	7.60	1.45	1.38
35	BA	877	G	C4'-C3'	-7.60	1.44	1.53
35	BA	1170	A	N7-C5	-7.60	1.34	1.39
2	AB	1006	C	C4-C5	7.59	1.49	1.43
2	AB	1186	G	C2-N3	7.59	1.38	1.32
1	AA	80	U	N3-C4	7.59	1.45	1.38
35	BA	385	C	P-O5'	7.59	1.67	1.59
2	AB	1313	U	C2-N3	7.59	1.43	1.37
2	AB	1401	G	N3-C4	7.59	1.40	1.35
35	BA	180	U	C2-N3	7.59	1.43	1.37
35	BA	1057	G	C8-N7	7.59	1.35	1.30
2	AB	964	C	C2-N3	7.59	1.41	1.35
2	AB	2564	A	N3-C4	7.59	1.39	1.34
35	BA	914	A	P-O5'	7.59	1.67	1.59
35	BA	1113	C	P-O5'	7.59	1.67	1.59
2	AB	267	C	P-O5'	7.59	1.67	1.59
2	AB	2020	A	N7-C5	7.59	1.43	1.39
2	AB	2699	C	P-O5'	7.59	1.67	1.59
1	AA	19	C	N1-C6	7.59	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1829	A	N9-C4	7.59	1.42	1.37
2	AB	2583	G	C2-N3	7.59	1.38	1.32
2	AB	2614	A	P-O5'	7.58	1.67	1.59
2	AB	232	G	N7-C5	7.58	1.43	1.39
2	AB	280	U	P-O5'	7.58	1.67	1.59
2	AB	2259	U	O4'-C1'	7.58	1.51	1.41
2	AB	2478	A	N3-C4	7.58	1.39	1.34
35	BA	4	U	C2-N3	7.58	1.43	1.37
35	BA	1310	G	C8-N7	-7.58	1.26	1.30
2	AB	570	G	C4'-O4'	-7.58	1.35	1.45
2	AB	1847	A	N1-C2	7.58	1.41	1.34
35	BA	96	U	C5-C6	7.58	1.41	1.34
35	BA	1258	G	N1-C2	-7.58	1.31	1.37
2	AB	1944	U	C2-N3	7.58	1.43	1.37
35	BA	1033	G	C8-N7	-7.58	1.26	1.30
2	AB	293	U	N1-C2	7.58	1.45	1.38
35	BA	174	A	O3'-P	7.58	1.70	1.61
35	BA	1507	A	C8-N7	7.58	1.36	1.31
37	BC	70	C	C2-N3	7.58	1.41	1.35
2	AB	891	G	O3'-P	7.57	1.70	1.61
2	AB	1916	A	N7-C5	-7.57	1.34	1.39
2	AB	124	G	C2-N3	7.57	1.38	1.32
35	BA	126	G	N7-C5	7.57	1.43	1.39
35	BA	860	A	P-O5'	7.57	1.67	1.59
35	BA	1114	C	P-O5'	7.57	1.67	1.59
2	AB	200	U	O3'-P	7.57	1.70	1.61
2	AB	339	U	C2'-C1'	7.57	1.61	1.53
2	AB	485	C	P-O5'	7.57	1.67	1.59
2	AB	795	C	C2'-C1'	7.57	1.61	1.53
37	BC	61	U	C4-C5	7.57	1.50	1.43
1	AA	34	A	C3'-C2'	7.57	1.61	1.52
2	AB	1654	A	N3-C4	7.57	1.39	1.34
36	BB	33	A	N7-C5	-7.57	1.34	1.39
2	AB	1037	G	N3-C4	7.56	1.40	1.35
2	AB	1093	G	C2-N3	7.56	1.38	1.32
35	BA	1370	G	C5'-C4'	7.56	1.60	1.51
2	AB	118	A	C8-N7	-7.56	1.26	1.31
2	AB	1643	G	N9-C8	-7.56	1.32	1.37
2	AB	2849	U	C4-O4	7.56	1.29	1.23
35	BA	1133	G	C5-C4	7.56	1.43	1.38
2	AB	1261	C	N3-C4	7.56	1.39	1.33
2	AB	2538	C	C5-C6	7.56	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	407	U	N1-C2	7.56	1.45	1.38
35	BA	476	U	N1-C6	7.56	1.44	1.38
35	BA	824	G	C3'-C2'	7.56	1.61	1.52
2	AB	1523	U	P-O5'	7.56	1.67	1.59
2	AB	1052	C	C1'-N1	7.55	1.60	1.48
2	AB	59	U	C2-N3	7.55	1.43	1.37
2	AB	559	G	N3-C4	7.55	1.40	1.35
2	AB	728	G	C5'-C4'	7.55	1.60	1.51
2	AB	740	C	N1-C6	7.55	1.41	1.37
2	AB	2071	A	C6-N1	7.55	1.40	1.35
35	BA	1030	U	O3'-P	7.55	1.70	1.61
35	BA	1136	C	C4'-O4'	-7.55	1.35	1.45
37	BC	32	G	N3-C4	7.55	1.40	1.35
2	AB	141	G	C4'-O4'	-7.55	1.35	1.45
2	AB	2246	G	N7-C5	-7.55	1.34	1.39
2	AB	2426	A	N9-C8	-7.55	1.31	1.37
2	AB	2543	G	C6-N1	-7.55	1.34	1.39
2	AB	2572	A	N7-C5	7.55	1.43	1.39
2	AB	2678	C	C5'-C4'	7.55	1.60	1.51
2	AB	2804	U	O4'-C1'	7.55	1.51	1.41
35	BA	841	C	C2-N3	7.55	1.41	1.35
2	AB	935	C	N1-C6	-7.55	1.32	1.37
35	BA	739	C	P-O5'	7.55	1.67	1.59
2	AB	360	U	P-O5'	7.54	1.67	1.59
2	AB	1147	A	N7-C5	7.54	1.43	1.39
2	AB	2195	U	O3'-P	7.54	1.70	1.61
2	AB	2282	G	N7-C5	-7.54	1.34	1.39
2	AB	2314	A	C3'-C2'	7.54	1.61	1.52
2	AB	663	G	N9-C4	-7.54	1.31	1.38
2	AB	1994	C	O3'-P	7.54	1.70	1.61
2	AB	2360	G	C6-N1	7.54	1.44	1.39
2	AB	2452	C	P-O5'	7.54	1.67	1.59
35	BA	675	A	N3-C4	7.54	1.39	1.34
35	BA	911	U	C5-C6	7.54	1.41	1.34
2	AB	1557	C	P-O5'	7.54	1.67	1.59
2	AB	14	A	N7-C5	7.54	1.43	1.39
2	AB	920	A	N3-C4	7.54	1.39	1.34
2	AB	2226	C	P-O5'	7.54	1.67	1.59
37	BC	65	G	C2-N3	7.54	1.38	1.32
2	AB	497	A	N3-C4	7.53	1.39	1.34
35	BA	213	G	N1-C2	7.53	1.43	1.37
1	AA	112	G	N7-C5	7.53	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2048	G	C2-N3	7.53	1.38	1.32
1	AA	1	U	N1-C2	7.53	1.45	1.38
36	BB	39	U	C4-C5	7.53	1.50	1.43
2	AB	407	G	C2-N3	7.52	1.38	1.32
2	AB	1310	G	P-O5'	7.52	1.67	1.59
2	AB	430	A	C6-N1	-7.52	1.30	1.35
2	AB	1602	U	O3'-P	7.52	1.70	1.61
2	AB	2358	A	C8-N7	7.52	1.36	1.31
37	BC	5	G	C2'-C1'	-7.52	1.45	1.53
2	AB	529	A	N3-C4	7.52	1.39	1.34
2	AB	1208	C	N3-C4	7.52	1.39	1.33
2	AB	2016	U	C4-C5	7.52	1.50	1.43
2	AB	2428	G	P-O5'	7.52	1.67	1.59
2	AB	2799	A	C8-N7	-7.52	1.26	1.31
35	BA	719	C	C4-C5	7.52	1.49	1.43
2	AB	949	G	N9-C4	-7.52	1.31	1.38
2	AB	2325	G	C6-N1	7.52	1.44	1.39
2	AB	2582	G	C2-N3	7.52	1.38	1.32
35	BA	250	A	N7-C5	-7.52	1.34	1.39
35	BA	1155	A	N3-C4	7.52	1.39	1.34
2	AB	1216	G	N3-C4	-7.52	1.30	1.35
2	AB	1860	G	C2-N3	7.52	1.38	1.32
2	AB	2054	A	N3-C4	-7.51	1.30	1.34
35	BA	482	A	C5-C6	7.51	1.47	1.41
35	BA	1381	U	N1-C2	7.51	1.45	1.38
2	AB	271	G	N9-C4	-7.51	1.31	1.38
2	AB	1055	G	C6-N1	7.51	1.44	1.39
2	AB	1592	C	C4'-C3'	7.51	1.61	1.53
35	BA	160	A	N3-C4	7.51	1.39	1.34
35	BA	1086	U	C4-C5	7.51	1.50	1.43
35	BA	1313	U	N3-C4	7.51	1.45	1.38
2	AB	1555	G	C6-N1	7.51	1.44	1.39
35	BA	1336	C	C2'-C1'	-7.51	1.45	1.53
2	AB	2494	G	C4'-O4'	-7.51	1.35	1.45
35	BA	888	G	C6-N1	-7.51	1.34	1.39
35	BA	1184	G	N9-C4	-7.51	1.31	1.38
35	BA	359	G	N3-C4	7.50	1.40	1.35
35	BA	1313	U	C2-O2	7.50	1.29	1.22
1	AA	105	G	N9-C8	-7.50	1.32	1.37
2	AB	1884	G	N1-C2	-7.50	1.31	1.37
2	AB	2102	G	N3-C4	7.50	1.40	1.35
2	AB	2276	G	C8-N7	7.50	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1599	U	N3-C4	7.50	1.45	1.38
2	AB	1831	G	C2-N3	7.50	1.38	1.32
2	AB	2395	C	P-O5'	-7.50	1.52	1.59
2	AB	2673	G	O4'-C1'	7.50	1.51	1.41
35	BA	189	A	P-O5'	7.50	1.67	1.59
2	AB	1977	A	N3-C4	7.50	1.39	1.34
2	AB	2616	C	N3-C4	7.50	1.39	1.33
35	BA	1374	A	C5-C4	-7.50	1.33	1.38
2	AB	784	G	N9-C8	7.50	1.43	1.37
2	AB	1115	G	C4'-O4'	-7.50	1.35	1.45
2	AB	291	G	C2-N3	7.49	1.38	1.32
2	AB	696	G	N3-C4	7.49	1.40	1.35
2	AB	862	G	C6-N1	-7.49	1.34	1.39
2	AB	1181	U	C2-N3	7.49	1.43	1.37
2	AB	1976	U	N3-C4	7.49	1.45	1.38
2	AB	810	U	O3'-P	7.49	1.70	1.61
2	AB	2056	G	C2-N3	7.49	1.38	1.32
35	BA	1084	G	N1-C2	7.49	1.43	1.37
2	AB	1492	G	O3'-P	7.49	1.70	1.61
2	AB	2546	U	C2-N3	7.49	1.43	1.37
35	BA	1005	A	N3-C4	7.49	1.39	1.34
35	BA	849	G	N3-C4	7.48	1.40	1.35
2	AB	1856	U	C2'-O2'	7.48	1.51	1.41
2	AB	181	A	N9-C4	7.48	1.42	1.37
35	BA	790	A	C5'-C4'	7.48	1.60	1.51
35	BA	1014	A	N7-C5	-7.48	1.34	1.39
2	AB	1362	C	C5-C6	7.48	1.40	1.34
2	AB	1524	G	C5'-C4'	7.48	1.60	1.51
2	AB	1817	G	P-O5'	7.48	1.67	1.59
2	AB	2108	A	P-O5'	7.48	1.67	1.59
2	AB	2809	A	N1-C2	-7.48	1.27	1.34
34	A7	28	SER	CB-OG	7.48	1.51	1.42
1	AA	43	C	O3'-P	7.48	1.70	1.61
35	BA	641	U	C3'-C2'	7.48	1.61	1.52
2	AB	2613	U	P-O5'	7.47	1.67	1.59
35	BA	135	C	C2-N3	7.47	1.41	1.35
35	BA	1172	C	C5'-C4'	7.47	1.60	1.51
2	AB	2490	G	C6-N1	7.47	1.44	1.39
2	AB	2582	G	O3'-P	7.47	1.70	1.61
35	BA	93	U	N3-C4	7.47	1.45	1.38
35	BA	246	A	P-O5'	7.47	1.67	1.59
35	BA	1535	C	C5'-C4'	7.47	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1308	A	C5-C6	7.47	1.47	1.41
35	BA	920	U	C4-O4	-7.47	1.17	1.23
35	BA	1239	A	N9-C8	-7.47	1.31	1.37
1	AA	12	C	O3'-P	7.47	1.70	1.61
2	AB	2819	G	C5-C4	7.47	1.43	1.38
35	BA	763	G	C2-N3	7.47	1.38	1.32
2	AB	1853	A	N9-C4	7.47	1.42	1.37
35	BA	609	A	C5-C4	-7.47	1.33	1.38
35	BA	964	A	N3-C4	7.47	1.39	1.34
2	AB	870	U	C5-C6	7.47	1.40	1.34
2	AB	1582	C	C4'-C3'	7.47	1.61	1.53
2	AB	859	G	C8-N7	-7.46	1.26	1.30
35	BA	544	G	N7-C5	7.46	1.43	1.39
35	BA	605	U	O3'-P	7.46	1.70	1.61
35	BA	803	G	N3-C4	7.46	1.40	1.35
2	AB	510	C	C2-N3	7.46	1.41	1.35
35	BA	336	A	N9-C4	-7.46	1.33	1.37
35	BA	1311	A	C5-C4	-7.46	1.33	1.38
35	BA	1436	U	C4-C5	7.46	1.50	1.43
2	AB	2867	G	P-O5'	7.46	1.67	1.59
2	AB	1726	C	C2-O2	-7.46	1.17	1.24
2	AB	2084	C	N3-C4	7.46	1.39	1.33
2	AB	2140	G	P-O5'	7.46	1.67	1.59
2	AB	2530	A	C4'-O4'	-7.46	1.35	1.45
2	AB	2223	G	C3'-C2'	7.46	1.61	1.52
2	AB	2694	G	N3-C4	7.46	1.40	1.35
35	BA	127	G	N9-C4	7.46	1.44	1.38
2	AB	98	G	C6-N1	7.45	1.44	1.39
2	AB	1115	G	N9-C4	7.45	1.44	1.38
2	AB	1525	A	N3-C4	7.45	1.39	1.34
2	AB	2043	C	N1-C6	7.45	1.41	1.37
2	AB	2201	G	N7-C5	-7.45	1.34	1.39
35	BA	127	G	C5-C4	7.45	1.43	1.38
2	AB	96	C	N3-C4	7.45	1.39	1.33
2	AB	329	G	C2-N3	7.45	1.38	1.32
2	AB	1564	C	C4'-O4'	-7.45	1.35	1.45
35	BA	503	C	N3-C4	7.45	1.39	1.33
35	BA	927	G	C8-N7	-7.45	1.26	1.30
2	AB	863	A	C5-C4	7.45	1.44	1.38
2	AB	1497	U	C2-O2	7.45	1.29	1.22
8	AH	134	GLY	CA-C	7.45	1.63	1.51
9	AI	76	GLU	CG-CD	7.45	1.63	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1252	G	C8-N7	7.45	1.35	1.30
2	AB	2701	U	P-O5'	7.45	1.67	1.59
35	BA	584	G	N9-C8	-7.45	1.32	1.37
35	BA	1160	G	N3-C4	7.45	1.40	1.35
35	BA	1313	U	C4-C5	7.45	1.50	1.43
2	AB	2124	G	N3-C4	7.44	1.40	1.35
35	BA	1293	C	C5'-C4'	7.44	1.60	1.51
1	AA	38	C	C5'-C4'	7.44	1.60	1.51
2	AB	694	U	P-O5'	7.44	1.67	1.59
2	AB	948	C	N1-C6	7.44	1.41	1.37
2	AB	1189	A	C8-N7	7.44	1.36	1.31
2	AB	1718	G	N9-C8	-7.44	1.32	1.37
35	BA	841	C	P-O5'	7.44	1.67	1.59
2	AB	893	C	C5-C6	7.44	1.40	1.34
2	AB	2354	C	N3-C4	7.44	1.39	1.33
35	BA	227	G	C4'-O4'	-7.44	1.35	1.45
2	AB	154	U	C4-C5	-7.44	1.36	1.43
2	AB	214	G	N1-C2	7.44	1.43	1.37
2	AB	1654	A	C4'-O4'	-7.44	1.35	1.45
35	BA	77	A	N1-C2	-7.44	1.27	1.34
35	BA	497	G	N7-C5	7.44	1.43	1.39
35	BA	1224	U	P-O5'	7.44	1.67	1.59
36	BB	22	G	C5'-C4'	7.44	1.60	1.51
2	AB	1389	G	C5-C4	7.44	1.43	1.38
35	BA	598	U	C2-N3	7.44	1.43	1.37
37	BC	15	G	N1-C2	7.44	1.43	1.37
35	BA	243	A	N7-C5	7.44	1.43	1.39
2	AB	1951	U	O4'-C1'	7.43	1.51	1.41
2	AB	2036	C	C2-N3	7.43	1.41	1.35
2	AB	2568	U	N3-C4	7.43	1.45	1.38
2	AB	1334	G	P-O5'	7.43	1.67	1.59
2	AB	131	A	P-O5'	7.43	1.67	1.59
2	AB	1401	G	C2-N3	7.43	1.38	1.32
2	AB	1679	A	C5-C4	-7.43	1.33	1.38
35	BA	572	A	C8-N7	-7.43	1.26	1.31
2	AB	1497	U	N3-C4	7.43	1.45	1.38
2	AB	1792	G	N9-C8	7.43	1.43	1.37
2	AB	28	A	N3-C4	7.43	1.39	1.34
2	AB	1205	A	N3-C4	7.42	1.39	1.34
2	AB	2123	G	C2-N3	7.42	1.38	1.32
35	BA	168	G	N9-C8	-7.42	1.32	1.37
2	AB	1058	U	C4-O4	-7.42	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1302	A	N1-C2	-7.42	1.27	1.34
2	AB	1360	G	C2-N3	7.42	1.38	1.32
35	BA	362	G	P-O5'	7.42	1.67	1.59
2	AB	1456	G	N7-C5	-7.42	1.34	1.39
2	AB	2081	U	O3'-P	7.42	1.70	1.61
2	AB	1520	U	N3-C4	7.42	1.45	1.38
2	AB	1734	G	C6-N1	7.42	1.44	1.39
2	AB	2364	C	C4'-O4'	-7.42	1.35	1.45
2	AB	2413	G	N1-C2	7.42	1.43	1.37
2	AB	804	A	N9-C8	7.42	1.43	1.37
2	AB	1252	G	C4'-O4'	-7.42	1.35	1.45
2	AB	2898	U	C5-C6	7.42	1.40	1.34
35	BA	19	A	C4'-O4'	-7.42	1.35	1.45
2	AB	176	A	O3'-P	7.41	1.70	1.61
2	AB	2640	G	N1-C2	7.41	1.43	1.37
2	AB	2886	A	C3'-C2'	-7.41	1.44	1.52
35	BA	1323	G	P-O5'	7.41	1.67	1.59
2	AB	656	G	C5-C4	-7.41	1.33	1.38
2	AB	1108	U	N1-C2	7.41	1.45	1.38
2	AB	2823	A	O4'-C1'	7.41	1.51	1.41
2	AB	261	G	N7-C5	-7.41	1.34	1.39
2	AB	2293	G	N9-C8	7.41	1.43	1.37
35	BA	99	C	O3'-P	7.41	1.70	1.61
2	AB	752	A	C5'-C4'	7.41	1.60	1.51
2	AB	979	A	C3'-C2'	7.41	1.61	1.52
2	AB	1012	U	N1-C2	7.41	1.45	1.38
2	AB	1982	U	O3'-P	7.41	1.70	1.61
2	AB	1328	A	C6-N6	7.41	1.39	1.33
35	BA	260	G	C6-N1	7.41	1.44	1.39
35	BA	428	G	C5'-C4'	7.41	1.60	1.51
2	AB	74	A	O3'-P	-7.41	1.52	1.61
2	AB	1034	G	C6-N1	7.41	1.44	1.39
2	AB	2127	G	C8-N7	7.41	1.35	1.30
2	AB	2803	G	C5-C4	-7.41	1.33	1.38
35	BA	388	G	N9-C8	7.41	1.43	1.37
35	BA	536	C	C2-N3	7.41	1.41	1.35
35	BA	1054	C	C4'-O4'	-7.41	1.35	1.45
2	AB	41	C	P-O5'	7.40	1.67	1.59
35	BA	785	G	C6-O6	7.40	1.30	1.24
35	BA	1299	A	C6-N1	-7.40	1.30	1.35
1	AA	9	G	P-O5'	-7.40	1.52	1.59
2	AB	1238	G	P-O5'	7.40	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2638	G	N7-C5	7.40	1.43	1.39
35	BA	104	G	C8-N7	-7.40	1.26	1.30
35	BA	546	A	N1-C2	-7.40	1.27	1.34
2	AB	2882	A	N3-C4	7.40	1.39	1.34
1	AA	53	A	C5'-C4'	7.40	1.60	1.51
35	BA	342	C	C4-C5	7.40	1.48	1.43
35	BA	519	C	P-O5'	7.40	1.67	1.59
2	AB	39	G	C8-N7	7.39	1.35	1.30
35	BA	1119	C	C2-O2	7.39	1.31	1.24
2	AB	1335	C	C5-C6	7.39	1.40	1.34
2	AB	2595	G	C2'-C1'	7.39	1.61	1.53
35	BA	770	C	P-O5'	7.39	1.67	1.59
2	AB	807	U	C4-O4	-7.39	1.17	1.23
2	AB	961	C	N3-C4	-7.39	1.28	1.33
2	AB	1310	G	N3-C4	7.39	1.40	1.35
2	AB	1547	C	C2-N3	7.39	1.41	1.35
35	BA	86	G	N1-C2	7.39	1.43	1.37
35	BA	637	C	C2-N3	7.39	1.41	1.35
35	BA	1485	U	C3'-C2'	7.39	1.61	1.52
2	AB	177	G	C5'-C4'	7.39	1.60	1.51
2	AB	230	G	C2-N3	7.39	1.38	1.32
2	AB	475	C	C4'-O4'	-7.39	1.35	1.45
2	AB	2273	A	N7-C5	7.39	1.43	1.39
2	AB	2893	A	C6-N1	7.39	1.40	1.35
35	BA	739	C	N3-C4	7.39	1.39	1.33
2	AB	2840	C	O3'-P	7.38	1.70	1.61
2	AB	2903	U	C2-N3	7.38	1.43	1.37
35	BA	728	A	C8-N7	-7.38	1.26	1.31
35	BA	1178	G	P-O5'	7.38	1.67	1.59
2	AB	770	G	C2-N3	7.38	1.38	1.32
2	AB	1796	U	C2-N3	7.38	1.43	1.37
35	BA	525	C	P-O5'	7.38	1.67	1.59
2	AB	150	U	C2-N3	7.38	1.43	1.37
2	AB	325	G	C8-N7	-7.38	1.26	1.30
35	BA	563	A	C6-N6	-7.38	1.28	1.33
35	BA	873	A	N3-C4	7.38	1.39	1.34
36	BB	40	G	P-O5'	7.38	1.67	1.59
2	AB	662	G	C2-N3	7.38	1.38	1.32
2	AB	1609	A	N7-C5	7.38	1.43	1.39
2	AB	2154	A	P-O5'	7.38	1.67	1.59
2	AB	886	A	C2-N3	-7.37	1.26	1.33
2	AB	2034	U	C2-N3	7.37	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2073	C	N1-C6	7.37	1.41	1.37
2	AB	2464	G	C4'-O4'	-7.37	1.35	1.45
2	AB	2474	U	N1-C2	7.37	1.45	1.38
2	AB	92	U	P-O5'	7.37	1.67	1.59
37	BC	76	C	C5-C6	7.37	1.40	1.34
35	BA	526	C	P-O5'	7.37	1.67	1.59
35	BA	1485	U	C4-C5	7.37	1.50	1.43
2	AB	645	C	N3-C4	7.37	1.39	1.33
2	AB	1632	A	N1-C2	-7.37	1.27	1.34
35	BA	809	G	N9-C8	7.37	1.43	1.37
35	BA	1357	A	C6-N1	-7.37	1.30	1.35
2	AB	367	G	N7-C5	-7.36	1.34	1.39
2	AB	445	C	O3'-P	7.36	1.70	1.61
2	AB	1360	G	N1-C2	7.36	1.43	1.37
2	AB	2298	A	C2'-C1'	7.36	1.61	1.53
2	AB	490	C	C2'-O2'	7.36	1.51	1.41
2	AB	678	C	P-O5'	7.36	1.67	1.59
2	AB	862	G	C5-C4	7.36	1.43	1.38
35	BA	6	G	C6-N1	7.36	1.44	1.39
35	BA	428	G	N1-C2	7.36	1.43	1.37
2	AB	1215	G	P-O5'	7.36	1.67	1.59
35	BA	649	A	N3-C4	7.36	1.39	1.34
1	AA	63	C	C2-N3	7.36	1.41	1.35
2	AB	1208	C	N1-C6	-7.36	1.32	1.37
2	AB	166	U	P-O5'	7.36	1.67	1.59
2	AB	340	A	C5'-C4'	7.36	1.60	1.51
2	AB	358	U	P-O5'	7.36	1.67	1.59
2	AB	2429	G	N3-C4	7.36	1.40	1.35
2	AB	2583	G	O3'-P	-7.36	1.52	1.61
35	BA	903	G	N9-C8	7.36	1.43	1.37
35	BA	1488	G	N3-C4	7.36	1.40	1.35
2	AB	1735	A	P-O5'	-7.35	1.52	1.59
35	BA	1138	G	C8-N7	7.35	1.35	1.30
35	BA	1278	G	C6-N1	7.35	1.44	1.39
35	BA	1354	U	C2-O2	7.35	1.28	1.22
2	AB	866	A	N3-C4	7.35	1.39	1.34
2	AB	1624	U	C2-O2	7.35	1.28	1.22
2	AB	1804	C	P-O5'	7.35	1.67	1.59
35	BA	791	G	C8-N7	7.35	1.35	1.30
2	AB	583	G	C2-N2	-7.35	1.27	1.34
35	BA	129	A	C5-C4	-7.35	1.33	1.38
35	BA	305	G	N9-C8	-7.35	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	726	C	N1-C6	7.35	1.41	1.37
35	BA	1396	A	C5-C4	-7.35	1.33	1.38
2	AB	2689	U	C2-N3	7.35	1.42	1.37
2	AB	327	G	C6-N1	-7.34	1.34	1.39
2	AB	1861	G	N7-C5	7.34	1.43	1.39
2	AB	2578	G	N3-C4	7.34	1.40	1.35
35	BA	510	A	C5'-C4'	7.34	1.60	1.51
35	BA	882	C	N1-C6	7.34	1.41	1.37
35	BA	1510	C	C2-N3	7.34	1.41	1.35
2	AB	130	C	N1-C6	7.34	1.41	1.37
2	AB	338	G	C2-N3	7.34	1.38	1.32
2	AB	674	G	N1-C2	7.34	1.43	1.37
2	AB	1332	G	N1-C2	7.34	1.43	1.37
2	AB	1466	U	C4-C5	7.34	1.50	1.43
2	AB	1550	C	N1-C2	7.34	1.47	1.40
2	AB	2282	G	N3-C4	-7.34	1.30	1.35
35	BA	173	U	C2-N3	7.34	1.42	1.37
37	BC	57	C	N3-C4	7.34	1.39	1.33
2	AB	2690	U	C2-N3	7.34	1.42	1.37
2	AB	2637	U	C2-N3	7.34	1.42	1.37
2	AB	1133	A	P-O5'	7.33	1.67	1.59
2	AB	1994	C	C5-C6	7.33	1.40	1.34
35	BA	858	G	C6-N1	7.33	1.44	1.39
2	AB	329	G	O3'-P	-7.33	1.52	1.61
2	AB	988	A	C5-C4	-7.33	1.33	1.38
2	AB	1880	U	C2-N3	7.33	1.42	1.37
2	AB	2806	C	N1-C2	7.33	1.47	1.40
35	BA	376	G	C5'-C4'	-7.33	1.42	1.51
37	BC	50	G	N9-C8	7.33	1.43	1.37
2	AB	882	G	O3'-P	7.33	1.70	1.61
2	AB	177	G	N9-C8	7.33	1.43	1.37
2	AB	1608	A	N9-C8	7.33	1.43	1.37
2	AB	2061	G	N3-C4	7.33	1.40	1.35
2	AB	2215	C	C2-N3	7.33	1.41	1.35
2	AB	126	A	N7-C5	7.33	1.43	1.39
2	AB	815	C	N1-C6	-7.33	1.32	1.37
2	AB	1805	A	C8-N7	-7.33	1.26	1.31
35	BA	1415	G	P-O5'	7.33	1.67	1.59
2	AB	129	C	N3-C4	7.32	1.39	1.33
2	AB	594	U	P-O5'	7.32	1.67	1.59
2	AB	916	G	C8-N7	7.32	1.35	1.30
2	AB	1299	G	C5'-C4'	7.32	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1653	G	C2'-O2'	7.32	1.51	1.41
2	AB	2222	C	C2-N3	7.32	1.41	1.35
35	BA	285	C	O3'-P	7.32	1.70	1.61
35	BA	451	A	N9-C4	7.32	1.42	1.37
2	AB	1121	C	O3'-P	7.32	1.70	1.61
36	BB	41	A	C3'-C2'	7.32	1.61	1.52
2	AB	1045	C	N1-C6	7.32	1.41	1.37
36	BB	37	G	N1-C2	7.32	1.43	1.37
2	AB	2267	A	N7-C5	7.32	1.43	1.39
2	AB	2862	G	C2-N3	7.32	1.38	1.32
35	BA	686	U	N1-C2	7.32	1.45	1.38
35	BA	1444	U	C2-O2	-7.32	1.15	1.22
2	AB	2824	C	N1-C6	7.32	1.41	1.37
35	BA	996	A	N3-C4	7.32	1.39	1.34
2	AB	178	G	N7-C5	7.31	1.43	1.39
2	AB	1905	C	N3-C4	-7.31	1.28	1.33
2	AB	2431	U	N3-C4	7.31	1.45	1.38
35	BA	842	U	P-O5'	7.31	1.67	1.59
2	AB	899	A	N7-C5	7.31	1.43	1.39
35	BA	508	U	C5'-C4'	7.31	1.60	1.51
35	BA	1006	G	N3-C4	7.31	1.40	1.35
35	BA	1473	G	O3'-P	7.31	1.70	1.61
2	AB	1479	G	N7-C5	7.31	1.43	1.39
2	AB	1743	G	P-O5'	7.31	1.67	1.59
2	AB	1840	G	C8-N7	-7.31	1.26	1.30
2	AB	2040	G	C8-N7	7.31	1.35	1.30
35	BA	976	G	N3-C4	7.31	1.40	1.35
2	AB	797	G	N9-C8	-7.30	1.32	1.37
2	AB	2276	G	C6-N1	-7.30	1.34	1.39
2	AB	2786	U	P-O5'	7.30	1.67	1.59
35	BA	1420	U	C4-C5	7.30	1.50	1.43
2	AB	114	U	C2-N3	7.30	1.42	1.37
2	AB	1024	G	C6-O6	-7.30	1.17	1.24
2	AB	1219	U	C4-C5	7.30	1.50	1.43
2	AB	2663	G	P-O5'	7.30	1.67	1.59
35	BA	183	C	C4-C5	7.30	1.48	1.43
35	BA	275	G	C5-C4	-7.30	1.33	1.38
35	BA	740	U	C5-C6	7.30	1.40	1.34
35	BA	530	G	N9-C4	7.30	1.43	1.38
2	AB	1080	A	C5-C6	7.30	1.47	1.41
2	AB	2084	C	C4-N4	-7.30	1.27	1.33
35	BA	70	U	C3'-O3'	7.30	1.52	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	586	C	N3-C4	7.30	1.39	1.33
35	BA	711	G	C5-C4	-7.30	1.33	1.38
35	BA	1419	G	N7-C5	-7.30	1.34	1.39
1	AA	14	U	P-O5'	7.29	1.67	1.59
2	AB	11	C	N3-C4	-7.29	1.28	1.33
2	AB	1218	G	C6-N1	7.29	1.44	1.39
2	AB	1613	G	O3'-P	7.29	1.70	1.61
2	AB	1927	A	N9-C4	-7.29	1.33	1.37
2	AB	2817	U	P-O5'	7.29	1.67	1.59
35	BA	439	U	C2'-C1'	7.29	1.61	1.53
35	BA	973	G	N7-C5	-7.29	1.34	1.39
35	BA	1448	C	N1-C6	7.29	1.41	1.37
2	AB	836	G	C8-N7	7.29	1.35	1.30
2	AB	53	A	N7-C5	7.29	1.43	1.39
2	AB	469	G	N7-C5	7.29	1.43	1.39
35	BA	63	C	N1-C6	7.29	1.41	1.37
2	AB	383	C	N3-C4	7.29	1.39	1.33
35	BA	466	A	N1-C2	-7.29	1.27	1.34
35	BA	922	G	C6-N1	7.29	1.44	1.39
36	BB	39	U	C4-O4	-7.29	1.17	1.23
2	AB	734	A	N3-C4	7.28	1.39	1.34
2	AB	1168	G	C5-C4	-7.28	1.33	1.38
2	AB	1699	G	N9-C4	7.28	1.43	1.38
2	AB	600	G	N1-C2	-7.28	1.31	1.37
2	AB	626	A	P-O5'	7.28	1.67	1.59
36	BB	38	G	C5'-C4'	7.28	1.60	1.51
35	BA	1217	C	P-O5'	7.28	1.67	1.59
2	AB	925	A	N3-C4	7.28	1.39	1.34
2	AB	1758	U	C2-N3	7.28	1.42	1.37
2	AB	1789	A	C8-N7	-7.28	1.26	1.31
2	AB	1978	A	C2-N3	-7.28	1.26	1.33
2	AB	2581	G	N7-C5	7.28	1.43	1.39
2	AB	2893	A	N3-C4	7.28	1.39	1.34
35	BA	228	A	N7-C5	-7.28	1.34	1.39
35	BA	721	G	C8-N7	-7.28	1.26	1.30
35	BA	941	G	N1-C2	7.28	1.43	1.37
35	BA	993	G	C5'-C4'	7.28	1.60	1.51
2	AB	972	A	C2'-C1'	7.28	1.61	1.53
2	AB	2653	U	P-O5'	7.28	1.67	1.59
35	BA	1158	C	C2'-O2'	-7.28	1.32	1.41
2	AB	2295	C	C4-C5	7.27	1.48	1.43
37	BC	2	G	P-O5'	7.27	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	430	A	N3-C4	7.27	1.39	1.34
2	AB	2769	U	C5-C6	7.27	1.40	1.34
2	AB	368	A	N3-C4	7.27	1.39	1.34
2	AB	651	G	O3'-P	-7.27	1.52	1.61
2	AB	1371	G	P-O5'	7.27	1.67	1.59
2	AB	1390	U	C5'-C4'	7.27	1.60	1.51
35	BA	38	G	C4'-C3'	-7.27	1.45	1.53
35	BA	410	G	C5-C4	-7.27	1.33	1.38
35	BA	864	A	C6-N1	-7.27	1.30	1.35
2	AB	1292	G	N1-C2	7.27	1.43	1.37
35	BA	204	G	N1-C2	7.27	1.43	1.37
55	BU	75	PRO	N-CD	-7.27	1.37	1.47
2	AB	2813	A	P-O5'	7.27	1.67	1.59
2	AB	1252	G	N9-C8	7.26	1.43	1.37
35	BA	572	A	N3-C4	7.26	1.39	1.34
35	BA	1101	A	C6-N1	7.26	1.40	1.35
35	BA	1427	C	C5-C6	7.26	1.40	1.34
2	AB	6	A	N9-C4	7.26	1.42	1.37
2	AB	627	A	P-O5'	-7.26	1.52	1.59
2	AB	1119	U	C2-N3	7.26	1.42	1.37
2	AB	1318	U	C2-N3	7.26	1.42	1.37
35	BA	323	U	C4-C5	7.26	1.50	1.43
35	BA	1379	G	P-O5'	7.26	1.67	1.59
1	AA	13	G	C2-N3	7.26	1.38	1.32
2	AB	1043	C	N1-C6	7.26	1.41	1.37
2	AB	1128	G	O4'-C1'	-7.26	1.32	1.41
2	AB	1961	C	C4'-O4'	-7.26	1.36	1.45
2	AB	2343	U	P-O5'	7.26	1.67	1.59
35	BA	1240	U	C2-N3	7.26	1.42	1.37
1	AA	26	C	N1-C6	7.26	1.41	1.37
2	AB	199	A	N3-C4	7.26	1.39	1.34
2	AB	816	C	C5-C6	7.26	1.40	1.34
2	AB	1333	G	N3-C4	7.26	1.40	1.35
2	AB	1508	A	N3-C4	7.26	1.39	1.34
2	AB	2317	A	C6-N6	-7.26	1.28	1.33
2	AB	2253	G	P-O5'	7.25	1.67	1.59
2	AB	2125	G	N7-C5	7.25	1.43	1.39
35	BA	75	G	C4'-O4'	-7.25	1.36	1.45
35	BA	297	G	C4'-C3'	7.25	1.61	1.53
2	AB	111	A	N3-C4	7.25	1.39	1.34
2	AB	1054	A	N7-C5	7.25	1.43	1.39
2	AB	1126	A	N3-C4	7.25	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1286	A	N3-C4	7.25	1.39	1.34
2	AB	2590	A	N3-C4	7.25	1.39	1.34
35	BA	192	A	N9-C8	7.25	1.43	1.37
35	BA	1385	G	N3-C4	7.25	1.40	1.35
35	BA	1527	U	C5'-C4'	7.25	1.60	1.51
1	AA	111	U	C2-N3	7.25	1.42	1.37
2	AB	237	C	C4-C5	7.25	1.48	1.43
2	AB	1280	G	P-O5'	7.25	1.67	1.59
2	AB	697	G	C6-N1	7.25	1.44	1.39
2	AB	2577	A	N3-C4	7.25	1.39	1.34
2	AB	305	C	C5-C6	7.25	1.40	1.34
2	AB	1055	G	O3'-P	7.25	1.69	1.61
2	AB	2434	A	C8-N7	-7.25	1.26	1.31
2	AB	2753	A	N1-C2	-7.25	1.27	1.34
2	AB	242	G	N9-C8	-7.25	1.32	1.37
2	AB	1551	A	P-O5'	7.24	1.67	1.59
35	BA	372	C	C2-N3	7.24	1.41	1.35
35	BA	464	U	C5'-C4'	7.24	1.60	1.51
35	BA	927	G	C5'-C4'	7.24	1.60	1.51
2	AB	85	G	N9-C8	-7.24	1.32	1.37
35	BA	540	G	N1-C2	7.24	1.43	1.37
2	AB	433	C	N1-C6	7.24	1.41	1.37
2	AB	706	A	C6-N1	-7.24	1.30	1.35
2	AB	1044	C	C5'-C4'	7.24	1.60	1.51
2	AB	1485	U	N1-C2	7.24	1.45	1.38
35	BA	999	C	N1-C6	7.24	1.41	1.37
35	BA	1043	G	N9-C4	7.24	1.43	1.38
36	BB	35	G	C5-C6	7.24	1.49	1.42
2	AB	342	A	N3-C4	7.24	1.39	1.34
2	AB	2213	U	C5'-C4'	7.24	1.60	1.51
35	BA	868	C	C2-N3	7.24	1.41	1.35
2	AB	857	G	N7-C5	7.24	1.43	1.39
2	AB	829	A	C2'-C1'	7.24	1.61	1.53
35	BA	65	A	C5'-C4'	7.24	1.60	1.51
35	BA	1172	C	N1-C2	7.24	1.47	1.40
2	AB	447	A	O4'-C1'	7.23	1.51	1.41
35	BA	322	C	C5'-C4'	7.23	1.60	1.51
35	BA	1467	C	N1-C6	7.23	1.41	1.37
2	AB	563	A	P-O5'	7.23	1.67	1.59
2	AB	1025	G	C3'-C2'	7.23	1.60	1.52
2	AB	1464	G	C5'-C4'	7.23	1.60	1.51
2	AB	1697	G	C3'-C2'	7.23	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	158	G	C6-N1	7.23	1.44	1.39
2	AB	795	C	O4'-C1'	7.23	1.51	1.41
2	AB	1508	A	C5-C4	7.23	1.43	1.38
2	AB	2487	G	P-O5'	7.23	1.67	1.59
2	AB	2509	G	N1-C2	7.23	1.43	1.37
2	AB	2757	A	C6-N1	7.23	1.40	1.35
35	BA	169	C	C4-N4	7.23	1.40	1.33
35	BA	630	A	N7-C5	7.23	1.43	1.39
2	AB	1170	C	C2-O2	-7.23	1.18	1.24
2	AB	1819	A	C5'-C4'	7.23	1.60	1.51
35	BA	1459	G	N3-C4	7.23	1.40	1.35
2	AB	1998	A	N9-C4	7.23	1.42	1.37
37	BC	38	A	C2'-C1'	7.23	1.61	1.53
2	AB	2292	U	C2-O2	7.23	1.28	1.22
2	AB	2358	A	P-O5'	7.23	1.67	1.59
2	AB	366	C	C2-N3	7.22	1.41	1.35
2	AB	1521	G	C4'-O4'	-7.22	1.36	1.45
2	AB	166	U	C2-N3	7.22	1.42	1.37
2	AB	1211	C	P-O5'	-7.22	1.52	1.59
2	AB	1599	U	N1-C2	7.22	1.45	1.38
35	BA	812	G	C5'-C4'	7.22	1.60	1.51
35	BA	1229	A	N7-C5	7.22	1.43	1.39
35	BA	1324	A	N3-C4	7.22	1.39	1.34
2	AB	2841	C	N3-C4	7.22	1.39	1.33
2	AB	1247	A	N9-C8	7.22	1.43	1.37
35	BA	662	U	C4'-O4'	-7.22	1.36	1.45
2	AB	135	U	C2'-C1'	7.22	1.61	1.53
2	AB	2692	G	C5'-C4'	7.22	1.60	1.51
35	BA	287	U	C4-C5	7.22	1.50	1.43
37	BC	16	C	C4'-C3'	7.22	1.61	1.53
54	BT	50	TYR	CG-CD1	7.22	1.48	1.39
1	AA	104	A	N3-C4	7.22	1.39	1.34
2	AB	1250	G	C4'-C3'	7.22	1.61	1.53
2	AB	1444	G	C2-N3	7.22	1.38	1.32
2	AB	1626	A	C8-N7	7.22	1.36	1.31
35	BA	581	G	C6-N1	7.22	1.44	1.39
35	BA	857	C	C4-C5	7.22	1.48	1.43
35	BA	1292	G	C6-N1	7.22	1.44	1.39
1	AA	79	G	N9-C4	7.21	1.43	1.38
2	AB	1477	A	C5'-C4'	7.21	1.60	1.51
35	BA	215	C	N3-C4	7.21	1.39	1.33
35	BA	904	U	N1-C2	7.21	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	662	G	O3'-P	7.21	1.69	1.61
2	AB	692	C	C4'-O4'	-7.21	1.36	1.45
2	AB	2318	G	N1-C2	7.21	1.43	1.37
2	AB	2381	A	C6-N1	-7.21	1.30	1.35
11	AK	15	GLY	CA-C	7.21	1.63	1.51
35	BA	122	G	C2-N3	7.21	1.38	1.32
35	BA	1026	G	C8-N7	7.21	1.35	1.30
2	AB	685	A	N9-C4	-7.21	1.33	1.37
2	AB	1057	A	N3-C4	7.21	1.39	1.34
2	AB	2272	U	C2'-C1'	7.21	1.61	1.53
35	BA	30	U	C4'-O4'	-7.21	1.36	1.45
35	BA	1048	G	C2-N3	7.21	1.38	1.32
1	AA	50	A	O3'-P	7.21	1.69	1.61
2	AB	286	U	C4'-O4'	-7.21	1.36	1.45
2	AB	487	C	C2-N3	7.21	1.41	1.35
2	AB	708	G	C8-N7	-7.21	1.26	1.30
2	AB	716	A	C4'-O4'	-7.21	1.36	1.45
2	AB	769	U	N1-C2	7.21	1.45	1.38
2	AB	1292	G	C8-N7	-7.21	1.26	1.30
2	AB	1450	G	N3-C4	7.21	1.40	1.35
2	AB	1761	C	C2-N3	7.21	1.41	1.35
2	AB	1916	A	C8-N7	-7.21	1.26	1.31
35	BA	596	A	N1-C2	-7.21	1.27	1.34
2	AB	18	U	C4-C5	7.21	1.50	1.43
2	AB	1397	U	N3-C4	7.21	1.45	1.38
35	BA	512	U	N1-C2	7.21	1.45	1.38
36	BB	56	G	C5-C6	7.21	1.49	1.42
1	AA	76	G	C5-C6	7.20	1.49	1.42
2	AB	602	A	P-O5'	7.20	1.67	1.59
2	AB	1410	G	N1-C2	7.20	1.43	1.37
35	BA	686	U	C4-O4	-7.20	1.17	1.23
2	AB	1326	U	P-O5'	7.20	1.67	1.59
2	AB	844	A	N7-C5	7.20	1.43	1.39
2	AB	1162	G	C5-C4	-7.20	1.33	1.38
2	AB	1257	C	N1-C6	-7.20	1.32	1.37
2	AB	2724	U	P-O5'	7.20	1.67	1.59
35	BA	1496	C	O5'-C5'	-7.20	1.31	1.42
2	AB	807	U	C2-N3	7.20	1.42	1.37
2	AB	921	C	C2-N3	7.20	1.41	1.35
2	AB	1146	C	C2-N3	7.20	1.41	1.35
2	AB	1797	G	C2-N3	7.20	1.38	1.32
2	AB	1964	G	N1-C2	7.20	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2437	G	N1-C2	7.20	1.43	1.37
2	AB	2751	G	N7-C5	-7.20	1.34	1.39
2	AB	1331	G	C2-N3	7.20	1.38	1.32
1	AA	41	G	N1-C2	7.20	1.43	1.37
35	BA	990	C	N3-C4	7.20	1.39	1.33
35	BA	603	U	N1-C2	7.19	1.45	1.38
2	AB	380	G	C5'-C4'	7.19	1.59	1.51
2	AB	1254	A	C8-N7	7.19	1.36	1.31
2	AB	1628	G	C5-C4	7.19	1.43	1.38
2	AB	2133	G	N3-C4	7.19	1.40	1.35
2	AB	2323	G	C8-N7	-7.19	1.26	1.30
35	BA	975	A	N9-C8	-7.19	1.31	1.37
35	BA	1371	G	N9-C4	-7.19	1.32	1.38
2	AB	1693	U	C3'-C2'	-7.19	1.44	1.52
35	BA	1457	G	N7-C5	7.19	1.43	1.39
2	AB	299	A	N1-C2	-7.19	1.27	1.34
2	AB	2887	A	N7-C5	7.19	1.43	1.39
2	AB	817	C	N1-C6	7.19	1.41	1.37
2	AB	1095	A	C5-C6	7.19	1.47	1.41
2	AB	1664	A	N9-C4	7.19	1.42	1.37
2	AB	2784	U	N3-C4	-7.19	1.31	1.38
35	BA	277	C	C5'-C4'	7.19	1.59	1.51
35	BA	415	A	N7-C5	7.19	1.43	1.39
2	AB	677	A	N9-C8	-7.19	1.32	1.37
2	AB	1400	U	C4'-C3'	7.19	1.61	1.53
2	AB	2442	C	C4-C5	7.19	1.48	1.43
35	BA	993	G	P-O5'	7.19	1.67	1.59
2	AB	259	G	N9-C8	-7.18	1.32	1.37
2	AB	352	A	C2-N3	7.18	1.40	1.33
2	AB	892	A	N9-C4	7.18	1.42	1.37
2	AB	2278	A	N7-C5	7.18	1.43	1.39
2	AB	559	G	C6-O6	-7.18	1.17	1.24
35	BA	993	G	C2'-C1'	-7.18	1.45	1.53
2	AB	1941	C	C2-O2	-7.18	1.18	1.24
2	AB	2618	G	N9-C8	-7.18	1.32	1.37
2	AB	1952	A	N3-C4	7.18	1.39	1.34
35	BA	944	G	C2'-C1'	7.18	1.61	1.53
1	AA	51	G	N1-C2	7.18	1.43	1.37
2	AB	2505	G	C8-N7	-7.18	1.26	1.30
35	BA	1420	U	C2-N3	7.18	1.42	1.37
2	AB	562	U	N3-C4	7.17	1.45	1.38
2	AB	584	C	P-O5'	7.17	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	771	G	C4'-O4'	-7.17	1.36	1.45
2	AB	1722	A	N7-C5	-7.17	1.34	1.39
35	BA	321	A	N3-C4	7.17	1.39	1.34
35	BA	568	G	N7-C5	7.17	1.43	1.39
2	AB	156	A	N7-C5	7.17	1.43	1.39
2	AB	336	C	N1-C6	7.17	1.41	1.37
2	AB	925	A	C2-N3	-7.17	1.27	1.33
2	AB	1003	G	P-O5'	7.17	1.67	1.59
2	AB	1400	U	C4-O4	-7.17	1.18	1.23
35	BA	509	A	C5'-C4'	7.17	1.59	1.51
2	AB	864	G	C2-N3	7.17	1.38	1.32
37	BC	47	A	P-O5'	-7.17	1.52	1.59
35	BA	786	G	P-O5'	7.17	1.67	1.59
36	BB	26	U	N1-C6	7.17	1.44	1.38
2	AB	491	G	N7-C5	7.17	1.43	1.39
2	AB	532	A	N3-C4	7.17	1.39	1.34
2	AB	1545	A	N9-C4	-7.17	1.33	1.37
2	AB	1977	A	N9-C4	7.17	1.42	1.37
2	AB	2663	G	N7-C5	-7.17	1.34	1.39
2	AB	75	G	O3'-P	7.17	1.69	1.61
2	AB	2520	C	C5'-C4'	7.17	1.59	1.51
2	AB	2781	A	N9-C8	-7.17	1.32	1.37
35	BA	730	G	O4'-C1'	7.17	1.50	1.41
35	BA	1301	U	C2-O2	7.17	1.28	1.22
2	AB	1205	A	N7-C5	7.17	1.43	1.39
35	BA	1401	G	N7-C5	7.17	1.43	1.39
2	AB	255	A	C8-N7	-7.16	1.26	1.31
2	AB	705	A	C4'-O4'	-7.16	1.36	1.45
2	AB	2829	A	C8-N7	-7.16	1.26	1.31
35	BA	899	C	C2'-C1'	7.16	1.61	1.53
35	BA	993	G	C4'-O4'	-7.16	1.36	1.45
35	BA	1346	A	N9-C4	7.16	1.42	1.37
2	AB	969	G	C6-N1	7.16	1.44	1.39
2	AB	1542	U	C4-O4	-7.16	1.18	1.23
2	AB	1727	C	N1-C6	7.16	1.41	1.37
2	AB	2092	U	P-O5'	7.16	1.67	1.59
35	BA	1170	A	N3-C4	7.16	1.39	1.34
37	BC	10	G	C6-N1	7.16	1.44	1.39
35	BA	16	A	C6-N6	-7.16	1.28	1.33
2	AB	280	U	C5-C6	7.16	1.40	1.34
2	AB	289	G	C5'-C4'	7.16	1.59	1.51
2	AB	1149	G	C8-N7	7.16	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2434	A	N3-C4	7.16	1.39	1.34
35	BA	321	A	N9-C8	-7.16	1.32	1.37
2	AB	63	A	C6-N6	7.15	1.39	1.33
2	AB	755	U	C4-O4	-7.15	1.18	1.23
2	AB	2312	U	C2-N3	7.15	1.42	1.37
37	BC	27	G	C3'-C2'	7.15	1.60	1.52
2	AB	512	G	N3-C4	7.15	1.40	1.35
35	BA	169	C	C4-C5	7.15	1.48	1.43
35	BA	1031	C	C4-C5	-7.15	1.37	1.43
1	AA	58	A	N7-C5	-7.15	1.34	1.39
2	AB	361	G	C5-C4	7.15	1.43	1.38
2	AB	2702	G	C6-N1	7.15	1.44	1.39
35	BA	75	G	C6-N1	7.15	1.44	1.39
2	AB	2899	A	N3-C4	7.15	1.39	1.34
2	AB	1691	C	C4-C5	7.14	1.48	1.43
2	AB	2509	G	C2'-C1'	7.14	1.61	1.53
35	BA	1016	A	N3-C4	-7.14	1.30	1.34
2	AB	836	G	N3-C4	7.14	1.40	1.35
2	AB	856	G	C8-N7	-7.14	1.26	1.30
2	AB	1802	A	O3'-P	7.14	1.69	1.61
2	AB	2776	A	C6-N6	7.14	1.39	1.33
2	AB	2116	G	C4'-C3'	-7.14	1.45	1.53
2	AB	2553	G	N3-C4	7.14	1.40	1.35
35	BA	297	G	C2-N3	7.14	1.38	1.32
2	AB	176	A	O4'-C1'	7.14	1.50	1.41
2	AB	243	U	C4-O4	-7.14	1.18	1.23
2	AB	1102	C	N3-C4	7.14	1.39	1.33
35	BA	553	A	P-O5'	7.14	1.66	1.59
35	BA	1365	G	C5-C6	7.14	1.49	1.42
35	BA	622	A	N9-C4	7.14	1.42	1.37
2	AB	1425	G	P-O5'	7.14	1.66	1.59
2	AB	2822	G	N7-C5	7.14	1.43	1.39
4	AD	170	TYR	CE1-CZ	7.14	1.47	1.38
35	BA	127	G	C6-N1	7.14	1.44	1.39
35	BA	264	C	O3'-P	7.14	1.69	1.61
35	BA	1068	G	C5-C4	-7.14	1.33	1.38
2	AB	31	C	C5-C6	7.13	1.40	1.34
2	AB	197	A	N3-C4	7.13	1.39	1.34
2	AB	771	G	C2-N3	7.13	1.38	1.32
35	BA	292	G	P-O5'	7.13	1.66	1.59
2	AB	1441	G	N1-C2	7.13	1.43	1.37
2	AB	1288	G	C2-N3	7.13	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1349	C	N1-C6	7.13	1.41	1.37
2	AB	1447	C	C4'-C3'	-7.13	1.45	1.53
2	AB	463	G	C4'-O4'	-7.13	1.36	1.45
2	AB	742	A	C8-N7	-7.13	1.26	1.31
35	BA	1101	A	P-O5'	7.13	1.66	1.59
2	AB	403	U	C4-C5	7.13	1.50	1.43
2	AB	437	U	P-O5'	7.13	1.66	1.59
2	AB	1176	U	C2-N3	7.13	1.42	1.37
2	AB	2052	A	P-O5'	7.13	1.66	1.59
2	AB	2599	G	P-O5'	-7.13	1.52	1.59
2	AB	2864	G	N3-C4	7.13	1.40	1.35
35	BA	79	G	C5-C4	7.13	1.43	1.38
2	AB	394	C	P-O5'	7.13	1.66	1.59
2	AB	1295	C	N3-C4	-7.13	1.28	1.33
2	AB	1950	G	P-O5'	7.13	1.66	1.59
35	BA	510	A	P-O5'	7.13	1.66	1.59
2	AB	1704	C	C2'-O2'	-7.12	1.32	1.41
2	AB	2639	A	P-O5'	7.12	1.66	1.59
35	BA	888	G	C5-C4	-7.12	1.33	1.38
2	AB	20	C	C2-O2	-7.12	1.18	1.24
2	AB	963	U	C2-N3	7.12	1.42	1.37
2	AB	1143	A	O3'-P	-7.12	1.52	1.61
2	AB	1281	G	N1-C2	7.12	1.43	1.37
2	AB	1884	G	C6-N1	7.12	1.44	1.39
35	BA	237	G	N7-C5	-7.12	1.34	1.39
35	BA	460	A	N3-C4	7.12	1.39	1.34
35	BA	1003	G	C2'-C1'	7.12	1.61	1.53
36	BB	17	U	C5'-C4'	7.12	1.59	1.51
2	AB	5	A	C5-C6	7.12	1.47	1.41
2	AB	123	G	C5-C4	-7.12	1.33	1.38
2	AB	1194	A	N9-C4	-7.12	1.33	1.37
2	AB	1332	G	P-O5'	7.12	1.66	1.59
2	AB	2097	A	N3-C4	7.12	1.39	1.34
2	AB	1459	G	C8-N7	-7.12	1.26	1.30
2	AB	1715	G	C5-C6	7.12	1.49	1.42
36	BB	17	U	N1-C2	7.12	1.45	1.38
2	AB	821	A	N9-C4	-7.12	1.33	1.37
2	AB	1433	A	C8-N7	-7.12	1.26	1.31
2	AB	1872	A	O3'-P	7.12	1.69	1.61
2	AB	2114	A	N1-C2	-7.12	1.27	1.34
2	AB	2116	G	C2'-C1'	-7.12	1.45	1.53
2	AB	2643	G	C5-C4	7.12	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BB	29	G	C8-N7	-7.12	1.26	1.30
2	AB	676	A	C4'-O4'	-7.12	1.36	1.45
35	BA	259	G	N7-C5	-7.12	1.34	1.39
35	BA	1339	A	N3-C4	7.12	1.39	1.34
2	AB	1141	U	C2-N3	7.11	1.42	1.37
2	AB	2305	U	N1-C2	7.11	1.45	1.38
2	AB	2639	A	C4'-C3'	7.11	1.60	1.53
2	AB	2877	G	C4'-C3'	-7.11	1.45	1.53
35	BA	33	A	N3-C4	7.11	1.39	1.34
1	AA	115	A	N3-C4	7.11	1.39	1.34
35	BA	204	G	C5-C6	7.11	1.49	1.42
35	BA	281	G	N1-C2	7.11	1.43	1.37
2	AB	1904	G	C6-N1	-7.11	1.34	1.39
35	BA	199	A	N9-C8	7.11	1.43	1.37
35	BA	639	G	N3-C4	7.11	1.40	1.35
35	BA	1429	A	N7-C5	-7.11	1.34	1.39
2	AB	1367	A	P-O5'	7.11	1.66	1.59
35	BA	1050	G	C8-N7	7.11	1.35	1.30
2	AB	99	U	C5-C6	7.11	1.40	1.34
2	AB	1338	G	C5'-C4'	7.11	1.59	1.51
2	AB	1571	A	P-O5'	7.11	1.66	1.59
35	BA	553	A	N3-C4	7.11	1.39	1.34
1	AA	108	A	N7-C5	-7.11	1.34	1.39
2	AB	156	A	C4'-O4'	-7.11	1.36	1.45
2	AB	462	C	C2-N3	7.11	1.41	1.35
2	AB	1442	U	C5-C6	7.11	1.40	1.34
2	AB	1800	C	C4-C5	-7.11	1.37	1.43
2	AB	1834	U	C2-N3	7.11	1.42	1.37
2	AB	2211	A	C5-C6	7.11	1.47	1.41
12	AL	66	GLY	N-CA	-7.11	1.35	1.46
35	BA	321	A	C6-N1	7.11	1.40	1.35
2	AB	508	A	N3-C4	7.10	1.39	1.34
35	BA	792	A	C5-C6	7.10	1.47	1.41
35	BA	1236	A	N7-C5	7.10	1.43	1.39
2	AB	790	U	N3-C4	7.10	1.44	1.38
36	BB	27	A	O3'-P	7.10	1.69	1.61
2	AB	177	G	C8-N7	7.10	1.35	1.30
2	AB	267	C	N1-C6	7.10	1.41	1.37
2	AB	917	A	N9-C4	-7.10	1.33	1.37
35	BA	105	G	N7-C5	7.10	1.43	1.39
35	BA	219	U	C4'-C3'	7.10	1.60	1.53
35	BA	1401	G	C2-N3	7.10	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	15	G	N7-C5	7.10	1.43	1.39
2	AB	51	G	N7-C5	7.10	1.43	1.39
2	AB	307	G	C2-N2	-7.10	1.27	1.34
2	AB	1033	U	C4'-O4'	-7.10	1.36	1.45
35	BA	1409	C	N1-C6	7.10	1.41	1.37
35	BA	467	U	N3-C4	7.10	1.44	1.38
2	AB	366	C	C4-C5	7.09	1.48	1.43
2	AB	522	A	C6-N1	7.09	1.40	1.35
2	AB	854	C	N1-C6	7.09	1.41	1.37
2	AB	2273	A	N9-C4	-7.09	1.33	1.37
35	BA	918	A	N3-C4	7.09	1.39	1.34
35	BA	644	U	P-O5'	7.09	1.66	1.59
35	BA	1018	G	N9-C4	-7.09	1.32	1.38
2	AB	273	G	C8-N7	-7.09	1.26	1.30
2	AB	2221	G	N1-C2	7.09	1.43	1.37
2	AB	2425	A	C5-C4	-7.09	1.33	1.38
2	AB	2705	A	P-O5'	7.09	1.66	1.59
35	BA	906	A	C6-N1	7.09	1.40	1.35
1	AA	80	U	C3'-C2'	7.09	1.60	1.52
2	AB	659	G	P-O5'	7.09	1.66	1.59
2	AB	880	G	C5'-C4'	7.09	1.59	1.51
2	AB	925	A	P-O5'	7.09	1.66	1.59
2	AB	1918	A	C6-N1	7.09	1.40	1.35
2	AB	561	G	P-O5'	7.09	1.66	1.59
2	AB	1587	G	N9-C8	7.09	1.42	1.37
2	AB	2780	G	C8-N7	7.09	1.35	1.30
35	BA	1110	A	C2-N3	7.08	1.40	1.33
2	AB	113	U	N1-C2	7.08	1.45	1.38
2	AB	1044	C	N1-C6	7.08	1.41	1.37
2	AB	1941	C	C4'-O4'	-7.08	1.36	1.45
2	AB	2707	U	C5-C6	7.08	1.40	1.34
2	AB	2810	A	C5-C6	7.08	1.47	1.41
35	BA	1145	A	N7-C5	7.08	1.43	1.39
2	AB	46	G	P-O5'	7.08	1.66	1.59
2	AB	2155	U	C4-C5	7.08	1.50	1.43
35	BA	722	G	N9-C4	7.08	1.43	1.38
35	BA	1204	A	C6-N1	-7.08	1.30	1.35
37	BC	72	C	C3'-C2'	7.08	1.60	1.52
2	AB	13	A	C3'-C2'	7.08	1.60	1.52
35	BA	1059	C	N1-C6	7.08	1.41	1.37
2	AB	902	C	N3-C4	7.08	1.39	1.33
2	AB	1065	U	C5-C6	7.08	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1379	U	N1-C2	7.08	1.45	1.38
35	BA	359	G	N9-C8	-7.08	1.32	1.37
35	BA	420	U	C4-C5	7.08	1.50	1.43
2	AB	11	C	C5'-C4'	7.08	1.59	1.51
2	AB	802	A	C8-N7	-7.08	1.26	1.31
2	AB	1584	U	C5-C6	7.08	1.40	1.34
2	AB	2803	G	N7-C5	7.08	1.43	1.39
35	BA	1336	C	C5'-C4'	7.08	1.59	1.51
2	AB	295	G	C2-N3	7.07	1.38	1.32
2	AB	328	U	C4'-O4'	-7.07	1.36	1.45
2	AB	497	A	O3'-P	-7.07	1.52	1.61
2	AB	2147	A	N7-C5	7.07	1.43	1.39
35	BA	348	G	C6-N1	7.07	1.44	1.39
35	BA	1013	G	C6-N1	7.07	1.44	1.39
35	BA	1339	A	C8-N7	-7.07	1.26	1.31
1	AA	111	U	C4-C5	-7.07	1.37	1.43
2	AB	2	G	N9-C4	7.07	1.43	1.38
2	AB	1187	G	P-O5'	7.07	1.66	1.59
2	AB	1312	U	C5-C6	7.07	1.40	1.34
35	BA	769	G	C6-N1	7.07	1.44	1.39
2	AB	271	G	C2-N3	7.07	1.38	1.32
35	BA	435	A	N9-C4	7.07	1.42	1.37
2	AB	104	A	N7-C5	-7.07	1.35	1.39
2	AB	2312	U	N1-C2	7.07	1.45	1.38
35	BA	1180	A	C2'-C1'	7.07	1.61	1.53
2	AB	2067	G	C6-N1	7.07	1.44	1.39
35	BA	1022	A	N7-C5	7.07	1.43	1.39
35	BA	1541	U	C4-C5	7.07	1.50	1.43
35	BA	69	G	P-O5'	7.06	1.66	1.59
1	AA	99	A	C3'-C2'	7.06	1.60	1.52
1	AA	110	C	P-O5'	7.06	1.66	1.59
2	AB	1280	G	N9-C4	7.06	1.43	1.38
2	AB	2265	U	C2-N3	7.06	1.42	1.37
2	AB	2328	A	O4'-C1'	7.06	1.50	1.41
35	BA	498	A	N7-C5	7.06	1.43	1.39
35	BA	1265	C	C2-O2	-7.06	1.18	1.24
35	BA	1411	C	C5-C6	7.06	1.40	1.34
2	AB	1654	A	N9-C4	-7.06	1.33	1.37
35	BA	926	G	P-O5'	7.06	1.66	1.59
2	AB	1252	G	C5-C4	7.06	1.43	1.38
35	BA	1165	U	C4-C5	7.06	1.50	1.43
2	AB	799	G	N9-C4	-7.06	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2109	U	P-O5'	7.06	1.66	1.59
2	AB	2729	G	C8-N7	-7.06	1.26	1.30
2	AB	2798	U	N1-C2	7.06	1.45	1.38
35	BA	854	U	C4-C5	7.06	1.50	1.43
2	AB	306	U	C4'-O4'	-7.06	1.36	1.45
2	AB	1935	G	N1-C2	7.06	1.43	1.37
2	AB	284	U	C2-N3	7.05	1.42	1.37
2	AB	1288	G	N3-C4	7.05	1.40	1.35
1	AA	57	A	P-O5'	7.05	1.66	1.59
35	BA	74	A	P-O5'	7.05	1.66	1.59
35	BA	990	C	N1-C6	7.05	1.41	1.37
2	AB	675	A	C5-C6	7.05	1.47	1.41
2	AB	901	C	C4'-C3'	7.05	1.60	1.53
2	AB	1315	C	N1-C6	7.05	1.41	1.37
35	BA	428	G	N9-C8	7.05	1.42	1.37
35	BA	591	U	C4-C5	-7.05	1.37	1.43
35	BA	1159	U	C4-C5	7.05	1.49	1.43
2	AB	12	U	C5-C6	7.05	1.40	1.34
2	AB	2630	G	C8-N7	-7.05	1.26	1.30
35	BA	1406	U	C2-N3	7.05	1.42	1.37
35	BA	1472	U	N1-C6	7.05	1.44	1.38
2	AB	1880	U	C5-C6	7.05	1.40	1.34
2	AB	1453	A	C4'-O4'	-7.05	1.36	1.45
2	AB	1510	G	N9-C8	7.05	1.42	1.37
2	AB	1619	G	N3-C4	7.05	1.40	1.35
2	AB	2684	U	C4'-O4'	-7.05	1.36	1.45
35	BA	396	C	C2-N3	7.05	1.41	1.35
2	AB	428	A	P-O5'	7.04	1.66	1.59
2	AB	559	G	O3'-P	7.04	1.69	1.61
2	AB	1442	U	N1-C6	7.04	1.44	1.38
2	AB	2697	G	P-O5'	7.04	1.66	1.59
2	AB	173	A	N7-C5	-7.04	1.35	1.39
2	AB	728	G	C5-C4	-7.04	1.33	1.38
2	AB	952	G	N9-C8	7.04	1.42	1.37
2	AB	1334	G	C2-N3	7.04	1.38	1.32
2	AB	1787	A	C6-N6	7.04	1.39	1.33
35	BA	760	G	C2'-C1'	7.04	1.61	1.53
35	BA	910	C	N1-C6	7.04	1.41	1.37
2	AB	795	C	N1-C6	7.04	1.41	1.37
2	AB	2056	G	N7-C5	-7.04	1.35	1.39
35	BA	1164	G	C5'-C4'	7.04	1.59	1.51
2	AB	1232	G	C5-C4	-7.04	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1380	G	C2-N3	7.04	1.38	1.32
35	BA	414	A	P-O5'	7.04	1.66	1.59
35	BA	1194	U	P-O5'	7.04	1.66	1.59
35	BA	1200	C	C5'-C4'	7.04	1.59	1.51
35	BA	1465	A	C4'-C3'	7.04	1.60	1.53
37	BC	59	A	C5-C6	-7.04	1.34	1.41
2	AB	483	A	C5'-C4'	7.04	1.59	1.51
2	AB	1180	U	C4-O4	7.04	1.29	1.23
2	AB	623	C	N1-C6	7.04	1.41	1.37
2	AB	698	C	C5'-C4'	7.04	1.59	1.51
2	AB	943	A	N7-C5	7.04	1.43	1.39
2	AB	1324	G	C6-N1	7.04	1.44	1.39
2	AB	1378	A	N9-C8	-7.04	1.32	1.37
35	BA	142	G	P-O5'	7.04	1.66	1.59
35	BA	1208	C	C5'-C4'	7.04	1.59	1.51
35	BA	1447	A	C5-C4	-7.04	1.33	1.38
2	AB	2361	G	N3-C4	7.03	1.40	1.35
35	BA	610	U	C4-O4	7.03	1.29	1.23
35	BA	788	U	N1-C6	-7.03	1.31	1.38
2	AB	324	A	N3-C4	7.03	1.39	1.34
2	AB	521	U	C5-C6	7.03	1.40	1.34
35	BA	472	U	C5'-C4'	7.03	1.59	1.51
35	BA	1101	A	C5'-C4'	7.03	1.59	1.51
2	AB	28	A	C6-N1	-7.03	1.30	1.35
2	AB	213	A	O3'-P	7.03	1.69	1.61
2	AB	1635	A	N9-C4	-7.03	1.33	1.37
2	AB	2864	G	P-O5'	7.03	1.66	1.59
35	BA	354	G	N7-C5	-7.03	1.35	1.39
35	BA	645	G	O3'-P	7.03	1.69	1.61
2	AB	945	A	P-O5'	7.03	1.66	1.59
1	AA	14	U	C5-C6	7.03	1.40	1.34
2	AB	712	G	C8-N7	-7.03	1.26	1.30
2	AB	2435	A	C6-N1	7.03	1.40	1.35
2	AB	2571	U	O3'-P	7.03	1.69	1.61
35	BA	1188	A	N9-C8	-7.03	1.32	1.37
2	AB	1025	G	C4'-O4'	-7.03	1.36	1.45
35	BA	18	C	N1-C6	7.03	1.41	1.37
35	BA	166	U	C2-O2	7.03	1.28	1.22
35	BA	450	G	C6-N1	7.03	1.44	1.39
2	AB	562	U	C2-N3	7.02	1.42	1.37
2	AB	587	C	O3'-P	7.02	1.69	1.61
2	AB	79	C	N1-C6	7.02	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1057	A	C5-C6	7.02	1.47	1.41
35	BA	978	A	C5-C4	7.02	1.43	1.38
2	AB	841	G	C5'-C4'	7.02	1.59	1.51
2	AB	1459	G	C5'-C4'	7.02	1.59	1.51
2	AB	1499	C	C5-C6	7.02	1.40	1.34
2	AB	2334	U	C2-N3	7.02	1.42	1.37
2	AB	1335	C	C2-N3	7.02	1.41	1.35
35	BA	858	G	N7-C5	7.02	1.43	1.39
35	BA	1286	U	N1-C2	7.02	1.44	1.38
2	AB	1127	A	P-O5'	7.01	1.66	1.59
2	AB	1984	G	C2-N3	7.01	1.38	1.32
2	AB	2154	A	C5-C6	7.01	1.47	1.41
35	BA	1055	A	C2'-O2'	7.01	1.50	1.41
2	AB	895	U	P-O5'	7.01	1.66	1.59
2	AB	2626	C	P-O5'	7.01	1.66	1.59
2	AB	285	G	C2-N3	7.01	1.38	1.32
2	AB	2778	A	C6-N6	-7.01	1.28	1.33
2	AB	2839	G	P-O5'	7.01	1.66	1.59
35	BA	759	A	C5'-C4'	7.01	1.59	1.51
35	BA	893	C	C4'-O4'	-7.01	1.36	1.45
35	BA	1075	U	C5-C6	7.01	1.40	1.34
2	AB	435	C	C4'-O4'	-7.01	1.36	1.45
2	AB	1142	A	C3'-O3'	7.01	1.51	1.42
2	AB	1191	G	N9-C8	7.01	1.42	1.37
35	BA	68	G	C6-N1	-7.01	1.34	1.39
35	BA	723	U	C4'-O4'	-7.01	1.36	1.45
2	AB	710	U	C2-O2	-7.01	1.16	1.22
35	BA	1316	G	N9-C4	-7.01	1.32	1.38
2	AB	1700	A	C5-C4	7.01	1.43	1.38
2	AB	1959	G	C5'-C4'	7.01	1.59	1.51
2	AB	2569	G	C4'-O4'	-7.01	1.36	1.45
35	BA	1092	A	C5'-C4'	7.01	1.59	1.51
2	AB	620	G	C5-C4	7.00	1.43	1.38
35	BA	667	G	N9-C8	7.00	1.42	1.37
2	AB	128	C	N1-C6	-7.00	1.32	1.37
2	AB	1098	A	P-O5'	7.00	1.66	1.59
2	AB	1490	A	C4'-C3'	7.00	1.60	1.53
35	BA	453	G	C5-C4	7.00	1.43	1.38
35	BA	1186	G	C4'-O4'	-7.00	1.36	1.45
2	AB	1175	A	N9-C8	7.00	1.43	1.37
2	AB	1664	A	C4'-O4'	-7.00	1.36	1.45
2	AB	822	G	N9-C8	7.00	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2497	A	C5-C4	-7.00	1.33	1.38
35	BA	1509	C	C4-N4	7.00	1.40	1.33
2	AB	77	G	N7-C5	-7.00	1.35	1.39
2	AB	2852	G	C5-C4	-7.00	1.33	1.38
35	BA	697	U	C5-C6	7.00	1.40	1.34
35	BA	1068	G	C6-O6	-7.00	1.17	1.24
35	BA	1075	U	C5'-C4'	7.00	1.59	1.51
2	AB	673	C	N3-C4	7.00	1.38	1.33
2	AB	2063	C	N3-C4	7.00	1.38	1.33
35	BA	149	A	C4'-C3'	7.00	1.60	1.53
35	BA	331	G	C5-C6	7.00	1.49	1.42
35	BA	457	G	C3'-C2'	7.00	1.60	1.52
35	BA	909	A	C8-N7	-7.00	1.26	1.31
35	BA	1086	U	C2-N3	7.00	1.42	1.37
2	AB	1386	C	N1-C6	7.00	1.41	1.37
2	AB	2533	U	C3'-C2'	-7.00	1.45	1.52
35	BA	1225	A	N7-C5	7.00	1.43	1.39
2	AB	187	G	C2'-C1'	6.99	1.61	1.53
2	AB	1066	U	N3-C4	6.99	1.44	1.38
37	BC	71	G	C6-N1	6.99	1.44	1.39
2	AB	360	U	N1-C6	6.99	1.44	1.38
2	AB	1062	G	C2-N3	6.99	1.38	1.32
2	AB	1861	G	C8-N7	6.99	1.35	1.30
35	BA	229	U	P-O5'	6.99	1.66	1.59
35	BA	713	G	N7-C5	-6.99	1.35	1.39
35	BA	1053	G	C6-O6	-6.99	1.17	1.24
35	BA	1208	C	N1-C6	6.99	1.41	1.37
2	AB	198	C	C3'-C2'	6.99	1.60	1.52
2	AB	650	C	N3-C4	6.99	1.38	1.33
2	AB	1010	A	P-O5'	-6.99	1.52	1.59
2	AB	1254	A	C3'-O3'	6.99	1.51	1.42
2	AB	2842	G	N3-C4	6.99	1.40	1.35
35	BA	65	A	C8-N7	-6.99	1.26	1.31
2	AB	572	A	P-O5'	6.99	1.66	1.59
35	BA	356	A	N3-C4	6.99	1.39	1.34
35	BA	616	G	N9-C4	6.99	1.43	1.38
2	AB	254	G	N1-C2	6.99	1.43	1.37
2	AB	406	G	C2-N3	6.99	1.38	1.32
2	AB	855	G	C3'-C2'	-6.99	1.45	1.52
2	AB	863	A	N9-C4	6.99	1.42	1.37
2	AB	1454	C	N1-C6	6.99	1.41	1.37
35	BA	619	U	P-O5'	6.99	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	367	G	C6-N1	6.98	1.44	1.39
2	AB	2632	A	C6-N1	-6.98	1.30	1.35
2	AB	2798	U	N3-C4	-6.98	1.32	1.38
35	BA	1304	G	C8-N7	-6.98	1.26	1.30
2	AB	246	C	C4-N4	-6.98	1.27	1.33
2	AB	1424	G	N9-C8	-6.98	1.32	1.37
2	AB	1710	G	C6-O6	-6.98	1.17	1.24
2	AB	1723	G	C6-N1	-6.98	1.34	1.39
35	BA	21	G	N3-C4	6.98	1.40	1.35
35	BA	796	C	P-O5'	6.98	1.66	1.59
35	BA	1209	C	N1-C6	6.98	1.41	1.37
2	AB	2264	C	O4'-C1'	-6.98	1.32	1.41
35	BA	43	C	C2'-C1'	6.98	1.61	1.53
35	BA	875	U	C4-C5	6.98	1.49	1.43
2	AB	1838	C	C5-C6	6.98	1.40	1.34
2	AB	1857	G	C4'-C3'	6.98	1.60	1.53
2	AB	2158	A	C5'-C4'	6.98	1.59	1.51
2	AB	278	A	C5-C4	-6.98	1.33	1.38
2	AB	559	G	N9-C8	6.98	1.42	1.37
2	AB	603	A	N9-C4	6.98	1.42	1.37
2	AB	1089	A	P-O5'	6.98	1.66	1.59
2	AB	1423	G	O3'-P	6.98	1.69	1.61
2	AB	2154	A	N3-C4	6.98	1.39	1.34
34	A7	31	PRO	N-CD	-6.98	1.38	1.47
35	BA	229	U	N1-C6	6.98	1.44	1.38
1	AA	114	C	O3'-P	6.98	1.69	1.61
2	AB	1743	G	C4'-O4'	-6.98	1.36	1.45
35	BA	1234	C	C2-N3	6.98	1.41	1.35
2	AB	161	A	C4'-O4'	-6.97	1.36	1.45
2	AB	384	A	C5-C4	-6.97	1.33	1.38
2	AB	388	G	C5-C6	6.97	1.49	1.42
2	AB	555	G	O3'-P	6.97	1.69	1.61
35	BA	1225	A	P-O5'	6.97	1.66	1.59
35	BA	1276	G	P-O5'	6.97	1.66	1.59
35	BA	1480	A	O3'-P	6.97	1.69	1.61
2	AB	1248	G	C5-C4	-6.97	1.33	1.38
2	AB	1393	A	C4'-C3'	6.97	1.60	1.53
2	AB	2294	G	C8-N7	-6.97	1.26	1.30
35	BA	305	G	C5'-C4'	6.97	1.59	1.51
36	BB	13	A	O4'-C1'	6.97	1.50	1.41
2	AB	945	A	C5'-C4'	6.97	1.59	1.51
2	AB	308	G	N1-C2	6.97	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1092	C	C4-C5	6.97	1.48	1.43
2	AB	2148	G	N7-C5	-6.97	1.35	1.39
2	AB	2323	G	C2-N3	6.97	1.38	1.32
35	BA	378	G	N3-C4	6.97	1.40	1.35
2	AB	734	A	C6-N1	6.97	1.40	1.35
2	AB	2257	U	C4-C5	6.97	1.49	1.43
2	AB	2369	A	N7-C5	-6.97	1.35	1.39
2	AB	2499	C	C4-C5	6.97	1.48	1.43
2	AB	64	A	C2'-C1'	6.97	1.61	1.53
2	AB	1090	A	C4'-C3'	6.97	1.60	1.53
2	AB	1173	U	C4-O4	-6.97	1.18	1.23
2	AB	1978	A	C6-N1	6.97	1.40	1.35
2	AB	2275	C	N3-C4	6.97	1.38	1.33
2	AB	2420	C	N1-C6	-6.97	1.32	1.37
35	BA	618	C	C4-N4	6.97	1.40	1.33
35	BA	1098	C	C4-C5	6.97	1.48	1.43
2	AB	674	G	C2-N3	6.96	1.38	1.32
35	BA	241	G	O3'-P	6.96	1.69	1.61
35	BA	1164	G	C4'-C3'	6.96	1.60	1.53
2	AB	2018	G	O4'-C1'	6.96	1.50	1.41
1	AA	120	U	C2'-O2'	6.96	1.50	1.41
2	AB	288	U	N3-C4	6.96	1.44	1.38
2	AB	1124	G	N7-C5	6.96	1.43	1.39
2	AB	2104	C	N1-C6	6.96	1.41	1.37
35	BA	230	G	C5-C6	-6.96	1.35	1.42
35	BA	956	U	C4-O4	6.96	1.29	1.23
35	BA	1371	G	N7-C5	-6.96	1.35	1.39
36	BB	38	G	N7-C5	6.96	1.43	1.39
2	AB	46	G	N9-C8	6.96	1.42	1.37
2	AB	294	A	C2'-C1'	6.96	1.61	1.53
2	AB	718	A	C4'-O4'	-6.96	1.36	1.45
2	AB	2824	C	P-O5'	6.96	1.66	1.59
35	BA	3	A	C5'-C4'	6.96	1.59	1.51
2	AB	86	G	C3'-C2'	6.96	1.60	1.52
2	AB	1780	A	C6-N1	-6.96	1.30	1.35
2	AB	2734	A	C2'-C1'	6.96	1.61	1.53
35	BA	1340	A	P-O5'	6.96	1.66	1.59
1	AA	34	A	C5'-C4'	6.96	1.59	1.51
2	AB	2259	U	O3'-P	-6.96	1.52	1.61
35	BA	598	U	C2'-C1'	-6.96	1.45	1.53
2	AB	19	A	N1-C2	6.95	1.40	1.34
2	AB	544	C	N1-C6	-6.95	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1256	G	P-O5'	6.95	1.66	1.59
2	AB	2755	C	C2-O2	-6.95	1.18	1.24
12	AL	53	TYR	CE2-CZ	6.95	1.47	1.38
35	BA	429	U	N3-C4	-6.95	1.32	1.38
2	AB	278	A	N3-C4	6.95	1.39	1.34
2	AB	1304	A	O3'-P	6.95	1.69	1.61
2	AB	2241	A	C5-C6	-6.95	1.34	1.41
2	AB	2716	C	N1-C6	6.95	1.41	1.37
35	BA	743	A	C5'-C4'	6.95	1.59	1.51
2	AB	779	U	C4'-O4'	-6.95	1.36	1.45
2	AB	943	A	N9-C4	-6.95	1.33	1.37
2	AB	1679	A	P-O5'	6.95	1.66	1.59
2	AB	2889	C	C5-C6	6.95	1.40	1.34
35	BA	436	C	C4-C5	6.95	1.48	1.43
35	BA	536	C	C5-C6	6.95	1.40	1.34
2	AB	1057	A	C8-N7	6.95	1.36	1.31
2	AB	1446	C	C2'-C1'	-6.95	1.45	1.53
35	BA	227	G	C3'-C2'	6.95	1.60	1.52
35	BA	1048	G	C8-N7	-6.95	1.26	1.30
35	BA	165	G	C5-C4	-6.95	1.33	1.38
2	AB	369	U	C5'-C4'	6.95	1.59	1.51
2	AB	944	C	C4-N4	6.95	1.40	1.33
2	AB	1235	G	N7-C5	6.95	1.43	1.39
2	AB	1343	G	C2'-O2'	6.95	1.50	1.41
2	AB	1514	G	C2-N2	6.95	1.41	1.34
35	BA	700	G	C2-N3	-6.95	1.27	1.32
35	BA	1100	C	C5'-C4'	6.95	1.59	1.51
2	AB	1454	C	C3'-C2'	6.94	1.60	1.52
2	AB	2695	U	C4-C5	6.94	1.49	1.43
36	BB	17	U	C4'-C3'	6.94	1.60	1.53
2	AB	1743	G	N7-C5	-6.94	1.35	1.39
35	BA	1180	A	C6-N6	6.94	1.39	1.33
2	AB	359	G	N9-C4	6.94	1.43	1.38
2	AB	1132	U	C5-C6	6.94	1.40	1.34
2	AB	2127	G	C5'-C4'	6.94	1.59	1.51
2	AB	2533	U	C2-N3	6.94	1.42	1.37
35	BA	304	U	O3'-P	6.94	1.69	1.61
35	BA	503	C	C4'-O4'	-6.94	1.36	1.45
35	BA	1129	C	N1-C6	6.94	1.41	1.37
2	AB	135	U	P-O5'	6.94	1.66	1.59
2	AB	388	G	O3'-P	6.94	1.69	1.61
2	AB	1361	G	C2-N2	6.94	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1645	G	N9-C8	-6.94	1.32	1.37
2	AB	136	G	P-O5'	6.93	1.66	1.59
2	AB	917	A	C5-C4	6.93	1.43	1.38
2	AB	1029	A	C8-N7	-6.93	1.26	1.31
2	AB	1211	C	O3'-P	6.93	1.69	1.61
2	AB	1790	C	C5'-C4'	6.93	1.59	1.51
2	AB	2488	G	C5'-C4'	6.93	1.59	1.51
35	BA	184	G	N1-C2	6.93	1.43	1.37
35	BA	815	A	N7-C5	-6.93	1.35	1.39
36	BB	57	C	C4-C5	6.93	1.48	1.43
2	AB	205	G	C5-C4	6.93	1.43	1.38
2	AB	1470	A	N9-C8	6.93	1.43	1.37
2	AB	1950	G	N7-C5	-6.93	1.35	1.39
35	BA	996	A	C5-C4	-6.93	1.33	1.38
35	BA	1007	U	N1-C6	6.93	1.44	1.38
2	AB	82	U	P-O5'	6.93	1.66	1.59
2	AB	1133	A	C4'-O4'	-6.93	1.36	1.45
35	BA	741	G	N9-C4	-6.93	1.32	1.38
35	BA	1300	G	C4'-O4'	-6.93	1.36	1.45
2	AB	460	A	N3-C4	6.93	1.39	1.34
2	AB	129	C	P-O5'	6.93	1.66	1.59
35	BA	102	G	N9-C8	-6.93	1.33	1.37
35	BA	243	A	C5-C4	-6.93	1.33	1.38
1	AA	59	A	N7-C5	-6.92	1.35	1.39
2	AB	67	U	C2-O2	6.92	1.28	1.22
2	AB	479	A	N9-C4	-6.92	1.33	1.37
2	AB	1298	C	N3-C4	-6.92	1.29	1.33
2	AB	1437	C	C4'-C3'	-6.92	1.45	1.53
2	AB	1809	A	C3'-C2'	6.92	1.60	1.52
2	AB	1856	U	O4'-C1'	6.92	1.50	1.41
2	AB	1952	A	C5'-C4'	6.92	1.59	1.51
35	BA	146	G	C6-N1	6.92	1.44	1.39
1	AA	13	G	C6-N1	6.92	1.44	1.39
2	AB	279	A	N9-C8	6.92	1.43	1.37
2	AB	363	G	N9-C8	-6.92	1.33	1.37
2	AB	861	A	C5-C4	-6.92	1.33	1.38
2	AB	2547	A	P-O5'	6.92	1.66	1.59
35	BA	427	U	N1-C6	6.92	1.44	1.38
1	AA	105	G	C2-N3	6.92	1.38	1.32
2	AB	1830	C	N3-C4	-6.92	1.29	1.33
2	AB	2778	A	N9-C8	-6.92	1.32	1.37
2	AB	938	G	C5-C4	-6.92	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1709	U	C4-O4	-6.92	1.18	1.23
2	AB	2874	C	C2-N3	6.92	1.41	1.35
35	BA	1079	G	C6-N1	6.92	1.44	1.39
35	BA	1115	U	C4-C5	6.92	1.49	1.43
2	AB	227	A	N9-C8	-6.92	1.32	1.37
2	AB	2049	G	N7-C5	6.92	1.43	1.39
2	AB	2137	U	P-O5'	6.92	1.66	1.59
35	BA	1019	A	C4'-C3'	6.92	1.60	1.53
35	BA	3	A	C5-C6	6.92	1.47	1.41
2	AB	183	C	O4'-C1'	6.91	1.50	1.41
2	AB	711	G	C5-C4	6.91	1.43	1.38
2	AB	1268	A	N3-C4	6.91	1.39	1.34
2	AB	1552	A	C2'-C1'	-6.91	1.45	1.53
2	AB	2262	U	N1-C2	6.91	1.44	1.38
35	BA	48	C	C4'-O4'	-6.91	1.36	1.45
35	BA	976	G	N9-C4	6.91	1.43	1.38
35	BA	1087	G	O3'-P	6.91	1.69	1.61
35	BA	1145	A	C8-N7	6.91	1.36	1.31
2	AB	42	A	N3-C4	6.91	1.39	1.34
2	AB	2564	A	C6-N6	-6.91	1.28	1.33
2	AB	2760	C	C4-C5	6.91	1.48	1.43
2	AB	754	U	P-O5'	-6.91	1.52	1.59
2	AB	924	G	N3-C4	6.91	1.40	1.35
2	AB	925	A	C5'-C4'	6.91	1.59	1.51
2	AB	1552	A	C5'-C4'	6.91	1.59	1.51
2	AB	2424	C	C4-C5	6.91	1.48	1.43
35	BA	265	G	C2-N3	6.91	1.38	1.32
35	BA	965	U	P-O5'	6.91	1.66	1.59
35	BA	1279	G	N9-C4	6.91	1.43	1.38
2	AB	385	C	C4'-O4'	-6.91	1.36	1.45
2	AB	554	U	C5-C6	6.91	1.40	1.34
2	AB	989	G	C8-N7	-6.91	1.26	1.30
2	AB	1448	G	C2-N3	6.91	1.38	1.32
2	AB	2318	G	C2'-C1'	6.91	1.60	1.53
2	AB	2866	U	C2-N3	6.91	1.42	1.37
35	BA	923	A	N7-C5	6.91	1.43	1.39
35	BA	1506	U	P-O5'	6.91	1.66	1.59
2	AB	254	G	C5-C6	6.91	1.49	1.42
2	AB	1587	G	C5-C4	6.91	1.43	1.38
35	BA	826	C	C2-N3	6.91	1.41	1.35
2	AB	371	A	P-O5'	6.91	1.66	1.59
2	AB	435	C	N1-C6	6.91	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1277	G	C2-N3	6.91	1.38	1.32
2	AB	1838	C	C4-C5	-6.91	1.37	1.43
35	BA	1031	C	C2-N3	6.91	1.41	1.35
35	BA	1370	G	P-O5'	6.91	1.66	1.59
2	AB	1730	C	P-O5'	6.90	1.66	1.59
35	BA	800	G	N7-C5	6.90	1.43	1.39
35	BA	1278	G	C2'-C1'	-6.90	1.45	1.53
37	BC	27	G	C5'-C4'	6.90	1.59	1.51
2	AB	459	U	P-O5'	6.90	1.66	1.59
2	AB	611	C	C2-O2	-6.90	1.18	1.24
2	AB	1730	C	C5-C6	6.90	1.39	1.34
2	AB	2119	A	P-O5'	6.90	1.66	1.59
2	AB	2646	C	N1-C6	6.90	1.41	1.37
35	BA	951	G	C2-N2	-6.90	1.27	1.34
35	BA	1022	A	N3-C4	6.90	1.39	1.34
35	BA	1299	A	N7-C5	-6.90	1.35	1.39
2	AB	291	G	N3-C4	6.90	1.40	1.35
2	AB	2092	U	C2-N3	6.90	1.42	1.37
2	AB	2894	G	N7-C5	-6.90	1.35	1.39
35	BA	1	A	C2'-C1'	6.90	1.60	1.53
35	BA	1341	U	C4'-O4'	-6.90	1.36	1.45
2	AB	2770	G	C3'-C2'	6.90	1.60	1.52
35	BA	719	C	N1-C6	6.90	1.41	1.37
1	AA	80	U	C4'-C3'	-6.90	1.45	1.53
2	AB	118	A	C2'-C1'	6.90	1.60	1.53
2	AB	2341	G	N7-C5	-6.90	1.35	1.39
2	AB	2860	A	N3-C4	6.90	1.39	1.34
35	BA	49	U	P-O5'	6.90	1.66	1.59
2	AB	900	A	N1-C2	-6.90	1.28	1.34
2	AB	1443	U	O4'-C1'	6.89	1.50	1.41
2	AB	2425	A	C4'-O4'	-6.89	1.36	1.45
35	BA	600	A	O4'-C1'	6.89	1.50	1.41
35	BA	1361	G	N3-C4	6.89	1.40	1.35
2	AB	2550	G	N9-C8	6.89	1.42	1.37
2	AB	823	C	P-O5'	6.89	1.66	1.59
2	AB	2508	G	P-O5'	6.89	1.66	1.59
2	AB	2667	C	O3'-P	6.89	1.69	1.61
35	BA	1246	A	N7-C5	6.89	1.43	1.39
2	AB	579	G	N7-C5	-6.89	1.35	1.39
2	AB	582	A	N7-C5	-6.89	1.35	1.39
2	AB	2510	C	C5-C6	6.89	1.39	1.34
2	AB	2737	G	C2-N3	6.89	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2834	G	N7-C5	6.89	1.43	1.39
35	BA	120	A	N9-C8	-6.89	1.32	1.37
35	BA	139	A	C2-N3	6.89	1.39	1.33
35	BA	924	C	N3-C4	6.89	1.38	1.33
2	AB	406	G	C5'-C4'	6.89	1.59	1.51
2	AB	2027	G	P-O5'	6.89	1.66	1.59
2	AB	909	A	N3-C4	6.89	1.39	1.34
2	AB	2138	G	C5-C6	6.89	1.49	1.42
2	AB	2267	A	C4'-O4'	-6.89	1.36	1.45
35	BA	1211	U	C4'-C3'	6.89	1.60	1.53
37	BC	30	G	C2'-C1'	-6.89	1.45	1.53
2	AB	600	G	C2-N3	6.88	1.38	1.32
2	AB	2225	A	C5'-C4'	6.88	1.59	1.51
2	AB	2547	A	N7-C5	-6.88	1.35	1.39
35	BA	746	A	C2'-O2'	-6.88	1.32	1.41
2	AB	1937	A	N9-C4	-6.88	1.33	1.37
1	AA	74	U	O3'-P	6.88	1.69	1.61
2	AB	1103	A	N3-C4	6.88	1.39	1.34
2	AB	2869	G	C8-N7	-6.88	1.26	1.30
37	BC	39	A	N1-C2	6.88	1.40	1.34
2	AB	831	G	N9-C4	-6.88	1.32	1.38
2	AB	1651	G	C8-N7	6.88	1.35	1.30
2	AB	2076	U	C4-C5	6.88	1.49	1.43
35	BA	888	G	N7-C5	-6.88	1.35	1.39
2	AB	1179	G	P-O5'	6.88	1.66	1.59
2	AB	2517	C	N1-C6	6.88	1.41	1.37
35	BA	283	U	P-O5'	6.88	1.66	1.59
35	BA	837	U	P-O5'	6.88	1.66	1.59
35	BA	971	G	N3-C4	6.88	1.40	1.35
1	AA	28	C	C5-C6	6.88	1.39	1.34
2	AB	345	A	N3-C4	6.88	1.39	1.34
2	AB	647	G	C2-N3	6.88	1.38	1.32
2	AB	405	U	P-O5'	6.87	1.66	1.59
2	AB	825	A	C4'-C3'	6.87	1.60	1.53
2	AB	1266	G	N9-C4	6.87	1.43	1.38
35	BA	1235	U	C2'-C1'	6.87	1.60	1.53
37	BC	43	G	C4'-O4'	-6.87	1.36	1.45
2	AB	2752	C	C1'-N1	6.87	1.59	1.48
35	BA	460	A	C3'-C2'	6.87	1.60	1.52
37	BC	57	C	C4-C5	6.87	1.48	1.43
2	AB	1815	A	N3-C4	6.87	1.39	1.34
2	AB	2744	G	N9-C8	-6.87	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	A3	49	ARG	CZ-NH2	6.87	1.42	1.33
35	BA	885	G	P-O5'	6.87	1.66	1.59
35	BA	1032	G	N9-C8	6.87	1.42	1.37
2	AB	2893	A	N7-C5	-6.87	1.35	1.39
35	BA	444	G	C3'-C2'	6.87	1.60	1.52
2	AB	792	A	C8-N7	-6.87	1.26	1.31
2	AB	1418	G	C6-N1	6.87	1.44	1.39
2	AB	1441	G	C8-N7	-6.87	1.26	1.30
2	AB	1919	A	N9-C8	6.87	1.43	1.37
35	BA	592	G	C8-N7	6.87	1.35	1.30
2	AB	156	A	C4'-C3'	6.87	1.60	1.53
2	AB	685	A	N1-C2	-6.87	1.28	1.34
2	AB	1363	C	C4'-O4'	-6.87	1.36	1.45
35	BA	954	G	P-O5'	6.87	1.66	1.59
35	BA	1422	G	P-O5'	6.87	1.66	1.59
35	BA	346	G	N9-C4	-6.86	1.32	1.38
35	BA	1486	G	P-O5'	6.86	1.66	1.59
2	AB	752	A	C4'-O4'	-6.86	1.36	1.45
2	AB	794	A	N9-C8	6.86	1.43	1.37
2	AB	1800	C	P-O5'	6.86	1.66	1.59
2	AB	1968	G	O3'-P	6.86	1.69	1.61
35	BA	677	U	C5-C6	6.86	1.40	1.34
35	BA	1526	G	O4'-C1'	6.86	1.50	1.41
2	AB	903	C	C2-N3	6.86	1.41	1.35
2	AB	1455	G	N9-C8	-6.86	1.33	1.37
2	AB	8	C	C2'-O2'	6.86	1.50	1.41
2	AB	1216	G	C2-N3	6.86	1.38	1.32
2	AB	1327	A	P-O5'	6.86	1.66	1.59
2	AB	1539	U	C2-N3	6.86	1.42	1.37
2	AB	2340	A	N9-C8	-6.86	1.32	1.37
35	BA	1293	C	C4'-O4'	-6.86	1.36	1.45
2	AB	1056	G	P-O5'	6.86	1.66	1.59
2	AB	1985	C	N3-C4	6.86	1.38	1.33
2	AB	2430	A	N9-C4	-6.86	1.33	1.37
35	BA	1331	G	P-O5'	6.86	1.66	1.59
35	BA	1504	G	C4'-O4'	-6.86	1.36	1.45
2	AB	98	G	N9-C8	6.85	1.42	1.37
35	BA	448	A	C5'-C4'	6.85	1.59	1.51
2	AB	847	U	C2-N3	6.85	1.42	1.37
2	AB	1555	G	C2-N3	6.85	1.38	1.32
2	AB	2460	U	C4-C5	6.85	1.49	1.43
35	BA	94	G	C5-C6	6.85	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	335	C	C4-C5	6.85	1.48	1.43
2	AB	1497	U	N1-C2	6.85	1.44	1.38
2	AB	2478	A	P-O5'	6.85	1.66	1.59
35	BA	162	A	P-O5'	6.85	1.66	1.59
2	AB	1932	A	N9-C8	6.85	1.43	1.37
35	BA	1237	C	C4-C5	6.85	1.48	1.43
35	BA	1243	C	C4-N4	6.85	1.40	1.33
2	AB	294	A	O3'-P	6.85	1.69	1.61
2	AB	382	A	C8-N7	-6.85	1.26	1.31
2	AB	488	G	C8-N7	-6.85	1.26	1.30
2	AB	1589	U	C4'-O4'	-6.85	1.36	1.45
2	AB	2656	U	C4'-O4'	-6.84	1.36	1.45
35	BA	1057	G	C2-N3	6.84	1.38	1.32
35	BA	1454	G	P-O5'	6.84	1.66	1.59
2	AB	1402	U	O4'-C1'	6.84	1.50	1.41
2	AB	1559	U	C4'-C3'	6.84	1.60	1.53
2	AB	1577	C	N1-C6	6.84	1.41	1.37
2	AB	98	G	O4'-C1'	6.84	1.50	1.41
2	AB	279	A	P-O5'	6.84	1.66	1.59
35	BA	714	G	C6-N1	-6.84	1.34	1.39
35	BA	988	G	N1-C2	6.84	1.43	1.37
35	BA	1375	A	C6-N1	6.84	1.40	1.35
2	AB	412	A	N9-C8	6.84	1.43	1.37
2	AB	654	A	C5-C4	6.84	1.43	1.38
2	AB	2649	C	N3-C4	6.84	1.38	1.33
35	BA	95	C	C4'-C3'	-6.84	1.45	1.53
35	BA	1245	C	N1-C6	6.84	1.41	1.37
2	AB	412	A	P-O5'	6.83	1.66	1.59
35	BA	59	A	N7-C5	-6.83	1.35	1.39
35	BA	674	G	C4'-C3'	6.83	1.60	1.53
2	AB	424	G	C6-N1	6.83	1.44	1.39
35	BA	194	C	C4'-O4'	-6.83	1.36	1.45
35	BA	568	G	C6-N1	-6.83	1.34	1.39
35	BA	881	G	C4'-O4'	-6.83	1.36	1.45
37	BC	72	C	C5'-C4'	6.83	1.59	1.51
2	AB	142	A	N9-C8	-6.83	1.32	1.37
2	AB	506	G	N3-C4	6.83	1.40	1.35
2	AB	787	C	N3-C4	6.83	1.38	1.33
2	AB	1583	A	C8-N7	-6.83	1.26	1.31
35	BA	127	G	C2-N3	6.83	1.38	1.32
35	BA	296	U	C4-C5	6.83	1.49	1.43
35	BA	342	C	C3'-C2'	6.83	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	930	C	N3-C4	6.83	1.38	1.33
2	AB	2001	C	C3'-C2'	-6.83	1.45	1.52
35	BA	1513	A	P-O5'	6.83	1.66	1.59
1	AA	31	C	C5-C6	6.83	1.39	1.34
2	AB	199	A	C8-N7	-6.83	1.26	1.31
2	AB	272	A	N3-C4	6.83	1.39	1.34
2	AB	684	G	C2'-C1'	-6.83	1.45	1.53
2	AB	1332	G	N7-C5	6.83	1.43	1.39
2	AB	1672	A	N3-C4	6.83	1.39	1.34
2	AB	1831	G	C3'-C2'	6.83	1.60	1.52
2	AB	1845	G	C6-O6	-6.83	1.18	1.24
35	BA	336	A	O3'-P	6.83	1.69	1.61
35	BA	1351	U	C2-N3	6.83	1.42	1.37
2	AB	95	A	N7-C5	6.83	1.43	1.39
2	AB	2892	G	N9-C8	-6.83	1.33	1.37
35	BA	944	G	N3-C4	6.83	1.40	1.35
2	AB	197	A	C8-N7	-6.82	1.26	1.31
2	AB	2745	C	C4'-O4'	-6.82	1.36	1.45
35	BA	1280	A	N9-C4	-6.82	1.33	1.37
2	AB	1610	A	C5'-C4'	6.82	1.59	1.51
2	AB	2831	G	C8-N7	-6.82	1.26	1.30
35	BA	1303	C	P-O5'	-6.82	1.52	1.59
35	BA	925	G	C5-C6	6.82	1.49	1.42
2	AB	690	G	C4'-O4'	-6.82	1.36	1.45
2	AB	744	U	C5-C6	6.82	1.40	1.34
2	AB	751	A	N9-C4	6.82	1.42	1.37
2	AB	2505	G	O4'-C1'	6.82	1.50	1.41
2	AB	989	G	N7-C5	6.82	1.43	1.39
2	AB	1427	A	C4'-O4'	-6.82	1.36	1.45
2	AB	2049	G	C4'-O4'	-6.82	1.36	1.45
2	AB	2868	A	O3'-P	6.82	1.69	1.61
35	BA	672	U	C4'-O4'	-6.82	1.36	1.45
35	BA	929	G	C2-N3	6.82	1.38	1.32
37	BC	22	A	N9-C4	6.82	1.42	1.37
2	AB	2739	U	P-O5'	6.82	1.66	1.59
2	AB	242	G	C6-N1	6.81	1.44	1.39
2	AB	1689	A	N3-C4	6.81	1.39	1.34
35	BA	1453	G	P-O5'	6.81	1.66	1.59
35	BA	1503	A	N9-C8	6.81	1.43	1.37
2	AB	613	A	N7-C5	-6.81	1.35	1.39
2	AB	852	U	C2-O2	6.81	1.28	1.22
2	AB	2162	G	N1-C2	6.81	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	484	G	C5-C4	-6.81	1.33	1.38
2	AB	961	C	C4-N4	6.81	1.40	1.33
2	AB	1873	G	P-O5'	6.81	1.66	1.59
2	AB	2202	U	C3'-C2'	6.81	1.60	1.52
2	AB	2883	A	C6-N1	-6.81	1.30	1.35
35	BA	1388	C	C2'-C1'	-6.81	1.45	1.53
1	AA	36	C	C4'-O4'	-6.81	1.36	1.45
2	AB	576	U	C5-C6	6.81	1.40	1.34
2	AB	2718	G	N9-C4	6.81	1.43	1.38
2	AB	2774	C	P-O5'	6.81	1.66	1.59
35	BA	371	A	N9-C8	6.81	1.43	1.37
2	AB	405	U	C4'-O4'	-6.81	1.36	1.45
2	AB	285	G	N3-C4	6.80	1.40	1.35
2	AB	300	A	C6-N1	-6.80	1.30	1.35
2	AB	887	U	O4'-C1'	6.80	1.50	1.41
2	AB	1733	G	P-O5'	6.80	1.66	1.59
2	AB	2587	A	C5-C4	-6.80	1.33	1.38
35	BA	116	A	N7-C5	-6.80	1.35	1.39
35	BA	1463	U	C2'-C1'	-6.80	1.45	1.53
37	BC	63	C	C2-O2	-6.80	1.18	1.24
2	AB	1215	G	C5'-C4'	6.80	1.59	1.51
2	AB	2900	A	C5'-C4'	6.80	1.59	1.51
2	AB	919	U	C4-C5	6.80	1.49	1.43
2	AB	1450	G	P-O5'	6.80	1.66	1.59
2	AB	1815	A	O3'-P	6.80	1.69	1.61
35	BA	775	G	C2-N3	6.80	1.38	1.32
35	BA	1054	C	C2'-C1'	6.80	1.60	1.53
2	AB	15	G	C2'-C1'	-6.80	1.45	1.53
2	AB	351	C	C4'-C3'	6.80	1.60	1.53
2	AB	948	C	C4-N4	6.80	1.40	1.33
2	AB	2415	G	N1-C2	6.80	1.43	1.37
35	BA	347	G	N3-C4	6.80	1.40	1.35
35	BA	645	G	C2-N3	6.80	1.38	1.32
2	AB	31	C	C3'-C2'	-6.80	1.45	1.52
2	AB	218	A	P-O5'	6.80	1.66	1.59
2	AB	380	G	C1'-N9	6.80	1.58	1.48
2	AB	1092	C	C4'-O4'	-6.80	1.36	1.45
2	AB	1126	A	N9-C4	-6.80	1.33	1.37
2	AB	2785	C	C5-C6	6.80	1.39	1.34
2	AB	2810	A	N7-C5	6.80	1.43	1.39
35	BA	107	G	C6-N1	-6.80	1.34	1.39
1	AA	20	G	C6-N1	6.79	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	113	U	C5-C6	6.79	1.40	1.34
2	AB	1026	G	C6-O6	-6.79	1.18	1.24
2	AB	2088	A	P-O5'	6.79	1.66	1.59
2	AB	2202	U	N1-C2	6.79	1.44	1.38
35	BA	1064	G	C4'-O4'	-6.79	1.36	1.45
35	BA	1394	A	C4'-C3'	6.79	1.60	1.53
2	AB	403	U	P-O5'	6.79	1.66	1.59
2	AB	585	G	P-O5'	6.79	1.66	1.59
35	BA	1157	A	N3-C4	6.79	1.39	1.34
35	BA	1329	A	P-O5'	6.79	1.66	1.59
35	BA	39	G	C2-N3	6.79	1.38	1.32
35	BA	329	A	C5-C6	6.79	1.47	1.41
2	AB	1077	A	C5-C4	-6.79	1.33	1.38
2	AB	1821	A	C5'-C4'	6.79	1.59	1.51
35	BA	257	G	N7-C5	6.79	1.43	1.39
35	BA	565	U	O3'-P	6.79	1.69	1.61
35	BA	900	A	C2'-C1'	-6.79	1.45	1.53
2	AB	1878	G	N7-C5	-6.79	1.35	1.39
35	BA	788	U	C5'-C4'	6.79	1.59	1.51
2	AB	2894	G	C6-N1	6.79	1.44	1.39
1	AA	26	C	C5-C6	6.78	1.39	1.34
2	AB	1668	A	C6-N6	6.78	1.39	1.33
35	BA	110	C	N3-C4	-6.78	1.29	1.33
35	BA	914	A	N7-C5	6.78	1.43	1.39
35	BA	1389	C	N3-C4	6.78	1.38	1.33
2	AB	1620	G	N1-C2	6.78	1.43	1.37
2	AB	2607	G	N3-C4	6.78	1.40	1.35
35	BA	184	G	C5-C4	-6.78	1.33	1.38
2	AB	513	A	N7-C5	6.78	1.43	1.39
2	AB	669	G	C6-N1	6.78	1.44	1.39
2	AB	1474	U	C2-N3	6.78	1.42	1.37
2	AB	1839	G	N3-C4	6.78	1.40	1.35
36	BB	28	U	P-O5'	6.78	1.66	1.59
2	AB	1585	C	C4-C5	-6.78	1.37	1.43
2	AB	2717	C	C2'-C1'	6.78	1.60	1.53
35	BA	1285	A	C5-C4	6.78	1.43	1.38
2	AB	1737	G	C6-O6	-6.78	1.18	1.24
2	AB	2866	U	P-O5'	6.78	1.66	1.59
2	AB	1344	U	N3-C4	6.78	1.44	1.38
2	AB	1553	A	C2'-C1'	6.78	1.60	1.53
2	AB	2324	U	C5-C6	6.78	1.40	1.34
35	BA	524	G	N1-C2	6.78	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	74	A	C8-N7	-6.77	1.26	1.31
2	AB	771	G	C5'-C4'	6.77	1.59	1.51
2	AB	942	G	N3-C4	6.77	1.40	1.35
2	AB	1705	A	C4'-O4'	-6.77	1.36	1.45
35	BA	410	G	C2-N2	-6.77	1.27	1.34
35	BA	453	G	N1-C2	6.77	1.43	1.37
2	AB	628	G	C2-N3	6.77	1.38	1.32
2	AB	844	A	P-O5'	6.77	1.66	1.59
2	AB	1843	C	P-O5'	6.77	1.66	1.59
35	BA	1098	C	C4'-O4'	-6.77	1.36	1.45
2	AB	791	C	C4'-C3'	-6.77	1.45	1.53
2	AB	1252	G	P-O5'	6.77	1.66	1.59
2	AB	2286	G	C2-N3	6.77	1.38	1.32
2	AB	2446	G	N9-C8	6.77	1.42	1.37
35	BA	220	G	C2-N3	6.77	1.38	1.32
35	BA	256	U	C4-O4	-6.77	1.18	1.23
35	BA	606	G	O3'-P	6.77	1.69	1.61
35	BA	997	U	C2-N3	6.77	1.42	1.37
35	BA	834	U	C4-C5	6.77	1.49	1.43
35	BA	1349	A	O3'-P	6.77	1.69	1.61
2	AB	700	G	N7-C5	-6.77	1.35	1.39
35	BA	1429	A	N3-C4	6.77	1.39	1.34
2	AB	1518	C	O3'-P	6.76	1.69	1.61
2	AB	1688	U	P-O5'	6.76	1.66	1.59
2	AB	387	U	O3'-P	6.76	1.69	1.61
2	AB	1755	A	N3-C4	6.76	1.39	1.34
2	AB	2136	G	N1-C2	6.76	1.43	1.37
2	AB	92	U	C2-N3	6.76	1.42	1.37
2	AB	654	A	C4'-O4'	-6.76	1.36	1.45
35	BA	85	U	C5-C6	6.76	1.40	1.34
1	AA	51	G	N3-C4	6.76	1.40	1.35
2	AB	2512	C	N1-C6	6.76	1.41	1.37
35	BA	476	U	N1-C2	6.76	1.44	1.38
35	BA	507	C	N1-C6	-6.76	1.33	1.37
2	AB	151	C	N3-C4	6.76	1.38	1.33
2	AB	218	A	C4'-O4'	-6.76	1.36	1.45
2	AB	2262	U	C5-C6	6.76	1.40	1.34
35	BA	932	C	C5'-C4'	6.76	1.59	1.51
2	AB	10	A	C2-N3	6.76	1.39	1.33
2	AB	1256	G	N9-C4	6.76	1.43	1.38
2	AB	1322	A	C8-N7	-6.76	1.26	1.31
2	AB	2654	A	N9-C8	-6.76	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	566	G	C6-O6	-6.76	1.18	1.24
2	AB	280	U	C2-N3	6.75	1.42	1.37
1	AA	27	C	C4-N4	-6.75	1.27	1.33
1	AA	59	A	N9-C8	6.75	1.43	1.37
2	AB	145	C	C5'-C4'	-6.75	1.43	1.51
2	AB	2588	G	N7-C5	-6.75	1.35	1.39
2	AB	2680	U	C4-C5	6.75	1.49	1.43
2	AB	2821	A	C8-N7	-6.75	1.26	1.31
35	BA	1163	A	N3-C4	6.75	1.39	1.34
35	BA	1219	A	N7-C5	-6.75	1.35	1.39
2	AB	427	U	N1-C2	6.75	1.44	1.38
2	AB	790	U	C2-O2	6.75	1.28	1.22
2	AB	944	C	C4-C5	6.75	1.48	1.43
2	AB	1990	C	N3-C4	6.75	1.38	1.33
2	AB	2487	G	O3'-P	6.75	1.69	1.61
2	AB	2596	U	C2-N3	-6.75	1.33	1.37
35	BA	946	A	C4'-O4'	-6.75	1.36	1.45
35	BA	1001	C	C4-C5	6.75	1.48	1.43
35	BA	1226	C	P-O5'	6.75	1.66	1.59
36	BB	15	G	C2-N3	6.75	1.38	1.32
2	AB	1156	A	C6-N6	-6.75	1.28	1.33
2	AB	1185	G	C6-O6	-6.75	1.18	1.24
2	AB	2165	C	N1-C6	6.75	1.41	1.37
35	BA	903	G	C6-N1	6.75	1.44	1.39
35	BA	1088	G	C4'-O4'	-6.75	1.36	1.45
2	AB	90	U	C2-N3	-6.75	1.33	1.37
2	AB	670	A	N7-C5	6.75	1.43	1.39
2	AB	634	C	C5'-C4'	6.74	1.59	1.51
2	AB	1279	G	C5-C6	6.74	1.49	1.42
35	BA	54	C	C5'-C4'	6.74	1.59	1.51
35	BA	687	A	N9-C4	-6.74	1.33	1.37
2	AB	2031	A	C4'-O4'	-6.74	1.36	1.45
37	BC	14	A	P-O5'	6.74	1.66	1.59
2	AB	248	G	N7-C5	6.74	1.43	1.39
2	AB	2331	G	N9-C8	-6.74	1.33	1.37
2	AB	2675	A	N7-C5	-6.74	1.35	1.39
35	BA	940	C	N1-C6	6.74	1.41	1.37
2	AB	381	G	N9-C8	-6.74	1.33	1.37
2	AB	1328	A	O4'-C1'	-6.74	1.32	1.41
2	AB	1780	A	N3-C4	6.74	1.38	1.34
2	AB	1889	A	P-O5'	6.74	1.66	1.59
2	AB	2802	G	C2-N3	6.74	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	688	G	C5-C6	6.74	1.49	1.42
35	BA	962	C	N3-C4	-6.74	1.29	1.33
35	BA	1433	A	C8-N7	-6.74	1.26	1.31
2	AB	2617	U	N1-C6	-6.74	1.31	1.38
2	AB	2777	G	C2-N3	6.74	1.38	1.32
2	AB	2418	A	C5'-C4'	6.74	1.59	1.51
35	BA	916	U	N1-C6	-6.74	1.31	1.38
2	AB	2117	A	N9-C8	-6.73	1.32	1.37
2	AB	611	C	O3'-P	6.73	1.69	1.61
2	AB	1266	G	C8-N7	6.73	1.34	1.30
2	AB	1468	U	P-O5'	6.73	1.66	1.59
2	AB	2374	C	N1-C6	6.73	1.41	1.37
2	AB	2725	A	N1-C2	-6.73	1.28	1.34
35	BA	366	A	C5'-C4'	6.73	1.59	1.51
35	BA	1426	G	N1-C2	6.73	1.43	1.37
35	BA	1468	A	O3'-P	6.73	1.69	1.61
2	AB	20	C	P-O5'	6.73	1.66	1.59
2	AB	548	G	C5'-C4'	6.73	1.59	1.51
2	AB	578	G	C2-N3	6.73	1.38	1.32
2	AB	2107	G	N1-C2	6.73	1.43	1.37
2	AB	2168	G	N3-C4	6.73	1.40	1.35
2	AB	2513	A	P-O5'	6.73	1.66	1.59
35	BA	173	U	P-O5'	6.73	1.66	1.59
2	AB	548	G	N1-C2	6.73	1.43	1.37
2	AB	619	G	C2-N2	6.73	1.41	1.34
2	AB	802	A	N7-C5	6.73	1.43	1.39
2	AB	1925	C	P-O5'	6.73	1.66	1.59
35	BA	389	A	N7-C5	-6.73	1.35	1.39
35	BA	531	U	P-O5'	6.73	1.66	1.59
35	BA	731	G	N9-C4	6.73	1.43	1.38
35	BA	832	G	O3'-P	6.73	1.69	1.61
2	AB	39	G	N7-C5	-6.73	1.35	1.39
35	BA	578	C	N3-C4	6.73	1.38	1.33
2	AB	337	C	N3-C4	6.72	1.38	1.33
2	AB	439	A	P-O5'	6.72	1.66	1.59
2	AB	923	G	N3-C4	6.72	1.40	1.35
2	AB	1774	C	P-O5'	6.72	1.66	1.59
2	AB	1819	A	N9-C8	6.72	1.43	1.37
35	BA	944	G	P-O5'	6.72	1.66	1.59
35	BA	54	C	C4'-O4'	-6.72	1.36	1.45
35	BA	591	U	N1-C2	6.72	1.44	1.38
35	BA	1006	G	N9-C4	6.72	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1427	C	C2-O2	-6.72	1.18	1.24
35	BA	1457	G	C4'-O4'	-6.72	1.36	1.45
2	AB	2726	A	C2'-C1'	-6.72	1.46	1.53
35	BA	299	G	O3'-P	-6.72	1.53	1.61
2	AB	105	C	C4'-C3'	6.72	1.60	1.53
2	AB	259	G	N7-C5	6.72	1.43	1.39
2	AB	765	C	N1-C6	6.72	1.41	1.37
2	AB	2353	G	C8-N7	6.72	1.34	1.30
2	AB	2525	G	O3'-P	6.72	1.69	1.61
2	AB	2624	G	C2-N3	6.72	1.38	1.32
35	BA	902	G	C8-N7	6.72	1.34	1.30
35	BA	1155	A	C4'-O4'	-6.72	1.36	1.45
37	BC	46	G	C2'-C1'	6.72	1.60	1.53
2	AB	711	G	C6-O6	-6.72	1.18	1.24
2	AB	1279	G	O3'-P	6.72	1.69	1.61
35	BA	33	A	N9-C4	-6.72	1.33	1.37
35	BA	108	G	C6-N1	6.72	1.44	1.39
35	BA	223	A	N3-C4	6.72	1.38	1.34
35	BA	324	G	C4'-O4'	-6.72	1.36	1.45
36	BB	37	G	C6-N1	-6.72	1.34	1.39
2	AB	499	U	C4-C5	6.71	1.49	1.43
2	AB	1793	C	C5'-C4'	6.71	1.59	1.51
2	AB	2664	G	C4'-O4'	-6.71	1.36	1.45
35	BA	108	G	C8-N7	6.71	1.34	1.30
2	AB	169	G	C2-N3	6.71	1.38	1.32
2	AB	605	G	C8-N7	-6.71	1.26	1.30
2	AB	1646	C	C5-C6	6.71	1.39	1.34
2	AB	1850	G	N1-C2	6.71	1.43	1.37
2	AB	2548	U	C3'-O3'	6.71	1.51	1.42
35	BA	68	G	C6-O6	-6.71	1.18	1.24
2	AB	2353	G	O3'-P	6.71	1.69	1.61
2	AB	2627	G	C2-N3	6.71	1.38	1.32
35	BA	178	C	N1-C6	6.71	1.41	1.37
35	BA	844	G	C3'-C2'	6.71	1.60	1.52
37	BC	42	C	P-O5'	-6.71	1.53	1.59
2	AB	1304	A	C8-N7	-6.71	1.26	1.31
35	BA	557	G	C6-N1	-6.71	1.34	1.39
35	BA	953	G	O4'-C1'	6.71	1.50	1.41
2	AB	29	U	C3'-O3'	6.71	1.51	1.42
2	AB	1946	U	N3-C4	-6.71	1.32	1.38
35	BA	466	A	P-O5'	6.71	1.66	1.59
35	BA	792	A	N3-C4	6.71	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	895	G	P-O5'	6.71	1.66	1.59
35	BA	923	A	C6-N1	-6.71	1.30	1.35
2	AB	660	C	C2-N3	6.71	1.41	1.35
35	BA	825	A	C4'-C3'	6.71	1.60	1.53
35	BA	1053	G	N3-C4	6.71	1.40	1.35
2	AB	1663	G	C3'-C2'	6.71	1.60	1.52
35	BA	1457	G	C3'-C2'	6.71	1.60	1.52
35	BA	276	G	C2'-C1'	6.70	1.60	1.53
35	BA	1310	G	P-O5'	6.70	1.66	1.59
1	AA	30	C	C2-O2	-6.70	1.18	1.24
2	AB	1789	A	N3-C4	6.70	1.38	1.34
35	BA	1075	U	C4'-O4'	-6.70	1.36	1.45
2	AB	20	C	N1-C2	6.70	1.46	1.40
2	AB	202	U	N1-C6	6.70	1.44	1.38
2	AB	1368	G	C6-O6	-6.70	1.18	1.24
2	AB	1623	G	P-O5'	6.70	1.66	1.59
2	AB	1875	G	C2-N2	6.70	1.41	1.34
2	AB	1968	G	C8-N7	-6.70	1.26	1.30
2	AB	2102	G	N1-C2	6.70	1.43	1.37
2	AB	751	A	N1-C2	-6.70	1.28	1.34
2	AB	1789	A	N7-C5	6.70	1.43	1.39
2	AB	2247	A	C4'-O4'	-6.70	1.36	1.45
2	AB	2303	G	N7-C5	-6.70	1.35	1.39
2	AB	2472	G	C6-N1	6.70	1.44	1.39
35	BA	343	U	O3'-P	6.70	1.69	1.61
35	BA	1488	G	C8-N7	-6.70	1.26	1.30
35	BA	1244	G	N9-C8	6.70	1.42	1.37
2	AB	599	A	C6-N6	-6.70	1.28	1.33
35	BA	41	G	N3-C4	6.70	1.40	1.35
35	BA	1237	C	O3'-P	6.70	1.69	1.61
37	BC	73	A	C5-C6	6.70	1.47	1.41
2	AB	177	G	C5-C4	6.69	1.43	1.38
2	AB	2798	U	C2-N3	6.69	1.42	1.37
2	AB	75	G	C5-C4	-6.69	1.33	1.38
2	AB	631	A	C4'-O4'	-6.69	1.36	1.45
2	AB	1446	C	P-O5'	6.69	1.66	1.59
2	AB	2334	U	O3'-P	6.69	1.69	1.61
35	BA	163	C	C4-C5	6.69	1.48	1.43
2	AB	587	C	C2-N3	6.69	1.41	1.35
2	AB	2512	C	C2-N3	6.69	1.41	1.35
2	AB	140	C	N1-C6	6.69	1.41	1.37
2	AB	1288	G	N7-C5	6.69	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1401	G	N1-C2	6.69	1.43	1.37
2	AB	2243	U	P-O5'	6.69	1.66	1.59
2	AB	2481	G	C2-N3	6.69	1.38	1.32
35	BA	956	U	C2-N3	6.69	1.42	1.37
2	AB	1364	G	C6-N1	-6.69	1.34	1.39
35	BA	1167	A	P-O5'	6.69	1.66	1.59
2	AB	172	A	C4'-O4'	-6.68	1.36	1.45
2	AB	198	C	C4-C5	6.68	1.48	1.43
2	AB	1548	A	C5-C6	6.68	1.47	1.41
35	BA	858	G	C2-N3	6.68	1.38	1.32
36	BB	15	G	C3'-C2'	6.68	1.60	1.52
2	AB	1554	U	C2'-C1'	6.68	1.60	1.53
2	AB	2100	G	N3-C4	6.68	1.40	1.35
2	AB	1373	A	N7-C5	6.68	1.43	1.39
2	AB	2876	G	N9-C8	6.68	1.42	1.37
35	BA	399	G	N9-C8	6.68	1.42	1.37
2	AB	511	U	N3-C4	6.68	1.44	1.38
2	AB	533	G	N9-C8	6.68	1.42	1.37
2	AB	662	G	N9-C8	6.68	1.42	1.37
2	AB	2098	U	P-O5'	6.68	1.66	1.59
35	BA	1251	A	C2-N3	6.68	1.39	1.33
1	AA	22	U	C5-C6	6.68	1.40	1.34
35	BA	376	G	C4'-O4'	-6.68	1.36	1.45
2	AB	167	A	C5'-C4'	6.68	1.59	1.51
2	AB	541	A	N3-C4	6.68	1.38	1.34
2	AB	1696	G	N7-C5	6.68	1.43	1.39
2	AB	2018	G	N7-C5	-6.68	1.35	1.39
2	AB	149	A	C4'-O4'	-6.67	1.36	1.45
2	AB	986	C	O3'-P	6.67	1.69	1.61
2	AB	1161	C	P-O5'	6.67	1.66	1.59
2	AB	2032	G	N7-C5	6.67	1.43	1.39
35	BA	375	U	C4-C5	6.67	1.49	1.43
35	BA	1062	U	C2-N3	6.67	1.42	1.37
35	BA	111	G	O3'-P	6.67	1.69	1.61
35	BA	409	U	C5-C6	6.67	1.40	1.34
2	AB	1763	G	N3-C4	6.67	1.40	1.35
2	AB	2095	A	N9-C4	6.67	1.41	1.37
2	AB	2876	G	C8-N7	-6.67	1.26	1.30
35	BA	684	U	P-O5'	6.67	1.66	1.59
2	AB	1235	G	N1-C2	6.67	1.43	1.37
2	AB	2536	G	C5'-C4'	6.67	1.59	1.51
2	AB	2646	C	C4'-O4'	-6.67	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1217	C	N3-C4	6.67	1.38	1.33
2	AB	207	A	C2'-C1'	-6.67	1.46	1.53
2	AB	1726	C	C4-N4	6.67	1.40	1.33
37	BC	39	A	C6-N1	6.67	1.40	1.35
2	AB	1673	G	N9-C8	6.67	1.42	1.37
35	BA	323	U	C2'-C1'	-6.67	1.46	1.53
35	BA	416	G	N1-C2	6.67	1.43	1.37
35	BA	695	A	P-O5'	6.67	1.66	1.59
2	AB	1494	A	C5-C4	-6.67	1.34	1.38
2	AB	1902	C	N3-C4	-6.67	1.29	1.33
2	AB	2238	G	C8-N7	-6.67	1.26	1.30
2	AB	1162	G	C2-N3	6.66	1.38	1.32
2	AB	2727	A	C4'-O4'	-6.66	1.36	1.45
35	BA	339	C	P-O5'	6.66	1.66	1.59
35	BA	503	C	C2'-C1'	6.66	1.60	1.53
35	BA	1522	U	C2'-O2'	6.66	1.50	1.41
2	AB	516	C	C4-C5	6.66	1.48	1.43
2	AB	1634	A	O3'-P	6.66	1.69	1.61
2	AB	530	G	P-O5'	6.66	1.66	1.59
2	AB	1092	C	O3'-P	6.66	1.69	1.61
35	BA	312	C	P-O5'	6.66	1.66	1.59
35	BA	410	G	N3-C4	6.66	1.40	1.35
35	BA	417	G	N7-C5	-6.66	1.35	1.39
35	BA	1514	G	N9-C8	-6.66	1.33	1.37
36	BB	31	U	P-O5'	6.66	1.66	1.59
2	AB	1502	A	C8-N7	-6.66	1.26	1.31
2	AB	1544	A	N9-C4	-6.66	1.33	1.37
2	AB	2269	G	C3'-C2'	-6.66	1.45	1.52
2	AB	2607	G	P-O5'	6.66	1.66	1.59
2	AB	384	A	C4'-O4'	-6.66	1.36	1.45
35	BA	524	G	C8-N7	6.66	1.34	1.30
1	AA	76	G	N3-C4	6.66	1.40	1.35
2	AB	186	G	N3-C4	6.66	1.40	1.35
2	AB	410	G	P-O5'	6.66	1.66	1.59
2	AB	650	C	C4-N4	6.66	1.40	1.33
2	AB	1964	G	N9-C4	6.66	1.43	1.38
2	AB	2199	A	C5-C4	-6.66	1.34	1.38
35	BA	1325	C	C5'-C4'	6.66	1.59	1.51
2	AB	1692	U	C4'-O4'	-6.65	1.36	1.45
35	BA	309	A	O3'-P	6.65	1.69	1.61
1	AA	52	A	C6-N1	6.65	1.40	1.35
2	AB	182	A	N9-C4	6.65	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	815	C	C1'-N1	6.65	1.58	1.48
2	AB	966	G	N9-C8	-6.65	1.33	1.37
2	AB	1329	U	C5'-C4'	6.65	1.59	1.51
35	BA	83	C	C4'-O4'	-6.65	1.36	1.45
35	BA	523	A	C4'-C3'	6.65	1.60	1.53
35	BA	785	G	N7-C5	-6.65	1.35	1.39
35	BA	1273	C	P-O5'	6.65	1.66	1.59
1	AA	13	G	C8-N7	-6.65	1.26	1.30
2	AB	84	A	N3-C4	6.65	1.38	1.34
2	AB	307	G	N3-C4	6.65	1.40	1.35
2	AB	450	G	C3'-C2'	6.65	1.60	1.52
2	AB	2782	G	N7-C5	-6.65	1.35	1.39
35	BA	50	A	N7-C5	-6.65	1.35	1.39
35	BA	223	A	N9-C4	6.65	1.41	1.37
35	BA	857	C	N1-C6	6.65	1.41	1.37
1	AA	88	C	N1-C6	6.65	1.41	1.37
35	BA	909	A	C5'-C4'	6.65	1.59	1.51
2	AB	1324	G	C2-N3	6.65	1.38	1.32
2	AB	1811	G	C2'-C1'	-6.65	1.46	1.53
2	AB	2230	G	N1-C2	6.65	1.43	1.37
2	AB	2441	U	C4'-C3'	6.65	1.60	1.53
35	BA	275	G	C2-N3	6.65	1.38	1.32
35	BA	425	G	O3'-P	-6.65	1.53	1.61
35	BA	773	G	C2-N3	6.65	1.38	1.32
2	AB	561	G	N7-C5	-6.65	1.35	1.39
2	AB	968	C	C4'-C3'	6.65	1.60	1.53
2	AB	1781	U	C4-O4	-6.65	1.18	1.23
24	AX	58	SER	CB-OG	-6.65	1.33	1.42
2	AB	625	G	P-O5'	6.64	1.66	1.59
35	BA	131	A	N7-C5	-6.64	1.35	1.39
35	BA	1104	G	C2-N3	6.64	1.38	1.32
35	BA	1274	A	N3-C4	6.64	1.38	1.34
2	AB	608	A	N3-C4	6.64	1.38	1.34
2	AB	741	U	C5'-C4'	6.64	1.59	1.51
2	AB	891	G	C2-N3	6.64	1.38	1.32
2	AB	2286	G	O3'-P	6.64	1.69	1.61
2	AB	384	A	N7-C5	6.64	1.43	1.39
35	BA	83	C	C3'-C2'	-6.64	1.45	1.52
35	BA	770	C	N1-C2	6.64	1.46	1.40
2	AB	1611	C	C4-C5	6.64	1.48	1.43
2	AB	1988	G	N9-C8	-6.64	1.33	1.37
2	AB	2129	C	P-O5'	6.64	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	729	A	C5'-C4'	6.64	1.59	1.51
2	AB	265	A	C6-N6	-6.64	1.28	1.33
2	AB	1251	C	P-O5'	6.64	1.66	1.59
2	AB	1550	C	C2-N3	6.64	1.41	1.35
2	AB	1850	G	N7-C5	-6.64	1.35	1.39
2	AB	2582	G	C5-C4	-6.64	1.33	1.38
35	BA	389	A	C8-N7	-6.64	1.26	1.31
35	BA	852	G	N9-C8	-6.64	1.33	1.37
35	BA	1163	A	C2'-C1'	-6.64	1.46	1.53
35	BA	1367	C	N3-C4	6.64	1.38	1.33
2	AB	359	G	N3-C4	6.63	1.40	1.35
2	AB	990	A	C6-N6	6.63	1.39	1.33
2	AB	2352	A	P-O5'	6.63	1.66	1.59
2	AB	1234	U	C4-C5	6.63	1.49	1.43
35	BA	105	G	C5-C6	6.63	1.49	1.42
35	BA	673	A	N7-C5	6.63	1.43	1.39
35	BA	990	C	O3'-P	6.63	1.69	1.61
2	AB	2633	G	C5-C4	6.63	1.43	1.38
2	AB	2677	G	C5-C6	6.63	1.49	1.42
35	BA	61	G	N3-C4	6.63	1.40	1.35
2	AB	590	A	N1-C2	-6.63	1.28	1.34
2	AB	1250	G	C8-N7	-6.63	1.26	1.30
2	AB	2189	U	C5-C6	6.63	1.40	1.34
2	AB	2369	A	C3'-C2'	6.63	1.60	1.52
35	BA	349	A	C5-C4	6.63	1.43	1.38
2	AB	877	A	C6-N6	6.62	1.39	1.33
2	AB	1373	A	N3-C4	6.62	1.38	1.34
2	AB	1683	U	C2-N3	6.62	1.42	1.37
2	AB	1999	C	C4'-C3'	6.62	1.60	1.53
35	BA	610	U	C5'-C4'	6.62	1.59	1.51
35	BA	1055	A	N3-C4	6.62	1.38	1.34
1	AA	35	C	C2-N3	6.62	1.41	1.35
2	AB	773	U	C2-O2	6.62	1.28	1.22
2	AB	1053	C	C2-N3	-6.62	1.30	1.35
2	AB	1381	G	C5'-C4'	6.62	1.59	1.51
35	BA	21	G	C8-N7	6.62	1.34	1.30
35	BA	204	G	C6-N1	6.62	1.44	1.39
35	BA	884	U	C2-O2	6.62	1.28	1.22
2	AB	489	G	P-O5'	6.62	1.66	1.59
35	BA	126	G	N1-C2	6.62	1.43	1.37
2	AB	225	C	N3-C4	6.62	1.38	1.33
2	AB	705	A	N7-C5	6.62	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1021	A	N3-C4	6.62	1.38	1.34
2	AB	2094	A	N9-C4	6.62	1.41	1.37
2	AB	2107	G	C4'-C3'	6.62	1.60	1.53
2	AB	2122	U	N1-C2	6.62	1.44	1.38
2	AB	2155	U	C4-O4	-6.62	1.18	1.23
2	AB	2485	G	N1-C2	6.62	1.43	1.37
35	BA	604	G	N9-C8	6.62	1.42	1.37
35	BA	760	G	C6-O6	-6.62	1.18	1.24
35	BA	944	G	C2-N3	6.62	1.38	1.32
35	BA	1318	A	C5'-C4'	6.62	1.59	1.51
2	AB	264	C	C5-C6	6.62	1.39	1.34
2	AB	2135	A	N9-C4	-6.62	1.33	1.37
2	AB	988	A	N7-C5	6.62	1.43	1.39
35	BA	987	G	C6-N1	6.62	1.44	1.39
1	AA	109	A	C8-N7	-6.61	1.26	1.31
2	AB	1772	A	C5-C4	-6.61	1.34	1.38
35	BA	3	A	N9-C8	6.61	1.43	1.37
35	BA	302	G	N9-C8	6.61	1.42	1.37
35	BA	609	A	N3-C4	6.61	1.38	1.34
35	BA	889	A	N3-C4	6.61	1.38	1.34
35	BA	1116	U	P-O5'	-6.61	1.53	1.59
36	BB	18	A	C8-N7	-6.61	1.26	1.31
2	AB	31	C	C2'-O2'	6.61	1.50	1.41
2	AB	455	C	N1-C6	-6.61	1.33	1.37
2	AB	699	A	N3-C4	6.61	1.38	1.34
2	AB	848	C	C2'-C1'	-6.61	1.46	1.53
2	AB	1235	G	O4'-C1'	6.61	1.50	1.41
2	AB	1602	U	N3-C4	6.61	1.44	1.38
2	AB	2867	G	N1-C2	6.61	1.43	1.37
35	BA	415	A	N3-C4	-6.61	1.30	1.34
35	BA	998	C	N3-C4	6.61	1.38	1.33
35	BA	85	U	N3-C4	6.61	1.44	1.38
35	BA	1496	C	C4'-O4'	-6.61	1.36	1.45
2	AB	246	C	C4'-O4'	-6.61	1.36	1.45
2	AB	650	C	N1-C6	6.61	1.41	1.37
35	BA	1028	C	C4-C5	6.61	1.48	1.43
35	BA	43	C	C4-C5	-6.60	1.37	1.43
35	BA	334	C	C2-O2	-6.60	1.18	1.24
35	BA	348	G	C4'-C3'	-6.60	1.45	1.53
2	AB	2280	G	C4'-C3'	6.60	1.60	1.53
2	AB	2844	G	C5-C4	-6.60	1.33	1.38
35	BA	211	G	N1-C2	6.60	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1535	C	C4'-O4'	-6.60	1.36	1.45
2	AB	2902	C	N1-C6	6.60	1.41	1.37
35	BA	96	U	C4'-O4'	-6.60	1.36	1.45
35	BA	404	G	C8-N7	-6.60	1.26	1.30
35	BA	412	A	C8-N7	-6.60	1.26	1.31
2	AB	131	A	C6-N6	6.60	1.39	1.33
2	AB	1408	G	O3'-P	6.60	1.69	1.61
1	AA	60	C	P-O5'	6.60	1.66	1.59
2	AB	589	U	P-O5'	6.60	1.66	1.59
2	AB	899	A	C8-N7	-6.60	1.26	1.31
2	AB	2148	G	C5'-C4'	6.60	1.59	1.51
35	BA	1093	A	O3'-P	6.60	1.69	1.61
2	AB	1262	A	C5'-C4'	6.60	1.59	1.51
2	AB	1781	U	C2-N3	6.60	1.42	1.37
2	AB	2400	G	C4'-O4'	-6.60	1.36	1.45
37	BC	30	G	C2-N3	6.60	1.38	1.32
2	AB	640	C	C5-C6	6.59	1.39	1.34
2	AB	1029	A	N7-C5	6.59	1.43	1.39
2	AB	1113	U	P-O5'	6.59	1.66	1.59
2	AB	1693	U	O3'-P	6.59	1.69	1.61
2	AB	2168	G	C5'-C4'	6.59	1.59	1.51
2	AB	2216	G	C4'-C3'	-6.59	1.45	1.53
2	AB	2901	C	O3'-P	6.59	1.69	1.61
35	BA	320	A	N7-C5	-6.59	1.35	1.39
35	BA	654	G	P-O5'	6.59	1.66	1.59
35	BA	917	G	C2-N3	6.59	1.38	1.32
36	BB	52	U	N1-C2	6.59	1.44	1.38
2	AB	1237	A	C6-N6	6.59	1.39	1.33
2	AB	2189	U	N1-C2	6.59	1.44	1.38
35	BA	483	C	N1-C6	6.59	1.41	1.37
2	AB	711	G	P-O5'	6.59	1.66	1.59
2	AB	1625	C	C3'-C2'	6.59	1.60	1.52
2	AB	1747	U	C5'-C4'	6.59	1.59	1.51
2	AB	2168	G	P-O5'	6.59	1.66	1.59
2	AB	2525	G	C4'-O4'	-6.59	1.36	1.45
35	BA	576	C	C5-C6	6.59	1.39	1.34
35	BA	964	A	N7-C5	-6.59	1.35	1.39
37	BC	59	A	N3-C4	6.59	1.38	1.34
2	AB	30	G	C3'-C2'	6.59	1.60	1.52
2	AB	67	U	C2-N3	6.59	1.42	1.37
2	AB	570	G	C2-N3	6.59	1.38	1.32
2	AB	1133	A	N3-C4	6.59	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2666	C	C2-N3	6.59	1.41	1.35
35	BA	197	A	N3-C4	6.59	1.38	1.34
35	BA	280	C	C5'-C4'	6.59	1.59	1.51
35	BA	1288	A	N3-C4	6.59	1.38	1.34
2	AB	1922	G	C6-O6	-6.59	1.18	1.24
2	AB	2072	C	C4'-C3'	6.59	1.60	1.53
2	AB	2758	A	N3-C4	6.59	1.38	1.34
2	AB	2855	C	C2-N3	6.59	1.41	1.35
35	BA	236	A	C5'-C4'	6.59	1.59	1.51
35	BA	1497	G	C8-N7	6.59	1.34	1.30
2	AB	661	A	O3'-P	6.59	1.69	1.61
2	AB	932	U	C3'-C2'	6.59	1.60	1.52
2	AB	989	G	C2'-C1'	-6.59	1.46	1.53
2	AB	1429	G	C5-C4	6.59	1.43	1.38
2	AB	1919	A	C6-N6	6.59	1.39	1.33
2	AB	2741	A	N9-C4	6.59	1.41	1.37
2	AB	2768	U	C2-N3	6.59	1.42	1.37
35	BA	358	U	O4'-C1'	6.59	1.50	1.41
37	BC	30	G	C4'-O4'	-6.59	1.36	1.45
2	AB	1343	G	C5-C4	-6.58	1.33	1.38
2	AB	1687	G	C8-N7	-6.58	1.26	1.30
2	AB	2366	A	N7-C5	-6.58	1.35	1.39
35	BA	1470	U	C2-N3	6.58	1.42	1.37
36	BB	57	C	P-O5'	6.58	1.66	1.59
2	AB	278	A	P-O5'	6.58	1.66	1.59
2	AB	373	U	N1-C2	6.58	1.44	1.38
2	AB	1162	G	C8-N7	6.58	1.34	1.30
35	BA	64	G	P-O5'	6.58	1.66	1.59
35	BA	727	G	N3-C4	-6.58	1.30	1.35
35	BA	1370	G	C8-N7	6.58	1.34	1.30
2	AB	1577	C	C2-N3	6.58	1.41	1.35
2	AB	1684	G	C5-C6	6.58	1.49	1.42
2	AB	1934	C	P-O5'	6.58	1.66	1.59
35	BA	1539	C	N1-C6	6.58	1.41	1.37
2	AB	929	U	C4-C5	6.58	1.49	1.43
2	AB	1443	U	N1-C2	6.58	1.44	1.38
2	AB	1585	C	N3-C4	6.58	1.38	1.33
2	AB	1693	U	C4'-O4'	-6.58	1.36	1.45
2	AB	2647	U	C2-N3	-6.58	1.33	1.37
2	AB	2687	U	N1-C2	6.58	1.44	1.38
35	BA	203	G	C2-N3	6.58	1.38	1.32
2	AB	1349	C	P-O5'	6.58	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1644	C	C3'-C2'	6.58	1.60	1.52
2	AB	2482	A	C8-N7	-6.58	1.26	1.31
35	BA	562	U	O3'-P	6.58	1.69	1.61
35	BA	1010	U	O3'-P	6.58	1.69	1.61
2	AB	2712	C	C5-C6	6.58	1.39	1.34
35	BA	22	G	N7-C5	6.58	1.43	1.39
35	BA	362	G	N3-C4	6.58	1.40	1.35
35	BA	1048	G	P-O5'	6.58	1.66	1.59
2	AB	503	A	C2'-C1'	6.57	1.60	1.53
2	AB	991	C	C5-C6	6.57	1.39	1.34
2	AB	1433	A	P-O5'	6.57	1.66	1.59
35	BA	559	A	C6-N1	6.57	1.40	1.35
35	BA	1141	C	C2-N3	6.57	1.41	1.35
35	BA	1143	G	P-O5'	6.57	1.66	1.59
2	AB	829	A	C8-N7	-6.57	1.26	1.31
2	AB	1890	A	N7-C5	6.57	1.43	1.39
35	BA	764	C	C4'-C3'	-6.57	1.46	1.53
2	AB	636	G	P-O5'	6.57	1.66	1.59
2	AB	664	G	C8-N7	6.57	1.34	1.30
2	AB	1689	A	C6-N1	-6.57	1.30	1.35
2	AB	2035	G	C5-C4	-6.57	1.33	1.38
2	AB	2844	G	N7-C5	6.57	1.43	1.39
37	BC	64	G	C8-N7	-6.57	1.27	1.30
39	BE	209	GLY	CA-C	6.57	1.62	1.51
35	BA	550	G	C4'-C3'	-6.57	1.46	1.53
35	BA	1071	C	C4-C5	6.57	1.48	1.43
35	BA	1204	A	C4'-C3'	6.57	1.60	1.53
2	AB	406	G	C8-N7	-6.57	1.27	1.30
2	AB	626	A	C6-N1	6.57	1.40	1.35
2	AB	1138	G	N7-C5	6.57	1.43	1.39
2	AB	1200	C	C5-C6	6.57	1.39	1.34
2	AB	2393	U	C4-O4	-6.57	1.18	1.23
2	AB	2492	U	N1-C2	6.57	1.44	1.38
2	AB	632	A	N1-C2	-6.57	1.28	1.34
2	AB	1728	C	C3'-C2'	6.57	1.60	1.52
2	AB	2655	G	N3-C4	6.57	1.40	1.35
2	AB	194	G	N7-C5	-6.56	1.35	1.39
2	AB	810	U	P-O5'	6.56	1.66	1.59
2	AB	2641	G	P-O5'	6.56	1.66	1.59
35	BA	379	C	C5'-C4'	6.56	1.59	1.51
35	BA	435	A	C5-C4	-6.56	1.34	1.38
2	AB	206	U	C3'-C2'	-6.56	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2635	A	P-O5'	6.56	1.66	1.59
35	BA	575	G	C2-N3	6.56	1.38	1.32
35	BA	588	G	N9-C4	-6.56	1.32	1.38
35	BA	1107	C	C2'-O2'	-6.56	1.33	1.41
35	BA	1031	C	C3'-C2'	6.56	1.60	1.52
35	BA	1203	C	C4'-O4'	-6.56	1.37	1.45
2	AB	561	G	O3'-P	6.56	1.69	1.61
2	AB	1321	A	N7-C5	6.56	1.43	1.39
2	AB	1434	A	C5-C4	-6.56	1.34	1.38
2	AB	1957	C	C4-N4	6.56	1.39	1.33
2	AB	2062	A	P-O5'	-6.56	1.53	1.59
2	AB	2266	A	N3-C4	6.56	1.38	1.34
2	AB	2616	C	N1-C2	6.56	1.46	1.40
2	AB	2693	G	C2-N3	6.56	1.38	1.32
35	BA	717	U	P-O5'	6.56	1.66	1.59
1	AA	61	G	O3'-P	6.56	1.69	1.61
2	AB	2899	A	N9-C4	6.56	1.41	1.37
35	BA	781	A	C4'-O4'	-6.56	1.37	1.45
35	BA	889	A	C4'-O4'	-6.56	1.37	1.45
2	AB	115	C	O3'-P	6.55	1.69	1.61
35	BA	884	U	C3'-C2'	6.55	1.60	1.52
36	BB	58	C	N3-C4	6.55	1.38	1.33
2	AB	318	C	N3-C4	6.55	1.38	1.33
2	AB	1129	A	C5'-C4'	6.55	1.59	1.51
2	AB	2843	G	P-O5'	6.55	1.66	1.59
2	AB	2266	A	N9-C4	-6.55	1.33	1.37
2	AB	2612	C	P-O5'	6.55	1.66	1.59
35	BA	473	U	C2-N3	6.55	1.42	1.37
35	BA	761	G	C6-N1	6.55	1.44	1.39
35	BA	775	G	N9-C4	6.55	1.43	1.38
35	BA	858	G	C6-O6	-6.55	1.18	1.24
35	BA	1442	G	P-O5'	6.55	1.66	1.59
2	AB	54	G	N1-C2	6.55	1.43	1.37
2	AB	1165	A	N3-C4	6.55	1.38	1.34
2	AB	1218	G	C2-N2	6.55	1.41	1.34
2	AB	2270	A	C5'-C4'	6.55	1.59	1.51
2	AB	2304	G	N9-C4	6.55	1.43	1.38
35	BA	73	C	O3'-P	6.55	1.69	1.61
35	BA	83	C	P-O5'	6.55	1.66	1.59
35	BA	179	A	N9-C8	-6.55	1.32	1.37
35	BA	952	U	C5-C6	6.55	1.40	1.34
35	BA	1151	A	C5-C4	-6.55	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	953	G	C6-N1	6.55	1.44	1.39
2	AB	1847	A	N3-C4	6.55	1.38	1.34
2	AB	2286	G	C4'-O4'	-6.55	1.37	1.45
37	BC	33	OMC	O3'-P	-6.55	1.53	1.61
2	AB	124	G	C4'-C3'	-6.54	1.46	1.53
2	AB	1673	G	P-O5'	6.54	1.66	1.59
2	AB	2219	U	C4-O4	6.54	1.28	1.23
8	AH	82	PHE	CG-CD2	6.54	1.48	1.38
35	BA	10	A	N9-C4	-6.54	1.33	1.37
2	AB	1681	G	N1-C2	6.54	1.43	1.37
2	AB	1812	U	N1-C2	6.54	1.44	1.38
36	BB	15	G	C6-O6	-6.54	1.18	1.24
2	AB	265	A	C2'-C1'	6.54	1.60	1.53
2	AB	842	U	C4'-O4'	-6.54	1.37	1.45
2	AB	1053	C	C4-N4	-6.54	1.28	1.33
2	AB	1327	A	C8-N7	-6.54	1.26	1.31
2	AB	1855	U	C4'-O4'	-6.54	1.37	1.45
2	AB	2308	G	C2-N3	6.54	1.38	1.32
2	AB	2379	G	C8-N7	-6.54	1.27	1.30
2	AB	2869	G	N9-C8	6.54	1.42	1.37
35	BA	737	C	N3-C4	6.54	1.38	1.33
35	BA	864	A	C8-N7	-6.54	1.26	1.31
2	AB	327	G	C2'-C1'	-6.54	1.46	1.53
2	AB	405	U	C2-N3	6.54	1.42	1.37
2	AB	979	A	N3-C4	6.54	1.38	1.34
2	AB	983	A	C5-C6	6.54	1.47	1.41
2	AB	1625	C	N1-C2	6.54	1.46	1.40
2	AB	1763	G	C5'-C4'	6.54	1.59	1.51
35	BA	383	A	N3-C4	6.54	1.38	1.34
35	BA	898	G	C6-N1	6.54	1.44	1.39
35	BA	1169	A	C5-C6	6.54	1.47	1.41
2	AB	994	C	C4-C5	6.54	1.48	1.43
2	AB	1771	C	N1-C2	6.54	1.46	1.40
2	AB	2404	U	P-O5'	6.54	1.66	1.59
35	BA	598	U	O4'-C1'	6.54	1.50	1.41
35	BA	1530	G	C6-N1	-6.54	1.34	1.39
2	AB	1977	A	N7-C5	6.53	1.43	1.39
35	BA	32	A	O3'-P	6.53	1.69	1.61
35	BA	364	A	N9-C4	-6.53	1.33	1.37
2	AB	123	G	C6-O6	-6.53	1.18	1.24
2	AB	411	G	C3'-C2'	6.53	1.60	1.52
2	AB	468	G	P-O5'	6.53	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1456	G	C2'-O2'	6.53	1.50	1.41
35	BA	483	C	C2-N3	6.53	1.41	1.35
35	BA	1091	U	C4'-O4'	-6.53	1.37	1.45
37	BC	6	G	C5'-C4'	6.53	1.59	1.51
37	BC	50	G	C8-N7	-6.53	1.27	1.30
2	AB	1645	G	C5-C6	6.53	1.48	1.42
35	BA	627	G	O4'-C1'	6.53	1.50	1.41
2	AB	674	G	C4'-O4'	-6.53	1.37	1.45
2	AB	1794	A	C8-N7	-6.53	1.26	1.31
2	AB	2409	G	N9-C4	-6.53	1.32	1.38
35	BA	412	A	C4'-C3'	6.53	1.60	1.53
35	BA	446	G	N1-C2	6.53	1.43	1.37
35	BA	769	G	N9-C4	-6.53	1.32	1.38
35	BA	799	G	C5-C4	6.53	1.43	1.38
35	BA	1286	U	C5-C6	6.53	1.40	1.34
2	AB	1263	U	C2-N3	6.53	1.42	1.37
2	AB	2726	A	N9-C4	6.53	1.41	1.37
2	AB	2775	G	C2-N3	6.53	1.38	1.32
35	BA	1198	G	C5'-C4'	6.53	1.59	1.51
35	BA	1219	A	C6-N1	-6.53	1.30	1.35
35	BA	1320	C	C5-C6	6.53	1.39	1.34
2	AB	31	C	C4'-O4'	-6.52	1.37	1.45
35	BA	437	U	N1-C2	6.52	1.44	1.38
2	AB	2	G	N3-C4	6.52	1.40	1.35
2	AB	156	A	O3'-P	6.52	1.69	1.61
2	AB	396	G	N7-C5	6.52	1.43	1.39
2	AB	422	A	C3'-C2'	6.52	1.60	1.52
2	AB	1930	G	C6-O6	-6.52	1.18	1.24
35	BA	1226	C	C2-O2	-6.52	1.18	1.24
35	BA	1526	G	N3-C4	6.52	1.40	1.35
2	AB	2569	G	C6-N1	6.52	1.44	1.39
35	BA	1397	C	N3-C4	6.52	1.38	1.33
2	AB	615	U	C5-C6	6.52	1.40	1.34
2	AB	1524	G	P-O5'	6.52	1.66	1.59
2	AB	2213	U	C2'-C1'	6.52	1.60	1.53
2	AB	2843	G	N9-C8	6.52	1.42	1.37
2	AB	196	A	C4'-O4'	-6.52	1.37	1.45
2	AB	351	C	C2'-C1'	6.52	1.60	1.53
2	AB	404	A	C6-N6	-6.52	1.28	1.33
2	AB	2010	G	C6-N1	6.52	1.44	1.39
2	AB	2879	A	N3-C4	6.52	1.38	1.34
35	BA	934	C	C5'-C4'	6.52	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2477	U	C2-N3	6.52	1.42	1.37
35	BA	1332	A	N1-C2	6.52	1.40	1.34
35	BA	1333	A	N9-C4	-6.52	1.33	1.37
2	AB	502	A	N9-C4	-6.51	1.33	1.37
2	AB	716	A	N7-C5	-6.51	1.35	1.39
2	AB	1142	A	N3-C4	6.51	1.38	1.34
2	AB	1279	G	C8-N7	-6.51	1.27	1.30
2	AB	2312	U	C5'-C4'	6.51	1.59	1.51
35	BA	60	A	N3-C4	6.51	1.38	1.34
35	BA	161	A	N9-C8	-6.51	1.32	1.37
35	BA	174	A	N3-C4	6.51	1.38	1.34
35	BA	755	G	N1-C2	6.51	1.43	1.37
2	AB	984	A	N3-C4	6.51	1.38	1.34
2	AB	1717	A	P-O5'	6.51	1.66	1.59
2	AB	2295	C	N1-C2	6.51	1.46	1.40
1	AA	94	A	N9-C4	-6.51	1.33	1.37
2	AB	602	A	C3'-C2'	6.51	1.60	1.52
37	BC	43	G	C8-N7	6.51	1.34	1.30
2	AB	715	A	N7-C5	6.51	1.43	1.39
2	AB	1600	C	C4-C5	6.51	1.48	1.43
2	AB	1838	C	C4-N4	6.51	1.39	1.33
2	AB	2322	A	N9-C4	-6.51	1.33	1.37
2	AB	2762	C	P-O5'	6.51	1.66	1.59
35	BA	45	G	N9-C4	-6.51	1.32	1.38
35	BA	220	G	C6-N1	6.51	1.44	1.39
35	BA	1009	U	C4-C5	6.51	1.49	1.43
35	BA	1345	U	N1-C2	6.51	1.44	1.38
2	AB	1224	U	C4-C5	6.51	1.49	1.43
2	AB	1365	A	N9-C4	6.51	1.41	1.37
35	BA	318	G	O4'-C1'	6.51	1.50	1.41
35	BA	1083	U	C4'-O4'	-6.51	1.37	1.45
2	AB	1142	A	C4'-O4'	-6.51	1.37	1.45
2	AB	1158	C	C4'-C3'	6.51	1.60	1.53
2	AB	1416	G	O3'-P	6.51	1.69	1.61
2	AB	2307	G	N7-C5	-6.51	1.35	1.39
2	AB	2490	G	C2-N3	6.51	1.38	1.32
2	AB	2499	C	P-O5'	6.51	1.66	1.59
2	AB	2617	U	P-O5'	-6.51	1.53	1.59
35	BA	724	G	O4'-C1'	-6.51	1.33	1.41
35	BA	842	U	C5'-C4'	6.51	1.59	1.51
35	BA	1234	C	C5-C6	-6.51	1.29	1.34
37	BC	46	G	C2-N2	6.51	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2008	C	P-O5'	-6.50	1.53	1.59
1	AA	111	U	C4-O4	6.50	1.28	1.23
2	AB	210	C	N3-C4	-6.50	1.29	1.33
2	AB	265	A	N3-C4	6.50	1.38	1.34
2	AB	352	A	C6-N1	6.50	1.40	1.35
2	AB	460	A	C8-N7	-6.50	1.26	1.31
35	BA	628	G	C2-N3	6.50	1.38	1.32
35	BA	859	G	P-O5'	6.50	1.66	1.59
35	BA	963	G	C6-N1	6.50	1.44	1.39
35	BA	1390	U	O3'-P	6.50	1.69	1.61
1	AA	62	C	C5'-C4'	6.50	1.59	1.51
2	AB	248	G	P-O5'	6.50	1.66	1.59
2	AB	609	A	N1-C2	6.50	1.40	1.34
2	AB	1518	C	C5'-C4'	6.50	1.59	1.51
2	AB	2011	U	C5'-C4'	6.50	1.59	1.51
35	BA	344	A	C6-N6	6.50	1.39	1.33
35	BA	1400	C	C5'-C4'	6.50	1.59	1.51
2	AB	30	G	C8-N7	6.50	1.34	1.30
2	AB	2782	G	N1-C2	6.50	1.43	1.37
2	AB	1584	U	C2-O2	6.50	1.28	1.22
2	AB	1610	A	C6-N1	6.50	1.40	1.35
2	AB	1881	C	C5'-C4'	6.50	1.59	1.51
2	AB	2166	U	P-O5'	6.50	1.66	1.59
2	AB	96	C	P-O5'	6.50	1.66	1.59
2	AB	242	G	O5'-C5'	-6.50	1.32	1.42
2	AB	867	C	N1-C6	6.50	1.41	1.37
2	AB	1083	U	C2'-C1'	-6.50	1.46	1.53
2	AB	1596	A	C5-C6	6.50	1.46	1.41
2	AB	2546	U	P-O5'	6.50	1.66	1.59
35	BA	630	A	C8-N7	6.50	1.36	1.31
35	BA	1110	A	N9-C4	6.50	1.41	1.37
35	BA	1158	C	N1-C2	6.50	1.46	1.40
35	BA	1326	U	O3'-P	6.50	1.69	1.61
2	AB	741	U	C3'-C2'	6.50	1.60	1.52
35	BA	522	C	N3-C4	6.50	1.38	1.33
35	BA	610	U	C4'-O4'	-6.50	1.37	1.45
2	AB	1155	A	O3'-P	6.49	1.69	1.61
35	BA	171	A	N3-C4	6.49	1.38	1.34
37	BC	38	A	N3-C4	6.49	1.38	1.34
2	AB	1631	G	C2-N3	6.49	1.38	1.32
2	AB	2473	U	C4-O4	-6.49	1.18	1.23
2	AB	2554	U	C4'-O4'	-6.49	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	51	U	C5'-C4'	6.49	1.59	1.51
2	AB	2243	U	O3'-P	6.49	1.69	1.61
35	BA	40	C	C4'-C3'	-6.49	1.46	1.53
35	BA	424	G	C8-N7	-6.49	1.27	1.30
35	BA	754	C	C3'-C2'	6.49	1.60	1.52
35	BA	840	C	N3-C4	6.49	1.38	1.33
35	BA	991	U	C4-O4	-6.49	1.18	1.23
39	BE	41	TYR	CG-CD1	6.49	1.47	1.39
2	AB	309	A	C2-N3	-6.49	1.27	1.33
2	AB	849	A	C5-C4	6.49	1.43	1.38
2	AB	1074	G	C4'-O4'	-6.49	1.37	1.45
2	AB	1090	A	N9-C8	-6.49	1.32	1.37
2	AB	1992	G	C2'-C1'	6.49	1.60	1.53
35	BA	281	G	N9-C8	-6.49	1.33	1.37
35	BA	327	A	N3-C4	6.49	1.38	1.34
35	BA	1036	A	N9-C8	-6.49	1.32	1.37
1	AA	83	G	C3'-C2'	6.49	1.60	1.52
2	AB	1452	G	C2-N3	6.49	1.38	1.32
35	BA	1166	G	C8-N7	-6.49	1.27	1.30
2	AB	315	G	N9-C8	-6.49	1.33	1.37
2	AB	736	C	N3-C4	6.49	1.38	1.33
2	AB	777	G	C2-N3	6.49	1.38	1.32
2	AB	1357	C	C4-C5	6.49	1.48	1.43
35	BA	181	A	C6-N1	6.49	1.40	1.35
2	AB	1257	C	C5-C6	6.48	1.39	1.34
2	AB	2596	U	C2'-O2'	-6.48	1.33	1.41
2	AB	529	A	C4'-O4'	-6.48	1.37	1.45
2	AB	1004	U	C2-N3	6.48	1.42	1.37
2	AB	1838	C	P-O5'	6.48	1.66	1.59
35	BA	119	A	C2'-C1'	6.48	1.60	1.53
35	BA	337	G	C5-C4	-6.48	1.33	1.38
35	BA	1237	C	C2-N3	6.48	1.41	1.35
37	BC	30	G	P-O5'	6.48	1.66	1.59
2	AB	56	A	P-O5'	6.48	1.66	1.59
2	AB	603	A	P-O5'	6.48	1.66	1.59
2	AB	1157	G	C2-N3	6.48	1.38	1.32
35	BA	418	C	C2-N3	6.48	1.41	1.35
35	BA	989	U	C2'-C1'	6.48	1.60	1.53
36	BB	37	G	C2-N3	6.48	1.38	1.32
2	AB	502	A	C2'-C1'	6.48	1.60	1.53
2	AB	2839	G	C6-O6	-6.48	1.18	1.24
2	AB	1520	U	P-O5'	6.48	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1565	C	N1-C6	-6.48	1.33	1.37
35	BA	450	G	C4'-O4'	-6.48	1.37	1.45
1	AA	112	G	C5-C4	-6.48	1.33	1.38
35	BA	151	A	N3-C4	6.48	1.38	1.34
2	AB	1171	G	N9-C4	6.47	1.43	1.38
2	AB	1629	U	P-O5'	-6.47	1.53	1.59
2	AB	2024	G	C6-N1	6.47	1.44	1.39
35	BA	15	G	N9-C8	6.47	1.42	1.37
35	BA	100	G	C6-N1	-6.47	1.35	1.39
35	BA	674	G	C2-N3	6.47	1.38	1.32
41	BG	156	ARG	NE-CZ	6.47	1.41	1.33
1	AA	87	U	N1-C2	6.47	1.44	1.38
2	AB	2	G	O4'-C1'	6.47	1.50	1.41
2	AB	408	G	C5'-C4'	6.47	1.59	1.51
2	AB	503	A	C4'-C3'	6.47	1.60	1.53
2	AB	643	A	C8-N7	-6.47	1.27	1.31
2	AB	2702	G	N7-C5	-6.47	1.35	1.39
2	AB	2844	G	N3-C4	6.47	1.40	1.35
35	BA	367	U	C5'-C4'	6.47	1.59	1.51
1	AA	45	A	N3-C4	6.47	1.38	1.34
2	AB	107	G	C2'-C1'	6.47	1.60	1.53
2	AB	421	C	N1-C6	6.47	1.41	1.37
2	AB	1390	U	C2-N3	6.47	1.42	1.37
35	BA	2	A	C8-N7	-6.47	1.27	1.31
35	BA	474	G	C3'-C2'	6.47	1.60	1.52
35	BA	828	U	O3'-P	6.47	1.69	1.61
35	BA	1241	G	C6-N1	-6.47	1.35	1.39
2	AB	1678	A	O3'-P	-6.47	1.53	1.61
2	AB	2410	G	C6-N1	-6.47	1.35	1.39
35	BA	350	G	C2-N2	-6.47	1.28	1.34
35	BA	1031	C	C4'-C3'	6.47	1.60	1.53
35	BA	1236	A	C6-N1	-6.47	1.31	1.35
2	AB	1952	A	C6-N6	6.47	1.39	1.33
2	AB	2260	C	C5'-C4'	6.47	1.59	1.51
35	BA	402	G	N7-C5	-6.47	1.35	1.39
35	BA	790	A	O3'-P	6.47	1.69	1.61
36	BB	48	C	O3'-P	6.47	1.69	1.61
2	AB	118	A	N7-C5	6.47	1.43	1.39
2	AB	996	A	C2'-C1'	6.47	1.60	1.53
2	AB	1217	U	C4-O4	-6.47	1.18	1.23
2	AB	1724	G	N1-C2	6.47	1.43	1.37
2	AB	428	A	C3'-C2'	6.46	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	762	U	C3'-C2'	6.46	1.60	1.52
2	AB	1299	G	C5-C4	-6.46	1.33	1.38
2	AB	1496	A	N7-C5	-6.46	1.35	1.39
2	AB	1995	U	N1-C2	6.46	1.44	1.38
2	AB	2298	A	C6-N6	6.46	1.39	1.33
2	AB	2632	A	C2-N3	6.46	1.39	1.33
2	AB	2871	U	C5-C6	6.46	1.40	1.34
35	BA	664	G	C6-N1	6.46	1.44	1.39
35	BA	911	U	C4-C5	6.46	1.49	1.43
35	BA	1105	A	N9-C4	6.46	1.41	1.37
2	AB	303	G	N9-C4	-6.46	1.32	1.38
2	AB	64	A	N9-C4	6.46	1.41	1.37
2	AB	1108	U	C3'-C2'	6.46	1.60	1.52
2	AB	2555	U	N3-C4	-6.46	1.32	1.38
2	AB	2817	U	N1-C2	6.46	1.44	1.38
35	BA	186	C	C2'-C1'	6.46	1.60	1.53
35	BA	396	C	N3-C4	6.46	1.38	1.33
35	BA	473	U	C4-O4	-6.46	1.18	1.23
35	BA	894	G	N9-C8	-6.46	1.33	1.37
1	AA	17	C	O4'-C1'	6.46	1.50	1.41
2	AB	487	C	N1-C2	6.46	1.46	1.40
2	AB	1487	U	C2-N3	6.46	1.42	1.37
2	AB	2291	U	C4-C5	6.46	1.49	1.43
6	AF	16	GLU	CD-OE2	-6.46	1.18	1.25
35	BA	95	C	C3'-C2'	6.46	1.60	1.52
2	AB	499	U	C4'-O4'	-6.46	1.37	1.45
2	AB	1292	G	C5-C4	6.46	1.42	1.38
2	AB	1403	A	C5'-C4'	6.46	1.59	1.51
2	AB	2218	G	C2'-C1'	6.46	1.60	1.53
2	AB	2603	G	C2-N3	6.46	1.38	1.32
35	BA	172	A	C4'-O4'	-6.46	1.37	1.45
35	BA	479	U	P-O5'	-6.46	1.53	1.59
35	BA	1283	U	P-O5'	6.46	1.66	1.59
35	BA	1317	C	O3'-P	-6.46	1.53	1.61
35	BA	1320	C	C4-C5	-6.46	1.37	1.43
2	AB	612	G	C4'-O4'	-6.46	1.37	1.45
2	AB	626	A	C8-N7	-6.46	1.27	1.31
35	BA	38	G	N3-C4	-6.46	1.30	1.35
35	BA	541	G	C2'-C1'	6.46	1.60	1.53
2	AB	106	C	N1-C6	6.46	1.41	1.37
35	BA	175	C	N1-C6	-6.46	1.33	1.37
2	AB	72	U	C5'-C4'	6.45	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1520	U	N1-C6	6.45	1.43	1.38
2	AB	2163	A	C5'-C4'	6.45	1.59	1.51
2	AB	2628	C	N3-C4	6.45	1.38	1.33
2	AB	2843	G	N1-C2	6.45	1.43	1.37
35	BA	824	G	C2-N3	6.45	1.38	1.32
35	BA	1290	G	N3-C4	6.45	1.40	1.35
35	BA	1297	G	C3'-C2'	6.45	1.60	1.52
36	BB	13	A	N7-C5	6.45	1.43	1.39
2	AB	537	G	C2-N3	6.45	1.38	1.32
2	AB	2211	A	C4'-C3'	-6.45	1.46	1.53
2	AB	2447	G	C6-N1	-6.45	1.35	1.39
2	AB	2881	U	N3-C4	6.45	1.44	1.38
35	BA	233	C	N3-C4	6.45	1.38	1.33
35	BA	1304	G	C5-C4	-6.45	1.33	1.38
1	AA	114	C	N1-C6	-6.45	1.33	1.37
2	AB	376	G	C4'-O4'	-6.45	1.37	1.45
2	AB	1812	U	C2-N3	6.45	1.42	1.37
2	AB	2107	G	O3'-P	6.45	1.68	1.61
2	AB	2136	G	C3'-O3'	-6.45	1.33	1.42
35	BA	713	G	N9-C4	-6.45	1.32	1.38
35	BA	973	G	C5-C4	-6.45	1.33	1.38
35	BA	1379	G	N7-C5	6.45	1.43	1.39
2	AB	1000	A	C5-C4	-6.45	1.34	1.38
2	AB	1707	G	N3-C4	6.45	1.40	1.35
2	AB	2578	G	C2-N3	6.45	1.38	1.32
35	BA	1214	C	C5'-C4'	6.45	1.59	1.51
35	BA	1322	C	P-O5'	6.45	1.66	1.59
35	BA	678	U	O3'-P	6.44	1.68	1.61
2	AB	323	C	C5'-C4'	6.44	1.59	1.51
2	AB	2409	G	N1-C2	6.44	1.43	1.37
35	BA	270	A	P-O5'	6.44	1.66	1.59
35	BA	1116	U	C2-N3	6.44	1.42	1.37
35	BA	1415	G	N9-C4	6.44	1.43	1.38
2	AB	230	G	N9-C4	-6.44	1.32	1.38
2	AB	408	G	P-O5'	6.44	1.66	1.59
2	AB	649	G	C4'-C3'	6.44	1.60	1.53
2	AB	1438	U	O3'-P	6.44	1.68	1.61
2	AB	1504	A	P-O5'	6.44	1.66	1.59
2	AB	2875	C	C2'-C1'	-6.44	1.46	1.53
35	BA	253	A	C4'-O4'	-6.44	1.37	1.45
35	BA	634	C	O3'-P	6.44	1.68	1.61
35	BA	331	G	P-O5'	6.44	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1086	A	P-O5'	6.44	1.66	1.59
2	AB	1325	U	C4-C5	6.44	1.49	1.43
2	AB	1722	A	P-O5'	-6.44	1.53	1.59
2	AB	2687	U	C2-O2	6.44	1.28	1.22
35	BA	247	G	C2-N3	6.44	1.37	1.32
35	BA	409	U	N3-C4	6.44	1.44	1.38
35	BA	600	A	N3-C4	6.44	1.38	1.34
35	BA	1179	A	N1-C2	-6.44	1.28	1.34
2	AB	131	A	C5-C4	6.44	1.43	1.38
2	AB	361	G	C5-C6	6.44	1.48	1.42
2	AB	980	A	C5'-C4'	6.44	1.59	1.51
2	AB	2339	C	C4'-O4'	-6.44	1.37	1.45
35	BA	876	C	C2'-C1'	-6.44	1.46	1.53
2	AB	342	A	C8-N7	-6.43	1.27	1.31
2	AB	1365	A	P-O5'	6.43	1.66	1.59
2	AB	2169	A	C6-N1	-6.43	1.31	1.35
2	AB	2872	A	O3'-P	6.43	1.68	1.61
35	BA	903	G	C2'-C1'	6.43	1.60	1.53
37	BC	10	G	C4'-O4'	-6.43	1.37	1.45
1	AA	59	A	P-O5'	6.43	1.66	1.59
2	AB	1193	G	C2'-C1'	6.43	1.60	1.53
2	AB	1755	A	N7-C5	-6.43	1.35	1.39
2	AB	1992	G	C8-N7	-6.43	1.27	1.30
2	AB	2626	C	C5-C6	6.43	1.39	1.34
2	AB	2716	C	P-O5'	6.43	1.66	1.59
35	BA	837	U	C2'-C1'	-6.43	1.46	1.53
35	BA	1021	A	C6-N1	-6.43	1.31	1.35
35	BA	1111	A	P-O5'	6.43	1.66	1.59
1	AA	38	C	C4'-O4'	-6.43	1.37	1.45
2	AB	979	A	C6-N6	-6.43	1.28	1.33
35	BA	823	C	C2-N3	6.43	1.40	1.35
35	BA	933	G	C2-N3	6.43	1.37	1.32
35	BA	1500	A	N9-C4	-6.43	1.33	1.37
2	AB	62	U	C4'-O4'	-6.43	1.37	1.45
2	AB	1114	C	O4'-C1'	-6.43	1.33	1.41
2	AB	1471	G	C2-N3	6.43	1.37	1.32
35	BA	268	U	C2'-C1'	6.43	1.60	1.53
2	AB	340	A	C3'-O3'	6.43	1.51	1.42
2	AB	546	U	C4'-O4'	-6.43	1.37	1.45
2	AB	691	C	N3-C4	6.43	1.38	1.33
2	AB	1495	A	O3'-P	-6.43	1.53	1.61
2	AB	2041	U	O3'-P	6.43	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	10	A	C4'-O4'	-6.43	1.37	1.45
35	BA	190	A	N7-C5	-6.43	1.35	1.39
2	AB	1000	A	P-O5'	6.42	1.66	1.59
2	AB	1151	A	C4'-O4'	-6.42	1.37	1.45
2	AB	1268	A	O4'-C1'	6.42	1.50	1.41
2	AB	1426	G	P-O5'	6.42	1.66	1.59
2	AB	1739	A	C3'-O3'	6.42	1.51	1.42
2	AB	2157	G	C4'-C3'	-6.42	1.46	1.53
2	AB	2865	U	C4-C5	6.42	1.49	1.43
35	BA	784	A	C4'-C3'	-6.42	1.46	1.53
35	BA	1290	G	C6-N1	6.42	1.44	1.39
2	AB	175	G	N3-C4	6.42	1.40	1.35
2	AB	710	U	C2-N3	6.42	1.42	1.37
2	AB	847	U	P-O5'	6.42	1.66	1.59
2	AB	1896	G	N7-C5	-6.42	1.35	1.39
35	BA	48	C	N1-C6	6.42	1.41	1.37
35	BA	106	C	N1-C6	6.42	1.41	1.37
35	BA	1509	C	C5-C6	6.42	1.39	1.34
37	BC	58	A	P-O5'	6.42	1.66	1.59
2	AB	2528	U	O4'-C1'	6.42	1.50	1.41
35	BA	1087	G	C5'-C4'	6.42	1.59	1.51
2	AB	458	G	O3'-P	6.42	1.68	1.61
2	AB	558	U	C2-N3	6.42	1.42	1.37
2	AB	754	U	N3-C4	6.42	1.44	1.38
2	AB	1524	G	C2-N3	6.42	1.37	1.32
2	AB	1961	C	N1-C6	6.42	1.41	1.37
2	AB	2055	C	C4-C5	6.42	1.48	1.43
2	AB	2643	G	C6-N1	6.42	1.44	1.39
35	BA	187	G	N7-C5	6.42	1.43	1.39
35	BA	1240	U	C3'-O3'	6.42	1.51	1.42
35	BA	1312	G	N9-C8	-6.42	1.33	1.37
1	AA	11	C	C5-C6	6.42	1.39	1.34
1	AA	31	C	N3-C4	6.42	1.38	1.33
2	AB	391	A	C5-C6	-6.42	1.35	1.41
2	AB	485	C	C5'-C4'	6.42	1.59	1.51
2	AB	1413	A	N3-C4	6.42	1.38	1.34
2	AB	1629	U	C4-O4	6.42	1.28	1.23
2	AB	2611	C	C4'-C3'	6.42	1.60	1.53
35	BA	487	A	N7-C5	6.42	1.43	1.39
35	BA	651	C	N1-C2	-6.42	1.33	1.40
2	AB	927	A	O3'-P	-6.42	1.53	1.61
2	AB	968	C	C1'-N1	6.41	1.58	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2398	U	N1-C2	6.41	1.44	1.38
2	AB	2402	U	C4'-O4'	-6.41	1.37	1.45
2	AB	1653	G	N1-C2	6.41	1.42	1.37
1	AA	112	G	C8-N7	6.41	1.34	1.30
2	AB	36	G	C3'-C2'	-6.41	1.45	1.52
2	AB	758	C	O3'-P	-6.41	1.53	1.61
2	AB	1764	C	N1-C2	-6.41	1.33	1.40
2	AB	2418	A	C8-N7	6.41	1.36	1.31
35	BA	509	A	C4'-O4'	-6.41	1.37	1.45
35	BA	1365	G	N7-C5	-6.41	1.35	1.39
2	AB	107	G	C8-N7	-6.41	1.27	1.30
2	AB	129	C	C4'-C3'	-6.41	1.46	1.53
2	AB	802	A	C5'-C4'	6.41	1.59	1.51
2	AB	1546	G	C5-C4	-6.41	1.33	1.38
2	AB	2197	U	N1-C6	6.41	1.43	1.38
2	AB	2246	G	P-O5'	6.41	1.66	1.59
35	BA	781	A	N9-C8	6.41	1.42	1.37
2	AB	650	C	C2'-O2'	6.41	1.50	1.41
2	AB	341	C	N1-C6	-6.41	1.33	1.37
2	AB	2047	C	C5-C6	6.41	1.39	1.34
2	AB	2390	U	C5'-C4'	6.41	1.59	1.51
2	AB	2746	U	N3-C4	6.41	1.44	1.38
2	AB	2827	C	N1-C6	6.41	1.41	1.37
35	BA	449	G	C4'-C3'	6.41	1.60	1.53
2	AB	903	C	C3'-C2'	-6.40	1.45	1.52
2	AB	1333	G	C6-N1	6.40	1.44	1.39
2	AB	1503	A	N3-C4	6.40	1.38	1.34
2	AB	2741	A	C6-N1	-6.40	1.31	1.35
35	BA	525	C	C5-C6	6.40	1.39	1.34
2	AB	1697	G	N3-C4	6.40	1.40	1.35
2	AB	2010	G	N9-C4	6.40	1.43	1.38
2	AB	2436	G	N3-C4	6.40	1.40	1.35
2	AB	1362	C	O3'-P	6.40	1.68	1.61
2	AB	2271	G	C5'-C4'	-6.40	1.43	1.51
2	AB	2469	A	O3'-P	6.40	1.68	1.61
35	BA	761	G	C4'-O4'	-6.40	1.37	1.45
1	AA	56	G	C3'-C2'	-6.40	1.45	1.52
35	BA	243	A	C6-N6	6.40	1.39	1.33
35	BA	266	G	O3'-P	6.40	1.68	1.61
35	BA	882	C	C2-N3	6.40	1.40	1.35
35	BA	976	G	C3'-C2'	6.40	1.59	1.52
2	AB	68	G	N7-C5	6.40	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1279	G	C2-N3	6.40	1.37	1.32
1	AA	12	C	C4'-O4'	-6.39	1.37	1.45
2	AB	344	A	N9-C4	6.39	1.41	1.37
2	AB	2342	C	C3'-C2'	6.39	1.59	1.52
2	AB	2534	A	P-O5'	6.39	1.66	1.59
35	BA	421	U	C4'-O4'	-6.39	1.37	1.45
35	BA	1193	G	P-O5'	6.39	1.66	1.59
2	AB	810	U	C5-C6	6.39	1.40	1.34
2	AB	2368	C	C4'-C3'	6.39	1.60	1.53
1	AA	85	G	N9-C8	-6.39	1.33	1.37
2	AB	2543	G	C4'-O4'	-6.39	1.37	1.45
35	BA	933	G	C6-N1	6.39	1.44	1.39
35	BA	1378	C	N3-C4	6.39	1.38	1.33
2	AB	165	A	C8-N7	-6.39	1.27	1.31
2	AB	693	A	C5-C4	-6.39	1.34	1.38
2	AB	929	U	C2-N3	6.39	1.42	1.37
2	AB	1426	G	C5'-C4'	6.39	1.59	1.51
2	AB	2112	G	C6-N1	6.39	1.44	1.39
2	AB	2535	G	C5-C4	-6.39	1.33	1.38
35	BA	223	A	C8-N7	-6.39	1.27	1.31
35	BA	876	C	N1-C6	6.39	1.41	1.37
37	BC	10	G	C6-O6	-6.39	1.18	1.24
2	AB	1634	A	C4'-O4'	-6.39	1.37	1.45
35	BA	396	C	C2'-O2'	6.39	1.50	1.41
35	BA	1398	A	N9-C4	6.39	1.41	1.37
2	AB	1301	A	O3'-P	6.39	1.68	1.61
2	AB	1485	U	C2-N3	6.39	1.42	1.37
2	AB	1928	A	C4'-C3'	6.39	1.60	1.53
2	AB	2368	C	C2-O2	-6.39	1.18	1.24
2	AB	2671	G	N1-C2	6.39	1.42	1.37
2	AB	2804	U	C4-C5	6.39	1.49	1.43
2	AB	2835	A	C5-C6	6.39	1.46	1.41
2	AB	610	C	C4'-C3'	-6.38	1.46	1.53
2	AB	675	A	P-O5'	6.38	1.66	1.59
2	AB	695	G	N9-C8	6.38	1.42	1.37
2	AB	762	U	C4'-O4'	-6.38	1.37	1.45
2	AB	1597	A	P-O5'	6.38	1.66	1.59
2	AB	2129	C	C4-C5	6.38	1.48	1.43
2	AB	2647	U	P-O5'	6.38	1.66	1.59
35	BA	775	G	C5'-C4'	6.38	1.59	1.51
35	BA	921	U	C2'-C1'	6.38	1.60	1.53
35	BA	1096	C	N1-C6	6.38	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	949	G	O3'-P	6.38	1.68	1.61
2	AB	1094	U	C4-C5	6.38	1.49	1.43
2	AB	1713	A	N1-C2	6.38	1.40	1.34
2	AB	1722	A	C6-N6	6.38	1.39	1.33
2	AB	1954	G	C3'-C2'	6.38	1.59	1.52
2	AB	2005	A	N1-C2	-6.38	1.28	1.34
35	BA	745	G	C6-O6	-6.38	1.18	1.24
35	BA	850	U	P-O5'	6.38	1.66	1.59
2	AB	480	A	C3'-O3'	-6.38	1.33	1.42
2	AB	1628	G	N3-C4	6.38	1.40	1.35
35	BA	29	U	N1-C2	6.38	1.44	1.38
35	BA	108	G	C6-O6	-6.38	1.18	1.24
2	AB	2354	C	C4'-O4'	-6.38	1.37	1.45
2	AB	2470	G	O4'-C1'	6.38	1.50	1.41
37	BC	38	A	C6-N1	-6.38	1.31	1.35
37	BC	53	G	P-O5'	6.38	1.66	1.59
2	AB	763	G	C6-N1	6.38	1.44	1.39
2	AB	1871	A	N9-C8	-6.38	1.32	1.37
2	AB	1897	G	N9-C8	-6.38	1.33	1.37
35	BA	899	C	P-O5'	6.38	1.66	1.59
2	AB	1038	G	N7-C5	6.38	1.43	1.39
2	AB	1442	U	P-O5'	6.38	1.66	1.59
2	AB	1772	A	N3-C4	6.38	1.38	1.34
2	AB	2052	A	C5-C6	6.38	1.46	1.41
35	BA	1440	U	N1-C2	6.38	1.44	1.38
2	AB	1805	A	O4'-C1'	6.37	1.50	1.41
2	AB	2348	U	C4'-C3'	6.37	1.60	1.53
2	AB	2729	G	C5'-C4'	6.37	1.58	1.51
35	BA	1137	C	C5-C6	6.37	1.39	1.34
1	AA	37	C	N1-C6	6.37	1.41	1.37
2	AB	259	G	O3'-P	6.37	1.68	1.61
2	AB	645	C	C5-C6	6.37	1.39	1.34
2	AB	911	A	C4'-O4'	-6.37	1.37	1.45
2	AB	1297	C	C2-N3	6.37	1.40	1.35
2	AB	2533	U	C4-C5	6.37	1.49	1.43
35	BA	64	G	N3-C4	6.37	1.40	1.35
35	BA	250	A	N9-C8	6.37	1.42	1.37
35	BA	252	U	O3'-P	6.37	1.68	1.61
35	BA	774	G	N1-C2	6.37	1.42	1.37
2	AB	2455	G	C6-N1	6.37	1.44	1.39
2	AB	267	C	C4-C5	-6.37	1.37	1.43
2	AB	1516	G	C4'-O4'	-6.37	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1723	G	C8-N7	-6.37	1.27	1.30
2	AB	2390	U	N1-C2	6.37	1.44	1.38
2	AB	2583	G	P-O5'	6.37	1.66	1.59
2	AB	277	G	N9-C8	-6.37	1.33	1.37
2	AB	2722	G	N1-C2	6.37	1.42	1.37
35	BA	547	A	N9-C8	-6.37	1.32	1.37
35	BA	1221	G	N3-C4	6.37	1.40	1.35
2	AB	344	A	C5-C6	6.37	1.46	1.41
2	AB	2537	U	C5'-C4'	6.37	1.58	1.51
35	BA	279	A	C2'-O2'	-6.37	1.33	1.41
2	AB	1540	G	C2-N2	-6.36	1.28	1.34
2	AB	2223	G	N9-C8	6.36	1.42	1.37
2	AB	2584	U	N1-C6	-6.36	1.32	1.38
35	BA	235	C	C2-N3	-6.36	1.30	1.35
2	AB	582	A	C3'-C2'	6.36	1.59	1.52
2	AB	2211	A	P-O5'	6.36	1.66	1.59
2	AB	16	C	C4'-O4'	-6.36	1.37	1.45
2	AB	346	A	N3-C4	6.36	1.38	1.34
2	AB	2711	A	C5'-C4'	6.36	1.58	1.51
35	BA	134	G	C2'-C1'	-6.36	1.46	1.53
35	BA	750	C	P-O5'	6.36	1.66	1.59
35	BA	889	A	C6-N1	-6.36	1.31	1.35
35	BA	1139	G	O5'-C5'	-6.36	1.32	1.42
2	AB	1038	G	C8-N7	6.36	1.34	1.30
2	AB	1360	G	P-O5'	6.36	1.66	1.59
2	AB	1803	A	N3-C4	6.36	1.38	1.34
2	AB	2736	A	O3'-P	6.36	1.68	1.61
35	BA	541	G	C5-C4	-6.36	1.33	1.38
2	AB	870	U	P-O5'	6.36	1.66	1.59
2	AB	1935	G	C3'-C2'	6.36	1.59	1.52
2	AB	2748	A	N7-C5	6.36	1.43	1.39
35	BA	836	G	C6-N1	6.36	1.44	1.39
35	BA	1383	C	C4-C5	6.36	1.48	1.43
2	AB	2400	G	N9-C8	-6.36	1.33	1.37
35	BA	219	U	O3'-P	6.36	1.68	1.61
35	BA	630	A	C2'-C1'	6.36	1.60	1.53
1	AA	50	A	C2-N3	6.35	1.39	1.33
2	AB	946	C	O4'-C1'	-6.35	1.33	1.41
2	AB	1273	U	C2'-O2'	6.35	1.50	1.41
2	AB	2698	U	N3-C4	6.35	1.44	1.38
2	AB	2793	C	P-O5'	6.35	1.66	1.59
2	AB	2852	G	N3-C4	6.35	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	107	G	C4'-O4'	-6.35	1.37	1.45
2	AB	251	A	C6-N1	-6.35	1.31	1.35
2	AB	251	A	N7-C5	-6.35	1.35	1.39
2	AB	1172	C	N1-C6	6.35	1.41	1.37
17	AQ	111	ARG	CD-NE	6.35	1.57	1.46
2	AB	1141	U	C4-C5	6.35	1.49	1.43
2	AB	1372	U	P-O5'	6.35	1.66	1.59
2	AB	1799	G	C2-N3	6.35	1.37	1.32
2	AB	2217	G	C6-N1	6.35	1.44	1.39
2	AB	2708	G	N9-C4	-6.35	1.32	1.38
35	BA	704	A	N9-C8	6.35	1.42	1.37
2	AB	739	A	O3'-P	6.35	1.68	1.61
2	AB	1431	A	N9-C4	6.35	1.41	1.37
2	AB	1877	A	C5'-C4'	6.35	1.58	1.51
35	BA	962	C	C2-O2	-6.35	1.18	1.24
2	AB	1008	A	C4'-C3'	6.35	1.60	1.53
2	AB	2434	A	C3'-C2'	6.35	1.59	1.52
2	AB	828	U	C4'-O4'	-6.35	1.37	1.45
2	AB	854	C	C5'-C4'	6.35	1.58	1.51
2	AB	1069	A	O3'-P	-6.35	1.53	1.61
35	BA	1504	G	C5-C6	6.35	1.48	1.42
2	AB	182	A	O3'-P	6.34	1.68	1.61
2	AB	396	G	O3'-P	-6.34	1.53	1.61
2	AB	442	G	C2-N3	6.34	1.37	1.32
2	AB	1169	A	P-O5'	6.34	1.66	1.59
2	AB	1768	C	O3'-P	-6.34	1.53	1.61
35	BA	203	G	C4'-O4'	-6.34	1.37	1.45
2	AB	897	C	O3'-P	6.34	1.68	1.61
2	AB	986	C	N1-C2	6.34	1.46	1.40
2	AB	1745	A	N3-C4	6.34	1.38	1.34
2	AB	2769	U	O3'-P	6.34	1.68	1.61
35	BA	666	G	C6-O6	-6.34	1.18	1.24
35	BA	1538	C	N3-C4	6.34	1.38	1.33
2	AB	385	C	N3-C4	6.34	1.38	1.33
2	AB	532	A	N7-C5	6.34	1.43	1.39
2	AB	1588	G	C5-C4	6.34	1.42	1.38
2	AB	1928	A	C4'-O4'	-6.34	1.37	1.45
35	BA	33	A	C8-N7	-6.34	1.27	1.31
35	BA	50	A	C8-N7	-6.34	1.27	1.31
35	BA	559	A	P-O5'	6.34	1.66	1.59
35	BA	902	G	N7-C5	-6.34	1.35	1.39
2	AB	523	C	C2-N3	6.34	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	577	G	N9-C8	6.34	1.42	1.37
2	AB	2283	C	P-O5'	6.34	1.66	1.59
35	BA	357	G	C2-N3	6.34	1.37	1.32
36	BB	27	A	P-O5'	6.34	1.66	1.59
2	AB	79	C	C4'-O4'	-6.34	1.37	1.45
2	AB	636	G	C5-C6	6.34	1.48	1.42
2	AB	889	C	C3'-O3'	-6.34	1.33	1.42
2	AB	1285	A	C8-N7	-6.34	1.27	1.31
2	AB	1616	A	O5'-C5'	-6.34	1.32	1.42
2	AB	2706	A	C2'-C1'	-6.34	1.46	1.53
35	BA	852	G	C6-N1	-6.34	1.35	1.39
35	BA	1027	C	C2-N3	6.34	1.40	1.35
35	BA	1133	G	N7-C5	-6.34	1.35	1.39
37	BC	17	C	C5-C6	6.34	1.39	1.34
35	BA	1128	C	C5'-C4'	6.33	1.58	1.51
35	BA	1508	A	C4'-O4'	-6.33	1.37	1.45
35	BA	1525	G	N9-C4	6.33	1.43	1.38
2	AB	43	G	C3'-C2'	6.33	1.59	1.52
2	AB	435	C	O3'-P	6.33	1.68	1.61
2	AB	2399	G	C4'-C3'	-6.33	1.46	1.53
2	AB	2651	C	N1-C6	6.33	1.41	1.37
2	AB	2782	G	N9-C8	-6.33	1.33	1.37
35	BA	414	A	C5'-C4'	6.33	1.58	1.51
35	BA	846	G	P-O5'	-6.33	1.53	1.59
35	BA	1534	A	N9-C4	6.33	1.41	1.37
2	AB	563	A	C6-N6	-6.33	1.28	1.33
2	AB	1585	C	C3'-O3'	6.33	1.51	1.42
2	AB	2714	G	C6-N1	-6.33	1.35	1.39
35	BA	175	C	C4-N4	-6.33	1.28	1.33
35	BA	827	U	N1-C2	6.33	1.44	1.38
35	BA	1014	A	N9-C4	6.33	1.41	1.37
1	AA	98	G	N9-C8	-6.33	1.33	1.37
2	AB	141	G	C8-N7	-6.33	1.27	1.30
1	AA	115	A	N7-C5	6.33	1.43	1.39
2	AB	204	A	C4'-C3'	6.33	1.60	1.53
2	AB	1179	G	C3'-O3'	6.33	1.51	1.42
2	AB	1273	U	C5-C6	6.33	1.39	1.34
2	AB	1757	A	N1-C2	-6.33	1.28	1.34
2	AB	2308	G	C4'-O4'	-6.33	1.37	1.45
2	AB	2407	A	P-O5'	6.33	1.66	1.59
35	BA	398	U	N3-C4	6.33	1.44	1.38
35	BA	456	A	C5'-C4'	6.33	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	152	A	N3-C4	-6.32	1.31	1.34
2	AB	663	G	P-O5'	6.32	1.66	1.59
2	AB	1506	U	N1-C2	6.32	1.44	1.38
2	AB	2822	G	C2-N3	6.32	1.37	1.32
35	BA	359	G	C5-C4	-6.32	1.33	1.38
35	BA	624	C	C5'-C4'	6.32	1.58	1.51
38	BD	73	ARG	CZ-NH2	6.32	1.41	1.33
2	AB	202	U	C3'-O3'	6.32	1.50	1.42
2	AB	602	A	N9-C4	-6.32	1.34	1.37
2	AB	1937	A	C4'-C3'	6.32	1.60	1.53
2	AB	2140	G	N9-C4	6.32	1.43	1.38
2	AB	2321	U	N1-C2	6.32	1.44	1.38
35	BA	367	U	C4-C5	6.32	1.49	1.43
35	BA	458	U	N1-C2	6.32	1.44	1.38
35	BA	1055	A	N9-C4	-6.32	1.34	1.37
2	AB	1045	C	C5-C6	6.32	1.39	1.34
35	BA	1129	C	N3-C4	6.32	1.38	1.33
2	AB	1541	C	N3-C4	6.32	1.38	1.33
35	BA	117	G	C8-N7	6.32	1.34	1.30
35	BA	158	G	N9-C8	-6.32	1.33	1.37
35	BA	439	U	C4'-O4'	-6.32	1.37	1.45
35	BA	445	G	C2'-C1'	6.32	1.60	1.53
35	BA	688	G	C5-C4	-6.32	1.33	1.38
35	BA	887	G	P-O5'	-6.32	1.53	1.59
2	AB	514	A	C2-N3	-6.31	1.27	1.33
2	AB	539	G	C8-N7	6.31	1.34	1.30
2	AB	1674	G	N1-C2	6.31	1.42	1.37
2	AB	2764	A	C5-C4	-6.31	1.34	1.38
35	BA	728	A	C3'-C2'	6.31	1.59	1.52
35	BA	874	G	P-O5'	6.31	1.66	1.59
35	BA	877	G	C2-N2	-6.31	1.28	1.34
36	BB	16	A	N9-C4	6.31	1.41	1.37
2	AB	1154	G	C2-N3	6.31	1.37	1.32
2	AB	2289	G	C8-N7	-6.31	1.27	1.30
2	AB	337	C	C2-N3	6.31	1.40	1.35
2	AB	1444	G	N1-C2	6.31	1.42	1.37
2	AB	2227	A	C4'-O4'	-6.31	1.37	1.45
2	AB	2278	A	N9-C4	6.31	1.41	1.37
35	BA	621	A	C6-N1	-6.31	1.31	1.35
37	BC	64	G	C4'-O4'	-6.31	1.37	1.45
1	AA	81	G	N7-C5	-6.31	1.35	1.39
2	AB	2856	A	C2-N3	6.31	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	244	U	C3'-C2'	6.31	1.59	1.52
35	BA	704	A	N9-C4	-6.31	1.34	1.37
35	BA	1419	G	C2-N3	6.31	1.37	1.32
2	AB	269	C	O4'-C1'	6.31	1.49	1.41
2	AB	614	A	P-O5'	6.31	1.66	1.59
35	BA	1381	U	N3-C4	-6.31	1.32	1.38
2	AB	990	A	N9-C8	-6.30	1.32	1.37
2	AB	1251	C	C4'-O4'	-6.30	1.37	1.45
2	AB	2122	U	N1-C6	6.30	1.43	1.38
35	BA	630	A	C2-N3	6.30	1.39	1.33
35	BA	1529	G	N9-C4	6.30	1.43	1.38
2	AB	2516	A	N3-C4	6.30	1.38	1.34
2	AB	2853	C	C4-C5	6.30	1.48	1.43
1	AA	2	G	N3-C4	6.30	1.39	1.35
2	AB	1552	A	P-O5'	6.30	1.66	1.59
2	AB	1819	A	N7-C5	6.30	1.43	1.39
35	BA	69	G	N7-C5	-6.30	1.35	1.39
35	BA	330	C	C2'-C1'	6.30	1.60	1.53
35	BA	1031	C	C5'-C4'	6.30	1.58	1.51
2	AB	2772	C	C2-O2	-6.30	1.18	1.24
35	BA	119	A	N7-C5	-6.30	1.35	1.39
35	BA	524	G	N9-C8	6.30	1.42	1.37
35	BA	815	A	C2'-C1'	-6.30	1.46	1.53
35	BA	1070	U	C5-C6	6.30	1.39	1.34
35	BA	1514	G	N1-C2	6.30	1.42	1.37
2	AB	250	G	C5-C6	6.30	1.48	1.42
2	AB	252	G	P-O5'	6.30	1.66	1.59
2	AB	498	G	C2-N3	6.30	1.37	1.32
2	AB	2562	U	P-O5'	-6.30	1.53	1.59
2	AB	2732	G	C4'-O4'	-6.30	1.37	1.45
45	BK	48	ARG	CZ-NH1	6.30	1.41	1.33
2	AB	1839	G	P-O5'	6.30	1.66	1.59
2	AB	1930	G	N9-C8	-6.30	1.33	1.37
2	AB	2002	G	C8-N7	-6.30	1.27	1.30
2	AB	2728	U	P-O5'	6.30	1.66	1.59
25	AY	40	ARG	NE-CZ	6.30	1.41	1.33
35	BA	223	A	C5-C6	6.30	1.46	1.41
35	BA	505	G	O5'-C5'	-6.30	1.32	1.42
2	AB	1083	U	C5-C6	6.29	1.39	1.34
2	AB	1415	U	C2-N3	6.29	1.42	1.37
2	AB	1742	U	C4-C5	6.29	1.49	1.43
35	BA	778	G	N3-C4	6.29	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1107	C	N1-C6	6.29	1.41	1.37
35	BA	1169	A	P-O5'	-6.29	1.53	1.59
2	AB	295	G	C8-N7	6.29	1.34	1.30
2	AB	1338	G	N7-C5	6.29	1.43	1.39
35	BA	658	C	C2-N3	6.29	1.40	1.35
35	BA	864	A	N3-C4	6.29	1.38	1.34
35	BA	1041	G	C3'-C2'	-6.29	1.45	1.52
1	AA	73	A	C2-N3	6.29	1.39	1.33
2	AB	728	G	C3'-C2'	6.29	1.59	1.52
2	AB	778	G	N9-C8	6.29	1.42	1.37
2	AB	1250	G	N7-C5	-6.29	1.35	1.39
2	AB	2366	A	P-O5'	6.29	1.66	1.59
35	BA	188	C	C4'-O4'	-6.29	1.37	1.45
35	BA	369	G	C6-N1	6.29	1.44	1.39
35	BA	837	U	N1-C2	6.29	1.44	1.38
35	BA	1256	A	P-O5'	6.29	1.66	1.59
2	AB	2733	A	N3-C4	6.29	1.38	1.34
35	BA	203	G	C6-N1	-6.29	1.35	1.39
2	AB	650	C	C4-C5	-6.29	1.38	1.43
2	AB	1628	G	P-O5'	6.29	1.66	1.59
35	BA	80	A	O3'-P	6.29	1.68	1.61
35	BA	129	A	N9-C4	-6.29	1.34	1.37
37	BC	57	C	C2'-O2'	6.29	1.49	1.41
1	AA	41	G	C4'-O4'	-6.29	1.37	1.45
2	AB	823	C	N1-C6	6.29	1.41	1.37
25	AY	8	SER	CA-CB	6.29	1.62	1.52
2	AB	397	U	C5'-C4'	6.29	1.58	1.51
2	AB	1214	A	C5'-C4'	6.29	1.58	1.51
2	AB	1808	A	C6-N1	6.29	1.40	1.35
2	AB	2293	G	C8-N7	-6.29	1.27	1.30
2	AB	2822	G	N9-C8	6.29	1.42	1.37
2	AB	2872	A	P-O5'	6.29	1.66	1.59
35	BA	583	A	N9-C4	-6.29	1.34	1.37
37	BC	72	C	C5-C6	6.29	1.39	1.34
1	AA	37	C	C3'-C2'	6.28	1.59	1.52
2	AB	856	G	N1-C2	6.28	1.42	1.37
2	AB	1430	G	C2'-C1'	6.28	1.60	1.53
2	AB	1922	G	N3-C4	6.28	1.39	1.35
33	A6	23	HIS	CB-CG	6.28	1.61	1.50
35	BA	99	C	C5'-C4'	6.28	1.58	1.51
35	BA	214	C	C2-O2	-6.28	1.18	1.24
35	BA	402	G	C6-N1	6.28	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1329	A	N9-C4	6.28	1.41	1.37
2	AB	110	G	C5-C6	6.28	1.48	1.42
2	AB	363	G	C8-N7	6.28	1.34	1.30
2	AB	927	A	P-O5'	6.28	1.66	1.59
2	AB	960	A	C2'-O2'	-6.28	1.33	1.41
2	AB	2353	G	C6-O6	-6.28	1.18	1.24
2	AB	2400	G	C8-N7	-6.28	1.27	1.30
35	BA	57	G	N3-C4	6.28	1.39	1.35
35	BA	758	C	C2-N3	-6.28	1.30	1.35
35	BA	1080	A	N9-C4	-6.28	1.34	1.37
2	AB	2868	A	N3-C4	6.28	1.38	1.34
2	AB	2882	A	C2-N3	6.28	1.39	1.33
2	AB	953	G	C2'-C1'	-6.28	1.46	1.53
2	AB	1272	A	C6-N1	-6.28	1.31	1.35
2	AB	1810	A	C2'-C1'	-6.28	1.46	1.53
2	AB	1823	G	C4'-C3'	6.28	1.60	1.53
2	AB	2615	U	N1-C2	6.28	1.44	1.38
2	AB	2718	G	C4'-O4'	-6.28	1.37	1.45
35	BA	620	C	C2-O2	-6.28	1.18	1.24
35	BA	702	A	C5-C4	-6.28	1.34	1.38
35	BA	836	G	C5'-C4'	6.28	1.58	1.51
35	BA	981	U	C4'-O4'	-6.28	1.37	1.45
2	AB	19	A	N7-C5	6.28	1.43	1.39
2	AB	687	C	N3-C4	6.28	1.38	1.33
2	AB	2217	G	C2-N3	6.28	1.37	1.32
39	BE	27	GLU	CD-OE1	-6.28	1.18	1.25
2	AB	723	C	N3-C4	6.27	1.38	1.33
2	AB	101	A	N3-C4	6.27	1.38	1.34
2	AB	1421	G	C2-N3	6.27	1.37	1.32
2	AB	1643	G	N1-C2	6.27	1.42	1.37
2	AB	2138	G	O4'-C1'	-6.27	1.33	1.41
2	AB	2140	G	C5'-C4'	6.27	1.58	1.51
2	AB	2736	A	C8-N7	-6.27	1.27	1.31
35	BA	112	G	N7-C5	-6.27	1.35	1.39
35	BA	207	C	O3'-P	6.27	1.68	1.61
35	BA	222	C	C4-N4	6.27	1.39	1.33
35	BA	1119	C	P-O5'	6.27	1.66	1.59
2	AB	1796	U	N1-C6	-6.27	1.32	1.38
2	AB	436	C	C2-N3	6.27	1.40	1.35
2	AB	852	U	C3'-C2'	6.27	1.59	1.52
2	AB	1361	G	N7-C5	6.27	1.43	1.39
2	AB	2460	U	N1-C2	6.27	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	AS	47	ARG	CZ-NH1	6.27	1.41	1.33
35	BA	797	C	C4'-O4'	-6.27	1.37	1.45
35	BA	1318	A	C6-N1	-6.27	1.31	1.35
2	AB	522	A	O3'-P	6.27	1.68	1.61
2	AB	994	C	C2'-O2'	6.27	1.49	1.41
2	AB	1900	A	N3-C4	6.27	1.38	1.34
2	AB	1912	A	N3-C4	6.27	1.38	1.34
2	AB	2259	U	C5-C6	6.27	1.39	1.34
2	AB	2357	G	N7-C5	-6.27	1.35	1.39
35	BA	276	G	C2'-O2'	-6.27	1.33	1.41
35	BA	1258	G	C2-N3	6.27	1.37	1.32
2	AB	905	A	O3'-P	6.27	1.68	1.61
2	AB	2042	A	P-O5'	6.27	1.66	1.59
37	BC	17	C	N1-C6	6.27	1.41	1.37
2	AB	426	C	O3'-P	-6.26	1.53	1.61
2	AB	478	A	C6-N1	6.26	1.40	1.35
2	AB	920	A	C3'-C2'	6.26	1.59	1.52
2	AB	1079	C	O3'-P	6.26	1.68	1.61
2	AB	1289	C	O3'-P	6.26	1.68	1.61
2	AB	2860	A	C4'-C3'	6.26	1.60	1.53
35	BA	577	G	N9-C4	6.26	1.43	1.38
35	BA	643	C	N1-C2	6.26	1.46	1.40
35	BA	915	A	C8-N7	-6.26	1.27	1.31
37	BC	38	A	N9-C4	-6.26	1.34	1.37
2	AB	1426	G	N3-C4	6.26	1.39	1.35
2	AB	2131	U	N3-C4	6.26	1.44	1.38
2	AB	2565	A	N3-C4	6.26	1.38	1.34
35	BA	388	G	N7-C5	6.26	1.43	1.39
1	AA	67	G	N3-C4	6.26	1.39	1.35
2	AB	447	A	C6-N1	-6.26	1.31	1.35
2	AB	525	U	O3'-P	-6.26	1.53	1.61
2	AB	725	G	O3'-P	6.26	1.68	1.61
2	AB	1087	G	N1-C2	6.26	1.42	1.37
2	AB	1282	U	N1-C2	6.26	1.44	1.38
35	BA	1137	C	P-O5'	-6.26	1.53	1.59
35	BA	1463	U	C4-C5	6.26	1.49	1.43
1	AA	97	C	C4'-O4'	-6.26	1.37	1.45
2	AB	2312	U	C4'-O4'	-6.26	1.37	1.45
2	AB	160	A	N9-C8	6.26	1.42	1.37
2	AB	1401	G	C3'-C2'	-6.26	1.45	1.52
2	AB	1907	G	C8-N7	-6.26	1.27	1.30
35	BA	361	G	C5-C6	6.26	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1033	G	P-O5'	6.26	1.66	1.59
35	BA	1300	G	P-O5'	-6.26	1.53	1.59
46	BL	43	PRO	N-CD	-6.26	1.39	1.47
1	AA	82	U	N1-C6	6.26	1.43	1.38
2	AB	450	G	C5'-C4'	-6.26	1.43	1.51
2	AB	633	A	O3'-P	6.26	1.68	1.61
2	AB	1546	G	C3'-C2'	6.26	1.59	1.52
2	AB	1961	C	N3-C4	6.26	1.38	1.33
35	BA	415	A	C4'-O4'	-6.26	1.37	1.45
35	BA	1453	G	C2-N3	6.26	1.37	1.32
2	AB	31	C	N1-C6	6.25	1.41	1.37
2	AB	146	A	C5'-C4'	6.25	1.58	1.51
2	AB	210	C	O3'-P	6.25	1.68	1.61
2	AB	826	U	P-O5'	6.25	1.66	1.59
35	BA	519	C	C4-N4	6.25	1.39	1.33
2	AB	317	G	N9-C8	6.25	1.42	1.37
2	AB	441	U	C2-N3	6.25	1.42	1.37
2	AB	673	C	C2-O2	-6.25	1.18	1.24
2	AB	1471	G	C5-C4	-6.25	1.33	1.38
2	AB	1608	A	N3-C4	6.25	1.38	1.34
2	AB	2207	C	P-O5'	6.25	1.66	1.59
35	BA	218	U	P-O5'	6.25	1.66	1.59
35	BA	321	A	N9-C4	-6.25	1.34	1.37
40	BF	94	GLU	CG-CD	6.25	1.61	1.51
2	AB	2688	G	C2'-O2'	-6.25	1.33	1.41
35	BA	335	C	N3-C4	6.25	1.38	1.33
35	BA	850	U	C4-C5	-6.25	1.38	1.43
35	BA	1359	C	C2-O2	-6.25	1.18	1.24
2	AB	279	A	C8-N7	-6.25	1.27	1.31
2	AB	448	U	C5'-C4'	6.25	1.58	1.51
2	AB	1172	C	P-O5'	6.25	1.66	1.59
2	AB	1862	G	C6-O6	6.25	1.29	1.24
2	AB	2050	C	N3-C4	6.25	1.38	1.33
2	AB	2121	G	C3'-C2'	6.25	1.59	1.52
2	AB	2184	A	C4'-O4'	-6.25	1.37	1.45
2	AB	2694	G	C6-O6	-6.25	1.18	1.24
2	AB	2709	G	N9-C4	6.25	1.43	1.38
35	BA	342	C	C2-N3	6.25	1.40	1.35
35	BA	1058	G	C6-O6	-6.25	1.18	1.24
35	BA	1154	G	N9-C4	6.25	1.43	1.38
37	BC	15	G	C2-N3	6.25	1.37	1.32
2	AB	88	G	C5'-C4'	6.25	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	825	A	C5'-C4'	6.25	1.58	1.51
2	AB	2095	A	C2'-C1'	6.25	1.60	1.53
2	AB	2200	C	O3'-P	6.25	1.68	1.61
2	AB	2521	C	C5'-C4'	6.25	1.58	1.51
33	A6	19	GLY	CA-C	6.25	1.61	1.51
35	BA	955	U	N1-C2	6.25	1.44	1.38
2	AB	1309	G	C5'-C4'	-6.25	1.43	1.51
35	BA	26	A	O3'-P	-6.25	1.53	1.61
2	AB	429	A	N9-C4	-6.24	1.34	1.37
2	AB	2731	G	N7-C5	-6.24	1.35	1.39
35	BA	291	U	P-O5'	6.24	1.66	1.59
35	BA	1251	A	P-O5'	6.24	1.66	1.59
35	BA	1300	G	N9-C8	6.24	1.42	1.37
35	BA	1425	U	C3'-C2'	6.24	1.59	1.52
35	BA	1540	U	N1-C2	6.24	1.44	1.38
2	AB	965	C	C2'-C1'	6.24	1.60	1.53
2	AB	1161	C	C4-C5	6.24	1.48	1.43
2	AB	2566	A	C6-N6	6.24	1.39	1.33
35	BA	618	C	N1-C6	-6.24	1.33	1.37
2	AB	644	A	C5-C4	6.24	1.43	1.38
2	AB	1083	U	C4'-O4'	-6.24	1.37	1.45
2	AB	1351	C	C4'-O4'	-6.24	1.37	1.45
2	AB	2085	U	P-O5'	6.24	1.66	1.59
2	AB	2883	A	P-O5'	6.24	1.66	1.59
2	AB	2890	G	N7-C5	6.24	1.43	1.39
35	BA	785	G	C6-N1	-6.24	1.35	1.39
35	BA	1135	U	C5-C6	6.24	1.39	1.34
36	BB	43	U	N1-C6	6.24	1.43	1.38
2	AB	932	U	P-O5'	6.24	1.66	1.59
2	AB	1367	A	C2-N3	-6.24	1.27	1.33
2	AB	1846	G	C5'-C4'	6.24	1.58	1.51
35	BA	319	G	O4'-C1'	6.24	1.49	1.41
35	BA	476	U	C2-N3	6.24	1.42	1.37
35	BA	533	A	N9-C4	6.24	1.41	1.37
35	BA	556	C	N1-C2	6.24	1.46	1.40
35	BA	983	A	C5-C4	-6.24	1.34	1.38
2	AB	983	A	P-O5'	6.24	1.66	1.59
2	AB	2131	U	C2-N3	6.24	1.42	1.37
2	AB	2716	C	C4-C5	6.24	1.48	1.43
2	AB	1314	C	C5'-C4'	6.24	1.58	1.51
2	AB	1562	U	C5-C6	6.24	1.39	1.34
2	AB	2036	C	O4'-C1'	6.24	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2565	A	N9-C4	-6.24	1.34	1.37
2	AB	2714	G	P-O5'	6.24	1.66	1.59
35	BA	21	G	C6-N1	-6.24	1.35	1.39
2	AB	2397	G	O4'-C1'	6.23	1.49	1.41
2	AB	2599	G	C3'-C2'	6.23	1.59	1.52
2	AB	2819	G	N1-C2	6.23	1.42	1.37
35	BA	322	C	O4'-C1'	6.23	1.49	1.41
35	BA	736	C	C2-N3	6.23	1.40	1.35
35	BA	1027	C	C2'-C1'	-6.23	1.46	1.53
35	BA	1280	A	C5-C4	-6.23	1.34	1.38
2	AB	58	G	P-O5'	6.23	1.66	1.59
2	AB	605	G	N9-C8	6.23	1.42	1.37
2	AB	1227	G	N7-C5	-6.23	1.35	1.39
2	AB	2609	U	C2-O2	6.23	1.27	1.22
11	AK	28	GLY	CA-C	6.23	1.61	1.51
35	BA	624	C	C2-N3	6.23	1.40	1.35
35	BA	1104	G	C2'-C1'	6.23	1.60	1.53
2	AB	928	A	P-O5'	6.23	1.66	1.59
2	AB	1131	G	O4'-C1'	6.23	1.49	1.41
2	AB	1412	U	N3-C4	-6.23	1.32	1.38
5	AE	101	PHE	CG-CD2	6.23	1.48	1.38
35	BA	513	C	C4'-O4'	-6.23	1.37	1.45
35	BA	671	G	C6-N1	-6.23	1.35	1.39
37	BC	73	A	C6-N1	-6.23	1.31	1.35
2	AB	473	G	C2-N2	6.23	1.40	1.34
2	AB	1273	U	C4-C5	6.23	1.49	1.43
2	AB	2618	G	C5'-C4'	6.23	1.58	1.51
2	AB	21	A	C3'-C2'	-6.23	1.46	1.52
2	AB	703	U	N3-C4	6.23	1.44	1.38
35	BA	116	A	C2'-C1'	6.23	1.60	1.53
35	BA	457	G	C8-N7	-6.23	1.27	1.30
35	BA	134	G	N3-C4	6.23	1.39	1.35
35	BA	1437	A	C4'-C3'	6.23	1.59	1.53
2	AB	521	U	C2-N3	6.22	1.42	1.37
2	AB	956	G	C5'-C4'	6.22	1.58	1.51
2	AB	1085	A	N9-C4	-6.22	1.34	1.37
2	AB	2130	U	C4-C5	6.22	1.49	1.43
2	AB	2523	G	O3'-P	6.22	1.68	1.61
2	AB	2538	C	N1-C2	-6.22	1.33	1.40
35	BA	224	U	N3-C4	-6.22	1.32	1.38
35	BA	619	U	C3'-C2'	6.22	1.59	1.52
35	BA	994	A	N9-C8	-6.22	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	BR	34	GLU	CG-CD	6.22	1.61	1.51
2	AB	1069	A	N3-C4	6.22	1.38	1.34
2	AB	2281	A	C8-N7	-6.22	1.27	1.31
2	AB	2703	C	C4-C5	6.22	1.48	1.43
2	AB	2759	G	C5-C4	6.22	1.42	1.38
2	AB	357	C	C5-C6	6.22	1.39	1.34
2	AB	602	A	N3-C4	6.22	1.38	1.34
2	AB	1540	G	P-O5'	6.22	1.66	1.59
35	BA	627	G	C5-C6	-6.22	1.36	1.42
35	BA	1020	G	C4'-O4'	-6.22	1.37	1.45
35	BA	1358	U	C2'-O2'	-6.22	1.33	1.41
2	AB	194	G	C5-C4	-6.22	1.33	1.38
2	AB	668	A	N7-C5	6.22	1.43	1.39
2	AB	1044	C	N3-C4	-6.22	1.29	1.33
2	AB	1187	G	N3-C4	6.22	1.39	1.35
2	AB	1273	U	C2-O2	6.22	1.27	1.22
2	AB	1396	U	C4'-O4'	-6.22	1.37	1.45
2	AB	1882	U	P-O5'	6.22	1.66	1.59
2	AB	2658	C	N1-C6	6.22	1.40	1.37
35	BA	40	C	C2-N3	6.22	1.40	1.35
35	BA	452	A	C6-N6	6.22	1.39	1.33
35	BA	459	A	C5'-C4'	6.22	1.58	1.51
35	BA	623	C	C4'-C3'	6.22	1.59	1.53
35	BA	1331	G	N7-C5	6.22	1.43	1.39
36	BB	38	G	N3-C4	6.22	1.39	1.35
2	AB	198	C	P-O5'	6.22	1.66	1.59
16	AP	119	SER	CA-CB	6.22	1.62	1.52
2	AB	419	U	C5'-C4'	6.22	1.58	1.51
2	AB	962	G	N3-C4	6.22	1.39	1.35
2	AB	2070	A	N9-C4	6.22	1.41	1.37
2	AB	2116	G	C8-N7	6.22	1.34	1.30
35	BA	1439	G	C2'-C1'	6.22	1.60	1.53
2	AB	561	G	C4'-C3'	-6.21	1.46	1.53
2	AB	1416	G	C6-N1	6.21	1.43	1.39
2	AB	2517	C	C4'-C3'	6.21	1.59	1.53
2	AB	2732	G	P-O5'	6.21	1.66	1.59
2	AB	456	C	C5-C6	6.21	1.39	1.34
2	AB	761	A	N9-C8	6.21	1.42	1.37
35	BA	314	C	O4'-C1'	6.21	1.49	1.41
2	AB	155	A	C6-N1	6.21	1.39	1.35
2	AB	2023	C	C2-N3	6.21	1.40	1.35
2	AB	2328	A	C5'-C4'	6.21	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2607	G	C3'-C2'	6.21	1.59	1.52
2	AB	982	C	O4'-C1'	6.21	1.49	1.41
2	AB	1907	G	N9-C8	6.21	1.42	1.37
2	AB	623	C	C5'-C4'	6.21	1.58	1.51
2	AB	1259	G	N7-C5	6.21	1.43	1.39
35	BA	153	C	C4-C5	6.21	1.48	1.43
35	BA	232	G	C5-C6	6.21	1.48	1.42
35	BA	733	G	C5'-C4'	6.21	1.58	1.51
35	BA	1343	G	C4'-C3'	-6.21	1.46	1.53
2	AB	647	G	C8-N7	-6.21	1.27	1.30
2	AB	1351	C	C3'-C2'	-6.21	1.46	1.52
35	BA	670	G	C2'-C1'	-6.21	1.46	1.53
37	BC	18	U	N1-C2	6.21	1.44	1.38
2	AB	2823	A	N3-C4	6.21	1.38	1.34
35	BA	986	U	O3'-P	6.21	1.68	1.61
35	BA	1426	G	N7-C5	6.21	1.43	1.39
2	AB	447	A	N1-C2	-6.20	1.28	1.34
2	AB	544	C	P-O5'	6.20	1.66	1.59
2	AB	774	G	P-O5'	6.20	1.66	1.59
2	AB	1164	C	N1-C6	6.20	1.40	1.37
2	AB	1198	U	C3'-C2'	6.20	1.59	1.52
2	AB	2332	C	N1-C6	6.20	1.40	1.37
35	BA	75	G	N1-C2	-6.20	1.32	1.37
35	BA	101	A	C6-N1	-6.20	1.31	1.35
35	BA	127	G	C6-O6	-6.20	1.18	1.24
35	BA	171	A	C2'-C1'	6.20	1.60	1.53
35	BA	757	U	C4'-O4'	-6.20	1.37	1.45
35	BA	1227	A	N3-C4	6.20	1.38	1.34
2	AB	1081	U	O3'-P	6.20	1.68	1.61
2	AB	2232	C	O3'-P	-6.20	1.53	1.61
2	AB	2487	G	C8-N7	6.20	1.34	1.30
2	AB	452	G	N7-C5	6.20	1.43	1.39
2	AB	1241	A	O3'-P	6.20	1.68	1.61
2	AB	1571	A	C5'-C4'	6.20	1.58	1.51
2	AB	2341	G	C3'-C2'	-6.20	1.46	1.52
35	BA	239	U	P-O5'	6.20	1.66	1.59
35	BA	952	U	C2-N3	6.20	1.42	1.37
35	BA	1494	G	C2'-C1'	-6.20	1.46	1.53
2	AB	1296	G	N9-C8	6.20	1.42	1.37
2	AB	1403	A	O3'-P	6.20	1.68	1.61
2	AB	2660	A	C2-N3	-6.20	1.27	1.33
35	BA	646	G	C8-N7	-6.20	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1034	G	N7-C5	-6.20	1.35	1.39
35	BA	1139	G	N7-C5	-6.20	1.35	1.39
35	BA	1442	G	O3'-P	6.20	1.68	1.61
36	BB	21	U	C2-N3	6.20	1.42	1.37
37	BC	26	C	N1-C6	6.20	1.40	1.37
37	BC	54	G	C8-N7	6.20	1.34	1.30
2	AB	265	A	C5-C6	-6.20	1.35	1.41
2	AB	1852	U	C2-N3	6.20	1.42	1.37
2	AB	2429	G	O5'-C5'	-6.20	1.32	1.42
35	BA	417	G	P-O5'	6.20	1.66	1.59
35	BA	741	G	N7-C5	-6.20	1.35	1.39
35	BA	855	U	C4-C5	6.20	1.49	1.43
35	BA	1201	A	C4'-O4'	-6.20	1.37	1.45
2	AB	1284	A	P-O5'	6.20	1.66	1.59
2	AB	2183	A	C8-N7	-6.20	1.27	1.31
2	AB	2545	G	N9-C4	6.20	1.43	1.38
2	AB	2859	G	P-O5'	6.20	1.66	1.59
10	AJ	78	PRO	N-CD	-6.20	1.39	1.47
35	BA	115	G	C5-C4	6.20	1.42	1.38
35	BA	194	C	N1-C6	6.20	1.40	1.37
35	BA	280	C	C2-N3	6.20	1.40	1.35
2	AB	159	G	N7-C5	6.19	1.43	1.39
2	AB	561	G	C2'-O2'	-6.19	1.33	1.41
2	AB	1043	C	C2'-C1'	6.19	1.60	1.53
2	AB	1235	G	C5-C4	-6.19	1.34	1.38
35	BA	544	G	C8-N7	6.19	1.34	1.30
35	BA	1381	U	N1-C6	6.19	1.43	1.38
2	AB	1002	G	C6-N1	6.19	1.43	1.39
2	AB	1015	U	C2-O2	6.19	1.27	1.22
2	AB	1572	A	O3'-P	6.19	1.68	1.61
2	AB	1598	A	C8-N7	-6.19	1.27	1.31
2	AB	1753	G	C2-N3	6.19	1.37	1.32
2	AB	1853	A	C6-N6	6.19	1.39	1.33
2	AB	2061	G	C3'-O3'	-6.19	1.33	1.42
2	AB	2403	C	N1-C6	6.19	1.40	1.37
35	BA	68	G	C2-N2	-6.19	1.28	1.34
35	BA	240	G	N9-C8	-6.19	1.33	1.37
35	BA	502	A	C2'-C1'	-6.19	1.46	1.53
35	BA	538	G	N3-C4	6.19	1.39	1.35
35	BA	1510	C	O4'-C1'	6.19	1.49	1.41
35	BA	1524	C	C2-N3	6.19	1.40	1.35
2	AB	1697	G	P-O5'	6.19	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	95	C	N1-C2	6.19	1.46	1.40
35	BA	627	G	O3'-P	6.19	1.68	1.61
35	BA	820	U	C3'-C2'	6.19	1.59	1.52
35	BA	949	A	O4'-C1'	6.19	1.49	1.41
35	BA	1083	U	C5'-C4'	6.19	1.58	1.51
2	AB	139	U	P-O5'	6.19	1.66	1.59
2	AB	370	G	N9-C8	6.19	1.42	1.37
2	AB	1064	C	P-O5'	6.19	1.66	1.59
2	AB	2517	C	P-O5'	6.19	1.66	1.59
35	BA	1208	C	C2-N3	-6.19	1.30	1.35
2	AB	179	C	P-O5'	6.19	1.66	1.59
2	AB	706	A	C6-N6	-6.19	1.29	1.33
2	AB	893	C	C4'-O4'	-6.19	1.37	1.45
2	AB	2282	G	N9-C4	6.19	1.42	1.38
2	AB	2423	U	P-O5'	6.19	1.66	1.59
35	BA	747	A	N7-C5	6.19	1.43	1.39
35	BA	750	C	O3'-P	6.19	1.68	1.61
35	BA	1010	U	C2-N3	6.19	1.42	1.37
35	BA	1081	A	N7-C5	-6.19	1.35	1.39
2	AB	1035	U	C2-O2	6.19	1.27	1.22
2	AB	1051	G	C8-N7	-6.19	1.27	1.30
35	BA	663	A	C8-N7	6.19	1.35	1.31
35	BA	722	G	C5-C4	-6.19	1.34	1.38
37	BC	60	A	P-O5'	6.19	1.66	1.59
2	AB	5	A	N3-C4	6.18	1.38	1.34
2	AB	305	C	C2-N3	6.18	1.40	1.35
2	AB	607	U	C3'-C2'	6.18	1.59	1.52
2	AB	1165	A	C6-N1	-6.18	1.31	1.35
2	AB	1177	G	C2-N3	6.18	1.37	1.32
2	AB	2110	G	C5-C4	-6.18	1.34	1.38
2	AB	2399	G	C6-O6	-6.18	1.18	1.24
2	AB	2677	G	C1'-N9	-6.18	1.38	1.46
35	BA	319	G	P-O5'	6.18	1.66	1.59
35	BA	1107	C	P-O5'	-6.18	1.53	1.59
35	BA	1227	A	O3'-P	6.18	1.68	1.61
1	AA	91	C	N3-C4	6.18	1.38	1.33
2	AB	489	G	O3'-P	6.18	1.68	1.61
2	AB	717	C	N3-C4	6.18	1.38	1.33
2	AB	1499	C	N3-C4	6.18	1.38	1.33
2	AB	1983	G	N3-C4	6.18	1.39	1.35
2	AB	2717	C	N1-C2	6.18	1.46	1.40
35	BA	474	G	C3'-O3'	6.18	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	494	G	C5-C4	-6.18	1.34	1.38
2	AB	754	U	C4'-O4'	-6.18	1.37	1.45
36	BB	20	G	P-O5'	6.18	1.66	1.59
2	AB	502	A	P-O5'	6.18	1.66	1.59
2	AB	507	A	N9-C4	6.18	1.41	1.37
2	AB	2092	U	C5-C6	6.18	1.39	1.34
35	BA	88	U	C4-C5	6.18	1.49	1.43
35	BA	517	G	N7-C5	6.18	1.43	1.39
37	BC	28	U	C4-O4	6.18	1.28	1.23
2	AB	161	A	P-O5'	6.18	1.66	1.59
2	AB	1363	C	P-O5'	6.18	1.66	1.59
2	AB	2523	G	C6-O6	6.18	1.29	1.24
35	BA	1322	C	C2'-O2'	6.18	1.49	1.41
2	AB	199	A	C5'-C4'	6.18	1.58	1.51
35	BA	236	A	C5-C6	6.18	1.46	1.41
35	BA	558	G	C2-N3	6.18	1.37	1.32
35	BA	582	C	C1'-N1	6.18	1.58	1.48
35	BA	828	U	N3-C4	6.18	1.44	1.38
35	BA	1535	C	C2'-O2'	-6.18	1.33	1.41
2	AB	496	G	P-O5'	6.17	1.66	1.59
2	AB	966	G	C2'-C1'	6.17	1.60	1.53
2	AB	1115	G	N7-C5	6.17	1.43	1.39
2	AB	2223	G	N7-C5	6.17	1.43	1.39
35	BA	918	A	C4'-C3'	-6.17	1.46	1.53
35	BA	972	C	C4'-C3'	6.17	1.59	1.53
2	AB	384	A	P-O5'	6.17	1.66	1.59
2	AB	448	U	C4-C5	6.17	1.49	1.43
2	AB	1443	U	C2-O2	6.17	1.27	1.22
35	BA	1318	A	C2-N3	6.17	1.39	1.33
2	AB	338	G	C4'-O4'	-6.17	1.37	1.45
2	AB	427	U	P-O5'	6.17	1.66	1.59
2	AB	2003	A	C2-N3	-6.17	1.27	1.33
2	AB	2224	G	C5'-C4'	6.17	1.58	1.51
2	AB	2853	C	N3-C4	6.17	1.38	1.33
35	BA	398	U	C2-N3	6.17	1.42	1.37
35	BA	1239	A	N9-C4	-6.17	1.34	1.37
35	BA	1340	A	C3'-C2'	6.17	1.59	1.52
35	BA	1427	C	C4'-O4'	-6.17	1.37	1.45
37	BC	9	G	N9-C8	6.17	1.42	1.37
36	BB	30	U	C3'-C2'	6.17	1.59	1.52
2	AB	53	A	O3'-P	6.17	1.68	1.61
2	AB	1445	G	C4'-O4'	-6.17	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1011	C	C4'-O4'	-6.17	1.37	1.45
2	AB	418	C	C4'-C3'	-6.17	1.46	1.53
2	AB	487	C	C3'-C2'	-6.17	1.46	1.52
2	AB	1295	C	C4'-O4'	-6.17	1.37	1.45
2	AB	1472	C	N3-C4	6.17	1.38	1.33
2	AB	1678	A	C3'-C2'	6.17	1.59	1.52
2	AB	2109	U	C4'-O4'	-6.17	1.37	1.45
2	AB	2192	U	C4-O4	-6.17	1.18	1.23
2	AB	2209	G	N9-C8	-6.17	1.33	1.37
35	BA	218	U	C2-N3	6.17	1.42	1.37
35	BA	644	U	C2'-O2'	6.17	1.49	1.41
35	BA	787	A	N7-C5	-6.17	1.35	1.39
2	AB	1115	G	N9-C8	6.17	1.42	1.37
2	AB	1571	A	N1-C2	-6.17	1.28	1.34
35	BA	410	G	N9-C8	-6.17	1.33	1.37
35	BA	888	G	C5'-C4'	6.17	1.58	1.51
35	BA	1324	A	C5'-C4'	6.17	1.58	1.51
2	AB	219	A	O3'-P	6.16	1.68	1.61
2	AB	912	C	N3-C4	6.16	1.38	1.33
2	AB	2499	C	O4'-C1'	6.16	1.49	1.41
2	AB	2630	G	C5-C6	6.16	1.48	1.42
35	BA	492	C	N1-C6	6.16	1.40	1.37
35	BA	503	C	C2-N3	-6.16	1.30	1.35
35	BA	744	C	C4'-O4'	-6.16	1.37	1.45
35	BA	906	A	N3-C4	6.16	1.38	1.34
35	BA	1261	A	N3-C4	6.16	1.38	1.34
2	AB	2560	A	C6-N6	-6.16	1.29	1.33
1	AA	43	C	C2-N3	6.16	1.40	1.35
2	AB	426	C	C4'-O4'	-6.16	1.37	1.45
2	AB	784	G	C4'-C3'	-6.16	1.46	1.53
2	AB	878	A	N3-C4	6.16	1.38	1.34
2	AB	1154	G	N9-C4	6.16	1.42	1.38
2	AB	1155	A	C5'-C4'	6.16	1.58	1.51
2	AB	2268	A	C5-C6	6.16	1.46	1.41
2	AB	2752	C	C2-N3	-6.16	1.30	1.35
35	BA	219	U	N1-C2	6.16	1.44	1.38
35	BA	570	G	C2-N3	6.16	1.37	1.32
2	AB	528	A	N7-C5	-6.16	1.35	1.39
2	AB	550	C	N3-C4	6.16	1.38	1.33
2	AB	733	G	P-O5'	-6.16	1.53	1.59
35	BA	866	C	C2-N3	6.16	1.40	1.35
35	BA	1137	C	C3'-O3'	6.16	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1701	A	O3'-P	6.16	1.68	1.61
2	AB	2332	C	O3'-P	6.16	1.68	1.61
2	AB	2897	U	N1-C2	6.16	1.44	1.38
37	BC	71	G	C8-N7	6.16	1.34	1.30
2	AB	459	U	C2-N3	6.16	1.42	1.37
2	AB	1358	G	C2'-O2'	-6.16	1.33	1.41
2	AB	1399	C	P-O5'	6.16	1.66	1.59
35	BA	250	A	N9-C4	-6.16	1.34	1.37
35	BA	561	U	N1-C2	6.16	1.44	1.38
35	BA	588	G	C8-N7	-6.16	1.27	1.30
35	BA	647	C	N3-C4	6.16	1.38	1.33
35	BA	769	G	C5-C6	6.16	1.48	1.42
2	AB	31	C	P-O5'	-6.15	1.53	1.59
2	AB	861	A	C6-N6	-6.15	1.29	1.33
2	AB	1415	U	C4-O4	-6.15	1.18	1.23
2	AB	2423	U	O3'-P	6.15	1.68	1.61
35	BA	83	C	C2'-C1'	6.15	1.60	1.53
35	BA	1483	A	N3-C4	6.15	1.38	1.34
2	AB	1824	G	C8-N7	-6.15	1.27	1.30
2	AB	2484	G	C3'-C2'	6.15	1.59	1.52
2	AB	2577	A	N9-C4	6.15	1.41	1.37
2	AB	2810	A	C5'-C4'	6.15	1.58	1.51
35	BA	1330	U	O3'-P	6.15	1.68	1.61
2	AB	257	C	N1-C6	-6.15	1.33	1.37
2	AB	553	G	C2-N2	6.15	1.40	1.34
2	AB	2531	A	C6-N6	6.15	1.38	1.33
2	AB	2602	A	N9-C4	6.15	1.41	1.37
2	AB	229	C	C4-C5	6.15	1.47	1.43
2	AB	646	U	N1-C2	6.15	1.44	1.38
2	AB	1102	C	C4-C5	6.15	1.47	1.43
2	AB	2318	G	C2-N3	6.15	1.37	1.32
35	BA	743	A	C2-N3	-6.15	1.28	1.33
2	AB	859	G	C2'-C1'	6.15	1.60	1.53
2	AB	977	G	O3'-P	6.15	1.68	1.61
2	AB	1171	G	C2'-C1'	6.15	1.60	1.53
2	AB	1958	C	C5'-C4'	6.15	1.58	1.51
2	AB	2091	C	C2'-O2'	6.15	1.49	1.41
2	AB	2586	U	C4-O4	-6.15	1.18	1.23
14	AN	58	TYR	CE1-CZ	6.15	1.46	1.38
35	BA	371	A	P-O5'	6.15	1.65	1.59
35	BA	802	A	O3'-P	-6.15	1.53	1.61
35	BA	1254	A	N9-C8	-6.15	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1204	A	N7-C5	6.15	1.43	1.39
2	AB	2014	A	N9-C4	-6.15	1.34	1.37
2	AB	2742	G	C6-N1	6.15	1.43	1.39
35	BA	853	C	O3'-P	6.15	1.68	1.61
2	AB	1997	C	C5'-C4'	6.14	1.58	1.51
35	BA	526	C	C5-C6	6.14	1.39	1.34
35	BA	659	U	C2'-O2'	6.14	1.49	1.41
2	AB	141	G	P-O5'	6.14	1.65	1.59
2	AB	144	A	C5-C4	-6.14	1.34	1.38
2	AB	770	G	N3-C4	6.14	1.39	1.35
2	AB	1093	G	N9-C8	-6.14	1.33	1.37
2	AB	1485	U	C3'-C2'	-6.14	1.46	1.52
2	AB	1471	G	N9-C8	-6.14	1.33	1.37
2	AB	1593	A	N3-C4	-6.14	1.31	1.34
2	AB	2228	G	C8-N7	6.14	1.34	1.30
2	AB	2607	G	N9-C8	-6.14	1.33	1.37
2	AB	2722	G	N9-C4	-6.14	1.33	1.38
2	AB	1315	C	C2-N3	6.14	1.40	1.35
2	AB	1960	A	N9-C8	6.14	1.42	1.37
2	AB	2666	C	N3-C4	-6.14	1.29	1.33
35	BA	1482	G	C6-N1	6.14	1.43	1.39
35	BA	1540	U	C5-C6	6.14	1.39	1.34
35	BA	65	A	C3'-O3'	6.14	1.50	1.42
35	BA	308	C	N1-C6	6.14	1.40	1.37
35	BA	1094	G	C2-N3	6.14	1.37	1.32
2	AB	43	G	N7-C5	6.14	1.43	1.39
2	AB	215	G	N9-C4	6.14	1.42	1.38
2	AB	263	G	N3-C4	6.14	1.39	1.35
2	AB	620	G	C5'-C4'	6.14	1.58	1.51
2	AB	1155	A	C2'-O2'	-6.14	1.33	1.41
2	AB	1167	C	N1-C6	-6.14	1.33	1.37
2	AB	2262	U	C5'-C4'	6.14	1.58	1.51
35	BA	807	A	N9-C4	6.14	1.41	1.37
35	BA	1025	U	C5'-C4'	6.14	1.58	1.51
1	AA	81	G	C6-N1	6.13	1.43	1.39
2	AB	309	A	C6-N6	6.13	1.38	1.33
2	AB	2708	G	P-O5'	6.13	1.65	1.59
35	BA	130	A	N3-C4	6.13	1.38	1.34
35	BA	156	C	C4-C5	-6.13	1.38	1.43
35	BA	555	U	P-O5'	6.13	1.65	1.59
35	BA	1144	G	N3-C4	6.13	1.39	1.35
2	AB	575	A	C5-C6	6.13	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2396	G	C8-N7	-6.13	1.27	1.30
2	AB	2583	G	N9-C8	-6.13	1.33	1.37
35	BA	1092	A	N3-C4	6.13	1.38	1.34
1	AA	11	C	C4'-C3'	6.13	1.59	1.53
1	AA	56	G	N7-C5	6.13	1.43	1.39
2	AB	229	C	C5-C6	6.13	1.39	1.34
2	AB	506	G	C6-N1	6.13	1.43	1.39
2	AB	561	G	C5'-C4'	-6.13	1.44	1.51
2	AB	2289	G	C6-N1	6.13	1.43	1.39
35	BA	1515	G	N1-C2	6.13	1.42	1.37
2	AB	2694	G	C5-C4	6.13	1.42	1.38
2	AB	2841	C	C2-N3	-6.13	1.30	1.35
35	BA	1456	A	C5-C4	-6.13	1.34	1.38
2	AB	243	U	P-O5'	6.13	1.65	1.59
2	AB	2544	G	N9-C4	-6.13	1.33	1.38
35	BA	710	G	C3'-C2'	6.13	1.59	1.52
2	AB	48	G	C3'-C2'	-6.13	1.46	1.52
2	AB	110	G	C4'-O4'	-6.13	1.37	1.45
2	AB	629	G	N9-C8	-6.13	1.33	1.37
2	AB	713	G	C8-N7	6.13	1.34	1.30
2	AB	1154	G	N9-C8	-6.13	1.33	1.37
2	AB	1338	G	C4'-O4'	-6.13	1.37	1.45
2	AB	1750	G	C4'-O4'	-6.13	1.37	1.45
2	AB	2396	G	P-O5'	6.13	1.65	1.59
2	AB	2809	A	O3'-P	6.13	1.68	1.61
35	BA	17	U	N1-C2	6.13	1.44	1.38
35	BA	206	C	C4'-C3'	6.13	1.59	1.53
35	BA	749	A	N3-C4	6.13	1.38	1.34
35	BA	804	U	N3-C4	6.13	1.44	1.38
35	BA	1122	U	N3-C4	6.13	1.44	1.38
2	AB	330	A	C5-C6	6.12	1.46	1.41
2	AB	1272	A	C4'-C3'	6.12	1.59	1.53
2	AB	2141	G	N3-C4	6.12	1.39	1.35
2	AB	2695	U	C4'-C3'	6.12	1.59	1.53
35	BA	335	C	C4-N4	-6.12	1.28	1.33
35	BA	1154	G	C6-N1	6.12	1.43	1.39
2	AB	91	A	C6-N6	6.12	1.38	1.33
2	AB	438	G	C2-N3	6.12	1.37	1.32
2	AB	1246	A	C5'-C4'	6.12	1.58	1.51
2	AB	2669	G	O3'-P	6.12	1.68	1.61
2	AB	2793	C	N1-C6	-6.12	1.33	1.37
2	AB	2885	G	N1-C2	6.12	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	549	G	C5-C6	6.12	1.48	1.42
2	AB	656	G	N7-C5	-6.12	1.35	1.39
2	AB	1960	A	P-O5'	6.12	1.65	1.59
2	AB	2212	A	N1-C2	-6.12	1.28	1.34
2	AB	2510	C	C2'-C1'	-6.12	1.46	1.53
2	AB	2731	G	O3'-P	6.12	1.68	1.61
2	AB	583	G	C6-N1	-6.12	1.35	1.39
2	AB	2319	G	C6-O6	-6.12	1.18	1.24
35	BA	1095	U	C5-C6	6.12	1.39	1.34
2	AB	29	U	N1-C2	6.12	1.44	1.38
2	AB	310	A	N1-C2	-6.12	1.28	1.34
2	AB	1037	G	P-O5'	6.12	1.65	1.59
2	AB	1802	A	N9-C8	6.12	1.42	1.37
2	AB	2721	A	N9-C8	-6.12	1.32	1.37
35	BA	130	A	N9-C8	6.12	1.42	1.37
35	BA	549	C	N1-C6	-6.12	1.33	1.37
2	AB	1160	G	C5-C6	6.12	1.48	1.42
2	AB	1472	C	C5'-C4'	6.12	1.58	1.51
2	AB	2358	A	C6-N1	6.12	1.39	1.35
35	BA	273	U	N1-C2	6.12	1.44	1.38
2	AB	668	A	C4'-O4'	-6.12	1.37	1.45
2	AB	947	A	C4'-O4'	-6.12	1.37	1.45
2	AB	1638	C	N1-C6	6.12	1.40	1.37
2	AB	1743	G	C8-N7	-6.12	1.27	1.30
35	BA	189	A	C6-N1	6.12	1.39	1.35
35	BA	851	G	C2-N3	6.12	1.37	1.32
2	AB	1294	U	C2-N3	6.11	1.42	1.37
2	AB	2657	A	C8-N7	-6.11	1.27	1.31
2	AB	2662	A	N9-C4	6.11	1.41	1.37
35	BA	684	U	C4-O4	6.11	1.28	1.23
35	BA	1026	G	C5'-C4'	6.11	1.58	1.51
2	AB	2190	G	P-O5'	6.11	1.65	1.59
2	AB	2723	C	C4-C5	6.11	1.47	1.43
2	AB	2763	G	P-O5'	6.11	1.65	1.59
36	BB	27	A	N9-C4	-6.11	1.34	1.37
43	BI	141	HIS	CB-CG	6.11	1.61	1.50
2	AB	17	G	C2-N3	6.11	1.37	1.32
2	AB	34	U	N1-C2	6.11	1.44	1.38
2	AB	1514	G	C8-N7	-6.11	1.27	1.30
2	AB	2072	C	C2'-C1'	6.11	1.60	1.53
35	BA	347	G	C4'-O4'	-6.11	1.37	1.45
35	BA	638	U	C5'-C4'	6.11	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	530	G	N9-C4	-6.11	1.33	1.38
2	AB	568	U	C2-O2	6.11	1.27	1.22
2	AB	568	U	C4-C5	6.11	1.49	1.43
2	AB	646	U	C4'-O4'	-6.11	1.37	1.45
2	AB	1598	A	P-O5'	6.11	1.65	1.59
2	AB	1896	G	C2-N3	6.11	1.37	1.32
2	AB	1938	A	C6-N1	6.11	1.39	1.35
2	AB	2834	G	C2-N3	6.11	1.37	1.32
2	AB	19	A	C4'-O4'	-6.11	1.37	1.45
2	AB	1135	C	C5-C6	6.11	1.39	1.34
2	AB	1688	U	C5-C6	6.11	1.39	1.34
2	AB	2156	G	N1-C2	6.11	1.42	1.37
2	AB	2252	G	C4'-O4'	-6.11	1.37	1.45
4	AD	174	ARG	NE-CZ	6.11	1.41	1.33
35	BA	32	A	C6-N6	6.11	1.38	1.33
35	BA	58	C	P-O5'	6.11	1.65	1.59
35	BA	408	A	C6-N1	6.11	1.39	1.35
40	BF	46	ARG	CD-NE	6.11	1.56	1.46
2	AB	602	A	O3'-P	6.11	1.68	1.61
2	AB	722	A	N3-C4	6.11	1.38	1.34
2	AB	1913	A	N9-C8	-6.11	1.32	1.37
2	AB	2060	A	N9-C8	6.11	1.42	1.37
35	BA	1347	G	N7-C5	6.11	1.43	1.39
2	AB	214	G	C4'-C3'	6.10	1.59	1.53
2	AB	606	U	N3-C4	6.10	1.44	1.38
2	AB	890	C	N1-C2	6.10	1.46	1.40
2	AB	1814	G	N3-C4	6.10	1.39	1.35
2	AB	1885	A	C4'-C3'	6.10	1.59	1.53
2	AB	1986	C	O3'-P	6.10	1.68	1.61
2	AB	2165	C	C2-N3	6.10	1.40	1.35
2	AB	2344	U	P-O5'	6.10	1.65	1.59
2	AB	2428	G	N3-C4	6.10	1.39	1.35
2	AB	2803	G	C3'-C2'	6.10	1.59	1.52
35	BA	580	C	C4'-O4'	-6.10	1.37	1.45
35	BA	767	A	C2'-C1'	6.10	1.60	1.53
35	BA	1182	G	O4'-C1'	6.10	1.49	1.41
2	AB	1038	G	P-O5'	6.10	1.65	1.59
7	AG	31	GLU	CD-OE2	-6.10	1.19	1.25
2	AB	271	G	N7-C5	6.10	1.43	1.39
2	AB	366	C	O3'-P	6.10	1.68	1.61
2	AB	1334	G	O3'-P	6.10	1.68	1.61
2	AB	1727	C	N3-C4	6.10	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2012	G	P-O5'	6.10	1.65	1.59
35	BA	223	A	C3'-C2'	6.10	1.59	1.52
2	AB	405	U	N1-C2	6.10	1.44	1.38
2	AB	652	U	C2-N3	6.10	1.42	1.37
2	AB	714	U	P-O5'	6.10	1.65	1.59
2	AB	1994	C	C2-N3	6.10	1.40	1.35
35	BA	707	U	O3'-P	6.10	1.68	1.61
35	BA	1272	G	P-O5'	6.10	1.65	1.59
35	BA	1341	U	C4-C5	6.10	1.49	1.43
35	BA	575	G	C2-N2	6.10	1.40	1.34
35	BA	1467	C	C4'-O4'	-6.10	1.37	1.45
2	AB	355	U	C2-N3	6.09	1.42	1.37
2	AB	454	A	C4'-C3'	6.09	1.59	1.53
2	AB	776	G	C5'-C4'	6.09	1.58	1.51
2	AB	784	G	N7-C5	6.09	1.43	1.39
2	AB	818	G	C2-N3	6.09	1.37	1.32
2	AB	1573	G	C4'-C3'	6.09	1.59	1.53
2	AB	1684	G	P-O5'	6.09	1.65	1.59
2	AB	2118	U	C4-C5	6.09	1.49	1.43
2	AB	2700	A	C6-N1	-6.09	1.31	1.35
35	BA	1034	G	C2-N3	6.09	1.37	1.32
2	AB	345	A	N7-C5	6.09	1.43	1.39
2	AB	2140	G	N3-C4	6.09	1.39	1.35
35	BA	85	U	C4'-C3'	6.09	1.59	1.53
2	AB	1828	G	C2-N3	6.09	1.37	1.32
2	AB	2448	A	O4'-C1'	6.09	1.49	1.41
2	AB	2572	A	C2-N3	6.09	1.39	1.33
2	AB	2852	G	C3'-C2'	-6.09	1.46	1.52
35	BA	832	G	P-O5'	6.09	1.65	1.59
35	BA	1048	G	N7-C5	6.09	1.43	1.39
35	BA	1537	U	C4-O4	-6.09	1.18	1.23
2	AB	1149	G	P-O5'	6.09	1.65	1.59
2	AB	2818	U	O4'-C1'	6.09	1.49	1.41
35	BA	808	C	N1-C6	6.09	1.40	1.37
35	BA	812	G	N1-C2	6.09	1.42	1.37
2	AB	555	G	N7-C5	6.09	1.43	1.39
2	AB	718	A	C3'-C2'	6.09	1.59	1.52
2	AB	1017	G	C5'-C4'	6.09	1.58	1.51
2	AB	1103	A	C6-N1	6.09	1.39	1.35
2	AB	2304	G	P-O5'	6.09	1.65	1.59
2	AB	2411	A	N7-C5	6.09	1.43	1.39
2	AB	2843	G	C2'-C1'	-6.09	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	73	C	N1-C6	6.09	1.40	1.37
35	BA	239	U	C4'-O4'	-6.09	1.37	1.45
35	BA	569	C	C5'-C4'	6.09	1.58	1.51
35	BA	631	C	O3'-P	6.09	1.68	1.61
35	BA	695	A	C2-N3	-6.09	1.28	1.33
35	BA	791	G	C5'-C4'	6.09	1.58	1.51
35	BA	912	C	N3-C4	6.09	1.38	1.33
2	AB	937	C	P-O5'	6.08	1.65	1.59
2	AB	947	A	C5'-C4'	6.08	1.58	1.51
2	AB	2276	G	N7-C5	6.08	1.43	1.39
1	AA	14	U	C2-N3	6.08	1.42	1.37
2	AB	96	C	N1-C6	6.08	1.40	1.37
2	AB	851	C	C4-N4	-6.08	1.28	1.33
2	AB	1287	A	C5'-C4'	6.08	1.58	1.51
35	BA	563	A	N3-C4	6.08	1.38	1.34
35	BA	869	G	C5-C6	6.08	1.48	1.42
36	BB	59	A	C6-N6	6.08	1.38	1.33
2	AB	935	C	C4-C5	6.08	1.47	1.43
2	AB	1124	G	O3'-P	6.08	1.68	1.61
2	AB	1477	A	N3-C4	6.08	1.38	1.34
2	AB	1877	A	P-O5'	6.08	1.65	1.59
2	AB	2565	A	C5-C4	-6.08	1.34	1.38
2	AB	2632	A	O3'-P	6.08	1.68	1.61
26	AZ	77	TYR	CG-CD1	6.08	1.47	1.39
35	BA	851	G	N1-C2	6.08	1.42	1.37
35	BA	1073	U	C3'-C2'	-6.08	1.46	1.52
35	BA	1370	G	N9-C4	6.08	1.42	1.38
2	AB	775	G	C2-N3	6.08	1.37	1.32
2	AB	1593	A	C8-N7	-6.08	1.27	1.31
2	AB	2388	A	O4'-C1'	6.08	1.49	1.41
35	BA	451	A	P-O5'	6.08	1.65	1.59
35	BA	1151	A	C2-N3	6.08	1.39	1.33
2	AB	171	U	N3-C4	6.08	1.44	1.38
2	AB	551	G	P-O5'	6.08	1.65	1.59
2	AB	2557	G	C2-N3	6.08	1.37	1.32
2	AB	2640	G	C2-N2	-6.08	1.28	1.34
35	BA	720	C	N1-C2	6.08	1.46	1.40
35	BA	1086	U	C2'-O2'	-6.08	1.33	1.41
35	BA	1107	C	C2-N3	6.08	1.40	1.35
36	BB	56	G	N7-C5	-6.08	1.35	1.39
1	AA	84	G	N9-C4	-6.08	1.33	1.38
2	AB	151	C	C2-N3	6.08	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	461	C	C2-N3	-6.08	1.30	1.35
2	AB	1080	A	P-O5'	6.08	1.65	1.59
4	AD	177	SER	CA-CB	6.08	1.62	1.52
2	AB	1556	C	C1'-N1	6.08	1.57	1.48
2	AB	1758	U	N1-C6	6.08	1.43	1.38
2	AB	2177	C	N1-C6	6.08	1.40	1.37
35	BA	363	A	C2'-C1'	6.08	1.60	1.53
35	BA	650	G	N9-C8	6.08	1.42	1.37
2	AB	452	G	C5-C4	6.07	1.42	1.38
2	AB	515	A	C5'-C4'	-6.07	1.44	1.51
2	AB	995	C	N1-C2	6.07	1.46	1.40
2	AB	1236	G	C6-O6	-6.07	1.18	1.24
2	AB	1339	G	C5'-C4'	6.07	1.58	1.51
2	AB	1653	G	C4'-O4'	-6.07	1.37	1.45
35	BA	2	A	N7-C5	6.07	1.42	1.39
35	BA	347	G	O3'-P	6.07	1.68	1.61
35	BA	411	A	P-O5'	-6.07	1.53	1.59
35	BA	624	C	O3'-P	-6.07	1.53	1.61
2	AB	1299	G	P-O5'	6.07	1.65	1.59
2	AB	126	A	C5-C4	-6.07	1.34	1.38
2	AB	1114	C	C4'-O4'	-6.07	1.37	1.45
2	AB	1158	C	C5'-C4'	6.07	1.58	1.51
2	AB	2452	C	N1-C6	6.07	1.40	1.37
2	AB	2839	G	C2-N3	6.07	1.37	1.32
35	BA	900	A	N3-C4	6.07	1.38	1.34
35	BA	1529	G	P-O5'	6.07	1.65	1.59
2	AB	1395	A	N1-C2	-6.07	1.28	1.34
2	AB	1453	A	C4'-C3'	-6.07	1.46	1.53
2	AB	1607	C	C4'-O4'	-6.07	1.37	1.45
2	AB	53	A	C4'-C3'	-6.07	1.46	1.53
2	AB	1856	U	C3'-C2'	6.07	1.59	1.52
2	AB	1976	U	C4-C5	6.07	1.49	1.43
2	AB	2783	U	O3'-P	6.07	1.68	1.61
6	AF	186	VAL	CB-CG1	6.07	1.65	1.52
35	BA	159	G	P-O5'	6.07	1.65	1.59
35	BA	190	A	N3-C4	6.07	1.38	1.34
35	BA	902	G	C2-N3	6.07	1.37	1.32
36	BB	42	U	N1-C6	-6.07	1.32	1.38
2	AB	632	A	C6-N1	-6.07	1.31	1.35
2	AB	711	G	C2-N3	6.07	1.37	1.32
2	AB	2008	C	O4'-C1'	6.07	1.49	1.41
2	AB	2380	C	N1-C6	-6.07	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	153	U	C2-N3	6.06	1.42	1.37
2	AB	2272	U	C3'-C2'	6.06	1.59	1.52
35	BA	125	U	C5-C6	6.06	1.39	1.34
35	BA	1409	C	N3-C4	6.06	1.38	1.33
2	AB	105	C	C2-N3	6.06	1.40	1.35
2	AB	277	G	N7-C5	-6.06	1.35	1.39
2	AB	822	G	N9-C4	6.06	1.42	1.38
2	AB	1021	A	C5-C6	6.06	1.46	1.41
2	AB	1235	G	O3'-P	-6.06	1.53	1.61
2	AB	1430	G	N9-C4	-6.06	1.33	1.38
2	AB	1698	A	N1-C2	-6.06	1.28	1.34
2	AB	2061	G	C4'-C3'	6.06	1.59	1.53
2	AB	2593	U	C2-N3	6.06	1.42	1.37
2	AB	2664	G	C2-N3	6.06	1.37	1.32
2	AB	2846	G	C5-C6	6.06	1.48	1.42
35	BA	492	C	P-O5'	6.06	1.65	1.59
35	BA	1169	A	O4'-C1'	-6.06	1.33	1.41
2	AB	2487	G	C6-O6	-6.06	1.18	1.24
35	BA	213	G	C6-N1	6.06	1.43	1.39
35	BA	288	A	C5-C6	6.06	1.46	1.41
35	BA	1011	C	C5'-C4'	6.06	1.58	1.51
1	AA	108	A	N1-C2	-6.06	1.28	1.34
2	AB	248	G	C5-C4	-6.06	1.34	1.38
2	AB	939	G	C5'-C4'	6.06	1.58	1.51
2	AB	1118	C	N3-C4	6.06	1.38	1.33
2	AB	2331	G	C2'-C1'	6.06	1.60	1.53
2	AB	2737	G	C5'-C4'	6.06	1.58	1.51
2	AB	2875	C	N3-C4	6.06	1.38	1.33
35	BA	1252	A	N3-C4	6.06	1.38	1.34
35	BA	1272	G	C5-C4	6.06	1.42	1.38
35	BA	1529	G	C2-N3	6.06	1.37	1.32
2	AB	847	U	C5-C6	6.06	1.39	1.34
2	AB	1216	G	C6-N1	6.06	1.43	1.39
2	AB	1426	G	C2-N3	6.06	1.37	1.32
2	AB	2680	U	P-O5'	6.06	1.65	1.59
35	BA	51	A	O3'-P	6.06	1.68	1.61
35	BA	1290	G	C8-N7	6.06	1.34	1.30
2	AB	54	G	O4'-C1'	6.05	1.49	1.41
2	AB	94	A	P-O5'	6.05	1.65	1.59
2	AB	144	A	C6-N6	6.05	1.38	1.33
2	AB	634	C	P-O5'	6.05	1.65	1.59
2	AB	828	U	C3'-C2'	6.05	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1184	U	C2-N3	6.05	1.42	1.37
2	AB	1924	C	N3-C4	6.05	1.38	1.33
2	AB	2162	G	O5'-C5'	-6.05	1.33	1.42
2	AB	2178	C	N3-C4	6.05	1.38	1.33
2	AB	2306	C	C2-N3	6.05	1.40	1.35
2	AB	2456	C	C4-N4	6.05	1.39	1.33
2	AB	2814	A	N9-C4	-6.05	1.34	1.37
35	BA	120	A	C4'-O4'	-6.05	1.37	1.45
35	BA	1075	U	C3'-C2'	6.05	1.59	1.52
36	BB	40	G	C1'-N9	6.05	1.57	1.48
2	AB	481	G	P-O5'	6.05	1.65	1.59
2	AB	1827	U	N3-C4	6.05	1.43	1.38
2	AB	2788	C	P-O5'	6.05	1.65	1.59
35	BA	811	C	O3'-P	6.05	1.68	1.61
2	AB	54	G	C4'-C3'	6.05	1.59	1.53
2	AB	1383	A	C5-C4	-6.05	1.34	1.38
2	AB	1988	G	O5'-C5'	-6.05	1.33	1.42
35	BA	35	G	C6-N1	6.05	1.43	1.39
35	BA	227	G	N1-C2	6.05	1.42	1.37
35	BA	500	G	C6-O6	-6.05	1.18	1.24
2	AB	971	G	C6-N1	-6.05	1.35	1.39
2	AB	1665	A	O4'-C1'	6.05	1.49	1.41
35	BA	768	A	P-O5'	6.05	1.65	1.59
35	BA	1337	G	N1-C2	6.05	1.42	1.37
35	BA	1404	C	C4-N4	-6.05	1.28	1.33
35	BA	230	G	C2-N3	6.05	1.37	1.32
35	BA	651	C	O3'-P	-6.05	1.53	1.61
35	BA	785	G	C2-N3	6.05	1.37	1.32
35	BA	1031	C	O3'-P	6.05	1.68	1.61
35	BA	1111	A	N9-C4	6.05	1.41	1.37
2	AB	517	C	C2'-O2'	-6.05	1.33	1.41
2	AB	1174	U	N1-C2	-6.05	1.33	1.38
2	AB	2490	G	N3-C4	6.05	1.39	1.35
2	AB	2891	U	C5'-C4'	6.05	1.58	1.51
4	AD	29	PHE	CG-CD2	6.05	1.47	1.38
35	BA	82	G	C2-N3	6.05	1.37	1.32
35	BA	522	C	C2'-C1'	6.05	1.60	1.53
35	BA	560	A	C6-N6	6.05	1.38	1.33
35	BA	1243	C	C5-C6	6.05	1.39	1.34
37	BC	75	C	C4'-O4'	-6.05	1.37	1.45
2	AB	13	A	C4'-O4'	-6.04	1.37	1.45
2	AB	1996	C	C5'-C4'	6.04	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2727	A	N3-C4	6.04	1.38	1.34
35	BA	1155	A	O4'-C1'	6.04	1.49	1.41
2	AB	355	U	P-O5'	6.04	1.65	1.59
2	AB	533	G	C2-N3	6.04	1.37	1.32
2	AB	1157	G	C4'-O4'	-6.04	1.37	1.45
2	AB	2241	A	N9-C8	-6.04	1.32	1.37
2	AB	2300	C	P-O5'	6.04	1.65	1.59
35	BA	204	G	C2'-C1'	6.04	1.59	1.53
2	AB	125	A	C5-C4	6.04	1.43	1.38
2	AB	470	A	N7-C5	6.04	1.42	1.39
2	AB	1572	A	N3-C4	6.04	1.38	1.34
2	AB	1665	A	C6-N6	6.04	1.38	1.33
35	BA	122	G	N3-C4	6.04	1.39	1.35
35	BA	391	G	N9-C8	6.04	1.42	1.37
35	BA	1048	G	C5-C4	-6.04	1.34	1.38
2	AB	96	C	C4-N4	-6.04	1.28	1.33
2	AB	728	G	N3-C4	6.04	1.39	1.35
2	AB	1876	A	C8-N7	-6.04	1.27	1.31
2	AB	2035	G	C5'-C4'	6.04	1.58	1.51
2	AB	334	C	P-O5'	6.04	1.65	1.59
2	AB	1033	U	C4-C5	6.04	1.49	1.43
2	AB	1594	U	P-O5'	6.04	1.65	1.59
2	AB	2557	G	N7-C5	6.04	1.42	1.39
35	BA	656	G	C5'-C4'	6.04	1.58	1.51
35	BA	658	C	C5'-C4'	6.04	1.58	1.51
35	BA	681	A	C2'-O2'	6.04	1.49	1.41
35	BA	828	U	C2'-C1'	6.04	1.59	1.53
2	AB	782	A	C5-C6	-6.04	1.35	1.41
2	AB	835	C	C5-C6	6.04	1.39	1.34
2	AB	2852	G	C5'-C4'	6.04	1.58	1.51
4	AD	170	TYR	CG-CD2	6.04	1.47	1.39
35	BA	330	C	N1-C6	-6.04	1.33	1.37
35	BA	1308	U	N3-C4	6.04	1.43	1.38
2	AB	54	G	C3'-C2'	-6.04	1.46	1.52
2	AB	1158	C	C4'-O4'	-6.04	1.37	1.45
2	AB	1328	A	N9-C4	6.04	1.41	1.37
2	AB	1888	G	N3-C4	6.04	1.39	1.35
2	AB	2371	G	N3-C4	6.04	1.39	1.35
2	AB	2660	A	C4'-C3'	6.04	1.59	1.53
35	BA	21	G	N9-C4	6.04	1.42	1.38
35	BA	200	G	C6-N1	6.04	1.43	1.39
35	BA	1274	A	C2-N3	6.04	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1347	G	N1-C2	6.04	1.42	1.37
2	AB	382	A	P-O5'	6.03	1.65	1.59
2	AB	859	G	N9-C8	-6.03	1.33	1.37
2	AB	1207	C	C4-N4	-6.03	1.28	1.33
2	AB	1234	U	N1-C2	6.03	1.44	1.38
2	AB	2117	A	C8-N7	-6.03	1.27	1.31
2	AB	2145	C	C2-N3	6.03	1.40	1.35
2	AB	2728	U	C3'-C2'	6.03	1.59	1.52
2	AB	2867	G	N3-C4	6.03	1.39	1.35
35	BA	140	U	P-O5'	6.03	1.65	1.59
2	AB	772	C	C2'-O2'	-6.03	1.33	1.41
2	AB	828	U	N3-C4	6.03	1.43	1.38
2	AB	2096	C	N3-C4	6.03	1.38	1.33
35	BA	86	G	C2-N3	6.03	1.37	1.32
1	AA	87	U	C4'-O4'	-6.03	1.37	1.45
2	AB	728	G	P-O5'	6.03	1.65	1.59
2	AB	778	G	C8-N7	6.03	1.34	1.30
2	AB	805	G	N3-C4	6.03	1.39	1.35
2	AB	1888	G	C2-N3	6.03	1.37	1.32
2	AB	1956	U	C4-C5	6.03	1.49	1.43
2	AB	2095	A	O5'-C5'	6.03	1.54	1.44
2	AB	2162	G	O3'-P	6.03	1.68	1.61
35	BA	382	A	N9-C4	-6.03	1.34	1.37
35	BA	411	A	N3-C4	6.03	1.38	1.34
35	BA	448	A	N7-C5	6.03	1.42	1.39
35	BA	1059	C	N3-C4	6.03	1.38	1.33
35	BA	1230	C	C3'-C2'	6.03	1.59	1.52
35	BA	1350	A	C5'-C4'	6.03	1.58	1.51
2	AB	1397	U	C4'-O4'	-6.03	1.37	1.45
2	AB	1583	A	C3'-O3'	6.03	1.50	1.42
2	AB	2289	G	N3-C4	6.03	1.39	1.35
35	BA	514	C	C4-C5	6.03	1.47	1.43
35	BA	909	A	C2'-O2'	6.03	1.49	1.41
2	AB	561	G	N1-C2	-6.03	1.32	1.37
2	AB	681	G	N3-C4	-6.03	1.31	1.35
2	AB	1496	A	C8-N7	-6.03	1.27	1.31
2	AB	2374	C	C4'-C3'	6.03	1.59	1.53
35	BA	846	G	C2-N3	6.03	1.37	1.32
35	BA	1043	G	C5'-C4'	6.03	1.58	1.51
37	BC	50	G	C2-N3	6.03	1.37	1.32
2	AB	840	C	C2'-O2'	6.03	1.49	1.41
2	AB	1211	C	C4'-C3'	6.03	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1485	U	O3'-P	-6.03	1.53	1.61
2	AB	1554	U	C4'-O4'	-6.03	1.37	1.45
2	AB	2454	G	N7-C5	-6.03	1.35	1.39
2	AB	2729	G	C2'-C1'	6.03	1.59	1.53
5	AE	125	TRP	CD2-CE2	6.03	1.48	1.41
35	BA	113	G	N1-C2	6.03	1.42	1.37
35	BA	120	A	C2'-O2'	6.03	1.49	1.41
35	BA	794	A	N3-C4	-6.03	1.31	1.34
2	AB	986	C	C2-N3	6.02	1.40	1.35
2	AB	2117	A	N3-C4	6.02	1.38	1.34
35	BA	192	A	C5-C6	6.02	1.46	1.41
35	BA	713	G	N1-C2	6.02	1.42	1.37
36	BB	29	G	N7-C5	6.02	1.42	1.39
2	AB	52	A	C2-N3	6.02	1.39	1.33
2	AB	1041	G	N3-C4	6.02	1.39	1.35
2	AB	1087	G	N9-C8	6.02	1.42	1.37
2	AB	1451	C	O3'-P	6.02	1.68	1.61
2	AB	2260	C	C4-C5	6.02	1.47	1.43
2	AB	2394	C	C4-C5	-6.02	1.38	1.43
35	BA	778	G	P-O5'	6.02	1.65	1.59
1	AA	38	C	C3'-C2'	6.02	1.59	1.52
2	AB	43	G	C4'-C3'	-6.02	1.46	1.53
2	AB	1570	A	N9-C4	6.02	1.41	1.37
2	AB	190	A	C2'-C1'	6.02	1.59	1.53
2	AB	1166	G	O3'-P	6.02	1.68	1.61
2	AB	1764	C	C3'-O3'	6.02	1.50	1.42
35	BA	35	G	N3-C4	6.02	1.39	1.35
35	BA	226	G	N7-C5	6.02	1.42	1.39
35	BA	923	A	C4'-O4'	-6.02	1.37	1.45
35	BA	1258	G	C8-N7	6.02	1.34	1.30
37	BC	32	G	C2-N3	6.02	1.37	1.32
37	BC	51	U	P-O5'	6.02	1.65	1.59
2	AB	162	U	N1-C2	6.02	1.44	1.38
2	AB	589	U	C2-N3	6.02	1.42	1.37
2	AB	775	G	N7-C5	-6.02	1.35	1.39
2	AB	1024	G	C2-N3	6.02	1.37	1.32
2	AB	1037	G	C3'-C2'	-6.02	1.46	1.52
2	AB	1112	G	C4'-C3'	6.02	1.59	1.53
2	AB	1501	G	C6-N1	6.02	1.43	1.39
35	BA	168	G	O3'-P	6.02	1.68	1.61
35	BA	334	C	C2-N3	6.02	1.40	1.35
35	BA	799	G	N1-C2	6.02	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1421	G	C2-N3	6.02	1.37	1.32
37	BC	60	A	N3-C4	6.02	1.38	1.34
2	AB	2442	C	C4'-O4'	-6.02	1.37	1.45
35	BA	755	G	C5-C4	6.02	1.42	1.38
35	BA	996	A	C5-C6	6.02	1.46	1.41
35	BA	1195	C	C4'-O4'	-6.02	1.37	1.45
2	AB	43	G	N9-C4	-6.01	1.33	1.38
2	AB	1066	U	C4-O4	-6.01	1.18	1.23
2	AB	1143	A	C4'-O4'	-6.01	1.37	1.45
2	AB	2323	G	N3-C4	6.01	1.39	1.35
2	AB	2705	A	N1-C2	-6.01	1.28	1.34
14	AN	51	GLU	CD-OE2	-6.01	1.19	1.25
32	A5	34	ARG	CZ-NH1	6.01	1.40	1.33
35	BA	358	U	C2-N3	6.01	1.42	1.37
35	BA	1000	A	C4'-O4'	-6.01	1.37	1.45
35	BA	1466	C	C4'-C3'	6.01	1.59	1.53
2	AB	386	G	N9-C8	6.01	1.42	1.37
2	AB	2564	A	P-O5'	-6.01	1.53	1.59
2	AB	2904	U	C5'-C4'	6.01	1.58	1.51
35	BA	817	C	N3-C4	6.01	1.38	1.33
35	BA	1198	G	C4'-O4'	-6.01	1.37	1.45
35	BA	1234	C	C4-N4	6.01	1.39	1.33
35	BA	1506	U	N1-C2	6.01	1.44	1.38
2	AB	1439	A	N7-C5	-6.01	1.35	1.39
2	AB	2000	C	C4-C5	-6.01	1.38	1.43
2	AB	2162	G	C8-N7	-6.01	1.27	1.30
2	AB	2521	C	C4-N4	6.01	1.39	1.33
2	AB	2863	C	C4-C5	6.01	1.47	1.43
2	AB	466	A	N7-C5	6.01	1.42	1.39
2	AB	1306	C	O3'-P	6.01	1.68	1.61
2	AB	1492	G	N7-C5	6.01	1.42	1.39
2	AB	1513	U	C4'-C3'	6.01	1.59	1.53
2	AB	1802	A	C8-N7	-6.01	1.27	1.31
2	AB	2336	A	C6-N6	-6.01	1.29	1.33
20	AT	14	VAL	CA-CB	6.01	1.67	1.54
35	BA	76	G	C6-N1	6.01	1.43	1.39
35	BA	212	G	N3-C4	6.01	1.39	1.35
35	BA	1197	A	N7-C5	6.01	1.42	1.39
35	BA	1350	A	N3-C4	6.01	1.38	1.34
35	BA	1368	A	C5'-C4'	6.01	1.58	1.51
37	BC	54	G	P-O5'	6.01	1.65	1.59
2	AB	2152	G	P-O5'	6.01	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	108	G	C2-N3	6.01	1.37	1.32
35	BA	658	C	P-O5'	6.01	1.65	1.59
35	BA	839	C	N1-C6	6.01	1.40	1.37
35	BA	1165	U	C2-N3	6.01	1.42	1.37
35	BA	1506	U	N3-C4	6.01	1.43	1.38
2	AB	1284	A	C2'-C1'	6.01	1.59	1.53
2	AB	1660	G	C6-N1	6.01	1.43	1.39
2	AB	1875	G	N9-C8	-6.01	1.33	1.37
2	AB	2170	A	C4'-O4'	-6.01	1.37	1.45
35	BA	163	C	C2-N3	6.01	1.40	1.35
35	BA	774	G	C5-C6	6.01	1.48	1.42
35	BA	1042	A	N9-C4	6.01	1.41	1.37
2	AB	409	G	N7-C5	6.00	1.42	1.39
2	AB	2124	G	C4'-O4'	-6.00	1.37	1.45
2	AB	2566	A	C4'-C3'	6.00	1.59	1.53
2	AB	301	G	C2-N2	6.00	1.40	1.34
2	AB	1240	U	O3'-P	6.00	1.68	1.61
2	AB	2228	G	N9-C8	-6.00	1.33	1.37
35	BA	564	C	C2-N3	6.00	1.40	1.35
2	AB	570	G	C4'-C3'	-6.00	1.46	1.53
2	AB	1225	G	C5-C4	6.00	1.42	1.38
2	AB	1459	G	O3'-P	6.00	1.68	1.61
2	AB	2466	C	C5'-C4'	6.00	1.58	1.51
2	AB	2901	C	C5-C6	6.00	1.39	1.34
35	BA	86	G	C4'-O4'	-6.00	1.37	1.45
35	BA	184	G	C3'-C2'	6.00	1.59	1.52
35	BA	767	A	N7-C5	6.00	1.42	1.39
35	BA	1243	C	N1-C6	6.00	1.40	1.37
2	AB	97	C	C2'-C1'	-6.00	1.46	1.53
6	AF	44	ARG	CZ-NH1	6.00	1.40	1.33
35	BA	174	A	C6-N6	6.00	1.38	1.33
35	BA	383	A	N7-C5	-6.00	1.35	1.39
35	BA	874	G	C2-N3	6.00	1.37	1.32
1	AA	44	G	C5'-C4'	6.00	1.58	1.51
2	AB	1323	C	C5'-C4'	6.00	1.58	1.51
2	AB	2330	G	C4'-C3'	6.00	1.59	1.53
35	BA	219	U	P-O5'	6.00	1.65	1.59
35	BA	987	G	C2-N3	6.00	1.37	1.32
2	AB	347	A	C2'-C1'	-6.00	1.46	1.53
2	AB	867	C	P-O5'	6.00	1.65	1.59
2	AB	2105	U	C2-N3	6.00	1.42	1.37
2	AB	2739	U	O3'-P	6.00	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2768	U	C2'-C1'	-6.00	1.46	1.53
2	AB	2849	U	C2'-C1'	6.00	1.59	1.53
35	BA	1007	U	C2-N3	6.00	1.42	1.37
35	BA	1234	C	O4'-C1'	6.00	1.49	1.41
36	BB	44	U	O3'-P	6.00	1.68	1.61
2	AB	684	G	N7-C5	6.00	1.42	1.39
2	AB	1254	A	C3'-C2'	6.00	1.59	1.52
2	AB	1763	G	C2-N3	6.00	1.37	1.32
35	BA	45	G	P-O5'	6.00	1.65	1.59
35	BA	188	C	N3-C4	6.00	1.38	1.33
2	AB	619	G	C6-N1	-5.99	1.35	1.39
2	AB	1351	C	P-O5'	5.99	1.65	1.59
2	AB	1842	G	N9-C8	5.99	1.42	1.37
2	AB	1919	A	N9-C4	5.99	1.41	1.37
35	BA	292	G	C5-C4	-5.99	1.34	1.38
35	BA	642	A	N9-C8	5.99	1.42	1.37
35	BA	697	U	C5'-C4'	5.99	1.58	1.51
35	BA	1508	A	N9-C8	-5.99	1.32	1.37
2	AB	1980	G	C4'-O4'	-5.99	1.37	1.45
35	BA	152	A	C5-C4	-5.99	1.34	1.38
35	BA	1073	U	C5'-C4'	5.99	1.58	1.51
35	BA	1276	G	N3-C4	5.99	1.39	1.35
2	AB	925	A	O3'-P	5.99	1.68	1.61
2	AB	1667	G	C2-N3	5.99	1.37	1.32
2	AB	1985	C	P-O5'	5.99	1.65	1.59
2	AB	2875	C	C5-C6	5.99	1.39	1.34
2	AB	2895	G	N3-C4	5.99	1.39	1.35
35	BA	748	G	N7-C5	5.99	1.42	1.39
35	BA	921	U	P-O5'	5.99	1.65	1.59
35	BA	1466	C	P-O5'	5.99	1.65	1.59
36	BB	40	G	C5-C4	5.99	1.42	1.38
37	BC	3	C	N3-C4	-5.99	1.29	1.33
1	AA	109	A	C2-N3	5.99	1.39	1.33
2	AB	292	U	C4-C5	5.99	1.49	1.43
2	AB	1189	A	C4'-O4'	-5.99	1.37	1.45
2	AB	1323	C	N1-C6	5.99	1.40	1.37
2	AB	1731	G	N9-C4	5.99	1.42	1.38
2	AB	1749	A	C6-N1	-5.99	1.31	1.35
2	AB	1995	U	C5-C6	5.99	1.39	1.34
2	AB	2771	C	P-O5'	5.99	1.65	1.59
35	BA	474	G	C6-N1	-5.99	1.35	1.39
35	BA	837	U	C4-O4	-5.99	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2594	C	C2-N3	5.99	1.40	1.35
35	BA	168	G	C5-C4	-5.99	1.34	1.38
2	AB	223	A	C4'-C3'	-5.99	1.46	1.52
2	AB	585	G	C6-N1	-5.99	1.35	1.39
2	AB	848	C	C5-C6	5.99	1.39	1.34
2	AB	1048	A	C8-N7	-5.99	1.27	1.31
2	AB	1347	A	N7-C5	-5.99	1.35	1.39
2	AB	1932	A	C2-N3	-5.99	1.28	1.33
35	BA	402	G	C4'-O4'	-5.99	1.37	1.45
37	BC	23	G	C6-O6	-5.99	1.18	1.24
37	BC	5	G	N1-C2	5.98	1.42	1.37
37	BC	11	A	C4'-O4'	-5.98	1.37	1.45
2	AB	1174	U	N1-C6	5.98	1.43	1.38
2	AB	1261	C	C2-N3	-5.98	1.30	1.35
2	AB	1992	G	C6-O6	-5.98	1.18	1.24
2	AB	2183	A	C4'-O4'	-5.98	1.37	1.45
2	AB	2335	A	C5-C6	5.98	1.46	1.41
35	BA	409	U	C5'-C4'	5.98	1.58	1.51
35	BA	570	G	C4'-O4'	-5.98	1.37	1.45
35	BA	899	C	C3'-C2'	5.98	1.59	1.52
35	BA	1152	A	C2'-C1'	5.98	1.59	1.53
35	BA	1255	G	N1-C2	5.98	1.42	1.37
2	AB	597	G	C8-N7	-5.98	1.27	1.30
2	AB	1889	A	C5-C6	5.98	1.46	1.41
2	AB	2281	A	C3'-C2'	-5.98	1.46	1.52
2	AB	2431	U	C5-C6	5.98	1.39	1.34
35	BA	144	G	C6-O6	-5.98	1.18	1.24
35	BA	413	G	C4'-C3'	5.98	1.59	1.53
35	BA	1360	A	C6-N1	-5.98	1.31	1.35
37	BC	60	A	C6-N1	-5.98	1.31	1.35
2	AB	1396	U	C2-O2	5.98	1.27	1.22
2	AB	1943	U	C5-C6	5.98	1.39	1.34
2	AB	883	G	C2-N3	5.98	1.37	1.32
2	AB	1755	A	C4'-O4'	-5.98	1.37	1.45
2	AB	2738	A	N3-C4	5.98	1.38	1.34
35	BA	18	C	N3-C4	5.98	1.38	1.33
35	BA	729	A	N3-C4	-5.98	1.31	1.34
2	AB	30	G	C4'-O4'	-5.98	1.37	1.45
2	AB	566	U	C5'-C4'	5.98	1.58	1.51
2	AB	2797	U	P-O5'	5.98	1.65	1.59
35	BA	1187	G	C6-N1	-5.98	1.35	1.39
35	BA	1469	C	C4'-O4'	-5.98	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	201	C	N3-C4	5.97	1.38	1.33
2	AB	259	G	P-O5'	5.97	1.65	1.59
2	AB	925	A	C5-C4	-5.97	1.34	1.38
2	AB	1083	U	C4'-C3'	5.97	1.59	1.53
2	AB	1177	G	C4'-O4'	-5.97	1.37	1.45
2	AB	1478	G	N1-C2	-5.97	1.32	1.37
35	BA	458	U	C5-C6	5.97	1.39	1.34
35	BA	849	G	P-O5'	5.97	1.65	1.59
35	BA	1280	A	N7-C5	5.97	1.42	1.39
2	AB	75	G	C6-N1	5.97	1.43	1.39
2	AB	649	G	P-O5'	5.97	1.65	1.59
2	AB	1464	G	N3-C4	5.97	1.39	1.35
2	AB	1814	G	N9-C4	-5.97	1.33	1.38
2	AB	2452	C	N3-C4	5.97	1.38	1.33
2	AB	2772	C	C4-N4	5.97	1.39	1.33
2	AB	2868	A	N7-C5	-5.97	1.35	1.39
35	BA	651	C	N3-C4	5.97	1.38	1.33
35	BA	1049	U	C4-C5	5.97	1.49	1.43
2	AB	1899	A	N9-C8	5.97	1.42	1.37
35	BA	1161	C	C2-N3	5.97	1.40	1.35
2	AB	217	A	C2'-O2'	-5.97	1.33	1.41
2	AB	1192	G	C4'-O4'	-5.97	1.37	1.45
2	AB	1214	A	C8-N7	-5.97	1.27	1.31
2	AB	1414	C	N1-C2	5.97	1.46	1.40
2	AB	2072	C	N1-C6	5.97	1.40	1.37
2	AB	2191	A	P-O5'	5.97	1.65	1.59
2	AB	2613	U	C5'-C4'	5.97	1.58	1.51
2	AB	2740	A	C8-N7	-5.97	1.27	1.31
35	BA	298	A	P-O5'	5.97	1.65	1.59
2	AB	1699	G	N7-C5	-5.97	1.35	1.39
2	AB	1848	A	C5-C4	-5.97	1.34	1.38
37	BC	7	G	C2-N2	5.97	1.40	1.34
42	BH	25	TYR	CE2-CZ	5.97	1.46	1.38
2	AB	358	U	C5'-C4'	5.97	1.58	1.51
2	AB	475	C	C2-N3	5.97	1.40	1.35
2	AB	479	A	C6-N1	5.97	1.39	1.35
2	AB	606	U	C4'-O4'	-5.97	1.37	1.45
2	AB	1189	A	N3-C4	5.97	1.38	1.34
2	AB	1797	G	N1-C2	-5.97	1.32	1.37
2	AB	2733	A	C2'-C1'	5.97	1.59	1.53
35	BA	514	C	P-O5'	5.97	1.65	1.59
35	BA	605	U	C2-O2	5.97	1.27	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1205	A	N9-C4	-5.96	1.34	1.37
2	AB	1441	G	N3-C4	5.96	1.39	1.35
2	AB	1552	A	O3'-P	-5.96	1.53	1.61
2	AB	1664	A	C2-N3	-5.96	1.28	1.33
2	AB	2881	U	C3'-C2'	-5.96	1.46	1.52
35	BA	98	A	P-O5'	5.96	1.65	1.59
35	BA	420	U	C2'-O2'	5.96	1.49	1.41
35	BA	1146	A	N9-C4	-5.96	1.34	1.37
35	BA	1410	A	N3-C4	5.96	1.38	1.34
1	AA	102	G	O4'-C1'	5.96	1.49	1.41
2	AB	551	G	C5-C6	5.96	1.48	1.42
2	AB	1343	G	C4'-C3'	-5.96	1.46	1.52
2	AB	1471	G	O3'-P	5.96	1.68	1.61
2	AB	2242	G	C5'-C4'	5.96	1.58	1.51
2	AB	2496	C	P-O5'	5.96	1.65	1.59
2	AB	2686	G	N9-C8	-5.96	1.33	1.37
2	AB	2903	U	P-O5'	5.96	1.65	1.59
35	BA	73	C	C1'-N1	5.96	1.57	1.48
35	BA	669	G	C6-O6	5.96	1.29	1.24
35	BA	1294	G	C6-N1	-5.96	1.35	1.39
36	BB	54	U	C2-N3	-5.96	1.33	1.37
37	BC	23	G	N7-C5	5.96	1.42	1.39
2	AB	1127	A	C2-N3	-5.96	1.28	1.33
35	BA	925	G	N7-C5	-5.96	1.35	1.39
35	BA	1290	G	C5'-C4'	5.96	1.58	1.51
2	AB	955	PSU	O3'-P	5.96	1.68	1.61
2	AB	1851	U	C5-C6	5.96	1.39	1.34
2	AB	2351	G	N1-C2	-5.96	1.32	1.37
35	BA	957	U	N1-C6	-5.96	1.32	1.38
35	BA	1119	C	C2'-C1'	5.96	1.59	1.53
35	BA	1192	C	C2'-O2'	5.96	1.49	1.41
35	BA	1219	A	C8-N7	-5.96	1.27	1.31
35	BA	1311	A	C5-C6	5.96	1.46	1.41
2	AB	44	A	C6-N6	5.96	1.38	1.33
2	AB	74	A	C2'-C1'	-5.96	1.46	1.53
2	AB	1255	U	N1-C6	-5.96	1.32	1.38
2	AB	1581	G	C2-N3	5.96	1.37	1.32
2	AB	2238	G	C6-N1	5.96	1.43	1.39
35	BA	208	U	N1-C2	5.96	1.44	1.38
35	BA	1031	C	N1-C2	-5.96	1.34	1.40
35	BA	1163	A	C3'-C2'	5.96	1.59	1.52
2	AB	84	A	C6-N6	5.96	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1750	G	C5-C4	5.96	1.42	1.38
35	BA	826	C	C2-O2	-5.96	1.19	1.24
35	BA	1389	C	N1-C6	5.96	1.40	1.37
2	AB	349	U	C2-N3	5.95	1.42	1.37
2	AB	572	A	C5-C4	-5.95	1.34	1.38
2	AB	1445	G	C5-C4	-5.95	1.34	1.38
2	AB	2367	G	N9-C4	5.95	1.42	1.38
35	BA	726	C	N3-C4	5.95	1.38	1.33
35	BA	773	G	C5-C6	5.95	1.48	1.42
35	BA	1067	A	O3'-P	5.95	1.68	1.61
36	BB	20	G	O3'-P	5.95	1.68	1.61
2	AB	699	A	C6-N6	5.95	1.38	1.33
2	AB	1448	G	C8-N7	-5.95	1.27	1.30
2	AB	2007	U	C4-C5	5.95	1.49	1.43
2	AB	2535	G	N7-C5	-5.95	1.35	1.39
35	BA	435	A	C6-N1	-5.95	1.31	1.35
35	BA	1254	A	C6-N6	5.95	1.38	1.33
2	AB	105	C	N3-C4	5.95	1.38	1.33
2	AB	196	A	C6-N6	5.95	1.38	1.33
2	AB	225	C	C4-C5	5.95	1.47	1.43
2	AB	233	A	C8-N7	-5.95	1.27	1.31
2	AB	1207	C	N3-C4	5.95	1.38	1.33
2	AB	1216	G	C2'-O2'	5.95	1.49	1.41
2	AB	1778	U	C2'-C1'	-5.95	1.46	1.53
2	AB	1927	A	N7-C5	5.95	1.42	1.39
35	BA	338	A	O3'-P	-5.95	1.54	1.61
35	BA	1221	G	C8-N7	5.95	1.34	1.30
2	AB	40	U	C5'-C4'	5.95	1.58	1.51
2	AB	1061	U	C4'-C3'	-5.95	1.46	1.52
2	AB	1742	U	N1-C2	5.95	1.44	1.38
2	AB	2192	U	O5'-C5'	-5.95	1.33	1.42
35	BA	1040	U	N1-C6	5.95	1.43	1.38
35	BA	1235	U	P-O5'	5.95	1.65	1.59
2	AB	1535	A	N3-C4	5.95	1.38	1.34
2	AB	2809	A	C6-N1	-5.95	1.31	1.35
35	BA	705	G	N9-C4	-5.95	1.33	1.38
36	BB	59	A	C4'-O4'	-5.95	1.37	1.45
2	AB	1363	C	C3'-C2'	-5.95	1.46	1.52
2	AB	1535	A	N1-C2	5.95	1.39	1.34
2	AB	2220	U	C4'-C3'	5.95	1.59	1.53
2	AB	2348	U	C4-O4	-5.95	1.18	1.23
2	AB	2367	G	O3'-P	5.95	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	701	U	C4-C5	5.95	1.49	1.43
39	BE	170	GLY	CA-C	5.95	1.61	1.51
2	AB	1569	A	N9-C4	5.94	1.41	1.37
35	BA	858	G	N9-C8	-5.94	1.33	1.37
35	BA	1458	G	C2-N3	5.94	1.37	1.32
2	AB	80	G	N1-C2	5.94	1.42	1.37
2	AB	694	U	C2-N3	5.94	1.42	1.37
2	AB	2211	A	C5-C4	-5.94	1.34	1.38
2	AB	2242	G	O3'-P	5.94	1.68	1.61
2	AB	2455	G	O3'-P	5.94	1.68	1.61
2	AB	2513	A	C3'-C2'	5.94	1.59	1.52
35	BA	1472	U	P-O5'	5.94	1.65	1.59
2	AB	635	C	C2'-C1'	5.94	1.59	1.53
2	AB	775	G	O3'-P	5.94	1.68	1.61
2	AB	1408	G	N9-C8	-5.94	1.33	1.37
2	AB	1899	A	N3-C4	-5.94	1.31	1.34
35	BA	723	U	C4-O4	-5.94	1.18	1.23
35	BA	803	G	N7-C5	5.94	1.42	1.39
35	BA	1333	A	C6-N1	-5.94	1.31	1.35
35	BA	1524	C	N1-C6	5.94	1.40	1.37
2	AB	177	G	O4'-C1'	-5.94	1.33	1.41
2	AB	1272	A	N9-C8	5.94	1.42	1.37
2	AB	1978	A	O3'-P	-5.94	1.54	1.61
35	BA	474	G	P-O5'	5.94	1.65	1.59
35	BA	1177	G	N1-C2	5.94	1.42	1.37
2	AB	189	G	O3'-P	5.94	1.68	1.61
2	AB	203	A	N1-C2	-5.94	1.29	1.34
2	AB	292	U	N3-C4	5.94	1.43	1.38
2	AB	496	G	N9-C8	5.94	1.42	1.37
2	AB	514	A	N9-C4	-5.94	1.34	1.37
2	AB	1093	G	C5'-C4'	5.94	1.58	1.51
2	AB	1432	G	C8-N7	-5.94	1.27	1.30
35	BA	548	G	N3-C4	5.94	1.39	1.35
35	BA	746	A	N1-C2	-5.94	1.29	1.34
35	BA	1056	U	C3'-C2'	5.94	1.59	1.52
35	BA	1233	G	N7-C5	5.94	1.42	1.39
2	AB	1611	C	N1-C6	5.94	1.40	1.37
2	AB	2148	G	N1-C2	-5.94	1.33	1.37
2	AB	249	C	C5-C6	5.93	1.39	1.34
2	AB	549	G	C2-N2	-5.93	1.28	1.34
2	AB	840	C	C4-C5	5.93	1.47	1.43
2	AB	2201	G	O3'-P	-5.93	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2306	C	C5'-C4'	5.93	1.58	1.51
2	AB	2700	A	P-O5'	5.93	1.65	1.59
2	AB	2712	C	C2'-O2'	-5.93	1.33	1.41
2	AB	2721	A	N7-C5	5.93	1.42	1.39
35	BA	128	G	C2'-C1'	5.93	1.59	1.53
35	BA	574	A	N7-C5	-5.93	1.35	1.39
2	AB	243	U	N1-C6	5.93	1.43	1.38
2	AB	705	A	C8-N7	-5.93	1.27	1.31
2	AB	765	C	C3'-C2'	5.93	1.59	1.52
2	AB	1027	A	C8-N7	5.93	1.35	1.31
2	AB	1147	A	C2-N3	5.93	1.38	1.33
2	AB	1702	G	C8-N7	5.93	1.34	1.30
2	AB	2290	G	C5'-C4'	5.93	1.58	1.51
2	AB	2673	G	C8-N7	5.93	1.34	1.30
2	AB	2747	G	C5'-C4'	5.93	1.58	1.51
35	BA	762	U	P-O5'	5.93	1.65	1.59
35	BA	1274	A	N9-C8	5.93	1.42	1.37
1	AA	88	C	C5'-C4'	5.93	1.58	1.51
35	BA	168	G	P-O5'	5.93	1.65	1.59
1	AA	90	C	C4'-O4'	-5.93	1.37	1.45
2	AB	638	G	P-O5'	5.93	1.65	1.59
35	BA	905	U	C4-C5	5.93	1.48	1.43
2	AB	301	G	C4'-C3'	5.93	1.59	1.53
2	AB	977	G	N7-C5	-5.93	1.35	1.39
2	AB	1362	C	C2'-C1'	5.93	1.59	1.53
35	BA	808	C	P-O5'	5.93	1.65	1.59
35	BA	1211	U	N1-C2	5.93	1.43	1.38
2	AB	644	A	N9-C8	5.93	1.42	1.37
2	AB	692	C	C4'-C3'	5.93	1.59	1.53
2	AB	748	G	C6-N1	-5.93	1.35	1.39
2	AB	1029	A	C6-N1	-5.93	1.31	1.35
2	AB	1707	G	C2'-C1'	-5.93	1.46	1.53
35	BA	532	A	N3-C4	-5.93	1.31	1.34
35	BA	786	G	C5'-C4'	5.93	1.58	1.51
35	BA	1004	A	N3-C4	5.93	1.38	1.34
35	BA	1028	C	P-O5'	5.93	1.65	1.59
35	BA	1212	U	C2-N3	5.93	1.41	1.37
35	BA	1227	A	C8-N7	-5.93	1.27	1.31
2	AB	247	G	N7-C5	5.92	1.42	1.39
2	AB	315	G	C8-N7	5.92	1.34	1.30
2	AB	386	G	C4'-O4'	-5.92	1.37	1.45
2	AB	458	G	N7-C5	5.92	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1737	G	O3'-P	5.92	1.68	1.61
2	AB	1996	C	C2-N3	5.92	1.40	1.35
2	AB	2545	G	C5-C6	5.92	1.48	1.42
35	BA	277	C	C4-N4	5.92	1.39	1.33
35	BA	344	A	C5-C6	5.92	1.46	1.41
35	BA	1229	A	C6-N1	5.92	1.39	1.35
2	AB	529	A	N9-C4	5.92	1.41	1.37
2	AB	770	G	N1-C2	5.92	1.42	1.37
2	AB	793	A	N9-C8	5.92	1.42	1.37
2	AB	1044	C	C4'-O4'	-5.92	1.37	1.45
2	AB	1289	C	N1-C6	5.92	1.40	1.37
2	AB	2060	A	N7-C5	5.92	1.42	1.39
2	AB	2260	C	C2-N3	-5.92	1.31	1.35
2	AB	2338	C	C4'-O4'	-5.92	1.37	1.45
35	BA	209	U	C5'-C4'	5.92	1.58	1.51
35	BA	1319	A	C6-N6	5.92	1.38	1.33
2	AB	440	C	C2-N3	5.92	1.40	1.35
2	AB	619	G	N7-C5	5.92	1.42	1.39
2	AB	2091	C	C3'-C2'	5.92	1.59	1.52
2	AB	2505	G	N3-C4	5.92	1.39	1.35
35	BA	315	A	C5-C4	-5.92	1.34	1.38
35	BA	1039	G	N9-C8	-5.92	1.33	1.37
35	BA	1253	G	C5-C6	5.92	1.48	1.42
1	AA	22	U	O4'-C1'	5.92	1.49	1.41
2	AB	343	C	P-O5'	5.92	1.65	1.59
2	AB	1360	G	N3-C4	5.92	1.39	1.35
2	AB	2494	G	P-O5'	5.92	1.65	1.59
35	BA	228	A	C5-C4	-5.92	1.34	1.38
35	BA	1480	A	N7-C5	5.92	1.42	1.39
2	AB	1383	A	N3-C4	5.92	1.38	1.34
2	AB	1490	A	C6-N1	5.92	1.39	1.35
2	AB	1657	U	C2'-C1'	5.92	1.59	1.53
17	AQ	36	TYR	CG-CD1	5.92	1.46	1.39
35	BA	33	A	P-O5'	5.92	1.65	1.59
35	BA	324	G	O3'-P	5.92	1.68	1.61
35	BA	573	A	N3-C4	5.92	1.38	1.34
35	BA	581	G	P-O5'	5.92	1.65	1.59
35	BA	755	G	C3'-C2'	5.92	1.59	1.52
35	BA	1224	U	C4-C5	5.92	1.48	1.43
35	BA	1426	G	C2-N3	5.92	1.37	1.32
2	AB	669	G	C8-N7	5.92	1.34	1.30
2	AB	848	C	C3'-C2'	-5.92	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	854	C	P-O5'	5.92	1.65	1.59
2	AB	1084	A	C6-N1	-5.92	1.31	1.35
2	AB	1204	A	O3'-P	5.92	1.68	1.61
35	BA	102	G	C6-N1	5.92	1.43	1.39
35	BA	141	G	C4'-O4'	-5.92	1.37	1.45
35	BA	275	G	C3'-C2'	5.92	1.59	1.52
36	BB	30	U	C5'-C4'	5.92	1.58	1.51
37	BC	37	U	C3'-C2'	5.92	1.59	1.52
2	AB	178	G	N1-C2	5.92	1.42	1.37
2	AB	333	G	N7-C5	-5.92	1.35	1.39
2	AB	338	G	C5-C4	-5.92	1.34	1.38
35	BA	986	U	P-O5'	5.92	1.65	1.59
35	BA	1076	U	C3'-O3'	-5.92	1.33	1.42
1	AA	50	A	P-O5'	-5.91	1.53	1.59
1	AA	93	C	O3'-P	5.91	1.68	1.61
2	AB	201	C	C5-C6	5.91	1.39	1.34
2	AB	1419	A	O3'-P	-5.91	1.54	1.61
2	AB	1891	G	N7-C5	-5.91	1.35	1.39
2	AB	2419	U	C4-C5	5.91	1.48	1.43
2	AB	2619	C	C3'-O3'	5.91	1.50	1.42
35	BA	454	G	C5'-C4'	5.91	1.58	1.51
35	BA	490	C	C4-N4	-5.91	1.28	1.33
35	BA	497	G	C2'-O2'	-5.91	1.33	1.41
35	BA	1430	A	C3'-C2'	5.91	1.59	1.52
2	AB	1689	A	P-O5'	5.91	1.65	1.59
2	AB	2144	G	O3'-P	5.91	1.68	1.61
2	AB	2144	G	N9-C4	-5.91	1.33	1.38
2	AB	582	A	N3-C4	-5.91	1.31	1.34
2	AB	665	U	C4-C5	5.91	1.48	1.43
2	AB	1368	G	N9-C8	-5.91	1.33	1.37
2	AB	1729	U	C4'-O4'	-5.91	1.37	1.45
2	AB	1755	A	C8-N7	-5.91	1.27	1.31
2	AB	2418	A	C6-N6	-5.91	1.29	1.33
2	AB	2569	G	N9-C4	-5.91	1.33	1.38
2	AB	2598	A	C8-N7	5.91	1.35	1.31
35	BA	515	G	C4'-O4'	-5.91	1.37	1.45
2	AB	356	G	O4'-C1'	5.91	1.49	1.41
2	AB	2302	U	C2-N3	5.91	1.41	1.37
2	AB	2531	A	C8-N7	5.91	1.35	1.31
2	AB	2856	A	C6-N1	5.91	1.39	1.35
49	BO	106	ARG	CZ-NH2	5.91	1.40	1.33
2	AB	1903	G	N1-C2	5.91	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2280	G	P-O5'	5.91	1.65	1.59
2	AB	2562	U	C3'-C2'	5.91	1.59	1.52
37	BC	37	U	C4'-C3'	5.91	1.59	1.53
42	BH	118	ASN	C-O	-5.91	1.12	1.23
2	AB	665	U	P-O5'	5.91	1.65	1.59
2	AB	1361	G	N9-C4	5.91	1.42	1.38
2	AB	2349	G	C4'-C3'	5.91	1.59	1.53
35	BA	13	U	C2-N3	5.91	1.41	1.37
35	BA	802	A	C4'-C3'	-5.91	1.46	1.52
35	BA	822	U	N1-C2	5.91	1.43	1.38
35	BA	1137	C	C5'-C4'	5.91	1.58	1.51
1	AA	102	G	C6-N1	-5.90	1.35	1.39
2	AB	593	U	N3-C4	5.90	1.43	1.38
2	AB	2091	C	N3-C4	5.90	1.38	1.33
2	AB	2400	G	C2-N2	5.90	1.40	1.34
2	AB	2869	G	C3'-C2'	5.90	1.59	1.52
35	BA	608	A	C8-N7	-5.90	1.27	1.31
35	BA	899	C	C4'-C3'	-5.90	1.46	1.52
1	AA	14	U	C4'-C3'	5.90	1.59	1.53
2	AB	486	C	O3'-P	-5.90	1.54	1.61
2	AB	1236	G	N3-C4	5.90	1.39	1.35
2	AB	1793	C	C4'-O4'	-5.90	1.37	1.45
2	AB	2138	G	C5'-C4'	5.90	1.58	1.51
2	AB	2833	U	N1-C6	-5.90	1.32	1.38
35	BA	468	A	O3'-P	5.90	1.68	1.61
35	BA	478	A	C2'-C1'	5.90	1.59	1.53
35	BA	761	G	C3'-O3'	5.90	1.50	1.42
35	BA	1161	C	P-O5'	-5.90	1.53	1.59
2	AB	105	C	C4'-O4'	-5.90	1.37	1.45
2	AB	528	A	N9-C4	5.90	1.41	1.37
2	AB	1369	G	N7-C5	5.90	1.42	1.39
2	AB	1538	G	N7-C5	5.90	1.42	1.39
2	AB	1839	G	C8-N7	-5.90	1.27	1.30
2	AB	2401	U	O4'-C1'	5.90	1.49	1.41
2	AB	2768	U	C3'-C2'	-5.90	1.46	1.52
35	BA	674	G	C3'-C2'	-5.90	1.46	1.52
36	BB	29	G	C2-N3	5.90	1.37	1.32
1	AA	29	A	N1-C2	-5.90	1.29	1.34
2	AB	232	G	C8-N7	-5.90	1.27	1.30
2	AB	675	A	C5'-C4'	5.90	1.58	1.51
2	AB	839	U	N1-C2	5.90	1.43	1.38
2	AB	1317	G	P-O5'	-5.90	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1391	U	C4'-O4'	-5.90	1.37	1.45
35	BA	63	C	C2-N3	5.90	1.40	1.35
35	BA	242	G	C6-N1	5.90	1.43	1.39
35	BA	825	A	N9-C8	-5.90	1.33	1.37
35	BA	976	G	C5-C6	5.90	1.48	1.42
2	AB	1249	U	C4-C5	5.90	1.48	1.43
2	AB	2493	U	C5'-C4'	5.90	1.58	1.51
35	BA	615	G	C2-N3	5.90	1.37	1.32
35	BA	1361	G	C5'-C4'	5.90	1.58	1.51
2	AB	928	A	N7-C5	-5.89	1.35	1.39
2	AB	1038	G	C4'-O4'	-5.89	1.37	1.45
2	AB	1996	C	N1-C6	5.89	1.40	1.37
2	AB	2832	U	P-O5'	5.89	1.65	1.59
2	AB	2877	G	C2-N2	-5.89	1.28	1.34
35	BA	650	G	C5'-C4'	5.89	1.58	1.51
35	BA	711	G	C5'-C4'	5.89	1.58	1.51
2	AB	93	G	C2'-C1'	5.89	1.59	1.53
2	AB	189	G	N9-C4	5.89	1.42	1.38
2	AB	354	A	C6-N6	5.89	1.38	1.33
2	AB	549	G	C2-N3	5.89	1.37	1.32
2	AB	1144	A	O3'-P	5.89	1.68	1.61
2	AB	1186	G	O3'-P	5.89	1.68	1.61
2	AB	1401	G	N9-C8	5.89	1.42	1.37
2	AB	1776	G	N9-C4	5.89	1.42	1.38
2	AB	2056	G	C5-C6	5.89	1.48	1.42
35	BA	122	G	N7-C5	5.89	1.42	1.39
35	BA	529	G	C5'-C4'	5.89	1.58	1.51
35	BA	679	C	C4-C5	5.89	1.47	1.43
35	BA	1012	A	C5'-C4'	5.89	1.58	1.51
35	BA	558	G	C4'-O4'	-5.89	1.37	1.45
35	BA	1310	G	C2'-C1'	5.89	1.59	1.53
2	AB	68	G	C8-N7	5.89	1.34	1.30
2	AB	294	A	C4'-O4'	-5.89	1.37	1.45
2	AB	483	A	C6-N1	-5.89	1.31	1.35
2	AB	794	A	C4'-C3'	-5.89	1.46	1.52
2	AB	1043	C	C2-O2	-5.89	1.19	1.24
2	AB	1354	A	C4'-O4'	-5.89	1.37	1.45
2	AB	1866	A	C5-C4	-5.89	1.34	1.38
2	AB	2133	G	C6-N1	5.89	1.43	1.39
35	BA	92	U	C5'-C4'	5.89	1.58	1.51
35	BA	870	U	N1-C2	5.89	1.43	1.38
35	BA	1297	G	P-O5'	5.89	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1486	G	N3-C4	5.89	1.39	1.35
2	AB	429	A	N3-C4	5.89	1.38	1.34
2	AB	1873	G	C3'-C2'	-5.89	1.46	1.52
2	AB	2064	C	O3'-P	5.89	1.68	1.61
2	AB	332	A	N9-C8	-5.89	1.33	1.37
2	AB	2068	U	C4'-O4'	-5.89	1.37	1.45
2	AB	2240	U	P-O5'	5.89	1.65	1.59
35	BA	721	G	O4'-C1'	5.89	1.49	1.41
2	AB	169	G	C6-O6	-5.88	1.18	1.24
2	AB	284	U	N1-C2	5.88	1.43	1.38
2	AB	711	G	N7-C5	5.88	1.42	1.39
2	AB	1012	U	P-O5'	-5.88	1.53	1.59
2	AB	1525	A	N7-C5	-5.88	1.35	1.39
2	AB	2289	G	P-OP1	5.88	1.58	1.49
35	BA	612	C	P-O5'	5.88	1.65	1.59
35	BA	713	G	O3'-P	5.88	1.68	1.61
2	AB	12	U	O4'-C1'	5.88	1.49	1.41
2	AB	48	G	O3'-P	5.88	1.68	1.61
2	AB	320	A	N9-C8	5.88	1.42	1.37
2	AB	510	C	O3'-P	5.88	1.68	1.61
2	AB	1069	A	P-O5'	5.88	1.65	1.59
2	AB	147	C	P-O5'	5.88	1.65	1.59
2	AB	696	G	N1-C2	5.88	1.42	1.37
2	AB	1522	A	C8-N7	-5.88	1.27	1.31
2	AB	1940	U	C2-N3	5.88	1.41	1.37
2	AB	2883	A	C4'-O4'	-5.88	1.38	1.45
35	BA	1005	A	C6-N1	5.88	1.39	1.35
37	BC	9	G	N7-C5	-5.88	1.35	1.39
2	AB	1254	A	N3-C4	-5.88	1.31	1.34
2	AB	1719	G	C8-N7	-5.88	1.27	1.30
2	AB	2450	A	O4'-C1'	5.88	1.49	1.41
35	BA	72	A	O4'-C1'	5.88	1.49	1.41
35	BA	1439	G	C5-C4	5.88	1.42	1.38
2	AB	192	C	C4-N4	-5.88	1.28	1.33
2	AB	690	G	N9-C8	5.88	1.42	1.37
2	AB	1036	G	P-O5'	5.88	1.65	1.59
2	AB	1045	C	C4'-O4'	-5.88	1.38	1.45
2	AB	1232	G	N3-C4	5.88	1.39	1.35
35	BA	490	C	N3-C4	5.88	1.38	1.33
35	BA	544	G	C3'-C2'	5.88	1.59	1.52
35	BA	608	A	P-O5'	5.88	1.65	1.59
35	BA	878	A	P-O5'	5.88	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1302	C	C5'-C4'	5.88	1.58	1.51
35	BA	1304	G	N3-C4	-5.88	1.31	1.35
49	BO	2	ARG	CZ-NH1	5.88	1.40	1.33
2	AB	1160	G	C8-N7	5.88	1.34	1.30
2	AB	1760	C	N1-C6	5.88	1.40	1.37
2	AB	2279	G	C5-C4	-5.88	1.34	1.38
2	AB	2776	A	C4'-O4'	-5.88	1.38	1.45
2	AB	2871	U	C4-C5	5.88	1.48	1.43
35	BA	1337	G	P-O5'	5.88	1.65	1.59
2	AB	1692	U	C5-C6	5.88	1.39	1.34
2	AB	2413	G	N3-C4	5.88	1.39	1.35
35	BA	61	G	N9-C4	-5.88	1.33	1.38
35	BA	1054	C	C3'-C2'	5.88	1.59	1.52
1	AA	34	A	C5-C6	5.87	1.46	1.41
2	AB	282	A	C6-N1	-5.87	1.31	1.35
2	AB	807	U	C2'-C1'	5.87	1.59	1.53
35	BA	496	A	N3-C4	5.87	1.38	1.34
35	BA	1189	U	C4-C5	5.87	1.48	1.43
2	AB	213	A	N9-C8	-5.87	1.33	1.37
2	AB	1123	C	N1-C6	5.87	1.40	1.37
2	AB	1219	U	C5-C6	5.87	1.39	1.34
2	AB	1582	C	C2-O2	-5.87	1.19	1.24
2	AB	2754	U	C5'-C4'	5.87	1.58	1.51
2	AB	2826	A	P-O5'	5.87	1.65	1.59
2	AB	2903	U	N1-C6	5.87	1.43	1.38
35	BA	403	C	N1-C2	-5.87	1.34	1.40
35	BA	682	G	C5-C6	5.87	1.48	1.42
35	BA	1161	C	C2'-O2'	-5.87	1.34	1.41
53	BS	59	GLU	CB-CG	5.87	1.63	1.52
53	BS	76	ARG	NE-CZ	5.87	1.40	1.33
2	AB	1919	A	C2'-C1'	5.87	1.59	1.53
2	AB	1943	U	C2-N3	5.87	1.41	1.37
2	AB	2135	A	N3-C4	5.87	1.38	1.34
35	BA	266	G	N1-C2	5.87	1.42	1.37
1	AA	58	A	N9-C4	-5.87	1.34	1.37
2	AB	1574	C	C4-C5	5.87	1.47	1.43
2	AB	1621	U	C5-C6	5.87	1.39	1.34
35	BA	171	A	C4'-O4'	-5.87	1.38	1.45
35	BA	700	G	N1-C2	5.87	1.42	1.37
35	BA	1094	G	N3-C4	5.87	1.39	1.35
2	AB	1115	G	P-O5'	5.87	1.65	1.59
2	AB	1930	G	P-O5'	5.87	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2054	A	O3'-P	5.87	1.68	1.61
35	BA	780	A	P-O5'	5.87	1.65	1.59
35	BA	1483	A	C5-C4	-5.87	1.34	1.38
2	AB	21	A	C2-N3	5.87	1.38	1.33
2	AB	1395	A	C6-N6	5.87	1.38	1.33
2	AB	1571	A	N7-C5	-5.87	1.35	1.39
2	AB	2038	G	N3-C4	5.87	1.39	1.35
2	AB	2306	C	C4'-O4'	-5.87	1.38	1.45
35	BA	65	A	P-O5'	5.87	1.65	1.59
35	BA	608	A	N3-C4	5.87	1.38	1.34
35	BA	1127	G	C4'-O4'	-5.87	1.38	1.45
1	AA	71	C	C2-O2	-5.86	1.19	1.24
2	AB	237	C	C2-N3	5.86	1.40	1.35
2	AB	347	A	C4'-O4'	-5.86	1.38	1.45
2	AB	1320	C	N1-C6	5.86	1.40	1.37
2	AB	1596	A	C2-N3	5.86	1.38	1.33
2	AB	1661	G	C5-C6	5.86	1.48	1.42
2	AB	2060	A	N3-C4	5.86	1.38	1.34
2	AB	2542	A	C3'-O3'	5.86	1.50	1.42
35	BA	280	C	C2'-C1'	-5.86	1.47	1.53
35	BA	359	G	C5'-C4'	5.86	1.58	1.51
35	BA	659	U	C5-C6	5.86	1.39	1.34
35	BA	1457	G	C8-N7	-5.86	1.27	1.30
2	AB	1640	A	O3'-P	5.86	1.68	1.61
2	AB	1997	C	C5-C6	-5.86	1.29	1.34
2	AB	2020	A	N9-C4	5.86	1.41	1.37
2	AB	93	G	N9-C4	-5.86	1.33	1.38
2	AB	528	A	P-O5'	5.86	1.65	1.59
2	AB	1562	U	C2'-C1'	5.86	1.59	1.53
2	AB	1784	A	C5-C4	-5.86	1.34	1.38
20	AT	2	TYR	CE2-CZ	5.86	1.46	1.38
27	A0	23	ARG	CD-NE	5.86	1.56	1.46
35	BA	8	A	N9-C4	5.86	1.41	1.37
35	BA	243	A	C6-N1	5.86	1.39	1.35
35	BA	254	G	N3-C4	5.86	1.39	1.35
35	BA	871	U	C2-N3	-5.86	1.33	1.37
35	BA	1116	U	N1-C6	5.86	1.43	1.38
35	BA	1258	G	C5-C4	5.86	1.42	1.38
2	AB	708	G	N3-C4	5.86	1.39	1.35
2	AB	849	A	C3'-C2'	5.86	1.59	1.52
2	AB	1173	U	N1-C2	5.86	1.43	1.38
35	BA	383	A	C5'-C4'	5.86	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2011	U	C2-N3	5.86	1.41	1.37
2	AB	2081	U	P-O5'	5.86	1.65	1.59
2	AB	2655	G	O3'-P	5.86	1.68	1.61
2	AB	2762	C	C5'-C4'	5.86	1.58	1.51
35	BA	21	G	C5-C6	-5.86	1.36	1.42
35	BA	802	A	C5'-C4'	5.86	1.58	1.51
35	BA	1100	C	C4'-C3'	-5.86	1.46	1.52
54	BT	22	TYR	CE2-CZ	5.86	1.46	1.38
2	AB	168	G	N9-C4	-5.86	1.33	1.38
2	AB	244	A	N7-C5	5.86	1.42	1.39
2	AB	377	G	C3'-C2'	5.86	1.59	1.52
2	AB	1104	C	C2-N3	5.86	1.40	1.35
2	AB	1255	U	N1-C2	5.86	1.43	1.38
2	AB	1377	G	C5'-C4'	5.86	1.58	1.51
2	AB	1512	C	P-O5'	5.86	1.65	1.59
31	A4	38	PHE	CG-CD2	5.86	1.47	1.38
35	BA	1371	G	N9-C8	-5.86	1.33	1.37
35	BA	1478	U	C4'-O4'	-5.86	1.38	1.45
2	AB	274	C	C4-C5	5.85	1.47	1.43
2	AB	775	G	C6-N1	5.85	1.43	1.39
2	AB	1967	C	C5'-C4'	5.85	1.58	1.51
2	AB	2487	G	N9-C8	5.85	1.42	1.37
35	BA	1360	A	P-O5'	5.85	1.65	1.59
2	AB	381	G	C6-N1	5.85	1.43	1.39
2	AB	494	G	N1-C2	5.85	1.42	1.37
2	AB	2071	A	O3'-P	5.85	1.68	1.61
2	AB	2465	C	O3'-P	5.85	1.68	1.61
2	AB	2465	C	N3-C4	5.85	1.38	1.33
35	BA	173	U	C2'-C1'	5.85	1.59	1.53
35	BA	1440	U	C4'-O4'	-5.85	1.38	1.45
2	AB	1058	U	C2-O2	5.85	1.27	1.22
2	AB	1830	C	C4'-O4'	-5.85	1.38	1.45
2	AB	2633	G	N9-C8	-5.85	1.33	1.37
35	BA	140	U	C2-N3	5.85	1.41	1.37
1	AA	106	G	P-O5'	5.85	1.65	1.59
2	AB	51	G	C5-C6	-5.85	1.36	1.42
2	AB	740	C	C5'-C4'	5.85	1.58	1.51
2	AB	1162	G	C4'-O4'	-5.85	1.38	1.45
2	AB	1486	U	C4'-C3'	5.85	1.59	1.53
2	AB	1689	A	N9-C8	-5.85	1.33	1.37
2	AB	1901	A	N3-C4	5.85	1.38	1.34
2	AB	2000	C	C4'-C3'	5.85	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2188	U	C4-O4	5.85	1.28	1.23
2	AB	2336	A	C4'-O4'	-5.85	1.38	1.45
2	AB	2699	C	C5'-C4'	5.85	1.58	1.51
2	AB	2802	G	C5'-C4'	5.85	1.58	1.51
2	AB	2864	G	C2-N3	5.85	1.37	1.32
35	BA	1360	A	C5-C4	-5.85	1.34	1.38
35	BA	1432	G	P-O5'	5.85	1.65	1.59
2	AB	1056	G	C2-N3	5.85	1.37	1.32
2	AB	2549	G	O3'-P	5.85	1.68	1.61
2	AB	2837	A	N7-C5	5.85	1.42	1.39
35	BA	676	A	C4'-O4'	-5.85	1.38	1.45
35	BA	1066	C	N3-C4	5.85	1.38	1.33
35	BA	1072	G	N7-C5	5.85	1.42	1.39
35	BA	1408	A	C5'-C4'	5.85	1.58	1.51
35	BA	188	C	N1-C6	5.85	1.40	1.37
35	BA	1352	C	N3-C4	5.85	1.38	1.33
36	BB	58	C	C4'-O4'	-5.85	1.38	1.45
2	AB	326	G	C8-N7	-5.84	1.27	1.30
2	AB	1430	G	N3-C4	5.84	1.39	1.35
2	AB	1778	U	O3'-P	-5.84	1.54	1.61
35	BA	306	A	C5'-C4'	5.84	1.58	1.51
35	BA	585	G	N3-C4	5.84	1.39	1.35
1	AA	10	G	N3-C4	-5.84	1.31	1.35
2	AB	915	C	C5-C6	5.84	1.39	1.34
2	AB	1645	G	N9-C4	5.84	1.42	1.38
2	AB	1945	G	C8-N7	5.84	1.34	1.30
2	AB	2262	U	C4'-C3'	-5.84	1.46	1.52
2	AB	330	A	N9-C4	5.84	1.41	1.37
2	AB	1509	A	C6-N1	-5.84	1.31	1.35
2	AB	1544	A	N3-C4	-5.84	1.31	1.34
2	AB	2209	G	C4'-C3'	-5.84	1.46	1.52
2	AB	2213	U	N1-C6	-5.84	1.32	1.38
2	AB	2827	C	C2-O2	-5.84	1.19	1.24
2	AB	2829	A	C5-C4	-5.84	1.34	1.38
35	BA	1364	U	O3'-P	5.84	1.68	1.61
35	BA	1403	C	C2'-C1'	5.84	1.59	1.53
1	AA	26	C	C4'-C3'	-5.84	1.46	1.52
2	AB	526	A	N3-C4	5.84	1.38	1.34
2	AB	727	A	C4'-O4'	-5.84	1.38	1.45
2	AB	848	C	N3-C4	5.84	1.38	1.33
2	AB	1030	C	C2-O2	-5.84	1.19	1.24
2	AB	1067	A	N3-C4	5.84	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2245	U	C5-C6	5.84	1.39	1.34
2	AB	2252	G	C6-N1	5.84	1.43	1.39
2	AB	2302	U	C4'-O4'	-5.84	1.38	1.45
2	AB	2332	C	C5'-C4'	5.84	1.58	1.51
2	AB	2722	G	N3-C4	5.84	1.39	1.35
2	AB	147	C	O3'-P	5.84	1.68	1.61
2	AB	730	A	C8-N7	-5.84	1.27	1.31
2	AB	1819	A	N9-C4	-5.84	1.34	1.37
2	AB	1928	A	C3'-C2'	5.84	1.59	1.52
35	BA	752	G	C2'-C1'	-5.84	1.47	1.53
2	AB	1115	G	C4'-C3'	5.84	1.59	1.53
2	AB	2563	U	O3'-P	5.84	1.68	1.61
35	BA	175	C	N3-C4	-5.84	1.29	1.33
35	BA	906	A	C2-N3	5.84	1.38	1.33
37	BC	60	A	N9-C4	5.84	1.41	1.37
2	AB	1699	G	N3-C4	5.83	1.39	1.35
2	AB	2812	G	C8-N7	-5.83	1.27	1.30
35	BA	688	G	N9-C8	5.83	1.42	1.37
2	AB	688	U	N1-C6	5.83	1.43	1.38
2	AB	1014	A	O3'-P	5.83	1.68	1.61
2	AB	1147	A	P-O5'	-5.83	1.53	1.59
2	AB	1898	U	C4'-O4'	-5.83	1.38	1.45
2	AB	2295	C	N3-C4	-5.83	1.29	1.33
2	AB	2588	G	C4'-C3'	5.83	1.59	1.53
35	BA	394	G	N9-C4	-5.83	1.33	1.38
35	BA	403	C	N3-C4	5.83	1.38	1.33
35	BA	1018	G	C2-N3	5.83	1.37	1.32
35	BA	1150	A	C6-N1	-5.83	1.31	1.35
2	AB	105	C	C4-C5	5.83	1.47	1.43
2	AB	444	C	C3'-C2'	5.83	1.59	1.52
2	AB	1106	G	C2'-C1'	-5.83	1.47	1.53
2	AB	1398	C	N1-C6	5.83	1.40	1.37
2	AB	1771	C	N1-C6	5.83	1.40	1.37
2	AB	2086	U	C2'-O2'	-5.83	1.34	1.41
2	AB	2088	A	N1-C2	5.83	1.39	1.34
2	AB	2112	G	N7-C5	5.83	1.42	1.39
2	AB	2877	G	C8-N7	5.83	1.34	1.30
35	BA	832	G	N9-C4	-5.83	1.33	1.38
2	AB	310	A	C4'-O4'	-5.83	1.38	1.45
2	AB	889	C	C3'-C2'	5.83	1.59	1.52
2	AB	1318	U	C5'-C4'	5.83	1.58	1.51
35	BA	1092	A	C6-N6	5.83	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	570	G	N7-C5	5.83	1.42	1.39
2	AB	2213	U	C2-N3	5.83	1.41	1.37
2	AB	2434	A	P-O5'	5.83	1.65	1.59
2	AB	2841	C	P-O5'	5.83	1.65	1.59
35	BA	243	A	C4'-C3'	5.83	1.59	1.53
35	BA	489	C	C4-C5	5.83	1.47	1.43
35	BA	700	G	C6-O6	5.83	1.29	1.24
2	AB	227	A	C4'-O4'	-5.83	1.38	1.45
2	AB	348	A	C6-N1	5.83	1.39	1.35
2	AB	2293	G	N1-C2	5.83	1.42	1.37
35	BA	750	C	C4-C5	5.83	1.47	1.43
35	BA	797	C	C4-C5	5.83	1.47	1.43
35	BA	921	U	C2-N3	5.83	1.41	1.37
2	AB	329	G	P-O5'	5.83	1.65	1.59
2	AB	451	U	N3-C4	5.83	1.43	1.38
2	AB	1536	C	O3'-P	5.83	1.68	1.61
2	AB	1715	G	C5'-C4'	5.83	1.58	1.51
2	AB	1786	A	N3-C4	5.83	1.38	1.34
2	AB	2156	G	C8-N7	-5.83	1.27	1.30
2	AB	2387	U	C5-C6	-5.83	1.28	1.34
35	BA	487	A	N3-C4	5.83	1.38	1.34
35	BA	1102	A	P-O5'	5.83	1.65	1.59
2	AB	165	A	C4'-O4'	-5.82	1.38	1.45
2	AB	499	U	O3'-P	5.82	1.68	1.61
2	AB	1051	G	P-O5'	5.82	1.65	1.59
2	AB	2160	C	O3'-P	5.82	1.68	1.61
35	BA	654	G	C5-C6	5.82	1.48	1.42
35	BA	667	G	C4'-C3'	5.82	1.59	1.53
35	BA	809	G	C5-C4	-5.82	1.34	1.38
35	BA	1281	C	N1-C6	5.82	1.40	1.37
36	BB	14	G	C6-N1	-5.82	1.35	1.39
35	BA	1131	G	C6-O6	-5.82	1.19	1.24
1	AA	85	G	N7-C5	5.82	1.42	1.39
2	AB	1524	G	O4'-C1'	5.82	1.49	1.41
2	AB	2539	C	C4-N4	-5.82	1.28	1.33
2	AB	2567	G	N3-C4	5.82	1.39	1.35
35	BA	709	U	C5'-C4'	5.82	1.58	1.51
35	BA	910	C	C4'-O4'	-5.82	1.38	1.45
2	AB	536	G	N1-C2	5.82	1.42	1.37
2	AB	1129	A	C6-N1	-5.82	1.31	1.35
2	AB	2882	A	C6-N1	5.82	1.39	1.35
35	BA	1153	G	N9-C8	-5.82	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1305	G	O4'-C1'	5.82	1.49	1.41
35	BA	1499	A	C4'-C3'	-5.82	1.46	1.52
1	AA	29	A	N3-C4	5.82	1.38	1.34
2	AB	71	A	N3-C4	5.82	1.38	1.34
2	AB	362	A	C3'-C2'	5.82	1.59	1.52
2	AB	418	C	O3'-P	5.82	1.68	1.61
2	AB	803	U	C2-N3	5.82	1.41	1.37
2	AB	1052	C	N3-C4	5.82	1.38	1.33
2	AB	1293	C	N1-C2	5.82	1.46	1.40
2	AB	1509	A	C6-N6	5.82	1.38	1.33
2	AB	2359	C	N1-C6	5.82	1.40	1.37
2	AB	2719	G	C2'-C1'	-5.82	1.47	1.53
18	AR	43	GLU	CD-OE1	-5.82	1.19	1.25
35	BA	339	C	C5-C6	5.82	1.39	1.34
35	BA	581	G	N7-C5	5.82	1.42	1.39
35	BA	583	A	C4'-O4'	-5.82	1.38	1.45
35	BA	1271	A	C5'-C4'	5.82	1.58	1.51
36	BB	18	A	P-O5'	5.82	1.65	1.59
2	AB	16	C	C2-O2	5.82	1.29	1.24
2	AB	1026	G	C2'-C1'	-5.82	1.47	1.53
2	AB	1119	U	O3'-P	5.82	1.68	1.61
2	AB	1290	C	C4'-C3'	5.82	1.59	1.53
2	AB	2193	G	N3-C4	5.82	1.39	1.35
35	BA	655	A	P-O5'	5.82	1.65	1.59
35	BA	863	U	C4-C5	5.82	1.48	1.43
49	BO	56	ARG	CD-NE	5.82	1.56	1.46
2	AB	560	C	C5'-C4'	5.81	1.58	1.51
2	AB	2210	U	C5-C6	5.81	1.39	1.34
2	AB	2336	A	N3-C4	5.81	1.38	1.34
2	AB	2875	C	C4'-O4'	-5.81	1.38	1.45
35	BA	748	G	C2-N3	5.81	1.37	1.32
2	AB	280	U	C4-C5	5.81	1.48	1.43
2	AB	1017	G	C2-N3	5.81	1.37	1.32
2	AB	1356	G	C8-N7	5.81	1.34	1.30
2	AB	1814	G	N7-C5	-5.81	1.35	1.39
2	AB	1892	C	C4'-C3'	-5.81	1.46	1.52
2	AB	2406	A	O3'-P	5.81	1.68	1.61
2	AB	2553	G	P-O5'	5.81	1.65	1.59
35	BA	662	U	C4'-C3'	5.81	1.59	1.53
35	BA	955	U	C2'-C1'	5.81	1.59	1.53
40	BF	75	TYR	CE2-CZ	5.81	1.46	1.38
35	BA	322	C	C4-C5	-5.81	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	101	A	C5-C4	5.81	1.42	1.38
2	AB	73	A	P-O5'	5.81	1.65	1.59
2	AB	615	U	C5'-C4'	5.81	1.58	1.51
2	AB	1227	G	C5'-C4'	5.81	1.58	1.51
2	AB	1733	G	N7-C5	-5.81	1.35	1.39
35	BA	131	A	N9-C4	-5.81	1.34	1.37
35	BA	776	G	O3'-P	5.81	1.68	1.61
35	BA	1275	A	C5-C4	5.81	1.42	1.38
35	BA	1359	C	C4'-C3'	-5.81	1.46	1.52
2	AB	620	G	C8-N7	-5.81	1.27	1.30
2	AB	1805	A	C6-N1	-5.81	1.31	1.35
2	AB	2364	C	C3'-C2'	5.81	1.59	1.52
2	AB	2506	U	C2-N3	5.81	1.41	1.37
35	BA	931	C	C5'-C4'	5.81	1.58	1.51
35	BA	1253	G	C3'-O3'	5.81	1.50	1.42
2	AB	89	A	C6-N6	5.81	1.38	1.33
2	AB	2095	A	O3'-P	-5.81	1.54	1.61
2	AB	2493	U	P-O5'	5.81	1.65	1.59
35	BA	375	U	C4'-C3'	5.81	1.59	1.53
2	AB	344	A	N9-C8	5.80	1.42	1.37
2	AB	410	G	C5'-C4'	5.80	1.58	1.51
2	AB	977	G	C5-C6	-5.80	1.36	1.42
2	AB	1127	A	C8-N7	-5.80	1.27	1.31
2	AB	1129	A	C6-N6	-5.80	1.29	1.33
2	AB	1385	A	C4'-C3'	5.80	1.59	1.53
2	AB	1911	PSU	O3'-P	5.80	1.68	1.61
2	AB	2388	A	N9-C8	5.80	1.42	1.37
35	BA	445	G	C6-N1	-5.80	1.35	1.39
35	BA	839	C	C2'-C1'	5.80	1.59	1.53
35	BA	1189	U	C4'-O4'	-5.80	1.38	1.45
35	BA	1270	G	N7-C5	5.80	1.42	1.39
1	AA	12	C	N1-C6	5.80	1.40	1.37
2	AB	588	U	C2-N3	5.80	1.41	1.37
2	AB	883	G	C4'-O4'	-5.80	1.38	1.45
2	AB	310	A	N9-C4	-5.80	1.34	1.37
2	AB	493	G	N9-C4	5.80	1.42	1.38
2	AB	979	A	C5'-C4'	5.80	1.58	1.51
2	AB	1626	A	P-O5'	5.80	1.65	1.59
2	AB	1767	G	N1-C2	5.80	1.42	1.37
35	BA	1097	C	N1-C6	5.80	1.40	1.37
2	AB	534	U	C2-N3	5.80	1.41	1.37
2	AB	1113	U	C2-O2	-5.80	1.17	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1937	A	N9-C8	-5.80	1.33	1.37
2	AB	1996	C	C4-C5	5.80	1.47	1.43
2	AB	2051	A	C4'-O4'	-5.80	1.38	1.45
2	AB	2759	G	C2-N3	5.80	1.37	1.32
35	BA	1274	A	C2'-O2'	5.80	1.49	1.41
36	BB	46	C	C2-N3	5.80	1.40	1.35
2	AB	1173	U	C2-N3	5.80	1.41	1.37
35	BA	841	C	C4-C5	5.80	1.47	1.43
35	BA	1542	A	N9-C4	5.80	1.41	1.37
36	BB	55	A	N9-C4	5.80	1.41	1.37
2	AB	685	A	C6-N1	5.80	1.39	1.35
2	AB	695	G	C2'-C1'	-5.80	1.47	1.53
2	AB	1119	U	N1-C2	5.80	1.43	1.38
2	AB	1705	A	C5'-C4'	5.80	1.58	1.51
2	AB	1899	A	N7-C5	-5.80	1.35	1.39
2	AB	2012	G	C8-N7	-5.80	1.27	1.30
35	BA	1398	A	N7-C5	5.80	1.42	1.39
2	AB	277	G	N1-C2	5.79	1.42	1.37
2	AB	1129	A	N9-C4	-5.79	1.34	1.37
35	BA	814	A	C3'-C2'	5.79	1.59	1.52
35	BA	1272	G	N9-C8	-5.79	1.33	1.37
1	AA	36	C	C2-O2	-5.79	1.19	1.24
1	AA	60	C	C4-C5	5.79	1.47	1.43
1	AA	118	C	N1-C6	5.79	1.40	1.37
2	AB	715	A	C6-N1	5.79	1.39	1.35
2	AB	1228	G	C4'-O4'	-5.79	1.38	1.45
2	AB	2483	C	O3'-P	5.79	1.68	1.61
2	AB	2530	A	N3-C4	5.79	1.38	1.34
35	BA	401	C	C5'-C4'	5.79	1.58	1.51
35	BA	778	G	C6-O6	-5.79	1.19	1.24
35	BA	1008	U	C5-C6	5.79	1.39	1.34
35	BA	1241	G	N3-C4	5.79	1.39	1.35
2	AB	437	U	N1-C6	5.79	1.43	1.38
2	AB	1446	C	C2-N3	5.79	1.40	1.35
2	AB	1578	U	N1-C6	5.79	1.43	1.38
2	AB	2373	G	C4'-O4'	-5.79	1.38	1.45
2	AB	2396	G	N3-C4	5.79	1.39	1.35
2	AB	2630	G	N7-C5	5.79	1.42	1.39
2	AB	2784	U	C2-N3	5.79	1.41	1.37
2	AB	2820	A	O3'-P	5.79	1.68	1.61
35	BA	281	G	C6-O6	-5.79	1.19	1.24
35	BA	300	A	N9-C4	-5.79	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	732	C	C2-O2	-5.79	1.19	1.24
35	BA	768	A	N7-C5	5.79	1.42	1.39
35	BA	1432	G	C2'-C1'	5.79	1.59	1.53
39	BE	17	TRP	CE3-CZ3	5.79	1.48	1.38
2	AB	364	C	C2-N3	5.79	1.40	1.35
2	AB	1307	A	C5'-C4'	5.79	1.58	1.51
35	BA	346	G	C5'-C4'	-5.79	1.44	1.51
35	BA	425	G	C5-C6	5.79	1.48	1.42
35	BA	968	A	C4'-O4'	-5.79	1.38	1.45
2	AB	117	G	O3'-P	5.79	1.68	1.61
2	AB	159	G	C6-N1	-5.79	1.35	1.39
2	AB	370	G	C8-N7	-5.79	1.27	1.30
2	AB	721	A	P-O5'	5.79	1.65	1.59
2	AB	1320	C	N3-C4	5.79	1.38	1.33
2	AB	1454	C	C5'-C4'	5.79	1.58	1.51
2	AB	1593	A	C5'-C4'	5.79	1.58	1.51
2	AB	1667	G	N7-C5	-5.79	1.35	1.39
2	AB	1945	G	C6-N1	-5.79	1.35	1.39
2	AB	2733	A	N9-C4	5.79	1.41	1.37
35	BA	567	G	N7-C5	5.79	1.42	1.39
35	BA	948	C	C4'-C3'	5.79	1.59	1.53
35	BA	1287	A	C5-C6	5.79	1.46	1.41
2	AB	1180	U	C4-C5	5.79	1.48	1.43
2	AB	1693	U	N1-C2	5.79	1.43	1.38
2	AB	1857	G	N7-C5	-5.79	1.35	1.39
2	AB	1970	A	C5-C4	-5.79	1.34	1.38
35	BA	855	U	C2-N3	-5.79	1.33	1.37
37	BC	51	U	N1-C6	5.79	1.43	1.38
2	AB	149	A	C3'-C2'	5.79	1.59	1.52
2	AB	209	C	N1-C6	5.79	1.40	1.37
2	AB	455	C	C4'-C3'	5.79	1.59	1.53
2	AB	743	A	C6-N6	-5.79	1.29	1.33
2	AB	1031	G	N7-C5	5.79	1.42	1.39
2	AB	1399	C	C3'-C2'	5.79	1.59	1.52
2	AB	1928	A	C5-C4	5.79	1.42	1.38
2	AB	2278	A	P-O5'	5.79	1.65	1.59
35	BA	212	G	C4'-O4'	-5.79	1.38	1.45
35	BA	467	U	N1-C2	5.79	1.43	1.38
35	BA	1085	U	C3'-C2'	5.79	1.59	1.52
35	BA	1239	A	P-O5'	5.79	1.65	1.59
2	AB	663	G	C2-N3	5.78	1.37	1.32
2	AB	1020	A	N3-C4	5.78	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1322	A	N9-C4	-5.78	1.34	1.37
2	AB	1937	A	C2'-O2'	-5.78	1.34	1.41
2	AB	2831	G	C2-N3	5.78	1.37	1.32
35	BA	50	A	N1-C2	-5.78	1.29	1.34
35	BA	349	A	C2-N3	-5.78	1.28	1.33
35	BA	951	G	O4'-C1'	5.78	1.49	1.41
35	BA	1434	A	C5'-C4'	5.78	1.58	1.51
2	AB	403	U	O3'-P	5.78	1.68	1.61
2	AB	437	U	C4-O4	-5.78	1.19	1.23
2	AB	1101	U	O3'-P	5.78	1.68	1.61
2	AB	1397	U	C4-C5	5.78	1.48	1.43
2	AB	2029	G	N1-C2	5.78	1.42	1.37
2	AB	2612	C	C2-N3	5.78	1.40	1.35
36	BB	28	U	C4'-O4'	-5.78	1.38	1.45
1	AA	87	U	C2-N3	5.78	1.41	1.37
2	AB	215	G	C5-C6	5.78	1.48	1.42
2	AB	336	C	C5-C6	5.78	1.39	1.34
2	AB	802	A	C6-N1	5.78	1.39	1.35
2	AB	1023	U	C2'-C1'	5.78	1.59	1.53
2	AB	1481	U	C5'-C4'	5.78	1.58	1.51
2	AB	2233	U	N3-C4	-5.78	1.33	1.38
2	AB	2478	A	N9-C8	5.78	1.42	1.37
2	AB	2761	A	C6-N6	5.78	1.38	1.33
2	AB	1739	A	N9-C4	5.78	1.41	1.37
22	AV	15	HIS	CB-CG	5.78	1.60	1.50
35	BA	1258	G	N3-C4	5.78	1.39	1.35
2	AB	25	U	C2'-C1'	-5.78	1.47	1.53
2	AB	173	A	C3'-C2'	5.78	1.59	1.52
2	AB	228	C	C2-O2	-5.78	1.19	1.24
2	AB	999	U	O3'-P	5.78	1.68	1.61
2	AB	2211	A	C6-N1	-5.78	1.31	1.35
2	AB	2307	G	C2-N2	5.78	1.40	1.34
35	BA	456	A	C3'-C2'	5.78	1.59	1.52
2	AB	1109	C	C5'-C4'	5.78	1.58	1.51
2	AB	1307	A	N9-C4	5.78	1.41	1.37
2	AB	1392	A	C5-C4	-5.78	1.34	1.38
2	AB	1717	A	C5-C4	-5.78	1.34	1.38
2	AB	2597	G	C2-N3	5.78	1.37	1.32
2	AB	2858	C	N1-C6	5.78	1.40	1.37
35	BA	608	A	N7-C5	5.78	1.42	1.39
35	BA	806	C	C4-C5	5.78	1.47	1.43
35	BA	1118	U	C4'-C3'	-5.78	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	951	C	C2-N3	5.77	1.40	1.35
2	AB	1411	U	O4'-C1'	5.77	1.49	1.41
35	BA	1238	A	N3-C4	5.77	1.38	1.34
2	AB	2318	G	C3'-C2'	-5.77	1.46	1.52
35	BA	212	G	P-O5'	5.77	1.65	1.59
35	BA	524	G	C4'-C3'	5.77	1.59	1.53
2	AB	41	C	C5-C6	5.77	1.39	1.34
2	AB	2553	G	C6-N1	-5.77	1.35	1.39
35	BA	187	G	C8-N7	-5.77	1.27	1.30
35	BA	196	A	N9-C4	5.77	1.41	1.37
2	AB	761	A	C5-C6	5.77	1.46	1.41
2	AB	1254	A	C6-N6	-5.77	1.29	1.33
2	AB	1487	U	C2-O2	5.77	1.27	1.22
2	AB	2210	U	C5'-C4'	5.77	1.58	1.51
2	AB	2608	G	C4'-O4'	-5.77	1.38	1.45
2	AB	2825	G	N7-C5	5.77	1.42	1.39
35	BA	68	G	C2-N3	5.77	1.37	1.32
35	BA	235	C	C4'-C3'	5.77	1.59	1.53
35	BA	709	U	C2'-O2'	5.77	1.49	1.41
35	BA	1483	A	O3'-P	5.77	1.68	1.61
2	AB	143	C	P-O5'	5.77	1.65	1.59
2	AB	473	G	N9-C4	5.77	1.42	1.38
2	AB	1054	A	N3-C4	5.77	1.38	1.34
2	AB	2209	G	C6-O6	-5.77	1.19	1.24
2	AB	2233	U	C3'-C2'	5.77	1.59	1.52
2	AB	2820	A	P-O5'	5.77	1.65	1.59
35	BA	235	C	C5-C6	5.77	1.39	1.34
35	BA	499	A	C5'-C4'	5.77	1.58	1.51
35	BA	579	A	O3'-P	5.77	1.68	1.61
2	AB	275	C	C4'-O4'	-5.77	1.38	1.45
2	AB	1453	A	N1-C2	5.77	1.39	1.34
2	AB	1753	G	C4'-O4'	-5.77	1.38	1.45
8	AH	111	PRO	N-CA	-5.77	1.37	1.47
35	BA	678	U	C4'-C3'	-5.77	1.46	1.52
35	BA	812	G	C2-N3	5.77	1.37	1.32
2	AB	911	A	N1-C2	-5.76	1.29	1.34
2	AB	939	G	P-O5'	5.76	1.65	1.59
2	AB	1166	G	N9-C8	-5.76	1.33	1.37
2	AB	1346	G	C2-N3	-5.76	1.28	1.32
35	BA	72	A	C6-N1	5.76	1.39	1.35
35	BA	331	G	C3'-C2'	-5.76	1.46	1.52
35	BA	779	C	C3'-O3'	5.76	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	950	U	C4'-C3'	5.76	1.59	1.53
36	BB	52	U	P-O5'	5.76	1.65	1.59
2	AB	216	A	C5-C4	-5.76	1.34	1.38
2	AB	1377	G	C4'-O4'	-5.76	1.38	1.45
35	BA	1094	G	N7-C5	-5.76	1.35	1.39
2	AB	1378	A	C8-N7	-5.76	1.27	1.31
2	AB	2156	G	N7-C5	-5.76	1.35	1.39
2	AB	2815	C	C2-N3	5.76	1.40	1.35
14	AN	41	ARG	CZ-NH1	5.76	1.40	1.33
35	BA	410	G	C3'-C2'	5.76	1.59	1.52
35	BA	470	C	N3-C4	5.76	1.38	1.33
35	BA	593	U	C5'-C4'	5.76	1.58	1.51
35	BA	842	U	C4-C5	5.76	1.48	1.43
35	BA	1291	U	C4'-C3'	5.76	1.59	1.53
35	BA	1398	A	C2'-O2'	-5.76	1.34	1.41
35	BA	1469	C	N3-C4	5.76	1.38	1.33
36	BB	32	U	C4'-O4'	-5.76	1.38	1.45
2	AB	39	G	P-O5'	5.76	1.65	1.59
2	AB	240	C	P-O5'	5.76	1.65	1.59
2	AB	1598	A	C4'-C3'	5.76	1.59	1.53
2	AB	1654	A	C5-C6	5.76	1.46	1.41
2	AB	2151	U	C2-N3	5.76	1.41	1.37
2	AB	2255	G	C2-N3	5.76	1.37	1.32
2	AB	2646	C	O4'-C1'	5.76	1.49	1.41
2	AB	2803	G	C2-N3	5.76	1.37	1.32
35	BA	1217	C	N1-C6	5.76	1.40	1.37
35	BA	1366	C	C3'-O3'	-5.76	1.34	1.42
35	BA	1480	A	C4'-O4'	-5.76	1.38	1.45
2	AB	1534	U	N1-C6	5.76	1.43	1.38
2	AB	1775	U	C4-O4	-5.76	1.19	1.23
2	AB	1969	A	N7-C5	5.76	1.42	1.39
35	BA	1403	C	C3'-C2'	-5.76	1.46	1.52
2	AB	904	G	C4'-O4'	-5.76	1.38	1.45
2	AB	1153	C	N3-C4	5.76	1.38	1.33
2	AB	1159	U	C5'-C4'	5.76	1.58	1.51
2	AB	1435	G	O3'-P	5.76	1.68	1.61
2	AB	1456	G	N3-C4	5.76	1.39	1.35
2	AB	1629	U	C2-N3	5.76	1.41	1.37
2	AB	2013	A	O3'-P	5.76	1.68	1.61
2	AB	2228	G	C5'-C4'	5.76	1.58	1.51
35	BA	357	G	C3'-O3'	5.76	1.50	1.42
35	BA	946	A	N7-C5	5.76	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	174	U	C5'-C4'	5.75	1.58	1.51
2	AB	393	C	P-O5'	-5.75	1.53	1.59
2	AB	851	C	P-O5'	5.75	1.65	1.59
2	AB	1625	C	C2-N3	5.75	1.40	1.35
2	AB	1690	A	C5-C6	5.75	1.46	1.41
2	AB	2610	C	C5'-C4'	5.75	1.58	1.51
35	BA	626	G	C4'-O4'	-5.75	1.38	1.45
35	BA	630	A	N3-C4	5.75	1.38	1.34
35	BA	664	G	C4'-C3'	-5.75	1.46	1.52
35	BA	1271	A	P-O5'	5.75	1.65	1.59
2	AB	789	A	N7-C5	5.75	1.42	1.39
2	AB	913	U	O3'-P	5.75	1.68	1.61
2	AB	1077	A	P-O5'	5.75	1.65	1.59
2	AB	2028	U	C2'-O2'	-5.75	1.34	1.41
2	AB	2295	C	N1-C6	5.75	1.40	1.37
2	AB	2409	G	C4'-O4'	-5.75	1.38	1.45
2	AB	2689	U	P-O5'	5.75	1.65	1.59
35	BA	104	G	N9-C8	-5.75	1.33	1.37
35	BA	340	U	C2'-C1'	-5.75	1.47	1.53
35	BA	1488	G	N1-C2	5.75	1.42	1.37
44	BJ	44	PHE	CE1-CZ	5.75	1.48	1.37
1	AA	35	C	N1-C6	5.75	1.40	1.37
2	AB	35	G	N9-C4	-5.75	1.33	1.38
2	AB	451	U	N1-C2	5.75	1.43	1.38
2	AB	479	A	C2'-O2'	-5.75	1.34	1.41
2	AB	598	U	C5'-C4'	5.75	1.58	1.51
2	AB	769	U	C5'-C4'	5.75	1.58	1.51
2	AB	989	G	C6-O6	-5.75	1.19	1.24
2	AB	1315	C	P-O5'	5.75	1.65	1.59
2	AB	1442	U	C2-N3	5.75	1.41	1.37
2	AB	2007	U	O3'-P	5.75	1.68	1.61
2	AB	2616	C	C4-C5	5.75	1.47	1.43
35	BA	96	U	C2'-C1'	5.75	1.59	1.53
35	BA	348	G	N1-C2	5.75	1.42	1.37
35	BA	725	G	N1-C2	5.75	1.42	1.37
35	BA	1352	C	C2-O2	-5.75	1.19	1.24
35	BA	1478	U	O3'-P	5.75	1.68	1.61
2	AB	1606	C	C5-C6	5.75	1.39	1.34
2	AB	2882	A	C5'-C4'	5.75	1.58	1.51
35	BA	532	A	N7-C5	-5.75	1.35	1.39
35	BA	535	A	N3-C4	5.75	1.38	1.34
35	BA	938	A	C5-C6	-5.75	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1139	G	C2-N3	5.75	1.37	1.32
1	AA	18	G	N7-C5	-5.75	1.35	1.39
2	AB	60	G	N7-C5	5.75	1.42	1.39
2	AB	313	G	C5'-C4'	5.75	1.58	1.51
2	AB	454	A	N9-C4	-5.75	1.34	1.37
2	AB	1229	C	C2'-C1'	5.75	1.59	1.53
2	AB	1586	A	N9-C4	5.75	1.41	1.37
2	AB	1897	G	C2'-C1'	-5.75	1.47	1.53
2	AB	2053	G	C5'-C4'	5.75	1.58	1.51
2	AB	2181	U	O3'-P	5.75	1.68	1.61
2	AB	2363	G	P-O5'	-5.75	1.54	1.59
2	AB	2635	A	O4'-C1'	5.75	1.49	1.41
2	AB	2710	C	C5-C6	5.75	1.39	1.34
35	BA	809	G	C4'-C3'	5.75	1.59	1.53
35	BA	970	C	P-O5'	5.75	1.65	1.59
2	AB	923	G	C5-C4	-5.75	1.34	1.38
2	AB	972	A	P-O5'	5.75	1.65	1.59
2	AB	1191	G	N7-C5	5.75	1.42	1.39
2	AB	1256	G	C6-N1	5.75	1.43	1.39
2	AB	1436	G	N9-C8	5.75	1.41	1.37
2	AB	1645	G	C2-N3	5.75	1.37	1.32
2	AB	1975	G	N3-C4	5.75	1.39	1.35
2	AB	2014	A	P-O5'	-5.75	1.54	1.59
2	AB	2123	G	O3'-P	5.75	1.68	1.61
2	AB	2149	U	C2-N3	5.75	1.41	1.37
2	AB	2569	G	N7-C5	-5.75	1.35	1.39
2	AB	2819	G	C3'-C2'	5.75	1.59	1.52
35	BA	451	A	C4'-O4'	-5.75	1.38	1.45
35	BA	1003	G	C5-C6	5.75	1.48	1.42
35	BA	1262	C	C2'-O2'	5.75	1.49	1.41
35	BA	1362	A	O3'-P	5.75	1.68	1.61
2	AB	491	G	C8-N7	-5.75	1.27	1.30
2	AB	854	C	C4-C5	5.75	1.47	1.43
2	AB	1876	A	N9-C4	5.75	1.41	1.37
2	AB	1932	A	C5'-C4'	5.75	1.58	1.51
2	AB	2055	C	P-O5'	5.75	1.65	1.59
35	BA	282	A	N9-C4	5.75	1.41	1.37
35	BA	688	G	N9-C4	5.75	1.42	1.38
2	AB	321	U	P-O5'	5.74	1.65	1.59
2	AB	333	G	C3'-C2'	5.74	1.59	1.52
2	AB	372	G	N7-C5	5.74	1.42	1.39
2	AB	1062	G	N7-C5	-5.74	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1473	G	N1-C2	-5.74	1.33	1.37
2	AB	1681	G	N7-C5	-5.74	1.35	1.39
2	AB	1840	G	N7-C5	5.74	1.42	1.39
2	AB	2398	U	C5'-C4'	5.74	1.58	1.51
35	BA	272	C	N1-C6	5.74	1.40	1.37
35	BA	1304	G	N7-C5	-5.74	1.35	1.39
1	AA	96	G	N1-C2	5.74	1.42	1.37
2	AB	437	U	C5'-C4'	5.74	1.58	1.51
2	AB	1349	C	C2-N3	5.74	1.40	1.35
2	AB	1984	G	C8-N7	-5.74	1.27	1.30
35	BA	503	C	O3'-P	-5.74	1.54	1.61
35	BA	1000	A	P-O5'	5.74	1.65	1.59
2	AB	158	U	C5-C6	5.74	1.39	1.34
2	AB	719	C	N1-C6	5.74	1.40	1.37
2	AB	891	G	N3-C4	5.74	1.39	1.35
2	AB	1033	U	O4'-C1'	-5.74	1.34	1.41
2	AB	2269	G	C2-N2	5.74	1.40	1.34
2	AB	2325	G	P-O5'	5.74	1.65	1.59
2	AB	2365	G	N7-C5	5.74	1.42	1.39
35	BA	1010	U	C4-C5	5.74	1.48	1.43
37	BC	17	C	C4'-C3'	-5.74	1.46	1.52
2	AB	647	G	C2'-O2'	-5.74	1.34	1.41
2	AB	1067	A	C5-C6	5.74	1.46	1.41
2	AB	1432	G	N9-C8	5.74	1.41	1.37
2	AB	1841	U	P-OP1	5.74	1.58	1.49
2	AB	1953	A	C5'-C4'	5.74	1.58	1.51
2	AB	2039	U	C4'-C3'	-5.74	1.46	1.52
6	AF	51	GLU	CG-CD	5.74	1.60	1.51
35	BA	156	C	O3'-P	5.74	1.68	1.61
35	BA	424	G	O3'-P	5.74	1.68	1.61
35	BA	793	U	C2-N3	5.74	1.41	1.37
35	BA	1379	G	C5-C6	5.74	1.48	1.42
2	AB	611	C	N1-C2	5.74	1.45	1.40
2	AB	2414	G	P-O5'	5.74	1.65	1.59
35	BA	1197	A	N3-C4	5.74	1.38	1.34
2	AB	1716	U	O3'-P	5.74	1.68	1.61
2	AB	1846	G	C6-O6	5.74	1.29	1.24
2	AB	1934	C	C4-C5	5.74	1.47	1.43
2	AB	2026	U	C4-O4	-5.74	1.19	1.23
2	AB	2153	C	N1-C6	5.74	1.40	1.37
2	AB	2469	A	C3'-C2'	5.74	1.59	1.52
2	AB	2551	C	P-O5'	5.74	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	128	G	C5-C4	-5.74	1.34	1.38
35	BA	186	C	C2-N3	5.74	1.40	1.35
35	BA	563	A	N7-C5	-5.74	1.35	1.39
37	BC	46	G	N3-C4	5.74	1.39	1.35
2	AB	2	G	N7-C5	-5.73	1.35	1.39
2	AB	1935	G	N9-C8	5.73	1.41	1.37
2	AB	2047	C	C2-N3	5.73	1.40	1.35
2	AB	2834	G	C6-O6	-5.73	1.19	1.24
35	BA	973	G	C5'-C4'	5.73	1.58	1.51
1	AA	56	G	C2-N3	5.73	1.37	1.32
2	AB	645	C	C4-C5	-5.73	1.38	1.43
2	AB	739	A	C6-N6	5.73	1.38	1.33
2	AB	808	G	O4'-C1'	-5.73	1.34	1.41
2	AB	889	C	N3-C4	5.73	1.38	1.33
2	AB	1329	U	C3'-O3'	5.73	1.50	1.42
2	AB	2373	G	N1-C2	5.73	1.42	1.37
2	AB	2674	G	N3-C4	5.73	1.39	1.35
16	AP	63	ARG	CZ-NH1	5.73	1.40	1.33
35	BA	362	G	C2-N3	5.73	1.37	1.32
35	BA	1513	A	C5'-C4'	5.73	1.58	1.51
2	AB	228	C	C2'-C1'	5.73	1.59	1.53
2	AB	789	A	C5-C4	-5.73	1.34	1.38
2	AB	1156	A	P-O5'	5.73	1.65	1.59
2	AB	1493	C	C2'-C1'	5.73	1.59	1.53
2	AB	1919	A	C5'-C4'	5.73	1.58	1.51
2	AB	2202	U	C2-O2	-5.73	1.17	1.22
2	AB	2533	U	C4'-O4'	-5.73	1.38	1.45
33	A6	50	SER	CA-CB	5.73	1.61	1.52
35	BA	326	G	C6-N1	5.73	1.43	1.39
35	BA	1034	G	C5-C4	-5.73	1.34	1.38
2	AB	2014	A	N7-C5	5.73	1.42	1.39
2	AB	2344	U	C2'-C1'	-5.73	1.47	1.53
2	AB	2464	G	N9-C8	-5.73	1.33	1.37
2	AB	564	C	C5'-C4'	5.73	1.58	1.51
35	BA	917	G	N1-C2	5.73	1.42	1.37
36	BB	42	U	C4'-O4'	-5.73	1.38	1.45
2	AB	470	A	C4'-O4'	-5.73	1.38	1.45
2	AB	881	G	N7-C5	5.73	1.42	1.39
2	AB	1139	G	C8-N7	-5.73	1.27	1.30
2	AB	1512	C	C3'-C2'	5.73	1.59	1.52
35	BA	49	U	C4-C5	5.73	1.48	1.43
35	BA	911	U	N1-C2	5.73	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	914	G	C6-N1	-5.72	1.35	1.39
2	AB	1264	A	C6-N6	5.72	1.38	1.33
2	AB	1510	G	N7-C5	-5.72	1.35	1.39
2	AB	1854	A	C2-N3	-5.72	1.28	1.33
2	AB	2136	G	C2-N3	5.72	1.37	1.32
2	AB	2139	U	C5'-C4'	5.72	1.58	1.51
2	AB	2184	A	C8-N7	5.72	1.35	1.31
2	AB	2407	A	C5-C4	5.72	1.42	1.38
6	AF	129	PRO	N-CD	-5.72	1.39	1.47
35	BA	538	G	C6-N1	5.72	1.43	1.39
35	BA	546	A	N3-C4	5.72	1.38	1.34
35	BA	547	A	N3-C4	-5.72	1.31	1.34
2	AB	46	G	N7-C5	-5.72	1.35	1.39
2	AB	121	G	O4'-C1'	5.72	1.49	1.41
2	AB	703	U	P-O5'	5.72	1.65	1.59
2	AB	1063	G	C5-C6	5.72	1.48	1.42
2	AB	1301	A	C2'-C1'	5.72	1.59	1.53
2	AB	1857	G	C5-C6	-5.72	1.36	1.42
2	AB	2376	A	N7-C5	-5.72	1.35	1.39
2	AB	2867	G	N9-C4	5.72	1.42	1.38
35	BA	79	G	P-O5'	-5.72	1.54	1.59
51	BQ	51	SER	CA-CB	5.72	1.61	1.52
2	AB	127	A	P-O5'	5.72	1.65	1.59
2	AB	363	G	C5-C6	-5.72	1.36	1.42
2	AB	586	A	N7-C5	-5.72	1.35	1.39
2	AB	602	A	C4'-C3'	5.72	1.59	1.53
2	AB	714	U	C1'-N1	5.72	1.57	1.48
2	AB	833	A	N9-C8	5.72	1.42	1.37
2	AB	963	U	C3'-C2'	5.72	1.59	1.52
2	AB	1121	C	N1-C6	5.72	1.40	1.37
2	AB	1194	A	P-O5'	-5.72	1.54	1.59
2	AB	1676	A	C5-C6	5.72	1.46	1.41
2	AB	2462	C	N3-C4	5.72	1.38	1.33
2	AB	2637	U	O4'-C1'	5.72	1.49	1.41
35	BA	377	G	C6-O6	-5.72	1.19	1.24
35	BA	630	A	C5'-C4'	5.72	1.58	1.51
35	BA	798	U	C3'-C2'	-5.72	1.46	1.52
35	BA	944	G	C4'-C3'	5.72	1.59	1.53
35	BA	1320	C	C2-O2	-5.72	1.19	1.24
35	BA	181	A	P-O5'	5.72	1.65	1.59
35	BA	1172	C	N1-C6	5.72	1.40	1.37
35	BA	1401	G	O4'-C1'	5.72	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	159	G	C2'-C1'	5.72	1.59	1.53
2	AB	223	A	N3-C4	5.72	1.38	1.34
2	AB	1527	G	C8-N7	-5.72	1.27	1.30
2	AB	2003	A	C4'-O4'	-5.72	1.38	1.45
35	BA	510	A	C8-N7	-5.72	1.27	1.31
35	BA	557	G	C6-O6	-5.72	1.19	1.24
35	BA	905	U	C4'-C3'	-5.72	1.46	1.52
35	BA	1396	A	N9-C4	5.72	1.41	1.37
1	AA	69	G	C2-N3	5.71	1.37	1.32
2	AB	90	U	P-O5'	5.71	1.65	1.59
2	AB	1465	G	C6-O6	-5.71	1.19	1.24
2	AB	1849	G	C5'-C4'	5.71	1.58	1.51
2	AB	2288	A	N3-C4	5.71	1.38	1.34
8	AH	150	TYR	CE1-CZ	5.71	1.46	1.38
35	BA	351	G	N7-C5	5.71	1.42	1.39
35	BA	397	A	N9-C4	5.71	1.41	1.37
35	BA	430	A	C6-N6	5.71	1.38	1.33
35	BA	591	U	C5-C6	5.71	1.39	1.34
35	BA	826	C	P-O5'	5.71	1.65	1.59
35	BA	1441	A	N7-C5	5.71	1.42	1.39
37	BC	73	A	C2-N3	-5.71	1.28	1.33
2	AB	29	U	C2-O2	5.71	1.27	1.22
2	AB	2017	U	N1-C2	5.71	1.43	1.38
2	AB	2507	C	N3-C4	5.71	1.38	1.33
35	BA	629	A	N3-C4	5.71	1.38	1.34
2	AB	547	A	N9-C4	5.71	1.41	1.37
2	AB	793	A	C5-C4	5.71	1.42	1.38
2	AB	1329	U	P-O5'	5.71	1.65	1.59
2	AB	1417	C	C5-C6	5.71	1.39	1.34
2	AB	1543	G	C5-C6	5.71	1.48	1.42
2	AB	2330	G	N9-C8	-5.71	1.33	1.37
35	BA	328	C	N3-C4	5.71	1.38	1.33
35	BA	449	G	N9-C4	5.71	1.42	1.38
35	BA	1427	C	C5'-C4'	5.71	1.58	1.51
40	BF	102	TYR	CE2-CZ	5.71	1.46	1.38
2	AB	377	G	N9-C4	-5.71	1.33	1.38
2	AB	558	U	C4'-O4'	-5.71	1.38	1.45
35	BA	429	U	C2-O2	5.71	1.27	1.22
35	BA	1009	U	C4'-O4'	-5.71	1.38	1.45
2	AB	2701	U	C2-N3	5.71	1.41	1.37
2	AB	2744	G	C2'-O2'	5.71	1.49	1.41
35	BA	16	A	C5'-C4'	5.71	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	137	U	C5'-C4'	5.71	1.58	1.51
35	BA	660	C	C2-N3	5.71	1.40	1.35
35	BA	845	A	C2'-O2'	5.71	1.49	1.41
35	BA	1068	G	C4'-O4'	-5.71	1.38	1.45
2	AB	382	A	C3'-O3'	5.71	1.50	1.42
2	AB	953	G	C3'-C2'	-5.71	1.46	1.52
2	AB	1416	G	N3-C4	5.71	1.39	1.35
2	AB	1821	A	N7-C5	-5.71	1.35	1.39
2	AB	2349	G	C6-N1	5.71	1.43	1.39
35	BA	74	A	C5'-C4'	5.71	1.58	1.51
35	BA	315	A	N7-C5	-5.71	1.35	1.39
35	BA	589	U	N1-C6	5.71	1.43	1.38
36	BB	41	A	C5-C4	-5.71	1.34	1.38
43	BI	176	TYR	CB-CG	5.71	1.60	1.51
2	AB	1382	G	C5'-C4'	5.71	1.58	1.51
35	BA	522	C	C5'-C4'	5.71	1.58	1.51
35	BA	1346	A	C5-C4	-5.71	1.34	1.38
35	BA	1471	U	O5'-C5'	-5.71	1.33	1.42
2	AB	426	C	N3-C4	5.70	1.38	1.33
2	AB	1087	G	C5'-C4'	5.70	1.58	1.51
2	AB	1347	A	P-O5'	5.70	1.65	1.59
35	BA	196	A	C4'-O4'	-5.70	1.38	1.45
35	BA	239	U	N3-C4	5.70	1.43	1.38
35	BA	648	A	C5-C4	-5.70	1.34	1.38
35	BA	1110	A	C6-N1	5.70	1.39	1.35
1	AA	75	G	C6-O6	-5.70	1.19	1.24
2	AB	61	C	N3-C4	5.70	1.38	1.33
2	AB	1511	G	C6-N1	5.70	1.43	1.39
2	AB	2138	G	N7-C5	-5.70	1.35	1.39
35	BA	1532	U	N1-C2	5.70	1.43	1.38
2	AB	68	G	C2-N3	5.70	1.37	1.32
2	AB	409	G	C6-O6	-5.70	1.19	1.24
2	AB	552	U	C2-N3	5.70	1.41	1.37
2	AB	780	G	C3'-C2'	5.70	1.59	1.52
2	AB	900	A	P-O5'	5.70	1.65	1.59
2	AB	1210	G	C5'-C4'	-5.70	1.44	1.51
2	AB	1452	G	C6-N1	5.70	1.43	1.39
2	AB	1914	C	C3'-C2'	5.70	1.59	1.52
2	AB	2032	G	C2'-C1'	-5.70	1.47	1.53
35	BA	360	G	P-O5'	5.70	1.65	1.59
35	BA	758	C	C5-C6	5.70	1.39	1.34
35	BA	1382	C	C2-N3	-5.70	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	294	A	C4'-C3'	-5.70	1.46	1.52
2	AB	786	C	O3'-P	5.70	1.68	1.61
2	AB	838	C	C2-N3	5.70	1.40	1.35
2	AB	1308	A	C4'-C3'	5.70	1.59	1.53
35	BA	1520	C	C4-C5	-5.70	1.38	1.43
1	AA	47	C	C5'-C4'	5.70	1.58	1.51
2	AB	2113	U	N1-C2	5.70	1.43	1.38
2	AB	2237	G	N9-C4	5.70	1.42	1.38
2	AB	617	G	C2'-C1'	-5.70	1.47	1.53
2	AB	1865	U	P-O5'	5.70	1.65	1.59
35	BA	884	U	C4'-O4'	-5.70	1.38	1.45
35	BA	1539	C	P-O5'	5.70	1.65	1.59
2	AB	487	C	O4'-C1'	5.69	1.49	1.41
2	AB	1739	A	O3'-P	5.69	1.68	1.61
1	AA	9	G	N3-C4	5.69	1.39	1.35
2	AB	17	G	C8-N7	-5.69	1.27	1.30
2	AB	41	C	O3'-P	5.69	1.68	1.61
2	AB	212	G	N9-C4	5.69	1.42	1.38
2	AB	694	U	N1-C2	5.69	1.43	1.38
2	AB	1111	A	O4'-C1'	5.69	1.49	1.41
2	AB	2464	G	O3'-P	-5.69	1.54	1.61
35	BA	353	A	O4'-C1'	-5.69	1.34	1.41
35	BA	383	A	C3'-O3'	5.69	1.50	1.42
35	BA	972	C	N1-C6	5.69	1.40	1.37
35	BA	1015	G	N3-C4	5.69	1.39	1.35
35	BA	1143	G	C2'-C1'	5.69	1.59	1.53
35	BA	1143	G	N9-C8	-5.69	1.33	1.37
2	AB	972	A	N7-C5	5.69	1.42	1.39
2	AB	1193	G	C6-O6	-5.69	1.19	1.24
2	AB	1973	G	C3'-C2'	5.69	1.59	1.52
2	AB	1973	G	N7-C5	5.69	1.42	1.39
35	BA	879	C	C5-C6	5.69	1.39	1.34
35	BA	1044	A	N9-C4	5.69	1.41	1.37
2	AB	574	A	C3'-C2'	-5.69	1.46	1.52
2	AB	1010	A	C5'-C4'	5.69	1.58	1.51
2	AB	2568	U	C2-O2	-5.69	1.17	1.22
2	AB	1695	G	N7-C5	5.69	1.42	1.39
2	AB	2090	A	C4'-O4'	-5.69	1.38	1.45
2	AB	2879	A	C6-N1	5.69	1.39	1.35
35	BA	453	G	N9-C4	5.69	1.42	1.38
2	AB	1211	C	C5'-C4'	5.69	1.58	1.51
2	AB	1950	G	O3'-P	5.69	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2053	G	N9-C8	-5.69	1.33	1.37
21	AU	88	ARG	NE-CZ	5.69	1.40	1.33
35	BA	118	U	C2-N3	5.69	1.41	1.37
35	BA	566	G	O3'-P	5.69	1.68	1.61
2	AB	1745	A	C5-C4	-5.68	1.34	1.38
2	AB	1830	C	C5'-C4'	5.68	1.58	1.51
35	BA	502	A	C4'-O4'	-5.68	1.38	1.45
35	BA	643	C	C4'-C3'	5.68	1.59	1.53
35	BA	952	U	N1-C2	5.68	1.43	1.38
2	AB	574	A	P-O5'	5.68	1.65	1.59
2	AB	1460	U	C5'-C4'	5.68	1.58	1.51
2	AB	1717	A	N1-C2	5.68	1.39	1.34
2	AB	2660	A	C5'-C4'	5.68	1.58	1.51
2	AB	2751	G	N3-C4	5.68	1.39	1.35
35	BA	568	G	P-O5'	-5.68	1.54	1.59
35	BA	1216	A	C4'-O4'	-5.68	1.38	1.45
35	BA	1346	A	C2'-C1'	5.68	1.59	1.53
37	BC	41	C	C4'-C3'	-5.68	1.46	1.52
39	BE	126	ARG	CZ-NH1	5.68	1.40	1.33
2	AB	1201	U	C2'-C1'	5.68	1.59	1.53
2	AB	1358	G	N9-C4	5.68	1.42	1.38
2	AB	1537	G	O3'-P	5.68	1.68	1.61
2	AB	1721	G	C8-N7	5.68	1.34	1.30
2	AB	2286	G	C6-O6	-5.68	1.19	1.24
2	AB	2892	G	C6-O6	-5.68	1.19	1.24
23	AW	61	GLU	CB-CG	5.68	1.62	1.52
35	BA	1012	A	C8-N7	-5.68	1.27	1.31
36	BB	40	G	C5-C6	5.68	1.48	1.42
2	AB	173	A	C5-C4	5.68	1.42	1.38
2	AB	709	U	C5'-C4'	5.68	1.58	1.51
2	AB	1107	G	C6-N1	5.68	1.43	1.39
2	AB	2234	G	C2-N3	5.68	1.37	1.32
2	AB	2426	A	N7-C5	-5.68	1.35	1.39
2	AB	2725	A	C4'-O4'	-5.68	1.38	1.45
35	BA	310	G	C6-N1	5.68	1.43	1.39
35	BA	710	G	N7-C5	5.68	1.42	1.39
35	BA	1058	G	C4'-O4'	-5.68	1.38	1.45
2	AB	538	A	C5-C4	5.68	1.42	1.38
2	AB	818	G	C6-N1	-5.68	1.35	1.39
2	AB	2509	G	N7-C5	-5.68	1.35	1.39
2	AB	2628	C	C5'-C4'	5.68	1.58	1.51
2	AB	2725	A	C6-N6	-5.68	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	891	U	C5'-C4'	5.68	1.58	1.51
1	AA	86	G	N3-C4	5.68	1.39	1.35
2	AB	101	A	C3'-C2'	5.68	1.59	1.52
2	AB	453	A	C3'-O3'	5.68	1.50	1.42
2	AB	917	A	P-O5'	5.68	1.65	1.59
2	AB	2164	C	N3-C4	5.68	1.38	1.33
2	AB	2263	C	O4'-C1'	5.68	1.49	1.41
2	AB	2310	C	O3'-P	-5.68	1.54	1.61
2	AB	2329	U	C4-C5	5.68	1.48	1.43
2	AB	2375	G	C2'-C1'	5.68	1.59	1.53
2	AB	2549	G	C6-O6	-5.68	1.19	1.24
2	AB	2670	A	C5-C6	-5.68	1.35	1.41
35	BA	304	U	C2-O2	5.68	1.27	1.22
35	BA	373	A	C6-N1	5.68	1.39	1.35
35	BA	1124	G	C4'-C3'	-5.68	1.46	1.52
2	AB	27	G	O3'-P	5.67	1.68	1.61
2	AB	75	G	N9-C8	5.67	1.41	1.37
2	AB	241	A	N3-C4	5.67	1.38	1.34
2	AB	426	C	N1-C6	5.67	1.40	1.37
2	AB	518	G	C2'-C1'	5.67	1.59	1.53
2	AB	736	C	P-O5'	5.67	1.65	1.59
2	AB	1311	G	C5-C4	5.67	1.42	1.38
2	AB	2555	U	C4-C5	5.67	1.48	1.43
35	BA	104	G	C6-O6	5.67	1.29	1.24
35	BA	111	G	C2-N3	5.67	1.37	1.32
35	BA	137	U	C2-N3	5.67	1.41	1.37
35	BA	147	G	C5'-C4'	5.67	1.58	1.51
2	AB	35	G	N9-C8	-5.67	1.33	1.37
2	AB	36	G	N7-C5	5.67	1.42	1.39
2	AB	66	C	N1-C6	5.67	1.40	1.37
2	AB	466	A	N9-C4	5.67	1.41	1.37
35	BA	709	U	P-O5'	5.67	1.65	1.59
37	BC	44	A	C5-C6	5.67	1.46	1.41
1	AA	88	C	C4-C5	5.67	1.47	1.43
2	AB	331	C	C5'-C4'	5.67	1.58	1.51
2	AB	920	A	C5-C6	5.67	1.46	1.41
2	AB	1578	U	C4'-O4'	-5.67	1.38	1.45
2	AB	1886	U	C4-C5	5.67	1.48	1.43
2	AB	1977	A	O3'-P	-5.67	1.54	1.61
2	AB	2406	A	N7-C5	5.67	1.42	1.39
2	AB	2724	U	O3'-P	5.67	1.68	1.61
2	AB	2852	G	N1-C2	5.67	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	859	G	C6-O6	-5.67	1.19	1.24
37	BC	65	G	C6-N1	-5.67	1.35	1.39
2	AB	258	G	N7-C5	5.67	1.42	1.39
2	AB	1291	C	C4-C5	5.67	1.47	1.43
2	AB	2323	G	C2'-C1'	-5.67	1.47	1.53
2	AB	2375	G	C2-N3	5.67	1.37	1.32
2	AB	2453	A	C5'-C4'	5.67	1.58	1.51
2	AB	2602	A	C4'-O4'	-5.67	1.38	1.45
35	BA	181	A	N7-C5	5.67	1.42	1.39
35	BA	805	C	C4-C5	5.67	1.47	1.43
1	AA	19	C	C2-N3	5.67	1.40	1.35
2	AB	306	U	C4-C5	5.67	1.48	1.43
2	AB	600	G	O4'-C1'	5.67	1.49	1.41
35	BA	495	A	P-O5'	5.67	1.65	1.59
35	BA	514	C	C4-N4	-5.67	1.28	1.33
35	BA	869	G	N7-C5	-5.67	1.35	1.39
2	AB	304	U	C2'-C1'	5.67	1.59	1.53
2	AB	1167	C	P-O5'	5.67	1.65	1.59
35	BA	809	G	C2-N3	5.67	1.37	1.32
35	BA	822	U	C2'-C1'	-5.67	1.47	1.53
1	AA	105	G	C5-C4	-5.66	1.34	1.38
2	AB	118	A	C6-N6	-5.66	1.29	1.33
2	AB	263	G	C2'-C1'	-5.66	1.47	1.53
2	AB	801	G	N7-C5	5.66	1.42	1.39
2	AB	801	G	N9-C4	5.66	1.42	1.38
2	AB	1029	A	C5-C4	-5.66	1.34	1.38
2	AB	2153	C	C2-N3	5.66	1.40	1.35
2	AB	2218	G	C4'-O4'	-5.66	1.38	1.45
2	AB	2881	U	O4'-C1'	5.66	1.49	1.41
35	BA	94	G	N9-C8	5.66	1.41	1.37
35	BA	1130	A	C6-N6	5.66	1.38	1.33
2	AB	795	C	C4'-O4'	-5.66	1.38	1.45
2	AB	2187	U	N1-C2	5.66	1.43	1.38
2	AB	2437	G	O3'-P	5.66	1.68	1.61
39	BE	57	GLU	CG-CD	5.66	1.60	1.51
2	AB	1003	G	C5-C4	5.66	1.42	1.38
2	AB	2304	G	N7-C5	5.66	1.42	1.39
2	AB	2488	G	P-O5'	5.66	1.65	1.59
2	AB	2765	A	P-O5'	5.66	1.65	1.59
5	AE	45	TYR	CE1-CZ	5.66	1.46	1.38
35	BA	508	U	C2-N3	5.66	1.41	1.37
35	BA	885	G	N7-C5	-5.66	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1538	C	C5-C6	5.66	1.38	1.34
2	AB	492	A	C5-C4	5.66	1.42	1.38
2	AB	1579	A	C5-C6	5.66	1.46	1.41
2	AB	1658	C	N1-C6	5.66	1.40	1.37
2	AB	1733	G	C2'-C1'	-5.66	1.47	1.53
2	AB	2020	A	C2'-C1'	5.66	1.59	1.53
2	AB	2450	A	C4'-O4'	-5.66	1.38	1.45
35	BA	71	A	N7-C5	5.66	1.42	1.39
35	BA	398	U	C4'-O4'	-5.66	1.38	1.45
35	BA	1380	U	C5-C6	5.66	1.39	1.34
35	BA	1491	G	N3-C4	5.66	1.39	1.35
2	AB	1340	U	N1-C2	5.66	1.43	1.38
2	AB	1770	G	C5'-C4'	5.66	1.58	1.51
2	AB	2482	A	C4'-O4'	-5.66	1.38	1.45
2	AB	2748	A	N9-C8	5.66	1.42	1.37
35	BA	266	G	N9-C8	5.66	1.41	1.37
2	AB	868	U	C4'-O4'	-5.66	1.38	1.45
2	AB	1425	G	N7-C5	-5.66	1.35	1.39
2	AB	1488	C	P-O5'	5.66	1.65	1.59
35	BA	405	U	C5'-C4'	5.66	1.58	1.51
35	BA	682	G	N3-C4	5.66	1.39	1.35
35	BA	688	G	N1-C2	5.66	1.42	1.37
2	AB	742	A	C5-C6	-5.65	1.35	1.41
2	AB	2002	G	C2'-C1'	5.65	1.59	1.53
2	AB	2826	A	N3-C4	5.65	1.38	1.34
35	BA	525	C	C4-N4	-5.65	1.28	1.33
35	BA	1260	G	P-O5'	5.65	1.65	1.59
2	AB	91	A	N9-C4	5.65	1.41	1.37
2	AB	1633	G	P-O5'	5.65	1.65	1.59
2	AB	2136	G	N7-C5	-5.65	1.35	1.39
2	AB	2210	U	N1-C2	5.65	1.43	1.38
2	AB	2657	A	O4'-C1'	5.65	1.49	1.41
2	AB	2882	A	C4'-C3'	5.65	1.59	1.53
35	BA	543	U	P-O5'	5.65	1.65	1.59
35	BA	1045	C	C5'-C4'	5.65	1.58	1.51
35	BA	1105	A	O4'-C1'	5.65	1.49	1.41
35	BA	1432	G	C5'-C4'	5.65	1.58	1.51
1	AA	34	A	C5-C4	5.65	1.42	1.38
2	AB	956	G	C6-N1	-5.65	1.35	1.39
2	AB	1105	U	O4'-C1'	5.65	1.49	1.41
2	AB	1284	A	N3-C4	5.65	1.38	1.34
2	AB	2172	U	C2-O2	5.65	1.27	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	502	A	C4'-C3'	-5.65	1.47	1.52
35	BA	668	G	C6-O6	5.65	1.29	1.24
35	BA	866	C	C4'-O4'	-5.65	1.38	1.45
35	BA	1108	G	C4'-O4'	-5.65	1.38	1.45
35	BA	1298	U	C4-C5	5.65	1.48	1.43
1	AA	45	A	N9-C4	5.65	1.41	1.37
2	AB	1965	C	C2-N3	5.65	1.40	1.35
35	BA	210	C	C5'-C4'	5.65	1.58	1.51
35	BA	230	G	N7-C5	-5.65	1.35	1.39
35	BA	444	G	N1-C2	5.65	1.42	1.37
2	AB	538	A	N3-C4	5.65	1.38	1.34
2	AB	545	U	C2-N3	5.65	1.41	1.37
2	AB	1230	A	C2'-C1'	-5.65	1.47	1.53
2	AB	1636	U	C5-C6	5.65	1.39	1.34
2	AB	1638	C	C3'-C2'	-5.65	1.46	1.52
2	AB	1804	C	C5'-C4'	5.65	1.58	1.51
2	AB	2223	G	C6-N1	5.65	1.43	1.39
2	AB	2366	A	C5'-C4'	5.65	1.58	1.51
2	AB	2473	U	C2-O2	-5.65	1.17	1.22
2	AB	2530	A	N7-C5	5.65	1.42	1.39
35	BA	692	U	C3'-C2'	5.65	1.59	1.52
2	AB	457	A	P-O5'	5.65	1.65	1.59
2	AB	1152	C	C5'-C4'	5.65	1.58	1.51
2	AB	1734	G	C2-N3	5.65	1.37	1.32
29	A2	63	ARG	CZ-NH1	5.65	1.40	1.33
35	BA	426	U	C4-C5	5.65	1.48	1.43
2	AB	865	C	N3-C4	5.64	1.38	1.33
2	AB	2238	G	C2-N3	5.64	1.37	1.32
2	AB	2832	U	N1-C6	5.64	1.43	1.38
35	BA	427	U	O3'-P	5.64	1.68	1.61
35	BA	916	U	N1-C2	5.64	1.43	1.38
2	AB	804	A	C8-N7	-5.64	1.27	1.31
2	AB	837	C	C2'-C1'	5.64	1.59	1.53
2	AB	1124	G	C8-N7	5.64	1.34	1.30
2	AB	1629	U	C4-C5	-5.64	1.38	1.43
2	AB	2388	A	C6-N6	-5.64	1.29	1.33
2	AB	2488	G	N7-C5	-5.64	1.35	1.39
2	AB	2698	U	C2-N3	5.64	1.41	1.37
35	BA	208	U	C4-C5	5.64	1.48	1.43
35	BA	1015	G	N1-C2	5.64	1.42	1.37
35	BA	1358	U	C2-N3	5.64	1.41	1.37
2	AB	216	A	C5-C6	5.64	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	618	G	C4'-O4'	-5.64	1.38	1.45
2	AB	621	A	C4'-O4'	-5.64	1.38	1.45
2	AB	2584	U	N1-C2	5.64	1.43	1.38
2	AB	2668	G	C8-N7	-5.64	1.27	1.30
35	BA	188	C	C4'-C3'	5.64	1.59	1.53
35	BA	1277	C	P-O5'	5.64	1.65	1.59
35	BA	1387	G	C2-N2	-5.64	1.28	1.34
1	AA	69	G	N3-C4	5.64	1.39	1.35
2	AB	139	U	C2-N3	5.64	1.41	1.37
2	AB	607	U	O4'-C1'	5.64	1.49	1.41
2	AB	717	C	O4'-C1'	5.64	1.49	1.41
2	AB	1128	G	C6-N1	5.64	1.43	1.39
2	AB	2058	A	P-O5'	5.64	1.65	1.59
2	AB	2372	U	O5'-C5'	-5.64	1.33	1.42
2	AB	2390	U	C4-O4	5.64	1.28	1.23
2	AB	2888	C	C4-N4	5.64	1.39	1.33
35	BA	938	A	C5'-C4'	5.64	1.58	1.51
35	BA	1077	G	C2-N3	5.64	1.37	1.32
35	BA	1171	A	C5'-C4'	5.64	1.58	1.51
1	AA	34	A	P-O5'	5.64	1.65	1.59
2	AB	349	U	N1-C6	5.64	1.43	1.38
2	AB	1034	G	C2-N3	5.64	1.37	1.32
35	BA	44	A	C6-N1	-5.64	1.31	1.35
2	AB	372	G	C2'-C1'	-5.64	1.47	1.53
2	AB	1641	A	C5'-C4'	5.64	1.58	1.51
2	AB	1660	G	C4'-O4'	-5.64	1.38	1.45
35	BA	718	A	C6-N1	-5.64	1.31	1.35
35	BA	763	G	P-O5'	5.64	1.65	1.59
35	BA	877	G	C2'-O2'	5.64	1.49	1.41
35	BA	1385	G	N7-C5	5.64	1.42	1.39
2	AB	181	A	N9-C8	5.63	1.42	1.37
2	AB	566	U	N3-C4	-5.63	1.33	1.38
2	AB	1058	U	N1-C2	5.63	1.43	1.38
2	AB	2307	G	C6-N1	5.63	1.43	1.39
2	AB	2319	G	P-O5'	5.63	1.65	1.59
2	AB	2613	U	O3'-P	5.63	1.68	1.61
35	BA	177	G	C8-N7	5.63	1.34	1.30
35	BA	1199	U	C2-N3	5.63	1.41	1.37
35	BA	1532	U	N3-C4	5.63	1.43	1.38
35	BA	418	C	O4'-C1'	5.63	1.49	1.41
35	BA	587	G	O4'-C1'	-5.63	1.34	1.41
35	BA	1018	G	C3'-C2'	5.63	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1761	C	C4'-O4'	-5.63	1.38	1.45
2	AB	1798	U	C4-C5	-5.63	1.38	1.43
20	AT	100	GLY	N-CA	-5.63	1.37	1.46
35	BA	447	G	C4'-O4'	-5.63	1.38	1.45
35	BA	861	G	C4'-C3'	5.63	1.59	1.53
2	AB	327	G	C1'-N9	5.63	1.57	1.48
2	AB	778	G	C4'-O4'	-5.63	1.38	1.45
2	AB	1280	G	C3'-C2'	5.63	1.59	1.52
35	BA	665	A	O3'-P	5.63	1.68	1.61
37	BC	48	U	P-O5'	5.63	1.65	1.59
2	AB	287	G	C6-N1	-5.63	1.35	1.39
2	AB	1369	G	C4'-C3'	5.63	1.59	1.53
2	AB	1399	C	O5'-C5'	-5.63	1.33	1.42
2	AB	1651	G	C2-N2	-5.63	1.28	1.34
2	AB	1773	A	C6-N6	5.63	1.38	1.33
2	AB	1825	U	C5-C6	5.63	1.39	1.34
2	AB	2143	C	C3'-O3'	5.63	1.50	1.42
2	AB	2515	C	C2'-O2'	-5.63	1.34	1.41
2	AB	2612	C	C4-C5	5.63	1.47	1.43
35	BA	351	G	C8-N7	5.63	1.34	1.30
35	BA	604	G	N9-C4	-5.63	1.33	1.38
35	BA	950	U	N1-C6	5.63	1.43	1.38
35	BA	1373	G	C5-C4	-5.63	1.34	1.38
35	BA	1393	U	C2-N3	5.63	1.41	1.37
35	BA	1395	C	O3'-P	-5.63	1.54	1.61
36	BB	58	C	P-O5'	5.63	1.65	1.59
2	AB	314	C	C5-C6	5.63	1.38	1.34
2	AB	376	G	C2'-C1'	-5.63	1.47	1.53
2	AB	798	G	C2-N3	5.63	1.37	1.32
2	AB	1028	A	C6-N1	-5.63	1.31	1.35
2	AB	1195	G	C2-N3	-5.63	1.28	1.32
2	AB	1265	A	C6-N6	5.63	1.38	1.33
2	AB	1718	G	C2-N3	5.63	1.37	1.32
2	AB	2058	A	C5-C6	5.63	1.46	1.41
2	AB	2602	A	C8-N7	-5.63	1.27	1.31
7	AG	173	ASP	CB-CG	5.63	1.63	1.51
35	BA	475	C	C2-N3	5.63	1.40	1.35
35	BA	949	A	N7-C5	-5.63	1.35	1.39
35	BA	1033	G	C2'-O2'	-5.63	1.34	1.41
35	BA	1038	C	C2'-C1'	5.63	1.59	1.53
40	BF	154	VAL	CA-CB	5.63	1.66	1.54
2	AB	240	C	N1-C6	-5.62	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1023	U	C2-N3	5.62	1.41	1.37
2	AB	2595	G	N3-C4	5.62	1.39	1.35
2	AB	2832	U	O4'-C1'	5.62	1.49	1.41
35	BA	115	G	P-O5'	5.62	1.65	1.59
35	BA	544	G	N1-C2	5.62	1.42	1.37
35	BA	1273	C	O4'-C1'	5.62	1.49	1.41
35	BA	1466	C	C2-O2	-5.62	1.19	1.24
2	AB	234	U	C4'-O4'	-5.62	1.38	1.45
2	AB	1348	C	N1-C6	-5.62	1.33	1.37
2	AB	1800	C	N1-C6	5.62	1.40	1.37
2	AB	2667	C	P-O5'	5.62	1.65	1.59
2	AB	2686	G	C6-N1	5.62	1.43	1.39
35	BA	173	U	N1-C2	5.62	1.43	1.38
35	BA	874	G	C5'-C4'	5.62	1.58	1.51
35	BA	876	C	C3'-C2'	5.62	1.59	1.52
2	AB	207	A	C6-N6	-5.62	1.29	1.33
2	AB	377	G	C4'-C3'	5.62	1.59	1.53
2	AB	477	A	C4'-O4'	-5.62	1.38	1.45
2	AB	719	C	P-O5'	5.62	1.65	1.59
2	AB	2528	U	N1-C6	5.62	1.43	1.38
35	BA	116	A	N9-C8	5.62	1.42	1.37
2	AB	953	G	C8-N7	-5.62	1.27	1.30
35	BA	350	G	C2'-O2'	-5.62	1.34	1.41
2	AB	958	U	C4-O4	-5.62	1.19	1.23
2	AB	1655	A	N9-C8	-5.62	1.33	1.37
2	AB	1766	G	N7-C5	-5.62	1.35	1.39
2	AB	1995	U	C2'-O2'	5.62	1.49	1.41
2	AB	2389	G	C3'-C2'	5.62	1.59	1.52
2	AB	2779	U	P-O5'	5.62	1.65	1.59
35	BA	365	U	C4-C5	-5.62	1.38	1.43
35	BA	836	G	N9-C8	5.62	1.41	1.37
2	AB	312	G	N7-C5	5.62	1.42	1.39
2	AB	338	G	P-O5'	5.62	1.65	1.59
2	AB	791	C	N3-C4	5.62	1.37	1.33
2	AB	912	C	C2-N3	5.62	1.40	1.35
2	AB	972	A	C5'-C4'	5.62	1.58	1.51
2	AB	2258	C	C4'-O4'	-5.62	1.38	1.45
2	AB	2429	G	N9-C4	-5.62	1.33	1.38
35	BA	245	U	C4'-O4'	-5.62	1.38	1.45
35	BA	330	C	C4-C5	5.62	1.47	1.43
35	BA	413	G	C8-N7	-5.62	1.27	1.30
35	BA	436	C	N1-C6	5.62	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	689	C	C2'-C1'	-5.62	1.47	1.53
35	BA	1458	G	P-O5'	5.62	1.65	1.59
1	AA	74	U	C4-O4	5.62	1.28	1.23
2	AB	821	A	N3-C4	5.62	1.38	1.34
2	AB	996	A	C5-C4	-5.62	1.34	1.38
2	AB	1024	G	C4'-O4'	-5.62	1.38	1.45
2	AB	1682	G	C2'-C1'	5.62	1.59	1.53
2	AB	2362	C	C2'-C1'	5.62	1.59	1.53
2	AB	2844	G	C4'-O4'	-5.62	1.38	1.45
35	BA	14	U	C4'-C3'	5.62	1.59	1.53
35	BA	179	A	C8-N7	-5.62	1.27	1.31
35	BA	1044	A	N7-C5	5.62	1.42	1.39
35	BA	1256	A	C3'-C2'	5.62	1.59	1.52
35	BA	1272	G	N7-C5	5.62	1.42	1.39
37	BC	35	C	O4'-C1'	5.62	1.49	1.41
2	AB	518	G	N1-C2	5.61	1.42	1.37
2	AB	1576	U	C5-C6	5.61	1.39	1.34
2	AB	1774	C	N1-C6	5.61	1.40	1.37
2	AB	1913	A	C6-N1	-5.61	1.31	1.35
2	AB	1973	G	C5'-C4'	5.61	1.58	1.51
2	AB	2128	G	C2-N3	5.61	1.37	1.32
2	AB	2216	G	C6-N1	5.61	1.43	1.39
2	AB	2482	A	N7-C5	-5.61	1.35	1.39
2	AB	1715	G	P-O5'	5.61	1.65	1.59
35	BA	117	G	C5-C6	5.61	1.48	1.42
35	BA	158	G	C2-N3	5.61	1.37	1.32
35	BA	1020	G	N9-C4	-5.61	1.33	1.38
2	AB	338	G	C6-O6	-5.61	1.19	1.24
2	AB	1311	G	C5'-C4'	5.61	1.58	1.51
2	AB	2323	G	P-O5'	5.61	1.65	1.59
2	AB	2657	A	C6-N1	-5.61	1.31	1.35
35	BA	151	A	C5-C4	5.61	1.42	1.38
35	BA	182	A	C5-C6	-5.61	1.36	1.41
35	BA	229	U	N3-C4	5.61	1.43	1.38
35	BA	400	C	C4-C5	5.61	1.47	1.43
35	BA	586	C	P-O5'	5.61	1.65	1.59
35	BA	1041	G	C2-N2	-5.61	1.28	1.34
2	AB	52	A	C6-N6	5.61	1.38	1.33
2	AB	2185	U	C2-N3	5.61	1.41	1.37
2	AB	2876	G	N3-C4	5.61	1.39	1.35
35	BA	336	A	C6-N6	-5.61	1.29	1.33
35	BA	346	G	C4'-C3'	5.61	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	97	C	N1-C2	5.61	1.45	1.40
2	AB	493	G	C4'-O4'	-5.61	1.38	1.45
2	AB	756	A	C5'-C4'	5.61	1.58	1.51
2	AB	777	G	C4'-O4'	-5.61	1.38	1.45
2	AB	1516	G	C6-N1	-5.61	1.35	1.39
2	AB	1612	C	N1-C6	5.61	1.40	1.37
2	AB	2006	C	N3-C4	5.61	1.37	1.33
2	AB	2039	U	O3'-P	5.61	1.67	1.61
2	AB	2355	G	C2-N3	5.61	1.37	1.32
35	BA	208	U	P-O5'	5.61	1.65	1.59
35	BA	1260	G	C5'-C4'	5.61	1.58	1.51
2	AB	1591	A	N3-C4	5.61	1.38	1.34
2	AB	1623	G	N1-C2	5.61	1.42	1.37
2	AB	1720	U	C2-N3	5.61	1.41	1.37
2	AB	2133	G	C4'-C3'	5.61	1.59	1.53
2	AB	2496	C	C4'-O4'	-5.61	1.38	1.45
2	AB	2569	G	O3'-P	5.61	1.67	1.61
35	BA	148	G	N9-C8	5.61	1.41	1.37
35	BA	233	C	C4-C5	5.61	1.47	1.43
35	BA	693	G	C2-N3	5.61	1.37	1.32
35	BA	1446	A	N3-C4	5.61	1.38	1.34
2	AB	1557	C	C5'-C4'	5.60	1.58	1.51
2	AB	2681	C	C2-O2	-5.60	1.19	1.24
2	AB	2803	G	N1-C2	5.60	1.42	1.37
35	BA	278	G	N3-C4	-5.60	1.31	1.35
35	BA	607	A	N9-C8	-5.60	1.33	1.37
35	BA	1122	U	C4'-O4'	-5.60	1.38	1.45
35	BA	1424	U	C4'-C3'	-5.60	1.47	1.52
2	AB	401	A	C5-C4	-5.60	1.34	1.38
2	AB	521	U	N3-C4	5.60	1.43	1.38
2	AB	572	A	N7-C5	-5.60	1.35	1.39
2	AB	588	U	N1-C2	5.60	1.43	1.38
2	AB	1074	G	O3'-P	5.60	1.67	1.61
2	AB	1621	U	C2-N3	5.60	1.41	1.37
35	BA	49	U	C5'-C4'	5.60	1.58	1.51
35	BA	306	A	C6-N6	5.60	1.38	1.33
35	BA	403	C	C5-C6	5.60	1.38	1.34
35	BA	453	G	C6-N1	5.60	1.43	1.39
35	BA	716	A	N9-C4	5.60	1.41	1.37
35	BA	1296	C	O3'-P	5.60	1.67	1.61
35	BA	1372	U	O4'-C1'	5.60	1.49	1.41
37	BC	64	G	P-O5'	5.60	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	BT	63	TYR	CG-CD2	5.60	1.46	1.39
2	AB	380	G	C3'-O3'	-5.60	1.34	1.42
2	AB	501	A	C4'-O4'	-5.60	1.38	1.45
2	AB	112	U	P-O5'	5.60	1.65	1.59
2	AB	261	G	P-O5'	5.60	1.65	1.59
2	AB	715	A	N9-C4	-5.60	1.34	1.37
2	AB	931	U	O3'-P	-5.60	1.54	1.61
2	AB	1017	G	C3'-C2'	5.60	1.59	1.52
2	AB	1020	A	C3'-C2'	5.60	1.59	1.52
2	AB	1182	G	N1-C2	5.60	1.42	1.37
2	AB	1770	G	O3'-P	5.60	1.67	1.61
2	AB	1971	U	C3'-C2'	-5.60	1.46	1.52
2	AB	2033	A	C8-N7	-5.60	1.27	1.31
35	BA	512	U	C4-O4	-5.60	1.19	1.23
2	AB	112	U	C2-N3	-5.60	1.33	1.37
2	AB	1928	A	N3-C4	5.60	1.38	1.34
2	AB	2048	G	N1-C2	5.60	1.42	1.37
2	AB	2094	A	C2-N3	5.60	1.38	1.33
2	AB	2767	C	C5'-C4'	5.60	1.58	1.51
2	AB	2879	A	N1-C2	-5.60	1.29	1.34
35	BA	1149	C	O3'-P	-5.60	1.54	1.61
35	BA	1276	G	N9-C8	-5.60	1.33	1.37
2	AB	684	G	C2-N3	5.60	1.37	1.32
2	AB	741	U	C2-O2	5.60	1.27	1.22
2	AB	2773	C	O4'-C1'	5.60	1.49	1.41
2	AB	2889	C	N3-C4	5.60	1.37	1.33
35	BA	30	U	C5-C6	5.60	1.39	1.34
35	BA	1132	C	C4-C5	5.60	1.47	1.43
35	BA	1231	G	N9-C8	-5.60	1.33	1.37
2	AB	973	A	N7-C5	-5.59	1.35	1.39
2	AB	1071	G	C2-N3	5.59	1.37	1.32
2	AB	1965	C	N3-C4	-5.59	1.30	1.33
2	AB	1969	A	C4'-O4'	-5.59	1.38	1.45
2	AB	2113	U	C4'-C3'	5.59	1.59	1.53
2	AB	2252	G	C2'-O2'	-5.59	1.34	1.41
2	AB	2754	U	N1-C2	5.59	1.43	1.38
3	AC	135	GLY	CA-C	5.59	1.60	1.51
35	BA	439	U	C2-O2	5.59	1.27	1.22
35	BA	919	A	C6-N1	5.59	1.39	1.35
35	BA	1398	A	C3'-C2'	5.59	1.59	1.52
35	BA	1513	A	O5'-C5'	-5.59	1.33	1.42
2	AB	396	G	N9-C4	-5.59	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	530	G	C8-N7	5.59	1.34	1.30
2	AB	1294	U	C3'-C2'	5.59	1.59	1.52
35	BA	106	C	O3'-P	5.59	1.67	1.61
35	BA	1063	C	N1-C6	-5.59	1.33	1.37
35	BA	1272	G	C2-N3	-5.59	1.28	1.32
35	BA	1377	A	C4'-C3'	5.59	1.59	1.53
1	AA	91	C	C2'-O2'	5.59	1.49	1.41
1	AA	100	G	O3'-P	5.59	1.67	1.61
2	AB	318	C	C4-N4	5.59	1.39	1.33
2	AB	948	C	C2-N3	5.59	1.40	1.35
2	AB	1134	A	N1-C2	-5.59	1.29	1.34
2	AB	1837	C	O3'-P	5.59	1.67	1.61
2	AB	2022	U	P-O5'	5.59	1.65	1.59
2	AB	2205	A	N9-C4	5.59	1.41	1.37
2	AB	2328	A	N7-C5	-5.59	1.35	1.39
35	BA	708	C	C5'-C4'	5.59	1.58	1.51
2	AB	609	A	N3-C4	5.59	1.38	1.34
2	AB	933	A	N9-C4	5.59	1.41	1.37
2	AB	1751	U	O4'-C1'	5.59	1.49	1.41
2	AB	1835	2MG	O3'-P	5.59	1.67	1.61
2	AB	2470	G	C8-N7	-5.59	1.27	1.30
2	AB	273	G	N1-C2	5.59	1.42	1.37
2	AB	1265	A	C3'-O3'	5.59	1.50	1.42
2	AB	1308	A	N9-C8	-5.59	1.33	1.37
2	AB	1733	G	N9-C8	5.59	1.41	1.37
2	AB	2414	G	N7-C5	5.59	1.42	1.39
2	AB	2463	C	P-O5'	5.59	1.65	1.59
2	AB	126	A	C4'-O4'	-5.59	1.38	1.45
2	AB	207	A	N9-C4	-5.59	1.34	1.37
2	AB	1666	G	C6-O6	-5.59	1.19	1.24
2	AB	2145	C	C4'-O4'	-5.59	1.38	1.45
2	AB	2218	G	N1-C2	5.59	1.42	1.37
2	AB	2400	G	N9-C4	5.59	1.42	1.38
2	AB	2675	A	P-O5'	5.59	1.65	1.59
35	BA	990	C	O4'-C1'	5.59	1.49	1.41
35	BA	1075	U	O3'-P	5.59	1.67	1.61
35	BA	1426	G	P-O5'	5.59	1.65	1.59
1	AA	64	G	C6-O6	-5.58	1.19	1.24
2	AB	350	G	C2-N2	5.58	1.40	1.34
2	AB	1373	A	C6-N1	-5.58	1.31	1.35
35	BA	1152	A	C5-C6	5.58	1.46	1.41
35	BA	1374	A	N7-C5	-5.58	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	100	G	C6-O6	-5.58	1.19	1.24
2	AB	1883	U	C4-O4	5.58	1.28	1.23
2	AB	2889	C	O3'-P	5.58	1.67	1.61
24	AX	69	GLU	CG-CD	-5.58	1.43	1.51
35	BA	122	G	P-O5'	5.58	1.65	1.59
35	BA	493	A	C2'-O2'	5.58	1.49	1.41
35	BA	565	U	C5'-C4'	5.58	1.58	1.51
2	AB	377	G	C5-C4	-5.58	1.34	1.38
2	AB	1048	A	N9-C8	-5.58	1.33	1.37
2	AB	1149	G	C4'-C3'	-5.58	1.47	1.52
2	AB	1466	U	C5-C6	5.58	1.39	1.34
2	AB	1499	C	C2'-C1'	5.58	1.59	1.53
2	AB	1898	U	O3'-P	5.58	1.67	1.61
2	AB	2107	G	P-O5'	5.58	1.65	1.59
2	AB	2110	G	C6-O6	-5.58	1.19	1.24
2	AB	2681	C	C5-C6	5.58	1.38	1.34
35	BA	138	G	O4'-C1'	5.58	1.49	1.41
35	BA	969	A	O3'-P	-5.58	1.54	1.61
2	AB	48	G	C4'-O4'	-5.58	1.38	1.45
2	AB	143	C	N3-C4	5.58	1.37	1.33
2	AB	1119	U	C2-O2	5.58	1.27	1.22
2	AB	1413	A	C4'-O4'	-5.58	1.38	1.45
2	AB	2463	C	O4'-C1'	5.58	1.49	1.41
35	BA	628	G	C4'-O4'	-5.58	1.38	1.45
35	BA	834	U	N1-C2	5.58	1.43	1.38
35	BA	945	G	N7-C5	5.58	1.42	1.39
35	BA	1404	C	C4-C5	5.58	1.47	1.43
37	BC	65	G	P-O5'	5.58	1.65	1.59
2	AB	507	A	C3'-C2'	5.58	1.59	1.52
2	AB	549	G	N9-C8	-5.58	1.33	1.37
2	AB	2131	U	C3'-C2'	5.58	1.59	1.52
2	AB	2615	U	C2-N3	5.58	1.41	1.37
2	AB	2762	C	N1-C2	5.58	1.45	1.40
2	AB	2872	A	N1-C2	-5.58	1.29	1.34
35	BA	303	A	N1-C2	5.58	1.39	1.34
36	BB	36	U	C4-C5	5.58	1.48	1.43
2	AB	353	C	C5'-C4'	5.58	1.58	1.51
2	AB	771	G	C6-N1	5.58	1.43	1.39
2	AB	2343	U	C4-O4	-5.58	1.19	1.23
2	AB	2354	C	O4'-C1'	5.58	1.48	1.41
35	BA	42	G	C5-C4	5.58	1.42	1.38
35	BA	46	G	P-O5'	5.58	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1015	G	P-O5'	5.58	1.65	1.59
35	BA	1529	G	C2'-O2'	5.58	1.48	1.41
2	AB	516	C	O3'-P	5.57	1.67	1.61
2	AB	704	G	C5'-C4'	5.57	1.58	1.51
2	AB	1098	A	N3-C4	5.57	1.38	1.34
2	AB	1782	U	C4-C5	5.57	1.48	1.43
2	AB	2473	U	C4'-O4'	-5.57	1.38	1.45
16	AP	106	ASP	CB-CG	5.57	1.63	1.51
35	BA	821	G	C8-N7	-5.57	1.27	1.30
35	BA	827	U	O4'-C1'	5.57	1.48	1.41
35	BA	911	U	C4'-O4'	-5.57	1.38	1.45
35	BA	1279	G	C5'-C4'	5.57	1.58	1.51
35	BA	1336	C	C4'-O4'	-5.57	1.38	1.45
37	BC	35	C	C2'-C1'	-5.57	1.47	1.53
2	AB	732	C	P-O5'	5.57	1.65	1.59
2	AB	1697	G	C4'-C3'	5.57	1.59	1.53
35	BA	493	A	C6-N1	5.57	1.39	1.35
2	AB	356	G	C4'-C3'	5.57	1.59	1.53
2	AB	1800	C	C4-N4	5.57	1.39	1.33
2	AB	2209	G	C2'-C1'	5.57	1.59	1.53
35	BA	178	C	C2'-O2'	5.57	1.48	1.41
35	BA	1343	G	C2-N2	-5.57	1.28	1.34
35	BA	1440	U	C4-O4	-5.57	1.19	1.23
2	AB	87	U	C3'-O3'	-5.57	1.34	1.42
2	AB	841	G	N1-C2	5.57	1.42	1.37
2	AB	1791	A	C8-N7	-5.57	1.27	1.31
2	AB	2543	G	C2'-C1'	-5.57	1.47	1.53
35	BA	892	A	N1-C2	-5.57	1.29	1.34
35	BA	1015	G	C2-N3	5.57	1.37	1.32
35	BA	1115	U	C3'-C2'	-5.57	1.46	1.52
2	AB	162	U	C2-O2	5.57	1.27	1.22
2	AB	486	C	N3-C4	-5.57	1.30	1.33
2	AB	858	G	N9-C4	5.57	1.42	1.38
2	AB	877	A	N7-C5	5.57	1.42	1.39
2	AB	891	G	C2-N2	-5.57	1.28	1.34
2	AB	1166	G	C5'-C4'	5.57	1.58	1.51
2	AB	1240	U	C4-C5	5.57	1.48	1.43
2	AB	1475	G	C2-N2	-5.57	1.28	1.34
2	AB	1601	G	C2-N2	-5.57	1.28	1.34
2	AB	1999	C	N3-C4	5.57	1.37	1.33
2	AB	2677	G	N3-C4	5.57	1.39	1.35
35	BA	27	G	C5-C6	5.57	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	104	G	O3'-P	-5.57	1.54	1.61
35	BA	161	A	N7-C5	-5.57	1.35	1.39
35	BA	268	U	C4-C5	5.57	1.48	1.43
35	BA	392	C	C5'-C4'	5.57	1.58	1.51
2	AB	1178	C	C2'-C1'	5.57	1.59	1.53
2	AB	1221	C	C5'-C4'	5.57	1.58	1.51
2	AB	1349	C	C3'-C2'	5.57	1.59	1.52
35	BA	449	G	N7-C5	-5.57	1.35	1.39
35	BA	1445	U	C4'-O4'	-5.57	1.38	1.45
36	BB	33	A	C6-N1	-5.57	1.31	1.35
2	AB	250	G	C4'-O4'	-5.56	1.38	1.45
2	AB	2397	G	N9-C8	-5.56	1.33	1.37
2	AB	2426	A	P-O5'	5.56	1.65	1.59
35	BA	206	C	O4'-C1'	5.56	1.48	1.41
35	BA	447	G	C2'-C1'	5.56	1.59	1.53
35	BA	538	G	P-O5'	5.56	1.65	1.59
2	AB	212	G	C3'-O3'	5.56	1.50	1.42
2	AB	364	C	C5'-C4'	-5.56	1.44	1.51
2	AB	632	A	C2'-C1'	5.56	1.59	1.53
2	AB	802	A	C4'-O4'	-5.56	1.38	1.45
2	AB	959	A	N3-C4	5.56	1.38	1.34
2	AB	1377	G	O3'-P	5.56	1.67	1.61
2	AB	1930	G	C2-N3	5.56	1.37	1.32
2	AB	1994	C	C3'-C2'	5.56	1.59	1.52
2	AB	2061	G	N7-C5	5.56	1.42	1.39
2	AB	2120	G	C3'-C2'	5.56	1.59	1.52
2	AB	2825	G	N3-C4	5.56	1.39	1.35
35	BA	122	G	C8-N7	-5.56	1.27	1.30
35	BA	606	G	N7-C5	-5.56	1.35	1.39
2	AB	64	A	C3'-C2'	-5.56	1.46	1.52
2	AB	811	U	O3'-P	5.56	1.67	1.61
2	AB	967	U	C4'-O4'	-5.56	1.38	1.45
2	AB	1363	C	O3'-P	5.56	1.67	1.61
2	AB	1820	U	N1-C6	-5.56	1.32	1.38
2	AB	1852	U	C2'-C1'	5.56	1.59	1.53
35	BA	686	U	C5-C6	5.56	1.39	1.34
35	BA	1068	G	N1-C2	5.56	1.42	1.37
2	AB	138	U	P-O5'	5.56	1.65	1.59
2	AB	1182	G	C6-N1	5.56	1.43	1.39
2	AB	1331	G	C6-O6	-5.56	1.19	1.24
2	AB	1708	C	O4'-C1'	5.56	1.48	1.41
2	AB	2049	G	C6-N1	5.56	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	323	U	C2-O2	-5.56	1.17	1.22
53	BS	36	PHE	CG-CD1	5.56	1.47	1.38
2	AB	585	G	N7-C5	-5.56	1.35	1.39
2	AB	930	G	C2-N3	5.56	1.37	1.32
2	AB	1145	C	N3-C4	5.56	1.37	1.33
2	AB	1183	U	P-O5'	5.56	1.65	1.59
2	AB	1706	C	N3-C4	5.56	1.37	1.33
2	AB	1796	U	N1-C2	5.56	1.43	1.38
2	AB	1910	G	N3-C4	5.56	1.39	1.35
2	AB	2724	U	N1-C2	5.56	1.43	1.38
35	BA	625	U	C2-N3	-5.56	1.33	1.37
35	BA	765	G	C2-N3	5.56	1.37	1.32
35	BA	824	G	C2'-C1'	-5.56	1.47	1.53
35	BA	1088	G	C8-N7	5.56	1.34	1.30
35	BA	1181	G	C2-N3	5.56	1.37	1.32
44	BJ	44	PHE	CG-CD2	5.56	1.47	1.38
57	BW	70	TYR	CB-CG	-5.56	1.43	1.51
2	AB	728	G	C2'-C1'	5.56	1.59	1.53
2	AB	959	A	C5-C4	-5.56	1.34	1.38
2	AB	2779	U	N1-C2	5.56	1.43	1.38
2	AB	263	G	C2'-O2'	5.55	1.48	1.41
2	AB	515	A	C5-C4	-5.55	1.34	1.38
2	AB	1047	G	C2-N2	-5.55	1.28	1.34
2	AB	1175	A	C3'-C2'	-5.55	1.46	1.52
2	AB	1536	C	N1-C6	-5.55	1.33	1.37
2	AB	1546	G	N7-C5	5.55	1.42	1.39
2	AB	1937	A	P-O5'	-5.55	1.54	1.59
35	BA	840	C	C3'-O3'	5.55	1.50	1.42
35	BA	1064	G	N1-C2	5.55	1.42	1.37
2	AB	1454	C	N3-C4	5.55	1.37	1.33
2	AB	2508	G	N9-C8	5.55	1.41	1.37
2	AB	780	G	C4'-C3'	-5.55	1.47	1.52
2	AB	846	U	O3'-P	5.55	1.67	1.61
2	AB	1318	U	C4-O4	-5.55	1.19	1.23
2	AB	1523	U	C4-C5	5.55	1.48	1.43
2	AB	2083	G	C5'-C4'	5.55	1.58	1.51
2	AB	2102	G	P-O5'	5.55	1.65	1.59
2	AB	2689	U	C4-C5	5.55	1.48	1.43
35	BA	362	G	C8-N7	-5.55	1.27	1.30
35	BA	413	G	P-O5'	5.55	1.65	1.59
35	BA	996	A	N7-C5	5.55	1.42	1.39
37	BC	14	A	C6-N6	-5.55	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	77	G	C6-N1	5.55	1.43	1.39
2	AB	377	G	C2-N3	5.55	1.37	1.32
2	AB	952	G	C8-N7	5.55	1.34	1.30
2	AB	1205	A	C4'-O4'	-5.55	1.38	1.45
2	AB	2351	G	N9-C8	5.55	1.41	1.37
35	BA	193	C	C4-C5	5.55	1.47	1.43
35	BA	666	G	C2-N3	5.55	1.37	1.32
35	BA	939	G	N1-C2	5.55	1.42	1.37
37	BC	32	G	N1-C2	5.55	1.42	1.37
1	AA	29	A	C5'-C4'	5.55	1.58	1.51
2	AB	727	A	N9-C4	5.55	1.41	1.37
2	AB	954	G	N1-C2	5.55	1.42	1.37
2	AB	2220	U	C5'-C4'	5.55	1.58	1.51
35	BA	652	U	O3'-P	-5.55	1.54	1.61
35	BA	748	G	O3'-P	5.55	1.67	1.61
35	BA	1522	U	C3'-C2'	5.55	1.59	1.52
36	BB	54	U	P-O5'	5.55	1.65	1.59
2	AB	54	G	O5'-C5'	-5.55	1.33	1.42
2	AB	1524	G	N3-C4	5.55	1.39	1.35
2	AB	2174	C	C4'-O4'	-5.55	1.38	1.45
2	AB	2249	U	N3-C4	5.55	1.43	1.38
2	AB	2278	A	C8-N7	-5.55	1.27	1.31
2	AB	2337	G	C5-C4	-5.55	1.34	1.38
35	BA	88	U	N1-C2	5.55	1.43	1.38
35	BA	181	A	C2-N3	-5.55	1.28	1.33
35	BA	725	G	C2'-C1'	5.55	1.59	1.53
35	BA	736	C	P-O5'	5.55	1.65	1.59
35	BA	934	C	C4'-C3'	5.55	1.59	1.53
36	BB	58	C	N1-C6	5.55	1.40	1.37
2	AB	1232	G	C5'-C4'	5.54	1.58	1.51
2	AB	2175	C	C4-C5	-5.54	1.38	1.43
2	AB	2788	C	O3'-P	5.54	1.67	1.61
2	AB	2870	C	N1-C6	5.54	1.40	1.37
35	BA	50	A	N3-C4	5.54	1.38	1.34
35	BA	983	A	P-O5'	5.54	1.65	1.59
2	AB	292	U	C2-N3	5.54	1.41	1.37
2	AB	1948	G	C2'-O2'	5.54	1.48	1.41
2	AB	2335	A	N7-C5	5.54	1.42	1.39
35	BA	199	A	C2'-O2'	-5.54	1.34	1.41
35	BA	342	C	P-O5'	5.54	1.65	1.59
35	BA	583	A	N3-C4	5.54	1.38	1.34
35	BA	891	U	C4'-C3'	-5.54	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	76	C	C4-N4	5.54	1.39	1.33
2	AB	713	G	P-O5'	5.54	1.65	1.59
2	AB	1354	A	C6-N6	5.54	1.38	1.33
2	AB	1696	G	C3'-C2'	5.54	1.59	1.52
2	AB	2321	U	C2'-C1'	-5.54	1.47	1.53
2	AB	2572	A	N3-C4	5.54	1.38	1.34
35	BA	328	C	C2'-C1'	5.54	1.59	1.53
35	BA	943	U	C4-C5	5.54	1.48	1.43
35	BA	946	A	C2'-C1'	5.54	1.59	1.53
2	AB	2160	C	C4'-O4'	-5.54	1.38	1.45
2	AB	2642	G	N7-C5	-5.54	1.35	1.39
36	BB	25	U	C4-O4	-5.54	1.19	1.23
2	AB	1264	A	N7-C5	-5.54	1.35	1.39
2	AB	1332	G	N3-C4	5.54	1.39	1.35
2	AB	2065	C	O3'-P	5.54	1.67	1.61
2	AB	2183	A	N3-C4	5.54	1.38	1.34
2	AB	2691	C	C2-O2	-5.54	1.19	1.24
19	AS	6	GLY	CA-C	-5.54	1.43	1.51
35	BA	571	U	N3-C4	-5.54	1.33	1.38
35	BA	651	C	C4'-O4'	-5.54	1.38	1.45
35	BA	872	A	C2'-O2'	-5.54	1.34	1.41
35	BA	1162	C	C3'-O3'	5.54	1.50	1.42
35	BA	1302	C	C5-C6	5.54	1.38	1.34
2	AB	126	A	O3'-P	5.54	1.67	1.61
2	AB	878	A	N7-C5	5.54	1.42	1.39
2	AB	2636	C	C5'-C4'	5.54	1.57	1.51
35	BA	67	C	O3'-P	5.54	1.67	1.61
35	BA	1298	U	C2'-C1'	-5.54	1.47	1.53
35	BA	1371	G	C6-N1	5.54	1.43	1.39
1	AA	62	C	N1-C6	5.54	1.40	1.37
2	AB	350	G	C1'-N9	5.54	1.57	1.48
2	AB	813	U	C4'-C3'	-5.54	1.47	1.52
2	AB	906	U	C2'-C1'	5.54	1.59	1.53
2	AB	1279	G	P-O5'	5.54	1.65	1.59
2	AB	2395	C	C5-C6	5.54	1.38	1.34
35	BA	843	U	N1-C2	5.54	1.43	1.38
35	BA	980	C	C5-C6	5.54	1.38	1.34
42	BH	113	ARG	NE-CZ	5.54	1.40	1.33
2	AB	9	G	C2-N3	5.53	1.37	1.32
2	AB	114	U	C3'-C2'	-5.53	1.46	1.52
2	AB	446	G	C8-N7	-5.53	1.27	1.30
2	AB	1451	C	C5-C6	5.53	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1877	A	C2'-O2'	5.53	1.48	1.41
2	AB	2221	G	N7-C5	-5.53	1.35	1.39
2	AB	2420	C	C4'-O4'	-5.53	1.38	1.45
2	AB	2692	G	C4'-O4'	-5.53	1.38	1.45
35	BA	143	A	N9-C8	-5.53	1.33	1.37
35	BA	277	C	C4'-O4'	-5.53	1.38	1.45
35	BA	329	A	C6-N6	5.53	1.38	1.33
35	BA	1538	C	P-O5'	5.53	1.65	1.59
2	AB	1435	G	C5'-C4'	5.53	1.57	1.51
2	AB	1519	G	C5'-C4'	5.53	1.57	1.51
2	AB	2158	A	C4'-C3'	5.53	1.59	1.53
35	BA	282	A	N7-C5	5.53	1.42	1.39
2	AB	72	U	N1-C2	5.53	1.43	1.38
2	AB	1131	G	N9-C8	-5.53	1.33	1.37
2	AB	1575	C	O3'-P	5.53	1.67	1.61
2	AB	2481	G	N7-C5	-5.53	1.35	1.39
2	AB	2732	G	C5'-C4'	5.53	1.57	1.51
2	AB	2830	C	N1-C6	5.53	1.40	1.37
16	AP	112	TYR	CE1-CZ	5.53	1.45	1.38
35	BA	89	U	N3-C4	-5.53	1.33	1.38
35	BA	733	G	C2-N3	5.53	1.37	1.32
35	BA	890	G	C4'-C3'	-5.53	1.47	1.52
2	AB	876	C	N1-C6	5.53	1.40	1.37
2	AB	2103	C	C4-C5	5.53	1.47	1.43
2	AB	400	G	C5-C6	5.53	1.47	1.42
2	AB	929	U	C2'-C1'	5.53	1.59	1.53
2	AB	1003	G	N3-C4	5.53	1.39	1.35
2	AB	1193	G	O4'-C1'	5.53	1.48	1.41
2	AB	1436	G	C6-N1	5.53	1.43	1.39
35	BA	56	U	C5'-C4'	5.53	1.57	1.51
35	BA	781	A	C6-N1	5.53	1.39	1.35
35	BA	826	C	N3-C4	5.53	1.37	1.33
37	BC	54	G	N9-C8	-5.53	1.33	1.37
2	AB	9	G	C8-N7	-5.53	1.27	1.30
2	AB	243	U	C4'-O4'	-5.53	1.38	1.45
2	AB	531	C	C4'-O4'	-5.53	1.38	1.45
2	AB	997	G	C4'-O4'	-5.53	1.38	1.45
2	AB	1646	C	C2'-O2'	5.53	1.48	1.41
2	AB	1822	C	C2'-C1'	5.53	1.59	1.53
2	AB	2325	G	O3'-P	5.53	1.67	1.61
2	AB	2469	A	C6-N6	-5.53	1.29	1.33
2	AB	2886	A	C4'-O4'	-5.53	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	377	G	N9-C4	5.53	1.42	1.38
35	BA	624	C	C4-C5	5.53	1.47	1.43
35	BA	723	U	N3-C4	5.53	1.43	1.38
35	BA	848	C	O3'-P	5.53	1.67	1.61
2	AB	217	A	N9-C4	5.52	1.41	1.37
35	BA	469	C	C2-N3	5.52	1.40	1.35
35	BA	736	C	C3'-C2'	5.52	1.59	1.52
35	BA	920	U	C3'-O3'	5.52	1.49	1.42
35	BA	1289	A	C6-N6	5.52	1.38	1.33
1	AA	103	U	N3-C4	5.52	1.43	1.38
2	AB	93	G	N7-C5	5.52	1.42	1.39
2	AB	573	U	N1-C2	5.52	1.43	1.38
2	AB	760	G	C6-O6	-5.52	1.19	1.24
2	AB	1312	U	C3'-C2'	5.52	1.59	1.52
2	AB	1678	A	P-O5'	5.52	1.65	1.59
2	AB	2074	U	C4'-O4'	-5.52	1.38	1.45
2	AB	2760	C	C2-N3	5.52	1.40	1.35
35	BA	299	G	N7-C5	5.52	1.42	1.39
35	BA	624	C	C5-C6	5.52	1.38	1.34
37	BC	1	C	C2'-C1'	5.52	1.59	1.53
2	AB	1252	G	C6-O6	-5.52	1.19	1.24
2	AB	1584	U	C4-C5	5.52	1.48	1.43
2	AB	2828	G	C4'-O4'	-5.52	1.38	1.45
4	AD	79	ARG	CD-NE	5.52	1.55	1.46
35	BA	428	G	C5-C4	5.52	1.42	1.38
35	BA	950	U	C5-C6	5.52	1.39	1.34
1	AA	86	G	N9-C8	-5.52	1.33	1.37
2	AB	768	G	C8-N7	-5.52	1.27	1.30
2	AB	1045	C	C1'-N1	5.52	1.57	1.48
2	AB	1787	A	C8-N7	-5.52	1.27	1.31
2	AB	2200	C	C2'-C1'	-5.52	1.47	1.53
2	AB	2602	A	C4'-C3'	5.52	1.59	1.53
2	AB	2740	A	O4'-C1'	5.52	1.48	1.41
35	BA	399	G	C2'-C1'	-5.52	1.47	1.53
35	BA	432	A	N3-C4	5.52	1.38	1.34
35	BA	1112	C	N3-C4	5.52	1.37	1.33
2	AB	238	C	C3'-C2'	-5.52	1.46	1.52
2	AB	1181	U	C5'-C4'	5.52	1.57	1.51
2	AB	1760	C	C4'-C3'	-5.52	1.47	1.52
2	AB	1766	G	P-O5'	5.52	1.65	1.59
2	AB	1798	U	N1-C2	5.52	1.43	1.38
2	AB	2477	U	N1-C2	5.52	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2730	C	C3'-C2'	5.52	1.59	1.52
35	BA	125	U	C2'-C1'	-5.52	1.47	1.53
35	BA	791	G	P-O5'	-5.52	1.54	1.59
35	BA	1305	G	P-O5'	5.52	1.65	1.59
47	BM	42	GLY	CA-C	5.52	1.60	1.51
2	AB	557	C	N1-C6	5.52	1.40	1.37
2	AB	847	U	C2'-C1'	5.52	1.59	1.53
2	AB	1981	A	N3-C4	5.52	1.38	1.34
2	AB	2420	C	C4-N4	-5.52	1.28	1.33
37	BC	13	C	C2-N3	5.52	1.40	1.35
2	AB	574	A	C5'-C4'	5.51	1.57	1.51
2	AB	1230	A	O3'-P	-5.51	1.54	1.61
2	AB	1665	A	C5'-C4'	5.51	1.57	1.51
2	AB	1706	C	N1-C6	-5.51	1.33	1.37
2	AB	1770	G	N9-C8	-5.51	1.33	1.37
2	AB	2315	G	C8-N7	5.51	1.34	1.30
2	AB	2365	G	C2-N3	5.51	1.37	1.32
2	AB	2682	A	C5-C4	-5.51	1.34	1.38
35	BA	88	U	P-O5'	5.51	1.65	1.59
35	BA	466	A	N3-C4	5.51	1.38	1.34
35	BA	485	U	O4'-C1'	5.51	1.48	1.41
35	BA	1288	A	C2-N3	-5.51	1.28	1.33
37	BC	50	G	C5'-C4'	5.51	1.57	1.51
9	AI	32	PRO	N-CD	-5.51	1.40	1.47
35	BA	717	U	C2-N3	5.51	1.41	1.37
35	BA	1145	A	N3-C4	5.51	1.38	1.34
35	BA	1465	A	O4'-C1'	5.51	1.48	1.41
2	AB	628	G	C4'-O4'	-5.51	1.38	1.45
2	AB	885	C	C5-C6	5.51	1.38	1.34
2	AB	2482	A	C5-C6	5.51	1.46	1.41
35	BA	119	A	N9-C4	-5.51	1.34	1.37
35	BA	205	A	C2-N3	5.51	1.38	1.33
35	BA	479	U	O3'-P	5.51	1.67	1.61
35	BA	481	G	C6-N1	5.51	1.43	1.39
35	BA	655	A	C6-N6	5.51	1.38	1.33
35	BA	704	A	C6-N1	-5.51	1.31	1.35
35	BA	1359	C	N3-C4	5.51	1.37	1.33
1	AA	11	C	C3'-C2'	5.51	1.59	1.52
1	AA	56	G	C4'-O4'	-5.51	1.38	1.45
2	AB	203	A	C2'-C1'	5.51	1.59	1.53
2	AB	372	G	N1-C2	-5.51	1.33	1.37
2	AB	663	G	C3'-C2'	5.51	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	695	G	C4'-O4'	-5.51	1.38	1.45
2	AB	1054	A	C4'-C3'	-5.51	1.47	1.52
2	AB	2162	G	P-O5'	-5.51	1.54	1.59
2	AB	2328	A	O3'-P	5.51	1.67	1.61
2	AB	2774	C	N1-C6	-5.51	1.33	1.37
35	BA	337	G	C8-N7	5.51	1.34	1.30
35	BA	505	G	C4'-O4'	-5.51	1.38	1.45
35	BA	544	G	C2-N3	5.51	1.37	1.32
35	BA	650	G	C5-C4	5.51	1.42	1.38
35	BA	1056	U	C4-O4	-5.51	1.19	1.23
35	BA	1057	G	C5-C4	-5.51	1.34	1.38
35	BA	1132	C	N1-C6	-5.51	1.33	1.37
35	BA	1180	A	C5-C6	-5.51	1.36	1.41
37	BC	47	A	C6-N1	-5.51	1.31	1.35
2	AB	1323	C	C2-N3	5.51	1.40	1.35
2	AB	1953	A	C6-N1	-5.51	1.31	1.35
55	BU	7	GLY	N-CA	-5.51	1.37	1.46
2	AB	577	G	C8-N7	5.51	1.34	1.30
2	AB	662	G	P-O5'	5.51	1.65	1.59
2	AB	1050	A	C6-N6	-5.51	1.29	1.33
2	AB	1380	G	N7-C5	5.51	1.42	1.39
2	AB	1491	G	C5'-C4'	5.51	1.57	1.51
2	AB	2612	C	N1-C6	5.51	1.40	1.37
28	A1	45	GLY	CA-C	5.51	1.60	1.51
35	BA	333	U	C4-C5	5.51	1.48	1.43
35	BA	353	A	N7-C5	5.51	1.42	1.39
35	BA	683	G	C2-N3	5.51	1.37	1.32
35	BA	1026	G	N1-C2	5.51	1.42	1.37
35	BA	1058	G	C2'-O2'	5.51	1.48	1.41
35	BA	1499	A	P-O5'	5.51	1.65	1.59
37	BC	73	A	C4'-O4'	-5.51	1.38	1.45
2	AB	513	A	N9-C8	-5.50	1.33	1.37
2	AB	1282	U	C2-N3	5.50	1.41	1.37
2	AB	1602	U	P-O5'	5.50	1.65	1.59
2	AB	2554	U	C2-N3	5.50	1.41	1.37
2	AB	2682	A	C2-N3	-5.50	1.28	1.33
35	BA	386	C	C4'-O4'	-5.50	1.38	1.45
35	BA	590	U	P-O5'	5.50	1.65	1.59
35	BA	994	A	N3-C4	-5.50	1.31	1.34
35	BA	1490	U	C2-N3	5.50	1.41	1.37
39	BE	19	SER	CB-OG	-5.50	1.35	1.42
49	BO	104	ASN	CB-CG	5.50	1.63	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	599	A	C3'-O3'	5.50	1.49	1.42
2	AB	794	A	C1'-N9	5.50	1.57	1.48
2	AB	2513	A	C6-N6	5.50	1.38	1.33
35	BA	397	A	P-O5'	5.50	1.65	1.59
35	BA	423	G	C2'-C1'	5.50	1.59	1.53
35	BA	646	G	N9-C8	-5.50	1.33	1.37
35	BA	724	G	C6-O6	-5.50	1.19	1.24
35	BA	1044	A	N9-C8	5.50	1.42	1.37
52	BR	8	ARG	NE-CZ	5.50	1.40	1.33
2	AB	29	U	P-O5'	5.50	1.65	1.59
2	AB	544	C	C5-C6	5.50	1.38	1.34
2	AB	657	U	C2-N3	5.50	1.41	1.37
2	AB	690	G	P-O5'	5.50	1.65	1.59
2	AB	1438	U	C5-C6	5.50	1.39	1.34
2	AB	1538	G	C2-N3	5.50	1.37	1.32
2	AB	1606	C	C4-N4	5.50	1.39	1.33
2	AB	2275	C	C5-C6	5.50	1.38	1.34
36	BB	29	G	C6-O6	-5.50	1.19	1.24
36	BB	56	G	P-O5'	-5.50	1.54	1.59
2	AB	1508	A	C3'-C2'	5.50	1.59	1.52
2	AB	1552	A	N3-C4	5.50	1.38	1.34
35	BA	187	G	C3'-C2'	5.50	1.59	1.52
35	BA	1051	C	O3'-P	5.50	1.67	1.61
1	AA	28	C	C4-C5	5.50	1.47	1.43
2	AB	256	A	N9-C8	-5.50	1.33	1.37
2	AB	264	C	C2'-O2'	-5.50	1.34	1.41
2	AB	608	A	C5-C4	-5.50	1.34	1.38
2	AB	1605	C	C2-N3	5.50	1.40	1.35
2	AB	1922	G	C4'-O4'	-5.50	1.38	1.45
2	AB	2440	C	C1'-N1	5.50	1.56	1.48
2	AB	2778	A	P-O5'	-5.50	1.54	1.59
35	BA	211	G	C8-N7	-5.50	1.27	1.30
35	BA	372	C	N1-C6	5.50	1.40	1.37
35	BA	627	G	N7-C5	5.50	1.42	1.39
35	BA	1204	A	C2'-O2'	5.50	1.48	1.41
35	BA	1246	A	N9-C4	5.50	1.41	1.37
35	BA	1413	A	C4'-O4'	-5.50	1.38	1.45
2	AB	362	A	C8-N7	-5.50	1.27	1.31
2	AB	635	C	P-O5'	5.50	1.65	1.59
2	AB	642	U	C2-N3	5.50	1.41	1.37
2	AB	1362	C	C2'-O2'	-5.50	1.34	1.41
2	AB	1436	G	C5'-C4'	5.50	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1855	U	C3'-C2'	5.50	1.58	1.52
2	AB	2433	A	C2-N3	-5.50	1.28	1.33
2	AB	2610	C	C2-N3	5.50	1.40	1.35
2	AB	2697	G	N9-C8	-5.50	1.34	1.37
35	BA	187	G	O3'-P	5.50	1.67	1.61
35	BA	270	A	C4'-C3'	-5.50	1.47	1.52
35	BA	498	A	C8-N7	-5.50	1.27	1.31
35	BA	704	A	N3-C4	5.50	1.38	1.34
35	BA	1146	A	C4'-C3'	5.50	1.59	1.53
35	BA	1363	A	C2'-O2'	-5.50	1.34	1.41
37	BC	4	G	N7-C5	-5.50	1.35	1.39
37	BC	25	U	O3'-P	5.50	1.67	1.61
47	BM	60	PHE	CE2-CZ	5.50	1.47	1.37
1	AA	39	A	C5-C6	5.49	1.46	1.41
2	AB	198	C	C2'-C1'	-5.49	1.47	1.53
2	AB	785	G	N1-C2	-5.49	1.33	1.37
2	AB	1035	U	C4'-O4'	-5.49	1.38	1.45
2	AB	1958	C	C2-N3	5.49	1.40	1.35
2	AB	2551	C	N1-C6	-5.49	1.33	1.37
2	AB	2863	C	N1-C6	-5.49	1.33	1.37
35	BA	1271	A	C6-N1	5.49	1.39	1.35
35	BA	1395	C	N1-C2	5.49	1.45	1.40
35	BA	1476	A	N9-C8	5.49	1.42	1.37
35	BA	1539	C	C2-O2	-5.49	1.19	1.24
53	BS	26	ARG	CD-NE	5.49	1.55	1.46
2	AB	166	U	O4'-C1'	5.49	1.48	1.41
2	AB	880	G	N7-C5	5.49	1.42	1.39
2	AB	1067	A	P-O5'	-5.49	1.54	1.59
2	AB	2144	G	C2-N3	5.49	1.37	1.32
2	AB	2289	G	C3'-C2'	-5.49	1.46	1.52
2	AB	2476	A	C6-N6	5.49	1.38	1.33
2	AB	2867	G	C5-C6	5.49	1.47	1.42
35	BA	139	A	C4'-O4'	-5.49	1.38	1.45
35	BA	321	A	C2'-C1'	-5.49	1.47	1.53
35	BA	441	A	O4'-C1'	-5.49	1.34	1.41
2	AB	987	C	C4-N4	5.49	1.38	1.33
2	AB	1337	G	C5-C6	5.49	1.47	1.42
2	AB	1947	C	C3'-C2'	5.49	1.58	1.52
2	AB	1968	G	O4'-C1'	5.49	1.48	1.41
2	AB	2187	U	C3'-C2'	-5.49	1.46	1.52
35	BA	669	G	N3-C4	5.49	1.39	1.35
35	BA	830	G	N1-C2	5.49	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1184	G	C6-O6	-5.49	1.19	1.24
35	BA	1190	G	C5-C4	5.49	1.42	1.38
35	BA	1232	U	O3'-P	5.49	1.67	1.61
37	BC	53	G	N3-C4	5.49	1.39	1.35
2	AB	976	G	N1-C2	5.49	1.42	1.37
2	AB	1384	A	C5-C4	-5.49	1.34	1.38
2	AB	1498	C	C3'-C2'	5.49	1.58	1.52
2	AB	1526	C	C2-N3	5.49	1.40	1.35
2	AB	1665	A	C2'-C1'	5.49	1.59	1.53
2	AB	1668	A	N9-C8	5.49	1.42	1.37
2	AB	2276	G	N3-C4	-5.49	1.31	1.35
35	BA	81	A	N1-C2	-5.49	1.29	1.34
35	BA	147	G	C3'-C2'	5.49	1.58	1.52
35	BA	430	A	C8-N7	-5.49	1.27	1.31
35	BA	448	A	C4'-O4'	-5.49	1.38	1.45
35	BA	497	G	C6-O6	-5.49	1.19	1.24
36	BB	17	U	N3-C4	5.49	1.43	1.38
36	BB	22	G	N9-C4	-5.49	1.33	1.38
2	AB	184	C	C4-C5	5.49	1.47	1.43
2	AB	795	C	C5-C6	5.49	1.38	1.34
35	BA	339	C	C2-O2	-5.49	1.19	1.24
2	AB	8	C	C5-C6	5.49	1.38	1.34
2	AB	419	U	C2'-C1'	5.49	1.59	1.53
2	AB	990	A	C3'-C2'	5.49	1.58	1.52
2	AB	1419	A	N7-C5	-5.49	1.35	1.39
2	AB	1563	U	C5-C6	5.49	1.39	1.34
2	AB	1675	C	C5'-C4'	5.49	1.57	1.51
2	AB	1682	G	N9-C4	-5.49	1.33	1.38
2	AB	1798	U	C3'-O3'	-5.49	1.34	1.42
2	AB	2143	C	N1-C2	-5.49	1.34	1.40
2	AB	2345	G	C4'-O4'	-5.49	1.38	1.45
37	BC	64	G	N9-C4	-5.49	1.33	1.38
47	BM	121	ARG	NE-CZ	5.49	1.40	1.33
2	AB	1127	A	C3'-C2'	-5.48	1.46	1.52
35	BA	309	A	C5-C6	5.48	1.46	1.41
35	BA	1004	A	C6-N6	5.48	1.38	1.33
2	AB	388	G	N1-C2	5.48	1.42	1.37
2	AB	436	C	C5'-C4'	5.48	1.57	1.51
2	AB	597	G	C5-C4	5.48	1.42	1.38
2	AB	1485	U	C4-O4	-5.48	1.19	1.23
2	AB	2756	U	C4'-C3'	5.48	1.59	1.53
35	BA	139	A	O3'-P	5.48	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	378	G	O3'-P	5.48	1.67	1.61
35	BA	421	U	C5-C6	5.48	1.39	1.34
35	BA	462	G	C2-N3	5.48	1.37	1.32
35	BA	685	G	C4'-O4'	-5.48	1.38	1.45
35	BA	928	G	N3-C4	5.48	1.39	1.35
35	BA	1306	A	C2'-C1'	-5.48	1.47	1.53
1	AA	87	U	O4'-C1'	5.48	1.48	1.41
2	AB	137	U	C4-C5	5.48	1.48	1.43
2	AB	1019	U	C2-N3	5.48	1.41	1.37
2	AB	1063	G	N1-C2	5.48	1.42	1.37
2	AB	2777	G	C4'-O4'	-5.48	1.38	1.45
2	AB	2777	G	N3-C4	-5.48	1.31	1.35
35	BA	146	G	N3-C4	5.48	1.39	1.35
2	AB	68	G	C3'-O3'	-5.48	1.34	1.42
2	AB	1208	C	C1'-N1	5.48	1.56	1.48
2	AB	1485	U	P-O5'	-5.48	1.54	1.59
2	AB	1798	U	C2-O2	5.48	1.27	1.22
2	AB	2611	C	C4'-O4'	-5.48	1.38	1.45
2	AB	2642	G	N3-C4	5.48	1.39	1.35
2	AB	2679	A	N9-C4	5.48	1.41	1.37
2	AB	2766	A	C5-C4	5.48	1.42	1.38
35	BA	562	U	C4'-O4'	-5.48	1.38	1.45
2	AB	124	G	C6-N1	5.48	1.43	1.39
2	AB	339	U	N1-C2	5.48	1.43	1.38
2	AB	370	G	C6-N1	5.48	1.43	1.39
2	AB	2249	U	C4-O4	5.48	1.28	1.23
2	AB	2476	A	N9-C8	-5.48	1.33	1.37
2	AB	2541	A	N9-C4	5.48	1.41	1.37
35	BA	621	A	C5-C4	-5.48	1.34	1.38
35	BA	716	A	N3-C4	5.48	1.38	1.34
35	BA	1199	U	C4'-O4'	-5.48	1.38	1.45
35	BA	1248	A	C3'-C2'	5.48	1.58	1.52
35	BA	1526	G	C8-N7	5.48	1.34	1.30
2	AB	1427	A	N9-C8	-5.48	1.33	1.37
2	AB	1957	C	P-O5'	5.48	1.65	1.59
2	AB	2229	U	N1-C2	5.48	1.43	1.38
35	BA	643	C	P-O5'	5.48	1.65	1.59
35	BA	1186	G	N1-C2	5.48	1.42	1.37
35	BA	1479	C	N3-C4	5.48	1.37	1.33
1	AA	6	G	P-O5'	5.47	1.65	1.59
2	AB	251	A	C3'-C2'	-5.47	1.46	1.52
2	AB	479	A	C5-C6	5.47	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	776	G	N1-C2	-5.47	1.33	1.37
2	AB	790	U	C4-O4	5.47	1.28	1.23
2	AB	1286	A	O4'-C1'	-5.47	1.34	1.41
2	AB	1393	A	N3-C4	5.47	1.38	1.34
2	AB	1706	C	C2-O2	-5.47	1.19	1.24
2	AB	2052	A	C2'-O2'	-5.47	1.34	1.41
2	AB	2146	C	N1-C6	5.47	1.40	1.37
2	AB	2285	C	C5'-C4'	-5.47	1.44	1.51
2	AB	2429	G	C5-C6	5.47	1.47	1.42
35	BA	703	G	C2-N2	-5.47	1.29	1.34
35	BA	1500	A	C8-N7	-5.47	1.27	1.31
2	AB	56	A	C6-N1	5.47	1.39	1.35
2	AB	447	A	C6-N6	-5.47	1.29	1.33
2	AB	453	A	C6-N6	5.47	1.38	1.33
2	AB	1236	G	C4'-O4'	-5.47	1.38	1.45
2	AB	1373	A	C5-C6	5.47	1.46	1.41
2	AB	1406	U	C2-O2	5.47	1.27	1.22
2	AB	1493	C	C4-C5	5.47	1.47	1.43
2	AB	1758	U	C4-C5	5.47	1.48	1.43
2	AB	2474	U	N3-C4	5.47	1.43	1.38
2	AB	2625	G	C5'-C4'	5.47	1.57	1.51
35	BA	861	G	C5-C4	-5.47	1.34	1.38
35	BA	1064	G	C5-C4	-5.47	1.34	1.38
1	AA	67	G	N9-C4	5.47	1.42	1.38
2	AB	699	A	N7-C5	5.47	1.42	1.39
2	AB	775	G	C5-C6	5.47	1.47	1.42
2	AB	2390	U	C2-N3	5.47	1.41	1.37
35	BA	39	G	N3-C4	-5.47	1.31	1.35
35	BA	327	A	C6-N6	5.47	1.38	1.33
2	AB	85	G	C4'-O4'	-5.47	1.38	1.45
2	AB	370	G	P-O5'	5.47	1.65	1.59
2	AB	918	A	C8-N7	-5.47	1.27	1.31
2	AB	957	C	C2-N3	5.47	1.40	1.35
2	AB	1390	U	C4-C5	5.47	1.48	1.43
2	AB	1745	A	C2-N3	5.47	1.38	1.33
2	AB	1801	A	O4'-C1'	5.47	1.48	1.41
2	AB	2068	U	C4-C5	5.47	1.48	1.43
2	AB	2158	A	C2-N3	-5.47	1.28	1.33
2	AB	2348	U	N1-C2	5.47	1.43	1.38
35	BA	773	G	N9-C8	-5.47	1.34	1.37
35	BA	865	A	N3-C4	5.47	1.38	1.34
35	BA	1027	C	N1-C2	5.47	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1405	G	N9-C8	-5.47	1.34	1.37
2	AB	156	A	C2'-O2'	-5.47	1.34	1.41
2	AB	1210	G	C8-N7	-5.47	1.27	1.30
2	AB	2007	U	N1-C2	5.47	1.43	1.38
2	AB	2314	A	N3-C4	5.47	1.38	1.34
35	BA	169	C	N3-C4	5.47	1.37	1.33
35	BA	1134	G	C4'-C3'	5.47	1.59	1.53
2	AB	165	A	P-O5'	5.47	1.65	1.59
2	AB	168	G	P-O5'	5.47	1.65	1.59
2	AB	425	G	C2-N3	5.47	1.37	1.32
2	AB	499	U	C2-N3	5.47	1.41	1.37
2	AB	1237	A	N9-C8	5.47	1.42	1.37
2	AB	2136	G	C6-N1	-5.47	1.35	1.39
2	AB	2213	U	C3'-C2'	5.47	1.58	1.52
2	AB	2217	G	N9-C8	5.47	1.41	1.37
2	AB	2855	C	C4-C5	5.47	1.47	1.43
2	AB	2887	A	C6-N1	5.47	1.39	1.35
35	BA	504	C	O3'-P	5.47	1.67	1.61
35	BA	930	C	C3'-C2'	5.47	1.58	1.52
35	BA	954	G	C2-N2	-5.47	1.29	1.34
35	BA	1051	C	C2-N3	5.47	1.40	1.35
35	BA	1125	U	C2-N3	5.47	1.41	1.37
2	AB	108	G	N3-C4	5.46	1.39	1.35
2	AB	1244	A	O3'-P	5.46	1.67	1.61
2	AB	1505	A	C5-C6	-5.46	1.36	1.41
2	AB	2309	A	P-O5'	5.46	1.65	1.59
2	AB	2743	U	N1-C2	5.46	1.43	1.38
35	BA	284	C	C4'-C3'	5.46	1.59	1.53
35	BA	341	C	P-O5'	5.46	1.65	1.59
35	BA	523	A	P-O5'	5.46	1.65	1.59
35	BA	739	C	C4-N4	5.46	1.38	1.33
2	AB	2464	G	C8-N7	5.46	1.34	1.30
2	AB	2636	C	C4'-O4'	-5.46	1.38	1.45
35	BA	520	A	O3'-P	5.46	1.67	1.61
35	BA	901	A	C4'-C3'	5.46	1.59	1.53
40	BF	55	ARG	CZ-NH2	5.46	1.40	1.33
54	BT	17	VAL	CB-CG2	5.46	1.64	1.52
2	AB	23	G	C5-C4	5.46	1.42	1.38
2	AB	1248	G	O4'-C1'	5.46	1.48	1.41
2	AB	1695	G	C5'-C4'	5.46	1.57	1.51
2	AB	2042	A	C5'-C4'	5.46	1.57	1.51
2	AB	2349	G	N1-C2	-5.46	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2491	U	C2-N3	5.46	1.41	1.37
2	AB	2804	U	N1-C6	5.46	1.42	1.38
4	AD	37	SER	N-CA	5.46	1.57	1.46
35	BA	442	G	N3-C4	5.46	1.39	1.35
35	BA	777	A	C6-N1	5.46	1.39	1.35
2	AB	327	G	C5-C6	5.46	1.47	1.42
2	AB	916	G	O4'-C1'	5.46	1.48	1.41
2	AB	1048	A	N7-C5	-5.46	1.35	1.39
2	AB	2042	A	O3'-P	5.46	1.67	1.61
2	AB	2772	C	O3'-P	5.46	1.67	1.61
35	BA	626	G	N7-C5	5.46	1.42	1.39
35	BA	1042	A	N7-C5	5.46	1.42	1.39
1	AA	33	G	N1-C2	5.46	1.42	1.37
2	AB	375	G	C5-C4	-5.46	1.34	1.38
2	AB	1345	C	C2-N3	5.46	1.40	1.35
2	AB	1723	G	C2-N3	5.46	1.37	1.32
2	AB	2162	G	C5'-C4'	5.46	1.57	1.51
2	AB	2392	A	N7-C5	5.46	1.42	1.39
2	AB	2574	G	N3-C4	5.46	1.39	1.35
2	AB	2697	G	N1-C2	5.46	1.42	1.37
29	A2	43	PHE	CG-CD2	5.46	1.47	1.38
35	BA	472	U	C2-N3	5.46	1.41	1.37
35	BA	789	U	C4'-O4'	-5.46	1.38	1.45
2	AB	726	G	N9-C4	-5.46	1.33	1.38
2	AB	975	A	C5'-C4'	5.46	1.57	1.51
2	AB	1041	G	N9-C8	-5.46	1.34	1.37
2	AB	1321	A	N3-C4	5.46	1.38	1.34
2	AB	1868	C	C2-N3	5.46	1.40	1.35
2	AB	2003	A	N9-C4	5.46	1.41	1.37
2	AB	2248	C	C4-N4	-5.46	1.29	1.33
35	BA	115	G	C2-N3	5.46	1.37	1.32
35	BA	280	C	C4'-C3'	-5.46	1.47	1.52
2	AB	1685	C	C4'-O4'	-5.46	1.38	1.45
2	AB	1958	C	O3'-P	-5.46	1.54	1.61
2	AB	2485	G	C5-C4	-5.46	1.34	1.38
2	AB	2801	G	N9-C4	5.46	1.42	1.38
35	BA	979	C	C3'-O3'	-5.46	1.34	1.42
35	BA	1153	G	C3'-C2'	5.46	1.58	1.52
35	BA	1324	A	N9-C8	5.46	1.42	1.37
2	AB	24	G	N1-C2	5.45	1.42	1.37
2	AB	155	A	N1-C2	5.45	1.39	1.34
2	AB	277	G	C3'-C2'	-5.45	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	643	A	C6-N6	5.45	1.38	1.33
2	AB	1487	U	C4-C5	5.45	1.48	1.43
2	AB	2381	A	C5-C4	-5.45	1.34	1.38
2	AB	2594	C	C4'-C3'	5.45	1.59	1.53
2	AB	2665	A	C6-N1	-5.45	1.31	1.35
2	AB	2889	C	N1-C6	-5.45	1.33	1.37
35	BA	505	G	P-O5'	5.45	1.65	1.59
35	BA	699	C	C5'-C4'	-5.45	1.44	1.51
35	BA	1284	C	C5-C6	5.45	1.38	1.34
1	AA	29	A	C8-N7	-5.45	1.27	1.31
2	AB	836	G	N9-C8	5.45	1.41	1.37
2	AB	2048	G	C4'-C3'	-5.45	1.47	1.52
35	BA	800	G	N9-C8	5.45	1.41	1.37
35	BA	896	C	C4-N4	5.45	1.38	1.33
2	AB	37	C	C5'-C4'	5.45	1.57	1.51
2	AB	796	C	O3'-P	5.45	1.67	1.61
2	AB	977	G	P-O5'	5.45	1.65	1.59
2	AB	1303	G	C5'-C4'	5.45	1.57	1.51
2	AB	1353	A	N1-C2	-5.45	1.29	1.34
2	AB	1530	G	C2'-C1'	-5.45	1.47	1.53
2	AB	1733	G	C5-C6	5.45	1.47	1.42
2	AB	2094	A	C6-N6	5.45	1.38	1.33
2	AB	2261	C	O3'-P	-5.45	1.54	1.61
2	AB	2458	G	C4'-O4'	-5.45	1.38	1.45
35	BA	52	C	C5-C6	5.45	1.38	1.34
35	BA	103	U	C5-C6	5.45	1.39	1.34
50	BP	41	TRP	CZ2-CH2	5.45	1.47	1.37
2	AB	24	G	C1'-N9	5.45	1.56	1.48
2	AB	249	C	N1-C6	5.45	1.40	1.37
2	AB	500	G	C8-N7	-5.45	1.27	1.30
2	AB	805	G	N7-C5	-5.45	1.35	1.39
2	AB	1013	C	C2-N3	5.45	1.40	1.35
2	AB	1258	U	C2'-O2'	5.45	1.48	1.41
2	AB	1645	G	C6-N1	5.45	1.43	1.39
2	AB	1661	G	C2-N2	-5.45	1.29	1.34
2	AB	1908	C	C4'-C3'	5.45	1.59	1.53
2	AB	2227	A	P-O5'	5.45	1.65	1.59
2	AB	2270	A	N9-C4	-5.45	1.34	1.37
2	AB	2525	G	C8-N7	-5.45	1.27	1.30
2	AB	2570	G	C2'-C1'	5.45	1.59	1.53
2	AB	2662	A	N9-C8	5.45	1.42	1.37
35	BA	195	A	N9-C4	5.45	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1236	A	C2-N3	5.45	1.38	1.33
1	AA	27	C	C4'-C3'	5.45	1.59	1.53
2	AB	1674	G	C3'-C2'	5.45	1.58	1.52
35	BA	740	U	C4'-O4'	-5.45	1.38	1.45
35	BA	818	G	C6-O6	-5.45	1.19	1.24
36	BB	54	U	N1-C2	5.45	1.43	1.38
2	AB	102	U	C2'-C1'	-5.45	1.47	1.53
2	AB	194	G	N9-C8	-5.45	1.34	1.37
2	AB	662	G	C3'-C2'	-5.45	1.46	1.52
2	AB	936	A	C8-N7	-5.45	1.27	1.31
2	AB	979	A	N7-C5	-5.45	1.35	1.39
2	AB	1301	A	C6-N1	5.45	1.39	1.35
2	AB	1404	C	C5-C6	5.45	1.38	1.34
2	AB	1637	A	C6-N1	-5.45	1.31	1.35
2	AB	1919	A	C5-C6	5.45	1.46	1.41
2	AB	2303	G	C2-N3	5.45	1.37	1.32
2	AB	2397	G	C5-C6	5.45	1.47	1.42
2	AB	2618	G	O3'-P	-5.45	1.54	1.61
10	AJ	75	PHE	CG-CD1	5.45	1.47	1.38
35	BA	534	U	N1-C6	-5.45	1.33	1.38
35	BA	1502	A	C5'-C4'	5.45	1.57	1.51
2	AB	2496	C	C5-C6	5.44	1.38	1.34
35	BA	545	C	C4-C5	5.44	1.47	1.43
1	AA	80	U	O5'-C5'	-5.44	1.34	1.42
2	AB	593	U	O3'-P	5.44	1.67	1.61
2	AB	634	C	C2'-C1'	5.44	1.59	1.53
2	AB	1447	C	C4-N4	5.44	1.38	1.33
2	AB	1906	G	N3-C4	-5.44	1.31	1.35
2	AB	2290	G	N3-C4	5.44	1.39	1.35
2	AB	2583	G	N3-C4	-5.44	1.31	1.35
15	AO	91	TYR	CE1-CZ	5.44	1.45	1.38
35	BA	289	G	C6-O6	-5.44	1.19	1.24
35	BA	431	A	C6-N6	5.44	1.38	1.33
35	BA	668	G	C6-N1	5.44	1.43	1.39
35	BA	1440	U	C4-C5	5.44	1.48	1.43
2	AB	802	A	C3'-C2'	5.44	1.58	1.52
2	AB	1004	U	O4'-C1'	5.44	1.48	1.41
2	AB	1400	U	N1-C6	5.44	1.42	1.38
2	AB	2298	A	C5-C4	-5.44	1.34	1.38
2	AB	2311	A	C8-N7	-5.44	1.27	1.31
2	AB	2332	C	C2'-C1'	-5.44	1.47	1.53
2	AB	2613	U	N1-C2	5.44	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	217	C	N3-C4	5.44	1.37	1.33
35	BA	706	A	N9-C4	5.44	1.41	1.37
35	BA	1316	G	N7-C5	-5.44	1.35	1.39
2	AB	449	A	N9-C4	-5.44	1.34	1.37
2	AB	830	G	C3'-C2'	-5.44	1.46	1.52
2	AB	2494	G	N3-C4	5.44	1.39	1.35
2	AB	41	C	C2-N3	5.44	1.40	1.35
2	AB	1080	A	C2'-C1'	5.44	1.59	1.53
35	BA	708	C	C4-C5	5.44	1.47	1.43
35	BA	839	C	C4'-O4'	-5.44	1.38	1.45
35	BA	1077	G	N9-C8	-5.44	1.34	1.37
35	BA	1174	G	C4'-O4'	-5.44	1.38	1.45
2	AB	353	C	C5-C6	5.44	1.38	1.34
2	AB	376	G	C8-N7	5.44	1.34	1.30
2	AB	449	A	C4'-C3'	5.44	1.59	1.53
2	AB	470	A	P-O5'	5.44	1.65	1.59
2	AB	480	A	P-O5'	5.44	1.65	1.59
2	AB	604	G	N1-C2	5.44	1.42	1.37
2	AB	816	C	C4-C5	5.44	1.47	1.43
2	AB	994	C	O4'-C1'	5.44	1.48	1.41
2	AB	2417	C	N1-C2	5.44	1.45	1.40
35	BA	502	A	C6-N6	5.44	1.38	1.33
2	AB	121	G	C4'-C3'	5.43	1.59	1.53
2	AB	192	C	C4-C5	5.43	1.47	1.43
2	AB	1199	U	C4'-C3'	5.43	1.59	1.53
2	AB	1532	A	P-O5'	5.43	1.65	1.59
2	AB	2429	G	C5-C4	5.43	1.42	1.38
35	BA	46	G	C2-N3	5.43	1.37	1.32
35	BA	249	U	O4'-C1'	5.43	1.48	1.41
35	BA	393	A	C4'-C3'	5.43	1.59	1.53
35	BA	1220	G	C2'-O2'	-5.43	1.34	1.41
41	BG	39	GLY	N-CA	-5.43	1.37	1.46
1	AA	57	A	O4'-C1'	5.43	1.48	1.41
2	AB	15	G	C5'-C4'	5.43	1.57	1.51
2	AB	533	G	C4'-O4'	-5.43	1.38	1.45
2	AB	2023	C	C3'-O3'	5.43	1.49	1.42
2	AB	2296	U	C5-C6	5.43	1.39	1.34
2	AB	2335	A	N1-C2	-5.43	1.29	1.34
2	AB	2567	G	C2'-C1'	5.43	1.59	1.53
26	AZ	42	GLU	CD-OE2	-5.43	1.19	1.25
36	BB	56	G	N9-C8	-5.43	1.34	1.37
2	AB	16	C	C4'-C3'	5.43	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	543	G	P-O5'	5.43	1.65	1.59
2	AB	624	C	C3'-O3'	5.43	1.49	1.42
2	AB	1221	C	C2'-O2'	5.43	1.48	1.41
2	AB	1257	C	C2-O2	-5.43	1.19	1.24
2	AB	2428	G	N1-C2	5.43	1.42	1.37
35	BA	622	A	C6-N1	-5.43	1.31	1.35
2	AB	127	A	O4'-C1'	-5.43	1.34	1.41
2	AB	357	C	C4-C5	5.43	1.47	1.43
2	AB	601	C	C4-C5	5.43	1.47	1.43
2	AB	1046	A	C3'-C2'	5.43	1.58	1.52
2	AB	1253	A	C4'-C3'	-5.43	1.47	1.52
2	AB	1712	U	O4'-C1'	5.43	1.48	1.41
2	AB	1928	A	N7-C5	-5.43	1.35	1.39
2	AB	1992	G	C6-N1	5.43	1.43	1.39
2	AB	2012	G	C5-C4	-5.43	1.34	1.38
2	AB	2331	G	N1-C2	5.43	1.42	1.37
2	AB	2488	G	C5-C6	5.43	1.47	1.42
2	AB	2570	G	N7-C5	5.43	1.42	1.39
35	BA	267	C	P-O5'	5.43	1.65	1.59
35	BA	654	G	C6-N1	5.43	1.43	1.39
35	BA	1109	C	C2-N3	-5.43	1.31	1.35
2	AB	2252	G	N1-C2	5.43	1.42	1.37
2	AB	2386	A	N1-C2	5.43	1.39	1.34
35	BA	807	A	N9-C8	5.43	1.42	1.37
35	BA	1053	G	C2-N3	5.43	1.37	1.32
36	BB	48	C	C4-C5	5.43	1.47	1.43
2	AB	38	A	C6-N6	5.43	1.38	1.33
2	AB	443	A	N9-C4	5.43	1.41	1.37
2	AB	539	G	C5'-C4'	5.43	1.57	1.51
2	AB	614	A	C6-N1	5.43	1.39	1.35
2	AB	1209	U	N3-C4	5.43	1.43	1.38
2	AB	1475	G	N1-C2	5.43	1.42	1.37
35	BA	227	G	N3-C4	5.43	1.39	1.35
35	BA	517	G	C5'-C4'	5.43	1.57	1.51
35	BA	571	U	C2'-C1'	-5.43	1.47	1.53
35	BA	600	A	C2'-C1'	-5.43	1.47	1.53
35	BA	1186	G	N9-C8	5.43	1.41	1.37
35	BA	1191	A	C5-C6	5.43	1.46	1.41
2	AB	177	G	N3-C4	5.42	1.39	1.35
2	AB	630	G	N3-C4	5.42	1.39	1.35
2	AB	926	G	N9-C4	5.42	1.42	1.38
2	AB	1515	A	C4'-O4'	-5.42	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1592	C	C5'-C4'	5.42	1.57	1.51
2	AB	1696	G	P-O5'	5.42	1.65	1.59
2	AB	1715	G	C2'-C1'	5.42	1.59	1.53
2	AB	1948	G	P-O5'	5.42	1.65	1.59
2	AB	2058	A	C3'-O3'	5.42	1.49	1.42
2	AB	2499	C	N3-C4	-5.42	1.30	1.33
13	AM	18	ARG	NE-CZ	5.42	1.40	1.33
35	BA	177	G	C2'-C1'	5.42	1.59	1.53
35	BA	380	G	C5-C4	-5.42	1.34	1.38
35	BA	975	A	C2'-O2'	-5.42	1.34	1.41
2	AB	936	A	C3'-C2'	5.42	1.58	1.52
2	AB	1061	U	C5'-C4'	5.42	1.57	1.51
2	AB	1435	G	N1-C2	5.42	1.42	1.37
2	AB	1446	C	C1'-N1	5.42	1.56	1.48
2	AB	1569	A	P-O5'	5.42	1.65	1.59
2	AB	1573	G	N9-C8	-5.42	1.34	1.37
2	AB	1845	G	C2'-O2'	-5.42	1.34	1.41
2	AB	2448	A	C6-N6	-5.42	1.29	1.33
35	BA	1384	C	C5-C6	-5.42	1.30	1.34
2	AB	1807	G	C4'-O4'	-5.42	1.38	1.45
2	AB	2438	U	C2-N3	5.42	1.41	1.37
2	AB	2884	U	C4'-O4'	-5.42	1.38	1.45
35	BA	803	G	C2'-C1'	-5.42	1.47	1.53
35	BA	1277	C	C4'-C3'	5.42	1.59	1.53
2	AB	571	U	C3'-C2'	5.42	1.58	1.52
2	AB	1064	C	N3-C4	5.42	1.37	1.33
2	AB	2791	G	C6-O6	-5.42	1.19	1.24
35	BA	334	C	C2'-C1'	-5.42	1.47	1.53
35	BA	908	A	O3'-P	5.42	1.67	1.61
1	AA	84	G	C2-N3	5.42	1.37	1.32
2	AB	1072	C	C4-C5	5.42	1.47	1.43
2	AB	1262	A	N9-C4	-5.42	1.34	1.37
2	AB	1619	G	N9-C8	-5.42	1.34	1.37
2	AB	2062	A	C6-N6	-5.42	1.29	1.33
2	AB	2114	A	C5-C4	-5.42	1.34	1.38
2	AB	2148	G	C8-N7	5.42	1.34	1.30
2	AB	2656	U	O3'-P	-5.42	1.54	1.61
2	AB	2781	A	N3-C4	5.42	1.38	1.34
35	BA	465	A	C5'-C4'	5.42	1.57	1.51
35	BA	570	G	O3'-P	5.42	1.67	1.61
35	BA	984	C	N3-C4	-5.42	1.30	1.33
36	BB	36	U	C4'-O4'	-5.42	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	294	A	P-O5'	5.42	1.65	1.59
2	AB	524	G	C6-N1	5.42	1.43	1.39
2	AB	562	U	C4'-O4'	-5.42	1.38	1.45
2	AB	749	A	N9-C8	-5.42	1.33	1.37
2	AB	825	A	C4'-O4'	-5.42	1.38	1.45
2	AB	1809	A	C5-C4	-5.42	1.34	1.38
2	AB	1890	A	C2'-O2'	5.42	1.48	1.41
2	AB	2077	A	C5-C6	5.42	1.46	1.41
2	AB	2679	A	C8-N7	5.42	1.35	1.31
35	BA	934	C	N1-C6	5.42	1.40	1.37
35	BA	1108	G	C2-N2	-5.42	1.29	1.34
35	BA	1135	U	O3'-P	5.42	1.67	1.61
35	BA	1389	C	P-O5'	-5.42	1.54	1.59
2	AB	1609	A	N3-C4	5.42	1.38	1.34
2	AB	2291	U	C5-C6	5.42	1.39	1.34
2	AB	2698	U	O3'-P	5.42	1.67	1.61
35	BA	1042	A	C6-N6	5.42	1.38	1.33
2	AB	126	A	N3-C4	5.41	1.38	1.34
2	AB	375	G	O3'-P	5.41	1.67	1.61
2	AB	571	U	C2'-O2'	5.41	1.48	1.41
2	AB	612	G	C6-N1	-5.41	1.35	1.39
2	AB	620	G	C2'-C1'	-5.41	1.47	1.53
2	AB	826	U	O4'-C1'	5.41	1.48	1.41
2	AB	1484	U	O3'-P	5.41	1.67	1.61
2	AB	1878	G	C6-O6	-5.41	1.19	1.24
2	AB	2049	G	C5-C4	-5.41	1.34	1.38
2	AB	2492	U	C4'-O4'	-5.41	1.38	1.45
35	BA	751	U	N3-C4	5.41	1.43	1.38
35	BA	818	G	N9-C8	-5.41	1.34	1.37
35	BA	1001	C	C3'-C2'	5.41	1.58	1.52
2	AB	1095	A	C3'-C2'	5.41	1.58	1.52
2	AB	1988	G	C2-N3	5.41	1.37	1.32
2	AB	2476	A	C3'-C2'	5.41	1.58	1.52
2	AB	2590	A	C4'-O4'	-5.41	1.38	1.45
2	AB	2665	A	N9-C4	-5.41	1.34	1.37
35	BA	129	A	N7-C5	5.41	1.42	1.39
2	AB	38	A	N7-C5	5.41	1.42	1.39
2	AB	86	G	C5'-C4'	5.41	1.57	1.51
2	AB	656	G	C6-N1	5.41	1.43	1.39
2	AB	1144	A	C4'-C3'	5.41	1.59	1.53
2	AB	1186	G	C5'-C4'	5.41	1.57	1.51
2	AB	1566	A	N9-C8	5.41	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2023	C	N1-C6	5.41	1.40	1.37
2	AB	2471	A	C4'-C3'	5.41	1.59	1.53
35	BA	830	G	P-O5'	5.41	1.65	1.59
35	BA	1310	G	N9-C8	5.41	1.41	1.37
35	BA	1417	G	C5-C4	-5.41	1.34	1.38
37	BC	38	A	C6-N6	5.41	1.38	1.33
1	AA	85	G	C4'-C3'	5.41	1.59	1.53
2	AB	677	A	C6-N1	5.41	1.39	1.35
2	AB	722	A	O3'-P	5.41	1.67	1.61
2	AB	829	A	O3'-P	5.41	1.67	1.61
2	AB	852	U	C5'-C4'	5.41	1.57	1.51
2	AB	928	A	O4'-C1'	5.41	1.48	1.41
2	AB	1114	C	N3-C4	5.41	1.37	1.33
2	AB	1757	A	N9-C4	5.41	1.41	1.37
2	AB	1984	G	N1-C2	-5.41	1.33	1.37
2	AB	2043	C	N3-C4	5.41	1.37	1.33
2	AB	2186	G	P-O5'	5.41	1.65	1.59
12	AL	75	TYR	CE1-CZ	5.41	1.45	1.38
35	BA	100	G	N1-C2	5.41	1.42	1.37
35	BA	124	C	C5'-C4'	5.41	1.57	1.51
35	BA	971	G	P-O5'	5.41	1.65	1.59
35	BA	1408	A	N9-C8	5.41	1.42	1.37
2	AB	303	G	O3'-P	-5.41	1.54	1.61
2	AB	457	A	C5-C6	5.41	1.46	1.41
2	AB	2481	G	N9-C8	5.41	1.41	1.37
2	AB	2524	G	C8-N7	-5.41	1.27	1.30
35	BA	618	C	N1-C2	5.41	1.45	1.40
35	BA	968	A	P-O5'	-5.41	1.54	1.59
2	AB	287	G	C2'-O2'	5.41	1.48	1.41
2	AB	906	U	C5-C6	5.41	1.39	1.34
2	AB	1707	G	N9-C4	5.41	1.42	1.38
2	AB	1716	U	N1-C6	5.41	1.42	1.38
2	AB	1955	U	N1-C6	5.41	1.42	1.38
2	AB	2267	A	C5-C4	-5.41	1.34	1.38
2	AB	2817	U	C4-C5	5.41	1.48	1.43
35	BA	247	G	C3'-C2'	5.41	1.58	1.52
35	BA	839	C	C2'-O2'	-5.41	1.34	1.41
35	BA	1145	A	C5-C6	5.41	1.46	1.41
36	BB	26	U	N3-C4	5.41	1.43	1.38
49	BO	5	GLY	N-CA	-5.41	1.38	1.46
2	AB	72	U	C4'-C3'	5.40	1.59	1.53
2	AB	575	A	C6-N1	5.40	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2425	A	C2-N3	-5.40	1.28	1.33
2	AB	93	G	C5-C6	5.40	1.47	1.42
2	AB	281	C	N3-C4	5.40	1.37	1.33
2	AB	294	A	N9-C4	5.40	1.41	1.37
2	AB	380	G	P-O5'	5.40	1.65	1.59
2	AB	698	C	C5-C6	5.40	1.38	1.34
2	AB	816	C	C4'-C3'	5.40	1.59	1.53
2	AB	1245	G	C5-C6	5.40	1.47	1.42
2	AB	1495	A	O4'-C1'	5.40	1.48	1.41
2	AB	1846	G	C2-N3	5.40	1.37	1.32
2	AB	2015	A	P-O5'	5.40	1.65	1.59
2	AB	2067	G	N9-C4	5.40	1.42	1.38
2	AB	2390	U	C2'-C1'	5.40	1.59	1.53
2	AB	2476	A	C4'-O4'	-5.40	1.38	1.45
2	AB	2541	A	C4'-O4'	-5.40	1.38	1.45
35	BA	38	G	N7-C5	-5.40	1.36	1.39
35	BA	290	C	C5'-C4'	5.40	1.57	1.51
35	BA	748	G	C6-O6	-5.40	1.19	1.24
35	BA	750	C	C2-N3	5.40	1.40	1.35
35	BA	1168	U	C4-C5	-5.40	1.38	1.43
35	BA	1335	U	O3'-P	5.40	1.67	1.61
2	AB	375	G	P-O5'	-5.40	1.54	1.59
2	AB	593	U	C4-O4	-5.40	1.19	1.23
2	AB	654	A	N9-C4	5.40	1.41	1.37
2	AB	899	A	N3-C4	5.40	1.38	1.34
2	AB	935	C	C1'-N1	5.40	1.56	1.48
2	AB	937	C	O3'-P	5.40	1.67	1.61
2	AB	1941	C	N1-C6	5.40	1.40	1.37
2	AB	2185	U	C5'-C4'	5.40	1.57	1.51
2	AB	2809	A	C5-C4	5.40	1.42	1.38
2	AB	2835	A	C2'-O2'	-5.40	1.34	1.41
13	AM	92	GLU	CD-OE2	5.40	1.31	1.25
35	BA	1204	A	O3'-P	5.40	1.67	1.61
35	BA	1355	G	C4'-C3'	-5.40	1.47	1.52
2	AB	1155	A	C2'-C1'	-5.40	1.47	1.53
35	BA	359	G	C2'-O2'	5.40	1.48	1.41
35	BA	608	A	C6-N1	-5.40	1.31	1.35
35	BA	844	G	N7-C5	5.40	1.42	1.39
35	BA	964	A	C3'-C2'	-5.40	1.46	1.52
1	AA	15	A	C6-N6	5.40	1.38	1.33
2	AB	24	G	C2'-C1'	-5.40	1.47	1.53
2	AB	132	G	C8-N7	-5.40	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	189	G	C4'-O4'	-5.40	1.38	1.45
2	AB	270	A	N9-C4	-5.40	1.34	1.37
2	AB	424	G	N3-C4	5.40	1.39	1.35
2	AB	1256	G	C4'-O4'	-5.40	1.38	1.45
2	AB	1274	A	N9-C4	-5.40	1.34	1.37
2	AB	1582	C	C2'-C1'	5.40	1.59	1.53
2	AB	2110	G	N7-C5	-5.40	1.36	1.39
2	AB	2145	C	C2-O2	-5.40	1.19	1.24
2	AB	2391	G	N3-C4	5.40	1.39	1.35
35	BA	446	G	C5-C6	5.40	1.47	1.42
35	BA	581	G	C5-C4	-5.40	1.34	1.38
35	BA	797	C	C4-N4	5.40	1.38	1.33
35	BA	1475	G	C4'-O4'	-5.40	1.38	1.45
35	BA	161	A	C5'-C4'	5.40	1.57	1.51
35	BA	1318	A	N7-C5	5.40	1.42	1.39
2	AB	263	G	C8-N7	-5.39	1.27	1.30
2	AB	2390	U	N1-C6	-5.39	1.33	1.38
2	AB	2668	G	N1-C2	5.39	1.42	1.37
35	BA	763	G	C4'-C3'	5.39	1.59	1.53
35	BA	840	C	C4'-C3'	5.39	1.59	1.53
35	BA	952	U	C4-C5	5.39	1.48	1.43
35	BA	1142	G	C2'-O2'	-5.39	1.34	1.41
35	BA	1175	G	N9-C8	-5.39	1.34	1.37
1	AA	47	C	O4'-C1'	5.39	1.48	1.41
2	AB	492	A	N3-C4	5.39	1.38	1.34
2	AB	730	A	P-O5'	5.39	1.65	1.59
2	AB	976	G	C4'-O4'	-5.39	1.38	1.45
2	AB	1156	A	N3-C4	5.39	1.38	1.34
2	AB	1178	C	O3'-P	5.39	1.67	1.61
2	AB	1217	U	N1-C6	5.39	1.42	1.38
2	AB	1269	A	C5'-C4'	5.39	1.57	1.51
2	AB	1404	C	C2'-O2'	5.39	1.48	1.41
2	AB	1612	C	C4-N4	-5.39	1.29	1.33
2	AB	2014	A	C5-C4	-5.39	1.34	1.38
2	AB	2066	C	C3'-C2'	5.39	1.58	1.52
2	AB	2204	G	C2-N2	-5.39	1.29	1.34
2	AB	2397	G	P-O5'	5.39	1.65	1.59
2	AB	2461	A	N1-C2	5.39	1.39	1.34
2	AB	2481	G	C5'-C4'	5.39	1.57	1.51
35	BA	250	A	C6-N6	-5.39	1.29	1.33
35	BA	602	A	N9-C4	5.39	1.41	1.37
35	BA	1292	G	C2-N2	-5.39	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	8	C	C5'-C4'	5.39	1.57	1.51
2	AB	126	A	P-O5'	5.39	1.65	1.59
2	AB	903	C	C2'-C1'	5.39	1.59	1.53
35	BA	1123	U	N1-C2	5.39	1.43	1.38
2	AB	833	A	O4'-C1'	5.39	1.48	1.41
2	AB	1669	A	P-O5'	5.39	1.65	1.59
2	AB	2096	C	N1-C6	5.39	1.40	1.37
35	BA	720	C	C5-C6	5.39	1.38	1.34
35	BA	1408	A	N7-C5	-5.39	1.36	1.39
35	BA	1463	U	N1-C6	5.39	1.42	1.38
2	AB	412	A	C2-N3	-5.39	1.28	1.33
2	AB	1403	A	C5-C6	5.39	1.45	1.41
2	AB	162	U	C5-C6	5.39	1.39	1.34
2	AB	178	G	C6-N1	5.39	1.43	1.39
2	AB	403	U	C2-N3	-5.39	1.33	1.37
2	AB	554	U	N3-C4	5.39	1.43	1.38
2	AB	629	G	N3-C4	5.39	1.39	1.35
2	AB	1270	C	C2'-C1'	5.39	1.59	1.53
2	AB	1861	G	O4'-C1'	5.39	1.48	1.41
2	AB	2017	U	C2-N3	5.39	1.41	1.37
2	AB	2630	G	N9-C8	5.39	1.41	1.37
2	AB	2778	A	C4'-O4'	-5.39	1.38	1.45
2	AB	2784	U	C2-O2	5.39	1.27	1.22
4	AD	95	TYR	CZ-OH	-5.39	1.28	1.37
35	BA	7	A	C4'-O4'	-5.39	1.38	1.45
35	BA	302	G	C6-O6	-5.39	1.19	1.24
35	BA	522	C	O3'-P	5.39	1.67	1.61
36	BB	46	C	C2'-C1'	-5.39	1.47	1.53
2	AB	70	G	P-O5'	5.38	1.65	1.59
2	AB	528	A	C2'-O2'	5.38	1.48	1.41
2	AB	533	G	N9-C4	5.38	1.42	1.38
2	AB	672	C	C2-N3	-5.38	1.31	1.35
2	AB	1265	A	C4'-C3'	5.38	1.59	1.53
2	AB	1284	A	O3'-P	5.38	1.67	1.61
2	AB	1436	G	N7-C5	5.38	1.42	1.39
2	AB	1518	C	C4-N4	5.38	1.38	1.33
2	AB	1819	A	C5-C4	-5.38	1.34	1.38
2	AB	1963	U	O4'-C1'	5.38	1.48	1.41
2	AB	2053	G	C2-N3	5.38	1.37	1.32
2	AB	2274	A	N3-C4	5.38	1.38	1.34
2	AB	2428	G	C6-N1	5.38	1.43	1.39
35	BA	799	G	C3'-C2'	5.38	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1451	U	P-O5'	-5.38	1.54	1.59
2	AB	1459	G	C2'-C1'	-5.38	1.47	1.53
2	AB	2624	G	N7-C5	-5.38	1.36	1.39
2	AB	2643	G	N9-C8	-5.38	1.34	1.37
35	BA	454	G	N9-C8	5.38	1.41	1.37
35	BA	540	G	O4'-C1'	5.38	1.48	1.41
35	BA	1107	C	C5'-C4'	-5.38	1.44	1.51
35	BA	1308	U	C4'-C3'	5.38	1.59	1.53
2	AB	394	C	O4'-C1'	5.38	1.48	1.41
2	AB	539	G	C2-N2	5.38	1.40	1.34
2	AB	1195	G	N9-C4	5.38	1.42	1.38
2	AB	1682	G	C2-N2	5.38	1.40	1.34
2	AB	2152	G	C4'-O4'	-5.38	1.38	1.45
35	BA	176	C	C5-C6	5.38	1.38	1.34
35	BA	838	G	C1'-N9	5.38	1.56	1.48
35	BA	863	U	C5-C6	5.38	1.39	1.34
35	BA	969	A	C4'-C3'	5.38	1.59	1.53
37	BC	39	A	C5-C4	5.38	1.42	1.38
2	AB	214	G	N3-C4	5.38	1.39	1.35
2	AB	2368	C	C4-C5	5.38	1.47	1.43
2	AB	2654	A	N9-C4	5.38	1.41	1.37
35	BA	262	A	O4'-C1'	5.38	1.48	1.41
2	AB	501	A	C5-C4	-5.38	1.34	1.38
2	AB	605	G	P-O5'	5.38	1.65	1.59
2	AB	796	C	N1-C2	5.38	1.45	1.40
2	AB	923	G	C5'-C4'	5.38	1.57	1.51
2	AB	1327	A	N9-C4	5.38	1.41	1.37
2	AB	1406	U	C3'-O3'	5.38	1.49	1.42
2	AB	1608	A	C4'-O4'	-5.38	1.38	1.45
2	AB	1885	A	C8-N7	-5.38	1.27	1.31
2	AB	1927	A	N3-C4	5.38	1.38	1.34
2	AB	2403	C	O3'-P	5.38	1.67	1.61
2	AB	2621	G	O3'-P	5.38	1.67	1.61
2	AB	2623	G	P-O5'	5.38	1.65	1.59
35	BA	108	G	N3-C4	5.38	1.39	1.35
35	BA	468	A	N9-C4	5.38	1.41	1.37
35	BA	1270	G	C2-N2	5.38	1.40	1.34
2	AB	460	A	O4'-C1'	5.38	1.48	1.41
2	AB	586	A	N9-C4	5.38	1.41	1.37
2	AB	603	A	C6-N1	-5.38	1.31	1.35
2	AB	661	A	C5-C4	5.38	1.42	1.38
2	AB	1104	C	C5-C6	5.38	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1201	U	C2-N3	5.38	1.41	1.37
2	AB	1426	G	N7-C5	-5.38	1.36	1.39
2	AB	2151	U	C4'-C3'	5.38	1.59	1.53
2	AB	2745	C	P-O5'	5.38	1.65	1.59
35	BA	128	G	C2-N3	5.38	1.37	1.32
38	BD	15	PHE	CG-CD1	5.38	1.46	1.38
2	AB	58	G	C4'-C3'	-5.38	1.47	1.52
2	AB	230	G	P-O5'	5.38	1.65	1.59
2	AB	506	G	C2-N3	5.38	1.37	1.32
13	AM	45	GLU	CD-OE1	5.38	1.31	1.25
2	AB	363	G	N3-C4	5.37	1.39	1.35
2	AB	504	A	C6-N1	5.37	1.39	1.35
2	AB	1093	G	O3'-P	-5.37	1.54	1.61
2	AB	1626	A	C2-N3	5.37	1.38	1.33
2	AB	2161	C	O3'-P	5.37	1.67	1.61
2	AB	2185	U	N1-C6	5.37	1.42	1.38
2	AB	2267	A	N9-C8	5.37	1.42	1.37
2	AB	2408	U	N3-C4	5.37	1.43	1.38
2	AB	2566	A	C1'-N9	5.37	1.56	1.48
2	AB	2878	U	C2'-O2'	5.37	1.48	1.41
35	BA	42	G	C4'-O4'	-5.37	1.38	1.45
35	BA	242	G	C3'-C2'	5.37	1.58	1.52
35	BA	543	U	N1-C2	5.37	1.43	1.38
35	BA	652	U	C2-N3	5.37	1.41	1.37
35	BA	1055	A	C5'-C4'	5.37	1.57	1.51
35	BA	1419	G	C2'-C1'	-5.37	1.47	1.53
2	AB	956	G	C5-C4	-5.37	1.34	1.38
2	AB	1885	A	O3'-P	-5.37	1.54	1.61
2	AB	2044	C	C2-N3	5.37	1.40	1.35
2	AB	2412	A	N9-C8	-5.37	1.33	1.37
35	BA	325	A	N3-C4	5.37	1.38	1.34
35	BA	356	A	C4'-C3'	5.37	1.59	1.53
35	BA	570	G	P-O5'	5.37	1.65	1.59
35	BA	753	A	C2-N3	-5.37	1.28	1.33
35	BA	852	G	C2-N3	5.37	1.37	1.32
35	BA	1045	C	C2'-O2'	5.37	1.48	1.41
35	BA	1084	G	O3'-P	-5.37	1.54	1.61
35	BA	1416	G	O3'-P	-5.37	1.54	1.61
37	BC	17	C	N3-C4	5.37	1.37	1.33
2	AB	349	U	C3'-C2'	-5.37	1.46	1.52
2	AB	554	U	O5'-C5'	-5.37	1.34	1.42
2	AB	667	U	N1-C2	5.37	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	809	G	C4'-O4'	-5.37	1.38	1.45
2	AB	1018	U	P-O5'	5.37	1.65	1.59
2	AB	1038	G	O4'-C1'	5.37	1.48	1.41
2	AB	1372	U	O5'-C5'	-5.37	1.34	1.42
2	AB	1968	G	N9-C8	-5.37	1.34	1.37
2	AB	2839	G	C5'-C4'	5.37	1.57	1.51
35	BA	531	U	C5'-C4'	5.37	1.57	1.51
2	AB	1045	C	C2-N3	5.37	1.40	1.35
2	AB	1689	A	N9-C4	5.37	1.41	1.37
35	BA	310	G	C5-C4	5.37	1.42	1.38
35	BA	450	G	C5-C4	5.37	1.42	1.38
2	AB	1393	A	C6-N6	5.37	1.38	1.33
2	AB	2010	G	P-O5'	5.37	1.65	1.59
2	AB	2046	G	C4'-O4'	-5.37	1.38	1.45
35	BA	217	C	C4'-C3'	-5.37	1.47	1.52
35	BA	264	C	N1-C6	-5.37	1.33	1.37
35	BA	357	G	C6-N1	5.37	1.43	1.39
35	BA	915	A	C3'-C2'	5.37	1.58	1.52
35	BA	1158	C	C2'-C1'	5.37	1.59	1.53
35	BA	1478	U	C2'-C1'	-5.37	1.47	1.53
37	BC	68	C	C4'-O4'	-5.37	1.38	1.45
2	AB	953	G	P-O5'	5.36	1.65	1.59
2	AB	1568	G	P-O5'	5.36	1.65	1.59
2	AB	1943	U	C4-C5	5.36	1.48	1.43
2	AB	2035	G	C5-C6	5.36	1.47	1.42
2	AB	2592	G	N9-C8	5.36	1.41	1.37
35	BA	1295	U	C2-O2	5.36	1.27	1.22
35	BA	1374	A	P-O5'	5.36	1.65	1.59
2	AB	2294	G	N1-C2	5.36	1.42	1.37
2	AB	2296	U	N3-C4	5.36	1.43	1.38
2	AB	2339	C	N1-C2	5.36	1.45	1.40
35	BA	483	C	N3-C4	5.36	1.37	1.33
35	BA	654	G	C4'-O4'	-5.36	1.38	1.45
2	AB	569	U	C4'-C3'	5.36	1.59	1.53
2	AB	1319	C	C4'-O4'	-5.36	1.38	1.45
2	AB	1677	A	N7-C5	5.36	1.42	1.39
2	AB	1814	G	C4'-O4'	-5.36	1.38	1.45
2	AB	2079	U	C4-O4	-5.36	1.19	1.23
2	AB	2083	G	C5-C4	5.36	1.42	1.38
2	AB	2490	G	N9-C4	-5.36	1.33	1.38
35	BA	595	A	C8-N7	-5.36	1.27	1.31
35	BA	1277	C	O3'-P	5.36	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1307	U	N3-C4	-5.36	1.33	1.38
37	BC	27	G	P-O5'	5.36	1.65	1.59
2	AB	1376	C	C4-C5	-5.36	1.38	1.43
2	AB	2486	C	O4'-C1'	5.36	1.48	1.41
35	BA	288	A	N7-C5	5.36	1.42	1.39
2	AB	200	U	C2'-C1'	5.36	1.59	1.53
2	AB	279	A	N9-C4	-5.36	1.34	1.37
2	AB	283	G	C2'-O2'	-5.36	1.34	1.41
2	AB	392	U	C4'-O4'	-5.36	1.38	1.45
2	AB	427	U	C2-N3	5.36	1.41	1.37
2	AB	853	C	C2'-O2'	5.36	1.48	1.41
2	AB	932	U	N1-C6	5.36	1.42	1.38
2	AB	1558	C	N1-C6	5.36	1.40	1.37
2	AB	1778	U	C5-C6	5.36	1.39	1.34
35	BA	96	U	C2-N3	-5.36	1.33	1.37
35	BA	773	G	N3-C4	-5.36	1.31	1.35
35	BA	982	U	N3-C4	5.36	1.43	1.38
35	BA	1275	A	C6-N6	-5.36	1.29	1.33
2	AB	99	U	O3'-P	5.36	1.67	1.61
2	AB	621	A	N1-C2	-5.36	1.29	1.34
2	AB	1223	G	N9-C4	5.36	1.42	1.38
2	AB	1227	G	C3'-O3'	5.36	1.49	1.42
2	AB	1310	G	C4'-O4'	-5.36	1.38	1.45
2	AB	1430	G	C4'-O4'	-5.36	1.38	1.45
2	AB	1493	C	C3'-O3'	5.36	1.49	1.42
2	AB	1532	A	N9-C4	-5.36	1.34	1.37
2	AB	1786	A	C6-N6	5.36	1.38	1.33
2	AB	2325	G	N3-C4	5.36	1.39	1.35
2	AB	2452	C	C2'-C1'	5.36	1.59	1.53
2	AB	2587	A	C4'-C3'	-5.36	1.47	1.52
20	AT	17	GLY	CA-C	5.36	1.60	1.51
35	BA	375	U	C2-N3	5.36	1.41	1.37
35	BA	1201	A	C5'-C4'	5.36	1.57	1.51
35	BA	1486	G	C5'-C4'	5.36	1.57	1.51
36	BB	23	C	C2-O2	-5.36	1.19	1.24
1	AA	51	G	C5-C6	5.35	1.47	1.42
2	AB	1494	A	N1-C2	-5.35	1.29	1.34
2	AB	1588	G	C3'-C2'	5.35	1.58	1.52
2	AB	1678	A	C4'-O4'	-5.35	1.38	1.45
2	AB	1777	U	C1'-N1	5.35	1.56	1.48
2	AB	2518	A	N9-C4	-5.35	1.34	1.37
35	BA	1333	A	C6-N6	-5.35	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
48	BN	55	ARG	CZ-NH2	5.35	1.40	1.33
1	AA	38	C	P-O5'	5.35	1.65	1.59
2	AB	53	A	C8-N7	-5.35	1.27	1.31
2	AB	379	G	N7-C5	5.35	1.42	1.39
2	AB	681	G	N1-C2	5.35	1.42	1.37
2	AB	976	G	C2-N3	5.35	1.37	1.32
2	AB	1026	G	N9-C8	-5.35	1.34	1.37
35	BA	1087	G	C6-N1	5.35	1.43	1.39
35	BA	1094	G	P-O5'	-5.35	1.54	1.59
35	BA	1206	G	N7-C5	5.35	1.42	1.39
2	AB	2035	G	N3-C4	5.35	1.39	1.35
35	BA	821	G	C5'-C4'	5.35	1.57	1.51
39	BE	87	ARG	NE-CZ	5.35	1.40	1.33
2	AB	801	G	C2-N3	-5.35	1.28	1.32
2	AB	1074	G	C3'-O3'	5.35	1.49	1.42
2	AB	2374	C	O4'-C1'	5.35	1.48	1.41
2	AB	2400	G	C2-N3	-5.35	1.28	1.32
2	AB	2474	U	C5-C6	5.35	1.39	1.34
2	AB	2785	C	N3-C4	5.35	1.37	1.33
2	AB	2877	G	N9-C8	5.35	1.41	1.37
19	AS	52	ARG	CZ-NH1	5.35	1.40	1.33
35	BA	189	A	N9-C4	5.35	1.41	1.37
35	BA	256	U	N3-C4	5.35	1.43	1.38
35	BA	1282	C	C2-N3	5.35	1.40	1.35
36	BB	25	U	C3'-O3'	5.35	1.49	1.42
2	AB	612	G	N9-C8	-5.35	1.34	1.37
2	AB	1248	G	C6-N1	-5.35	1.35	1.39
2	AB	1406	U	C5'-C4'	5.35	1.57	1.51
2	AB	1433	A	N9-C4	5.35	1.41	1.37
2	AB	1585	C	P-O5'	5.35	1.65	1.59
2	AB	2279	G	C5'-C4'	5.35	1.57	1.51
2	AB	2322	A	N3-C4	5.35	1.38	1.34
2	AB	2421	G	N9-C8	-5.35	1.34	1.37
2	AB	2572	A	C4'-C3'	-5.35	1.47	1.52
35	BA	33	A	N7-C5	5.35	1.42	1.39
35	BA	75	G	O3'-P	5.35	1.67	1.61
35	BA	434	U	C2-O2	5.35	1.27	1.22
35	BA	488	C	P-O5'	5.35	1.65	1.59
35	BA	740	U	C4-C5	5.35	1.48	1.43
40	BF	164	ARG	NE-CZ	5.35	1.40	1.33
2	AB	96	C	C4'-O4'	-5.35	1.38	1.45
2	AB	411	G	C4'-O4'	-5.35	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	424	G	O3'-P	5.35	1.67	1.61
2	AB	800	A	C5'-C4'	5.35	1.57	1.51
35	BA	762	U	C4-O4	-5.35	1.19	1.23
2	AB	345	A	N9-C8	5.34	1.42	1.37
2	AB	491	G	C5-C4	-5.34	1.34	1.38
2	AB	808	G	P-O5'	-5.34	1.54	1.59
2	AB	959	A	C6-N6	5.34	1.38	1.33
2	AB	1115	G	C5-C6	5.34	1.47	1.42
2	AB	1518	C	C4-C5	5.34	1.47	1.43
2	AB	1823	G	C2-N3	5.34	1.37	1.32
2	AB	2036	C	P-O5'	5.34	1.65	1.59
2	AB	2064	C	C5'-C4'	5.34	1.57	1.51
35	BA	15	G	C2-N2	-5.34	1.29	1.34
35	BA	823	C	C4-C5	5.34	1.47	1.43
35	BA	955	U	C3'-C2'	-5.34	1.46	1.52
35	BA	1110	A	C2'-O2'	-5.34	1.34	1.41
1	AA	108	A	C5-C6	5.34	1.45	1.41
2	AB	1412	U	C2-N3	5.34	1.41	1.37
35	BA	270	A	C2'-C1'	-5.34	1.47	1.53
35	BA	789	U	C2-N3	5.34	1.41	1.37
35	BA	1047	G	C4'-C3'	-5.34	1.47	1.52
35	BA	1170	A	C4'-O4'	-5.34	1.38	1.45
35	BA	1268	G	C5-C6	5.34	1.47	1.42
35	BA	1299	A	P-O5'	5.34	1.65	1.59
2	AB	105	C	C2'-C1'	-5.34	1.47	1.53
2	AB	927	A	C4'-O4'	-5.34	1.38	1.45
2	AB	1004	U	N1-C6	5.34	1.42	1.38
2	AB	1523	U	C3'-O3'	5.34	1.49	1.42
2	AB	1579	A	C6-N6	5.34	1.38	1.33
2	AB	1831	G	C2'-C1'	-5.34	1.47	1.53
2	AB	2582	G	C5-C6	5.34	1.47	1.42
2	AB	2643	G	N1-C2	5.34	1.42	1.37
2	AB	2694	G	C5-C6	5.34	1.47	1.42
2	AB	2873	A	C6-N1	-5.34	1.31	1.35
17	AQ	49	VAL	CA-CB	5.34	1.66	1.54
35	BA	532	A	C6-N1	5.34	1.39	1.35
35	BA	865	A	N9-C8	-5.34	1.33	1.37
35	BA	1045	C	C2-N3	5.34	1.40	1.35
1	AA	44	G	N9-C8	-5.34	1.34	1.37
2	AB	162	U	C4-O4	-5.34	1.19	1.23
2	AB	270	A	C5'-C4'	5.34	1.57	1.51
2	AB	565	C	C5-C6	-5.34	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	834	G	C2-N3	5.34	1.37	1.32
2	AB	1204	A	C4'-C3'	5.34	1.59	1.53
2	AB	1285	A	C5-C4	-5.34	1.35	1.38
2	AB	1394	U	C2'-C1'	5.34	1.59	1.53
2	AB	1443	U	P-O5'	5.34	1.65	1.59
2	AB	2236	U	P-O5'	5.34	1.65	1.59
2	AB	2739	U	C2-O2	5.34	1.27	1.22
3	AC	122	ARG	CD-NE	5.34	1.55	1.46
36	BB	33	A	N9-C8	-5.34	1.33	1.37
1	AA	41	G	C5-C4	5.34	1.42	1.38
2	AB	83	A	O3'-P	5.34	1.67	1.61
2	AB	2309	A	C3'-C2'	5.34	1.58	1.52
2	AB	2461	A	C4'-O4'	-5.34	1.38	1.45
2	AB	2764	A	N3-C4	5.34	1.38	1.34
2	AB	440	C	O3'-P	-5.34	1.54	1.61
2	AB	441	U	C3'-C2'	5.34	1.58	1.52
2	AB	1060	U	C5-C6	5.34	1.39	1.34
2	AB	1493	C	C5-C6	5.34	1.38	1.34
2	AB	1831	G	N1-C2	5.34	1.42	1.37
2	AB	1883	U	C2-N3	5.34	1.41	1.37
2	AB	1997	C	P-O5'	5.34	1.65	1.59
2	AB	2231	U	P-O5'	5.34	1.65	1.59
2	AB	2794	C	N1-C2	5.34	1.45	1.40
2	AB	2835	A	C4'-C3'	-5.34	1.47	1.52
35	BA	81	A	C4'-O4'	-5.34	1.38	1.45
35	BA	890	G	C6-N1	5.34	1.43	1.39
37	BC	74	A	N3-C4	5.34	1.38	1.34
2	AB	469	G	C3'-C2'	5.33	1.58	1.52
2	AB	1336	A	N3-C4	5.33	1.38	1.34
2	AB	1709	U	P-O5'	5.33	1.65	1.59
35	BA	391	G	N9-C4	5.33	1.42	1.38
35	BA	1064	G	C8-N7	-5.33	1.27	1.30
36	BB	46	C	N1-C6	5.33	1.40	1.37
2	AB	12	U	C4-O4	5.33	1.27	1.23
2	AB	1313	U	C4'-C3'	-5.33	1.47	1.52
2	AB	1491	G	C3'-C2'	5.33	1.58	1.52
2	AB	2053	G	N3-C4	5.33	1.39	1.35
2	AB	2123	G	N7-C5	-5.33	1.36	1.39
2	AB	2464	G	O4'-C1'	5.33	1.48	1.41
19	AS	46	TYR	CG-CD2	5.33	1.46	1.39
35	BA	145	G	N1-C2	-5.33	1.33	1.37
35	BA	453	G	N9-C8	5.33	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1462	C	C5-C6	5.33	1.38	1.34
1	AA	100	G	C4'-O4'	-5.33	1.38	1.45
2	AB	381	G	C5-C4	5.33	1.42	1.38
2	AB	469	G	C2-N3	5.33	1.37	1.32
2	AB	674	G	C8-N7	-5.33	1.27	1.30
2	AB	1258	U	C4'-O4'	-5.33	1.38	1.45
2	AB	1342	A	C4'-C3'	5.33	1.59	1.53
2	AB	1595	C	O3'-P	5.33	1.67	1.61
2	AB	1697	G	C5'-C4'	5.33	1.57	1.51
2	AB	2851	A	C4'-O4'	-5.33	1.38	1.45
35	BA	9	G	N1-C2	5.33	1.42	1.37
35	BA	573	A	C6-N1	5.33	1.39	1.35
35	BA	895	G	N3-C4	5.33	1.39	1.35
37	BC	50	G	N7-C5	5.33	1.42	1.39
2	AB	2	G	C4'-O4'	-5.33	1.38	1.45
2	AB	145	C	C4'-C3'	-5.33	1.47	1.52
2	AB	537	G	O4'-C1'	5.33	1.48	1.41
2	AB	927	A	C5-C4	-5.33	1.35	1.38
35	BA	268	U	O3'-P	5.33	1.67	1.61
35	BA	923	A	C3'-C2'	-5.33	1.46	1.52
1	AA	92	C	C4-C5	5.33	1.47	1.43
2	AB	489	G	N1-C2	5.33	1.42	1.37
2	AB	498	G	C8-N7	5.33	1.34	1.30
2	AB	644	A	O4'-C1'	-5.33	1.34	1.41
2	AB	1072	C	C3'-C2'	5.33	1.58	1.52
2	AB	1779	U	C5-C6	5.33	1.39	1.34
2	AB	1837	C	C2-O2	-5.33	1.19	1.24
2	AB	2218	G	N9-C8	5.33	1.41	1.37
35	BA	294	U	C2-N3	5.33	1.41	1.37
35	BA	500	G	C5'-C4'	5.33	1.57	1.51
35	BA	632	U	C2-N3	5.33	1.41	1.37
35	BA	796	C	C4-C5	5.33	1.47	1.43
35	BA	819	A	P-O5'	5.33	1.65	1.59
35	BA	1320	C	N1-C2	5.33	1.45	1.40
35	BA	1439	G	N9-C4	5.33	1.42	1.38
35	BA	1497	G	C2'-C1'	5.33	1.59	1.53
47	BM	105	ARG	CZ-NH2	5.33	1.40	1.33
2	AB	83	A	C5'-C4'	5.33	1.57	1.51
2	AB	1540	G	C2'-C1'	-5.33	1.47	1.53
35	BA	498	A	C5-C4	-5.33	1.35	1.38
35	BA	1150	A	P-O5'	5.33	1.65	1.59
35	BA	1189	U	N1-C6	5.33	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1320	C	C2-N3	5.33	1.40	1.35
2	AB	13	A	C4'-C3'	5.33	1.59	1.53
2	AB	276	U	O4'-C1'	5.33	1.48	1.41
2	AB	1406	U	N1-C2	5.33	1.43	1.38
2	AB	1634	A	N9-C4	5.33	1.41	1.37
2	AB	2065	C	N1-C6	5.33	1.40	1.37
2	AB	2510	C	N1-C6	5.33	1.40	1.37
2	AB	2512	C	O3'-P	5.33	1.67	1.61
35	BA	13	U	O3'-P	-5.33	1.54	1.61
35	BA	201	G	N9-C8	5.33	1.41	1.37
35	BA	621	A	C6-N6	5.33	1.38	1.33
35	BA	1046	A	C6-N6	5.33	1.38	1.33
37	BC	73	A	P-O5'	5.33	1.65	1.59
2	AB	339	U	O3'-P	5.32	1.67	1.61
2	AB	536	G	P-O5'	5.32	1.65	1.59
2	AB	871	U	P-O5'	5.32	1.65	1.59
2	AB	1212	G	C4'-O4'	-5.32	1.38	1.45
2	AB	1260	A	C6-N6	5.32	1.38	1.33
2	AB	1296	G	C5-C4	-5.32	1.34	1.38
2	AB	1344	U	C4-O4	-5.32	1.19	1.23
2	AB	1353	A	C2-N3	-5.32	1.28	1.33
2	AB	1547	C	C4-C5	5.32	1.47	1.43
2	AB	1567	G	C2-N3	5.32	1.37	1.32
2	AB	1658	C	O4'-C1'	5.32	1.48	1.41
2	AB	1972	G	C3'-C2'	5.32	1.58	1.52
2	AB	2589	A	P-O5'	5.32	1.65	1.59
35	BA	393	A	N7-C5	-5.32	1.36	1.39
35	BA	491	G	N9-C4	5.32	1.42	1.38
35	BA	560	A	C5'-C4'	5.32	1.57	1.51
35	BA	917	G	C2'-C1'	5.32	1.59	1.53
35	BA	1261	A	C5-C4	-5.32	1.35	1.38
2	AB	50	U	C2'-C1'	-5.32	1.47	1.53
2	AB	258	G	N1-C2	-5.32	1.33	1.37
2	AB	447	A	C5-C4	-5.32	1.35	1.38
35	BA	791	G	N9-C8	-5.32	1.34	1.37
2	AB	397	U	O5'-C5'	-5.32	1.34	1.42
2	AB	403	U	C4-O4	5.32	1.27	1.23
2	AB	799	G	N7-C5	-5.32	1.36	1.39
2	AB	1366	A	P-O5'	-5.32	1.54	1.59
2	AB	1862	G	C5-C4	-5.32	1.34	1.38
2	AB	2099	U	N1-C6	5.32	1.42	1.38
35	BA	664	G	N3-C4	-5.32	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1000	A	C3'-C2'	-5.32	1.46	1.52
37	BC	54	G	N3-C4	5.32	1.39	1.35
37	BC	74	A	C5-C4	-5.32	1.35	1.38
53	BS	42	LYS	CA-CB	5.32	1.65	1.53
2	AB	72	U	P-O5'	-5.32	1.54	1.59
2	AB	841	G	C8-N7	5.32	1.34	1.30
2	AB	1098	A	C3'-C2'	5.32	1.58	1.52
2	AB	1416	G	C3'-C2'	5.32	1.58	1.52
2	AB	1633	G	C4'-O4'	-5.32	1.38	1.45
2	AB	2160	C	C3'-O3'	5.32	1.49	1.42
37	BC	74	A	C4'-O4'	-5.32	1.38	1.45
1	AA	3	C	C4'-O4'	-5.32	1.38	1.45
2	AB	676	A	C4'-C3'	5.32	1.58	1.53
2	AB	769	U	O3'-P	5.32	1.67	1.61
2	AB	2373	G	N7-C5	5.32	1.42	1.39
2	AB	2737	G	C2'-O2'	5.32	1.48	1.41
2	AB	2888	C	O3'-P	5.32	1.67	1.61
35	BA	376	G	C8-N7	-5.32	1.27	1.30
35	BA	519	C	N3-C4	-5.32	1.30	1.33
35	BA	1429	A	C6-N1	5.32	1.39	1.35
1	AA	32	U	N3-C4	5.32	1.43	1.38
2	AB	1285	A	N9-C4	5.32	1.41	1.37
2	AB	1379	U	C4-C5	5.32	1.48	1.43
2	AB	1955	U	O5'-C5'	-5.32	1.34	1.42
2	AB	2298	A	C5'-C4'	5.32	1.57	1.51
2	AB	2631	G	C5-C4	-5.32	1.34	1.38
2	AB	2773	C	C3'-C2'	5.32	1.58	1.52
2	AB	2855	C	N3-C4	5.32	1.37	1.33
18	AR	108	ARG	NE-CZ	5.32	1.40	1.33
35	BA	262	A	N9-C8	-5.32	1.33	1.37
35	BA	630	A	P-OP2	-5.32	1.40	1.49
35	BA	1318	A	C5-C6	5.32	1.45	1.41
2	AB	1500	G	C2'-C1'	5.31	1.59	1.53
35	BA	133	U	N1-C2	5.31	1.43	1.38
1	AA	37	C	C2'-C1'	5.31	1.59	1.53
1	AA	85	G	P-O5'	5.31	1.65	1.59
2	AB	443	A	N3-C4	5.31	1.38	1.34
2	AB	466	A	C5'-C4'	5.31	1.57	1.51
2	AB	633	A	P-O5'	5.31	1.65	1.59
2	AB	792	A	C5-C4	-5.31	1.35	1.38
2	AB	846	U	P-O5'	5.31	1.65	1.59
2	AB	934	U	C2'-C1'	5.31	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1574	C	C2'-C1'	-5.31	1.47	1.53
2	AB	1595	C	C4-C5	5.31	1.47	1.43
2	AB	1612	C	C2-N3	5.31	1.40	1.35
2	AB	2008	C	C4-C5	-5.31	1.38	1.43
35	BA	307	C	O3'-P	-5.31	1.54	1.61
35	BA	315	A	O3'-P	-5.31	1.54	1.61
35	BA	354	G	C4'-C3'	5.31	1.58	1.53
2	AB	627	A	N7-C5	-5.31	1.36	1.39
2	AB	2355	G	C4'-O4'	-5.31	1.38	1.45
2	AB	2887	A	N9-C8	-5.31	1.33	1.37
36	BB	24	A	O3'-P	-5.31	1.54	1.61
2	AB	390	U	C2-N3	5.31	1.41	1.37
2	AB	409	G	C2'-C1'	-5.31	1.47	1.53
2	AB	1356	G	C2'-O2'	5.31	1.48	1.41
2	AB	1527	G	C6-N1	-5.31	1.35	1.39
2	AB	1931	U	C4-C5	5.31	1.48	1.43
2	AB	2145	C	C5'-C4'	5.31	1.57	1.51
2	AB	2303	G	N3-C4	5.31	1.39	1.35
35	BA	44	A	N3-C4	5.31	1.38	1.34
35	BA	145	G	C6-N1	-5.31	1.35	1.39
35	BA	237	G	C5-C6	5.31	1.47	1.42
35	BA	551	U	C2-O2	-5.31	1.17	1.22
35	BA	782	A	C2'-C1'	5.31	1.59	1.53
35	BA	1330	U	N1-C2	5.31	1.43	1.38
35	BA	1352	C	C4-C5	-5.31	1.38	1.43
35	BA	1454	G	N1-C2	5.31	1.42	1.37
2	AB	1622	G	C3'-O3'	5.31	1.49	1.42
2	AB	1872	A	C4'-C3'	-5.31	1.47	1.52
2	AB	2043	C	C4'-O4'	-5.31	1.38	1.45
2	AB	2280	G	C6-O6	-5.31	1.19	1.24
35	BA	546	A	C4'-C3'	5.31	1.58	1.53
35	BA	668	G	C2'-C1'	-5.31	1.47	1.53
35	BA	1446	A	C8-N7	5.31	1.35	1.31
35	BA	1485	U	C5-C6	5.31	1.39	1.34
2	AB	471	A	C5'-C4'	5.31	1.57	1.51
2	AB	1457	U	P-O5'	5.31	1.65	1.59
2	AB	1851	U	C4'-C3'	-5.31	1.47	1.52
2	AB	2151	U	P-O5'	5.31	1.65	1.59
2	AB	2170	A	C5-C6	5.31	1.45	1.41
2	AB	2659	G	N7-C5	5.31	1.42	1.39
2	AB	2705	A	C8-N7	-5.31	1.27	1.31
2	AB	2808	G	C6-O6	-5.31	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	180	G	C8-N7	-5.30	1.27	1.30
2	AB	285	G	N9-C8	-5.30	1.34	1.37
2	AB	870	U	C4'-O4'	-5.30	1.38	1.45
2	AB	1475	G	N3-C4	5.30	1.39	1.35
2	AB	1582	C	N3-C4	5.30	1.37	1.33
2	AB	1644	C	C4'-O4'	-5.30	1.38	1.45
2	AB	1661	G	C2-N3	5.30	1.36	1.32
2	AB	1893	C	C2'-O2'	5.30	1.48	1.41
2	AB	1945	G	C2-N3	5.30	1.36	1.32
2	AB	2666	C	C4-N4	-5.30	1.29	1.33
2	AB	2702	G	O5'-C5'	-5.30	1.34	1.42
35	BA	769	G	N7-C5	5.30	1.42	1.39
35	BA	1126	U	P-O5'	5.30	1.65	1.59
35	BA	1185	G	N3-C4	5.30	1.39	1.35
35	BA	1502	A	C8-N7	-5.30	1.27	1.31
35	BA	1527	U	P-O5'	5.30	1.65	1.59
2	AB	253	C	N1-C6	-5.30	1.33	1.37
2	AB	378	C	C5'-C4'	5.30	1.57	1.51
2	AB	585	G	N3-C4	5.30	1.39	1.35
2	AB	2761	A	C6-N1	-5.30	1.31	1.35
35	BA	736	C	O3'-P	5.30	1.67	1.61
35	BA	955	U	N3-C4	-5.30	1.33	1.38
2	AB	507	A	C4'-O4'	-5.30	1.38	1.45
2	AB	1419	A	C5-C4	-5.30	1.35	1.38
2	AB	2297	A	C2'-C1'	5.30	1.59	1.53
2	AB	2821	A	N3-C4	5.30	1.38	1.34
35	BA	609	A	O4'-C1'	5.30	1.48	1.41
35	BA	799	G	C2-N3	5.30	1.36	1.32
35	BA	810	C	C5'-C4'	5.30	1.57	1.51
35	BA	1145	A	C2'-C1'	-5.30	1.47	1.53
35	BA	1241	G	C5'-C4'	5.30	1.57	1.51
35	BA	1326	U	C5-C6	5.30	1.39	1.34
2	AB	77	G	C5-C4	-5.30	1.34	1.38
2	AB	316	C	C5-C6	5.30	1.38	1.34
2	AB	346	A	N9-C4	5.30	1.41	1.37
2	AB	531	C	P-O5'	5.30	1.65	1.59
2	AB	1252	G	N7-C5	5.30	1.42	1.39
2	AB	1261	C	N1-C6	-5.30	1.33	1.37
2	AB	1964	G	C4'-C3'	5.30	1.58	1.53
2	AB	2579	C	C5'-C4'	5.30	1.57	1.51
35	BA	155	A	N7-C5	5.30	1.42	1.39
35	BA	934	C	C4'-O4'	-5.30	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1145	A	P-O5'	5.30	1.65	1.59
2	AB	869	G	C5'-C4'	5.30	1.57	1.51
2	AB	1177	G	C5'-C4'	5.30	1.57	1.51
2	AB	1237	A	N9-C4	5.30	1.41	1.37
2	AB	2286	G	N9-C4	5.30	1.42	1.38
35	BA	358	U	C4-C5	-5.30	1.38	1.43
2	AB	975	A	N3-C4	5.30	1.38	1.34
2	AB	1120	G	N9-C4	-5.30	1.33	1.38
2	AB	1505	A	P-O5'	-5.30	1.54	1.59
2	AB	1690	A	C5-C4	-5.30	1.35	1.38
2	AB	2440	C	C3'-C2'	5.30	1.58	1.52
2	AB	2453	A	P-O5'	5.30	1.65	1.59
2	AB	2627	G	C4'-O4'	-5.30	1.38	1.45
35	BA	912	C	O3'-P	-5.30	1.54	1.61
2	AB	145	C	C2'-O2'	5.29	1.48	1.41
2	AB	479	A	C5-C4	5.29	1.42	1.38
2	AB	1247	A	C3'-C2'	5.29	1.58	1.52
2	AB	2347	C	N1-C6	5.29	1.40	1.37
2	AB	2573	C	O4'-C1'	5.29	1.48	1.41
35	BA	32	A	N3-C4	5.29	1.38	1.34
35	BA	89	U	P-O5'	5.29	1.65	1.59
35	BA	490	C	C5'-C4'	5.29	1.57	1.51
35	BA	883	C	C2-O2	-5.29	1.19	1.24
2	AB	654	A	C8-N7	-5.29	1.27	1.31
2	AB	1285	A	N7-C5	5.29	1.42	1.39
2	AB	1560	G	C2-N3	5.29	1.36	1.32
2	AB	1600	C	C2'-C1'	-5.29	1.47	1.53
2	AB	1664	A	O4'-C1'	5.29	1.48	1.41
2	AB	2723	C	O4'-C1'	5.29	1.48	1.41
35	BA	642	A	C5-C4	-5.29	1.35	1.38
35	BA	1541	U	O3'-P	5.29	1.67	1.61
37	BC	27	G	O3'-P	5.29	1.67	1.61
2	AB	121	G	C2-N3	-5.29	1.28	1.32
2	AB	244	A	N9-C8	-5.29	1.33	1.37
2	AB	1245	G	P-O5'	-5.29	1.54	1.59
2	AB	1537	G	N9-C4	5.29	1.42	1.38
2	AB	2835	A	P-O5'	5.29	1.65	1.59
35	BA	61	G	O4'-C1'	5.29	1.48	1.41
35	BA	103	U	C4-O4	-5.29	1.19	1.23
35	BA	596	A	C8-N7	-5.29	1.27	1.31
2	AB	212	G	C5-C6	5.29	1.47	1.42
2	AB	621	A	P-O5'	5.29	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1491	G	P-O5'	5.29	1.65	1.59
35	BA	97	G	O4'-C1'	5.29	1.48	1.41
35	BA	378	G	C2-N3	5.29	1.36	1.32
35	BA	762	U	C4'-O4'	-5.29	1.38	1.45
2	AB	571	U	P-O5'	5.29	1.65	1.59
2	AB	825	A	C2-N3	5.29	1.38	1.33
2	AB	2128	G	P-O5'	5.29	1.65	1.59
2	AB	2526	G	N3-C4	5.29	1.39	1.35
2	AB	2857	G	C5-C4	-5.29	1.34	1.38
35	BA	104	G	C5-C6	5.29	1.47	1.42
35	BA	297	G	P-O5'	5.29	1.65	1.59
35	BA	472	U	N3-C4	5.29	1.43	1.38
35	BA	490	C	O3'-P	5.29	1.67	1.61
35	BA	681	A	C6-N6	-5.29	1.29	1.33
41	BG	20	VAL	CB-CG2	5.29	1.64	1.52
2	AB	1278	C	C2-O2	-5.29	1.19	1.24
2	AB	1499	C	O4'-C1'	5.29	1.48	1.41
2	AB	1637	A	N9-C4	5.29	1.41	1.37
2	AB	2426	A	C8-N7	-5.29	1.27	1.31
2	AB	2783	U	C4-O4	-5.29	1.19	1.23
2	AB	2812	G	N9-C8	-5.29	1.34	1.37
11	AK	87	SER	CA-CB	5.29	1.60	1.52
35	BA	12	U	C5-C6	5.29	1.39	1.34
35	BA	371	A	N3-C4	-5.29	1.31	1.34
35	BA	491	G	N3-C4	5.29	1.39	1.35
2	AB	192	C	O3'-P	5.29	1.67	1.61
2	AB	927	A	C6-N6	5.29	1.38	1.33
2	AB	1179	G	C4'-O4'	-5.29	1.38	1.45
2	AB	1271	G	P-O5'	5.29	1.65	1.59
2	AB	1310	G	N1-C2	5.29	1.42	1.37
2	AB	1366	A	C6-N6	5.29	1.38	1.33
2	AB	1462	C	C3'-C2'	-5.29	1.47	1.52
2	AB	1498	C	O4'-C1'	5.29	1.48	1.41
2	AB	1687	G	C4'-O4'	-5.29	1.38	1.45
2	AB	2226	C	C2-O2	-5.29	1.19	1.24
35	BA	255	G	N9-C8	5.29	1.41	1.37
35	BA	399	G	N1-C2	5.29	1.42	1.37
35	BA	1031	C	C4-N4	5.29	1.38	1.33
35	BA	1298	U	N3-C4	-5.29	1.33	1.38
35	BA	1378	C	O3'-P	5.29	1.67	1.61
35	BA	1472	U	C2-N3	5.29	1.41	1.37
2	AB	1021	A	N7-C5	-5.28	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2292	U	N3-C4	5.28	1.43	1.38
2	AB	2562	U	N3-C4	5.28	1.43	1.38
35	BA	604	G	C8-N7	5.28	1.34	1.30
35	BA	687	A	N7-C5	5.28	1.42	1.39
35	BA	706	A	C5-C4	-5.28	1.35	1.38
35	BA	971	G	C8-N7	-5.28	1.27	1.30
35	BA	1014	A	C4'-O4'	-5.28	1.38	1.45
35	BA	1103	C	C2'-C1'	5.28	1.59	1.53
35	BA	1349	A	C2'-C1'	5.28	1.59	1.53
35	BA	1390	U	P-O5'	5.28	1.65	1.59
37	BC	6	G	C6-O6	-5.28	1.19	1.24
2	AB	251	A	N9-C8	-5.28	1.33	1.37
2	AB	1457	U	O3'-P	-5.28	1.54	1.61
35	BA	592	G	C6-N1	5.28	1.43	1.39
35	BA	1324	A	N7-C5	5.28	1.42	1.39
2	AB	66	C	C4'-O4'	-5.28	1.38	1.45
2	AB	381	G	N9-C4	5.28	1.42	1.38
2	AB	1494	A	N3-C4	5.28	1.38	1.34
2	AB	1543	G	C2'-O2'	-5.28	1.34	1.41
2	AB	1886	U	C5-C6	5.28	1.39	1.34
2	AB	2534	A	N7-C5	-5.28	1.36	1.39
2	AB	2789	C	N3-C4	5.28	1.37	1.33
2	AB	2882	A	N1-C2	-5.28	1.29	1.34
35	BA	53	A	N9-C8	5.28	1.42	1.37
35	BA	97	G	N1-C2	5.28	1.42	1.37
35	BA	246	A	N1-C2	-5.28	1.29	1.34
35	BA	452	A	O3'-P	-5.28	1.54	1.61
35	BA	719	C	P-O5'	5.28	1.65	1.59
35	BA	1165	U	P-OP1	-5.28	1.40	1.49
2	AB	215	G	C5-C4	-5.28	1.34	1.38
2	AB	520	G	P-O5'	5.28	1.65	1.59
2	AB	1402	U	C5'-C4'	5.28	1.57	1.51
2	AB	1693	U	C4-C5	5.28	1.48	1.43
2	AB	2519	U	C3'-C2'	-5.28	1.47	1.52
2	AB	2707	U	C4'-C3'	5.28	1.58	1.53
2	AB	1534	U	N3-C4	5.28	1.43	1.38
35	BA	129	A	C5'-C4'	5.28	1.57	1.51
36	BB	31	U	C4'-O4'	-5.28	1.38	1.45
2	AB	43	G	P-O5'	5.28	1.65	1.59
2	AB	272	A	C8-N7	-5.28	1.27	1.31
2	AB	1480	C	C4-C5	5.28	1.47	1.43
2	AB	2262	U	N3-C4	5.28	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2462	C	C4-N4	-5.28	1.29	1.33
2	AB	2570	G	C6-N1	-5.28	1.35	1.39
35	BA	433	G	N1-C2	5.28	1.42	1.37
35	BA	453	G	C5-C6	5.28	1.47	1.42
35	BA	477	C	P-O5'	5.28	1.65	1.59
35	BA	991	U	C3'-O3'	5.28	1.49	1.42
35	BA	1015	G	C6-N1	5.28	1.43	1.39
35	BA	1504	G	N1-C2	5.28	1.42	1.37
1	AA	110	C	C4'-O4'	-5.27	1.38	1.45
2	AB	1364	G	N9-C4	-5.27	1.33	1.38
2	AB	1732	C	N1-C6	5.27	1.40	1.37
2	AB	1973	G	C8-N7	5.27	1.34	1.30
2	AB	2056	G	N9-C8	5.27	1.41	1.37
2	AB	2675	A	C6-N1	5.27	1.39	1.35
2	AB	528	A	C6-N6	5.27	1.38	1.33
2	AB	595	C	N3-C4	5.27	1.37	1.33
2	AB	602	A	C8-N7	-5.27	1.27	1.31
2	AB	1681	G	O3'-P	5.27	1.67	1.61
2	AB	2024	G	P-O5'	5.27	1.65	1.59
2	AB	2389	G	N9-C8	5.27	1.41	1.37
2	AB	2588	G	C5-C4	5.27	1.42	1.38
35	BA	544	G	C6-N1	-5.27	1.35	1.39
35	BA	1140	C	N3-C4	-5.27	1.30	1.33
35	BA	1242	G	N9-C4	5.27	1.42	1.38
2	AB	220	G	C5'-C4'	5.27	1.57	1.51
2	AB	323	C	C4-C5	5.27	1.47	1.43
2	AB	968	C	C4'-O4'	-5.27	1.38	1.45
2	AB	1050	A	N1-C2	-5.27	1.29	1.34
2	AB	1194	A	C5-C6	5.27	1.45	1.41
2	AB	2319	G	N9-C8	-5.27	1.34	1.37
2	AB	2353	G	C6-N1	5.27	1.43	1.39
2	AB	2584	U	C1'-N1	5.27	1.56	1.48
35	BA	956	U	C2'-O2'	-5.27	1.34	1.41
35	BA	1053	G	C6-N1	-5.27	1.35	1.39
2	AB	140	C	P-O5'	5.27	1.65	1.59
2	AB	892	A	C5-C6	5.27	1.45	1.41
2	AB	1175	A	P-O5'	5.27	1.65	1.59
2	AB	1725	U	C5'-C4'	5.27	1.57	1.51
2	AB	2120	G	C4'-O4'	-5.27	1.38	1.45
2	AB	2486	C	C4'-O4'	-5.27	1.38	1.45
2	AB	2843	G	C2-N3	5.27	1.36	1.32
2	AB	2902	C	C4-C5	5.27	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	202	G	C2-N3	5.27	1.36	1.32
35	BA	423	G	C4'-O4'	-5.27	1.38	1.45
35	BA	1214	C	C5-C6	-5.27	1.30	1.34
47	BM	76	TYR	CE1-CZ	5.27	1.45	1.38
48	BN	60	PHE	CG-CD2	5.27	1.46	1.38
2	AB	945	A	C4'-O4'	-5.27	1.38	1.45
2	AB	1424	G	C2-N3	5.27	1.36	1.32
2	AB	1483	G	C2-N3	5.27	1.36	1.32
2	AB	1753	G	C5-C6	-5.27	1.37	1.42
2	AB	2827	C	C3'-O3'	-5.27	1.34	1.42
35	BA	647	C	C5'-C4'	5.27	1.57	1.51
35	BA	1031	C	C5-C6	5.27	1.38	1.34
35	BA	1277	C	C4-C5	5.27	1.47	1.43
35	BA	1282	C	N3-C4	5.27	1.37	1.33
35	BA	1382	C	C4-C5	5.27	1.47	1.43
2	AB	641	U	P-O5'	5.27	1.65	1.59
2	AB	701	G	C4'-C3'	-5.27	1.47	1.52
2	AB	1635	A	C2'-O2'	5.27	1.48	1.41
2	AB	2296	U	C4-C5	-5.27	1.38	1.43
2	AB	2459	A	N7-C5	5.27	1.42	1.39
35	BA	205	A	C2'-C1'	5.27	1.59	1.53
35	BA	552	U	P-O5'	5.27	1.65	1.59
35	BA	900	A	C4'-O4'	-5.27	1.38	1.45
1	AA	8	C	C2-N3	5.26	1.40	1.35
1	AA	25	U	C5-C6	5.26	1.38	1.34
2	AB	111	A	N9-C8	-5.26	1.33	1.37
2	AB	222	A	C5'-C4'	5.26	1.57	1.51
2	AB	259	G	C5'-C4'	5.26	1.57	1.51
2	AB	466	A	O3'-P	-5.26	1.54	1.61
2	AB	694	U	C4'-O4'	-5.26	1.38	1.45
2	AB	936	A	C3'-O3'	-5.26	1.34	1.42
2	AB	1174	U	C3'-O3'	5.26	1.49	1.42
2	AB	1437	C	C4-C5	5.26	1.47	1.43
2	AB	1553	A	C2'-O2'	5.26	1.48	1.41
2	AB	2285	C	N3-C4	5.26	1.37	1.33
2	AB	2632	A	C5-C6	5.26	1.45	1.41
2	AB	2747	G	C4'-C3'	5.26	1.58	1.53
2	AB	2780	G	C5-C4	-5.26	1.34	1.38
2	AB	2835	A	N7-C5	5.26	1.42	1.39
2	AB	2878	U	C4'-O4'	-5.26	1.38	1.45
35	BA	219	U	O4'-C1'	5.26	1.48	1.41
35	BA	934	C	P-O5'	5.26	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2705	A	C5-C4	-5.26	1.35	1.38
35	BA	648	A	C1'-N9	-5.26	1.39	1.46
35	BA	772	U	C3'-O3'	5.26	1.49	1.42
2	AB	55	G	C5-C6	5.26	1.47	1.42
2	AB	922	C	C4-N4	5.26	1.38	1.33
2	AB	1031	G	P-O5'	5.26	1.65	1.59
2	AB	1475	G	C4'-O4'	-5.26	1.38	1.45
2	AB	1972	G	C2-N3	5.26	1.36	1.32
2	AB	2378	A	C8-N7	5.26	1.35	1.31
2	AB	2875	C	N1-C6	5.26	1.40	1.37
35	BA	1330	U	O4'-C1'	-5.26	1.34	1.41
1	AA	113	C	N1-C6	5.26	1.40	1.37
2	AB	486	C	P-O5'	5.26	1.65	1.59
2	AB	916	G	O3'-P	5.26	1.67	1.61
2	AB	1018	U	C4'-O4'	-5.26	1.38	1.45
2	AB	2025	C	C2'-O2'	5.26	1.48	1.41
2	AB	2199	A	C2-N3	5.26	1.38	1.33
2	AB	2261	C	C2-N3	5.26	1.40	1.35
2	AB	2595	G	C8-N7	-5.26	1.27	1.30
35	BA	143	A	C8-N7	-5.26	1.27	1.31
35	BA	585	G	C6-O6	5.26	1.28	1.24
35	BA	1079	G	C5-C4	5.26	1.42	1.38
35	BA	1257	A	N9-C4	5.26	1.41	1.37
37	BC	26	C	C4'-C3'	-5.26	1.47	1.52
1	AA	78	A	P-O5'	5.26	1.65	1.59
2	AB	484	C	P-O5'	5.26	1.65	1.59
2	AB	886	A	C5'-C4'	5.26	1.57	1.51
2	AB	2094	A	C4'-O4'	-5.26	1.38	1.45
2	AB	2820	A	C8-N7	-5.26	1.27	1.31
35	BA	1104	G	C8-N7	5.26	1.34	1.30
45	BK	121	ARG	NE-CZ	5.26	1.39	1.33
1	AA	88	C	C4-N4	5.26	1.38	1.33
2	AB	23	G	P-O5'	-5.26	1.54	1.59
2	AB	275	C	C4'-C3'	5.26	1.58	1.53
2	AB	904	G	N9-C8	-5.26	1.34	1.37
2	AB	1131	G	C5-C4	5.26	1.42	1.38
2	AB	2079	U	C2-N3	5.26	1.41	1.37
2	AB	2218	G	C3'-O3'	-5.26	1.34	1.42
2	AB	2225	A	N9-C4	5.26	1.41	1.37
2	AB	2331	G	P-O5'	5.26	1.65	1.59
35	BA	117	G	N3-C4	5.26	1.39	1.35
35	BA	389	A	N3-C4	5.26	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	636	U	C4-C5	5.26	1.48	1.43
35	BA	970	C	C5'-C4'	5.26	1.57	1.51
35	BA	1031	C	C3'-O3'	-5.26	1.34	1.42
37	BC	19	G	C5'-C4'	5.26	1.57	1.51
37	BC	45	A	N7-C5	-5.26	1.36	1.39
2	AB	837	C	C2-O2	-5.25	1.19	1.24
2	AB	1500	G	O3'-P	5.25	1.67	1.61
2	AB	2667	C	C4'-C3'	5.25	1.58	1.53
13	AM	70	ARG	NE-CZ	5.25	1.39	1.33
2	AB	240	C	C2-N3	-5.25	1.31	1.35
2	AB	851	C	O3'-P	5.25	1.67	1.61
2	AB	873	C	C2-N3	5.25	1.40	1.35
2	AB	930	G	C6-O6	-5.25	1.19	1.24
2	AB	1293	C	C1'-N1	5.25	1.56	1.48
2	AB	1294	U	C5-C6	5.25	1.38	1.34
2	AB	1631	G	C2'-O2'	-5.25	1.34	1.41
35	BA	195	A	C4'-O4'	-5.25	1.38	1.45
35	BA	567	G	N1-C2	-5.25	1.33	1.37
35	BA	578	C	C4-C5	5.25	1.47	1.43
35	BA	677	U	O4'-C1'	5.25	1.48	1.41
35	BA	850	U	N3-C4	5.25	1.43	1.38
35	BA	1355	G	N9-C8	-5.25	1.34	1.37
1	AA	17	C	N1-C6	5.25	1.40	1.37
2	AB	498	G	C6-N1	-5.25	1.35	1.39
2	AB	801	G	N1-C2	5.25	1.42	1.37
2	AB	819	A	C6-N6	-5.25	1.29	1.33
2	AB	1485	U	C2'-C1'	5.25	1.59	1.53
2	AB	1658	C	C2-N3	5.25	1.40	1.35
2	AB	1961	C	C4'-C3'	-5.25	1.47	1.52
2	AB	2204	G	C4'-C3'	-5.25	1.47	1.52
2	AB	2363	G	C4'-O4'	-5.25	1.38	1.45
35	BA	78	A	C4'-O4'	-5.25	1.38	1.45
35	BA	612	C	C5'-C4'	5.25	1.57	1.51
35	BA	629	A	C5'-C4'	-5.25	1.45	1.51
35	BA	775	G	C6-O6	-5.25	1.19	1.24
35	BA	1018	G	C5-C6	5.25	1.47	1.42
35	BA	1054	C	N1-C6	5.25	1.40	1.37
35	BA	1177	G	C2-N3	5.25	1.36	1.32
35	BA	1329	A	C6-N6	-5.25	1.29	1.33
41	BG	47	PHE	CE1-CZ	5.25	1.47	1.37
2	AB	116	C	C4'-O4'	-5.25	1.38	1.45
2	AB	785	G	C5-C4	5.25	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2167	U	P-O5'	5.25	1.65	1.59
2	AB	2693	G	P-O5'	5.25	1.65	1.59
35	BA	718	A	C4'-C3'	5.25	1.58	1.53
35	BA	789	U	C3'-C2'	5.25	1.58	1.52
35	BA	980	C	O4'-C1'	5.25	1.48	1.41
2	AB	1160	G	C5'-C4'	5.25	1.57	1.51
2	AB	2157	G	C4'-O4'	-5.25	1.38	1.45
2	AB	2318	G	C4'-O4'	-5.25	1.38	1.45
2	AB	2483	C	C4'-C3'	-5.25	1.47	1.52
35	BA	1459	G	C4'-O4'	-5.25	1.38	1.45
35	BA	1500	A	C6-N1	5.25	1.39	1.35
2	AB	47	C	P-O5'	5.25	1.65	1.59
2	AB	299	A	N9-C8	5.25	1.42	1.37
2	AB	1592	C	P-O5'	5.25	1.65	1.59
2	AB	1664	A	N7-C5	5.25	1.42	1.39
2	AB	1793	C	C1'-N1	5.25	1.56	1.48
2	AB	1865	U	N1-C2	5.25	1.43	1.38
2	AB	2633	G	N1-C2	5.25	1.42	1.37
2	AB	2643	G	N7-C5	5.25	1.42	1.39
35	BA	212	G	C8-N7	-5.25	1.27	1.30
35	BA	268	U	C4'-O4'	-5.25	1.38	1.45
35	BA	875	U	N1-C6	5.25	1.42	1.38
2	AB	272	A	C6-N1	5.25	1.39	1.35
2	AB	1403	A	N3-C4	5.25	1.38	1.34
2	AB	1489	C	C2'-C1'	-5.25	1.47	1.53
2	AB	2000	C	C2'-O2'	5.25	1.48	1.41
11	AK	15	GLY	C-O	-5.25	1.15	1.23
35	BA	177	G	C5'-C4'	5.25	1.57	1.51
1	AA	30	C	P-O5'	5.24	1.65	1.59
2	AB	366	C	N3-C4	5.24	1.37	1.33
2	AB	794	A	C6-N6	5.24	1.38	1.33
2	AB	1197	G	C2'-C1'	-5.24	1.47	1.53
2	AB	1452	G	C4'-O4'	-5.24	1.38	1.45
2	AB	1863	G	P-O5'	5.24	1.65	1.59
35	BA	648	A	C3'-O3'	5.24	1.49	1.42
35	BA	727	G	C5-C4	5.24	1.42	1.38
35	BA	1211	U	C2-N3	5.24	1.41	1.37
1	AA	76	G	P-O5'	5.24	1.65	1.59
2	AB	161	A	C2'-O2'	5.24	1.48	1.41
2	AB	935	C	N3-C4	5.24	1.37	1.33
2	AB	1456	G	C2-N3	5.24	1.36	1.32
2	AB	2865	U	C4-O4	5.24	1.27	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	49	U	C4'-O4'	-5.24	1.38	1.45
35	BA	1493	A	P-O5'	5.24	1.65	1.59
37	BC	23	G	P-O5'	5.24	1.65	1.59
2	AB	387	U	C3'-O3'	5.24	1.49	1.42
2	AB	556	A	C8-N7	-5.24	1.27	1.31
2	AB	716	A	C6-N6	5.24	1.38	1.33
2	AB	958	U	C3'-O3'	5.24	1.49	1.42
2	AB	1212	G	C2-N2	5.24	1.39	1.34
2	AB	1252	G	C3'-C2'	-5.24	1.47	1.52
2	AB	2335	A	C3'-C2'	-5.24	1.47	1.52
2	AB	2862	G	C3'-C2'	5.24	1.58	1.52
35	BA	705	G	N3-C4	5.24	1.39	1.35
35	BA	1186	G	O4'-C1'	5.24	1.48	1.41
2	AB	341	C	O3'-P	-5.24	1.54	1.61
2	AB	434	U	N1-C6	-5.24	1.33	1.38
2	AB	498	G	C3'-C2'	5.24	1.58	1.52
2	AB	520	G	C2-N3	5.24	1.36	1.32
2	AB	1059	G	N1-C2	5.24	1.42	1.37
2	AB	1787	A	N9-C8	5.24	1.42	1.37
2	AB	1932	A	P-O5'	5.24	1.65	1.59
29	A2	9	TYR	CE1-CZ	5.24	1.45	1.38
35	BA	86	G	O3'-P	5.24	1.67	1.61
35	BA	319	G	N1-C2	5.24	1.42	1.37
35	BA	583	A	C8-N7	-5.24	1.27	1.31
35	BA	636	U	C4-O4	5.24	1.27	1.23
35	BA	1306	A	P-O5'	5.24	1.65	1.59
36	BB	48	C	C3'-C2'	5.24	1.58	1.52
2	AB	375	G	C8-N7	-5.24	1.27	1.30
2	AB	707	G	N9-C8	-5.24	1.34	1.37
2	AB	1640	A	C4'-O4'	-5.24	1.38	1.45
2	AB	1878	G	C5'-C4'	5.24	1.57	1.51
35	BA	107	G	O5'-C5'	-5.24	1.34	1.42
35	BA	642	A	C1'-N9	5.24	1.56	1.48
2	AB	69	C	C5-C6	5.24	1.38	1.34
2	AB	218	A	C4'-C3'	-5.24	1.47	1.52
2	AB	251	A	C5-C4	-5.24	1.35	1.38
2	AB	337	C	C4'-O4'	-5.24	1.38	1.45
2	AB	843	G	C5-C4	-5.24	1.34	1.38
2	AB	1307	A	C5-C4	5.24	1.42	1.38
2	AB	1522	A	C5'-C4'	5.24	1.57	1.51
2	AB	2512	C	C4'-O4'	-5.24	1.38	1.45
4	AD	261	ARG	CZ-NH2	5.24	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	AE	163	GLY	N-CA	5.24	1.53	1.46
2	AB	1325	U	C4'-C3'	5.23	1.58	1.53
2	AB	2143	C	P-O5'	5.23	1.65	1.59
2	AB	2312	U	C2'-O2'	-5.23	1.34	1.41
17	AQ	10	ARG	CZ-NH2	5.23	1.39	1.33
35	BA	26	A	N3-C4	5.23	1.38	1.34
35	BA	1154	G	N3-C4	5.23	1.39	1.35
1	AA	7	G	N3-C4	5.23	1.39	1.35
2	AB	1	G	C5'-C4'	5.23	1.57	1.51
2	AB	8	C	C2-N3	5.23	1.40	1.35
2	AB	82	U	C4-C5	5.23	1.48	1.43
2	AB	822	G	C6-N1	5.23	1.43	1.39
2	AB	1533	C	C5'-C4'	5.23	1.57	1.51
2	AB	2294	G	O5'-C5'	-5.23	1.34	1.42
2	AB	2570	G	N9-C4	-5.23	1.33	1.38
2	AB	2579	C	N3-C4	5.23	1.37	1.33
35	BA	155	A	P-O5'	5.23	1.65	1.59
35	BA	636	U	C2-O2	5.23	1.27	1.22
35	BA	772	U	C2-O2	5.23	1.27	1.22
35	BA	822	U	C1'-N1	5.23	1.56	1.48
35	BA	1379	G	C4'-C3'	5.23	1.58	1.53
37	BC	16	C	N1-C6	-5.23	1.34	1.37
1	AA	32	U	C4'-O4'	-5.23	1.38	1.45
2	AB	181	A	N7-C5	5.23	1.42	1.39
2	AB	503	A	C8-N7	-5.23	1.27	1.31
2	AB	511	U	C4'-O4'	-5.23	1.38	1.45
2	AB	812	C	P-O5'	5.23	1.65	1.59
2	AB	1340	U	C2-N3	5.23	1.41	1.37
2	AB	1353	A	O3'-P	5.23	1.67	1.61
2	AB	1655	A	C5-C4	-5.23	1.35	1.38
2	AB	1772	A	C8-N7	-5.23	1.27	1.31
2	AB	2090	A	N7-C5	5.23	1.42	1.39
2	AB	2098	U	C4'-C3'	5.23	1.58	1.53
2	AB	2596	U	C4'-C3'	5.23	1.58	1.53
35	BA	406	G	P-O5'	-5.23	1.54	1.59
35	BA	1247	U	N1-C2	5.23	1.43	1.38
37	BC	74	A	C8-N7	5.23	1.35	1.31
2	AB	648	G	P-O5'	5.23	1.65	1.59
2	AB	1444	G	C2'-C1'	-5.23	1.47	1.53
2	AB	1456	G	C5-C6	5.23	1.47	1.42
2	AB	1959	G	C2-N3	5.23	1.36	1.32
35	BA	289	G	N1-C2	5.23	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1344	C	C2'-C1'	-5.23	1.47	1.53
2	AB	695	G	C5-C6	5.23	1.47	1.42
2	AB	930	G	N9-C8	5.23	1.41	1.37
2	AB	982	C	C4-C5	5.23	1.47	1.43
2	AB	1365	A	C2-N3	5.23	1.38	1.33
2	AB	1520	U	N1-C2	5.23	1.43	1.38
2	AB	2083	G	C4'-O4'	-5.23	1.38	1.45
2	AB	2088	A	C4'-O4'	-5.23	1.38	1.45
2	AB	2671	G	N7-C5	5.23	1.42	1.39
35	BA	10	A	C3'-C2'	-5.23	1.47	1.52
35	BA	69	G	C2-N3	5.23	1.36	1.32
35	BA	106	C	P-O5'	5.23	1.65	1.59
35	BA	1301	U	O3'-P	-5.23	1.54	1.61
35	BA	1456	A	P-O5'	5.23	1.65	1.59
2	AB	1017	G	C3'-O3'	-5.23	1.34	1.42
2	AB	1502	A	O4'-C1'	5.23	1.48	1.41
2	AB	2270	A	O3'-P	5.23	1.67	1.61
35	BA	261	U	N1-C2	5.23	1.43	1.38
2	AB	62	U	C5'-C4'	5.22	1.57	1.51
2	AB	514	A	C4'-O4'	-5.22	1.38	1.45
2	AB	722	A	C6-N1	5.22	1.39	1.35
2	AB	1628	G	O5'-C5'	-5.22	1.34	1.42
2	AB	1913	A	C5-C4	5.22	1.42	1.38
2	AB	2284	A	C6-N6	5.22	1.38	1.33
2	AB	2458	G	C5-C6	5.22	1.47	1.42
2	AB	2627	G	C4'-C3'	-5.22	1.47	1.52
2	AB	2781	A	N9-C4	-5.22	1.34	1.37
35	BA	249	U	O3'-P	5.22	1.67	1.61
57	BW	40	PRO	N-CD	-5.22	1.40	1.47
2	AB	21	A	C6-N1	-5.22	1.31	1.35
2	AB	865	C	C5'-C4'	5.22	1.57	1.51
2	AB	903	C	O3'-P	5.22	1.67	1.61
2	AB	1069	A	C6-N1	5.22	1.39	1.35
2	AB	1156	A	O3'-P	5.22	1.67	1.61
2	AB	1629	U	C2'-O2'	5.22	1.48	1.41
2	AB	1847	A	N7-C5	5.22	1.42	1.39
2	AB	2013	A	N9-C4	-5.22	1.34	1.37
2	AB	2189	U	P-O5'	5.22	1.65	1.59
2	AB	2270	A	C2'-C1'	-5.22	1.47	1.53
2	AB	2437	G	C6-O6	-5.22	1.19	1.24
2	AB	2483	C	C4-C5	5.22	1.47	1.43
2	AB	2641	G	N1-C2	5.22	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2729	G	P-O5'	-5.22	1.54	1.59
35	BA	328	C	N1-C6	5.22	1.40	1.37
35	BA	610	U	C5-C6	5.22	1.38	1.34
35	BA	718	A	C5-C4	-5.22	1.35	1.38
35	BA	747	A	O3'-P	5.22	1.67	1.61
35	BA	1102	A	C6-N6	5.22	1.38	1.33
2	AB	40	U	C4'-C3'	5.22	1.58	1.53
2	AB	136	G	N1-C2	5.22	1.42	1.37
2	AB	1424	G	C2'-O2'	5.22	1.48	1.41
2	AB	1569	A	C6-N1	5.22	1.39	1.35
2	AB	1976	U	O3'-P	5.22	1.67	1.61
2	AB	2209	G	C2-N2	5.22	1.39	1.34
35	BA	1163	A	C4'-O4'	-5.22	1.38	1.45
35	BA	1219	A	C3'-O3'	5.22	1.49	1.42
48	BN	70	GLY	CA-C	5.22	1.60	1.51
2	AB	256	A	C6-N1	-5.22	1.31	1.35
2	AB	665	U	C4'-C3'	5.22	1.58	1.53
2	AB	665	U	C4'-O4'	-5.22	1.38	1.45
2	AB	862	G	C3'-C2'	-5.22	1.47	1.52
2	AB	1254	A	N1-C2	-5.22	1.29	1.34
2	AB	1303	G	C2'-O2'	-5.22	1.34	1.41
2	AB	1334	G	C2'-C1'	5.22	1.59	1.53
2	AB	1350	C	C5-C6	5.22	1.38	1.34
2	AB	1676	A	C4'-O4'	-5.22	1.38	1.45
2	AB	2164	C	C5'-C4'	5.22	1.57	1.51
2	AB	2187	U	C5'-C4'	5.22	1.57	1.51
2	AB	2546	U	C5'-C4'	5.22	1.57	1.51
2	AB	2670	A	N7-C5	5.22	1.42	1.39
2	AB	2681	C	C3'-C2'	-5.22	1.47	1.52
2	AB	2836	U	C2-N3	5.22	1.41	1.37
35	BA	136	C	O3'-P	5.22	1.67	1.61
35	BA	514	C	C2'-C1'	5.22	1.59	1.53
35	BA	667	G	C5-C4	5.22	1.42	1.38
35	BA	791	G	C5-C4	-5.22	1.34	1.38
35	BA	861	G	N1-C2	-5.22	1.33	1.37
35	BA	865	A	O4'-C1'	5.22	1.48	1.41
35	BA	1068	G	O4'-C1'	5.22	1.48	1.41
35	BA	1088	G	C4'-C3'	5.22	1.58	1.53
35	BA	1353	G	N1-C2	-5.22	1.33	1.37
2	AB	220	G	N1-C2	5.22	1.42	1.37
2	AB	593	U	C4-C5	5.22	1.48	1.43
2	AB	651	G	C2-N3	5.22	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1600	C	C5-C6	5.22	1.38	1.34
2	AB	1749	A	C2-N3	5.22	1.38	1.33
2	AB	2067	G	C5-C4	5.22	1.42	1.38
35	BA	1121	U	C4'-O4'	-5.22	1.38	1.45
2	AB	190	A	C2'-O2'	5.22	1.48	1.41
2	AB	1537	G	N3-C4	5.22	1.39	1.35
2	AB	1705	A	C6-N6	5.22	1.38	1.33
2	AB	1860	G	C3'-O3'	5.22	1.49	1.42
2	AB	2032	G	C6-N1	5.22	1.43	1.39
2	AB	2625	G	C5-C6	5.22	1.47	1.42
2	AB	2775	G	N1-C2	5.22	1.42	1.37
35	BA	11	G	C6-N1	5.22	1.43	1.39
35	BA	461	A	N3-C4	5.22	1.38	1.34
35	BA	686	U	O3'-P	5.22	1.67	1.61
35	BA	1198	G	N9-C4	5.22	1.42	1.38
35	BA	1517	G	C5'-C4'	5.22	1.57	1.51
2	AB	132	G	O3'-P	5.21	1.67	1.61
2	AB	1159	U	N1-C6	5.21	1.42	1.38
2	AB	1202	G	C3'-C2'	-5.21	1.47	1.52
2	AB	1355	G	C5-C4	5.21	1.42	1.38
2	AB	1367	A	O3'-P	5.21	1.67	1.61
2	AB	1462	C	C4-C5	-5.21	1.38	1.43
2	AB	1617	C	N1-C2	5.21	1.45	1.40
2	AB	2197	U	C5-C6	5.21	1.38	1.34
2	AB	2308	G	N3-C4	5.21	1.39	1.35
2	AB	2766	A	N9-C4	5.21	1.41	1.37
2	AB	2768	U	C4-C5	5.21	1.48	1.43
2	AB	2777	G	C4'-C3'	-5.21	1.47	1.52
19	AS	52	ARG	NE-CZ	5.21	1.39	1.33
35	BA	231	U	C2-N3	5.21	1.41	1.37
1	AA	9	G	C5-C6	-5.21	1.37	1.42
2	AB	136	G	C2'-O2'	-5.21	1.34	1.41
2	AB	316	C	C2-N3	5.21	1.40	1.35
2	AB	1545	A	C6-N1	-5.21	1.31	1.35
2	AB	2057	G	C4'-O4'	-5.21	1.38	1.45
35	BA	434	U	O3'-P	5.21	1.67	1.61
35	BA	829	G	C5-C6	5.21	1.47	1.42
2	AB	244	A	C2'-C1'	-5.21	1.47	1.53
2	AB	1267	U	C4'-O4'	-5.21	1.38	1.45
2	AB	1324	G	N1-C2	5.21	1.42	1.37
2	AB	2041	U	C4'-C3'	5.21	1.58	1.53
2	AB	2149	U	N3-C4	-5.21	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2213	U	C4'-O4'	-5.21	1.38	1.45
2	AB	2278	A	C5-C4	-5.21	1.35	1.38
2	AB	2409	G	P-O5'	5.21	1.65	1.59
35	BA	499	A	C2-N3	5.21	1.38	1.33
1	AA	81	G	C2-N3	5.21	1.36	1.32
2	AB	296	U	N3-C4	5.21	1.43	1.38
2	AB	888	C	C2'-C1'	5.21	1.59	1.53
2	AB	1530	G	O4'-C1'	-5.21	1.34	1.41
35	BA	427	U	C4-C5	5.21	1.48	1.43
35	BA	589	U	C2-N3	5.21	1.41	1.37
1	AA	39	A	N1-C2	5.21	1.39	1.34
2	AB	195	A	N1-C2	-5.21	1.29	1.34
2	AB	761	A	P-O5'	5.21	1.65	1.59
2	AB	908	C	N1-C6	5.21	1.40	1.37
2	AB	1112	G	N1-C2	5.21	1.42	1.37
2	AB	2056	G	C2-N2	-5.21	1.29	1.34
2	AB	2335	A	C6-N1	-5.21	1.31	1.35
2	AB	2421	G	C2-N3	5.21	1.36	1.32
2	AB	2516	A	C6-N1	5.21	1.39	1.35
2	AB	2869	G	C6-N1	-5.21	1.35	1.39
4	AD	176	ARG	CZ-NH1	5.21	1.39	1.33
35	BA	294	U	P-O5'	5.21	1.65	1.59
35	BA	298	A	N9-C4	5.21	1.41	1.37
35	BA	925	G	N1-C2	5.21	1.42	1.37
35	BA	1450	U	C4-C5	5.21	1.48	1.43
36	BB	20	G	C8-N7	5.21	1.34	1.30
2	AB	83	A	C3'-C2'	-5.21	1.47	1.52
2	AB	161	A	O5'-C5'	-5.21	1.34	1.42
2	AB	478	A	N3-C4	5.21	1.38	1.34
2	AB	1200	C	C4'-O4'	-5.21	1.38	1.45
2	AB	1493	C	C2'-O2'	-5.21	1.34	1.41
2	AB	1534	U	C2-N3	-5.21	1.34	1.37
2	AB	2411	A	C1'-N9	5.21	1.56	1.48
2	AB	2818	U	C5'-C4'	5.21	1.57	1.51
35	BA	1027	C	N1-C6	5.21	1.40	1.37
1	AA	43	C	C2-O2	-5.21	1.19	1.24
2	AB	1271	G	C4'-O4'	-5.21	1.38	1.45
2	AB	1883	U	N3-C4	5.21	1.43	1.38
2	AB	2202	U	C4'-O4'	-5.21	1.38	1.45
2	AB	2691	C	O3'-P	5.21	1.67	1.61
35	BA	627	G	C5-C4	5.21	1.42	1.38
35	BA	664	G	C2'-C1'	-5.21	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	876	C	N3-C4	5.21	1.37	1.33
35	BA	1110	A	C6-N6	5.21	1.38	1.33
35	BA	1295	U	N1-C2	5.21	1.43	1.38
2	AB	731	C	C2'-C1'	5.20	1.59	1.53
2	AB	937	C	C4'-C3'	5.20	1.58	1.53
2	AB	940	G	O3'-P	5.20	1.67	1.61
2	AB	1078	U	N1-C2	5.20	1.43	1.38
2	AB	1279	G	C6-O6	5.20	1.28	1.24
2	AB	1653	G	C5-C4	-5.20	1.34	1.38
2	AB	2238	G	P-O5'	5.20	1.65	1.59
2	AB	2434	A	O3'-P	-5.20	1.54	1.61
2	AB	2590	A	C5-C6	-5.20	1.36	1.41
2	AB	2869	G	C2-N2	-5.20	1.29	1.34
14	AN	59	ARG	CZ-NH1	5.20	1.39	1.33
35	BA	383	A	C5-C4	5.20	1.42	1.38
35	BA	779	C	O3'-P	-5.20	1.54	1.61
35	BA	960	U	C2-N3	-5.20	1.34	1.37
35	BA	1182	G	C2-N3	5.20	1.36	1.32
35	BA	1352	C	C2-N3	-5.20	1.31	1.35
2	AB	1216	G	C4'-O4'	-5.20	1.38	1.45
2	AB	1288	G	C5'-C4'	5.20	1.57	1.51
2	AB	1353	A	N9-C4	-5.20	1.34	1.37
2	AB	1519	G	C6-N1	5.20	1.43	1.39
2	AB	1530	G	C6-N1	5.20	1.43	1.39
2	AB	1760	C	C2-N3	5.20	1.40	1.35
2	AB	2472	G	C2'-C1'	5.20	1.59	1.53
2	AB	2739	U	C4'-O4'	-5.20	1.38	1.45
35	BA	761	G	C5-C4	5.20	1.42	1.38
35	BA	1262	C	C2-N3	5.20	1.40	1.35
54	BT	50	TYR	CG-CD2	5.20	1.46	1.39
2	AB	1173	U	O3'-P	5.20	1.67	1.61
2	AB	1426	G	C3'-C2'	5.20	1.58	1.52
2	AB	2080	A	C3'-C2'	5.20	1.58	1.52
2	AB	2234	G	C2'-C1'	-5.20	1.47	1.53
2	AB	2678	C	C4-C5	5.20	1.47	1.43
2	AB	2897	U	N3-C4	5.20	1.43	1.38
35	BA	301	G	P-O5'	5.20	1.65	1.59
35	BA	838	G	N7-C5	-5.20	1.36	1.39
37	BC	10	G	N7-C5	-5.20	1.36	1.39
1	AA	3	C	P-O5'	-5.20	1.54	1.59
2	AB	214	G	O3'-P	5.20	1.67	1.61
2	AB	1283	G	C5'-C4'	5.20	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1310	G	C6-N1	-5.20	1.35	1.39
2	AB	2492	U	C3'-C2'	-5.20	1.47	1.52
35	BA	1037	C	C5'-C4'	5.20	1.57	1.51
35	BA	1109	C	C5-C6	5.20	1.38	1.34
2	AB	1752	C	O3'-P	5.20	1.67	1.61
2	AB	2181	U	C2-N3	5.20	1.41	1.37
2	AB	2284	A	O4'-C1'	5.20	1.48	1.41
35	BA	116	A	C5-C6	-5.20	1.36	1.41
35	BA	183	C	C3'-C2'	5.20	1.58	1.52
35	BA	644	U	N1-C2	5.20	1.43	1.38
35	BA	998	C	C4-C5	5.20	1.47	1.43
35	BA	1198	G	N3-C4	5.20	1.39	1.35
35	BA	1496	C	C2'-O2'	-5.20	1.34	1.41
36	BB	27	A	C2'-C1'	5.20	1.59	1.53
1	AA	37	C	C5-C6	5.20	1.38	1.34
2	AB	436	C	O4'-C1'	5.20	1.48	1.41
2	AB	529	A	C5'-C4'	5.20	1.57	1.51
2	AB	1322	A	N7-C5	5.20	1.42	1.39
2	AB	1656	C	P-O5'	5.20	1.65	1.59
2	AB	2036	C	C4'-O4'	-5.20	1.38	1.45
2	AB	2107	G	C4'-O4'	-5.20	1.38	1.45
2	AB	2701	U	C5'-C4'	5.20	1.57	1.51
2	AB	2771	C	O3'-P	5.20	1.67	1.61
35	BA	436	C	C2-O2	-5.20	1.19	1.24
35	BA	649	A	C8-N7	5.20	1.35	1.31
2	AB	673	C	N1-C6	5.19	1.40	1.37
2	AB	1613	G	C6-O6	-5.19	1.19	1.24
2	AB	2295	C	C2'-C1'	5.19	1.59	1.53
2	AB	2834	G	N3-C4	-5.19	1.31	1.35
36	BB	24	A	N7-C5	-5.19	1.36	1.39
2	AB	31	C	N3-C4	5.19	1.37	1.33
2	AB	1529	G	C4'-C3'	5.19	1.58	1.53
2	AB	1627	G	N3-C4	5.19	1.39	1.35
2	AB	1875	G	C2'-O2'	5.19	1.48	1.41
2	AB	2024	G	N7-C5	5.19	1.42	1.39
2	AB	2154	A	C6-N6	5.19	1.38	1.33
2	AB	2230	G	C2-N3	5.19	1.36	1.32
2	AB	2351	G	C2'-C1'	-5.19	1.47	1.53
35	BA	101	A	N9-C4	5.19	1.41	1.37
35	BA	507	C	P-O5'	5.19	1.65	1.59
35	BA	1505	G	C6-O6	-5.19	1.19	1.24
2	AB	356	G	C2-N3	5.19	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1559	U	C2'-O2'	-5.19	1.34	1.41
2	AB	2085	U	N1-C2	-5.19	1.33	1.38
2	AB	2185	U	N1-C2	5.19	1.43	1.38
35	BA	455	G	N7-C5	-5.19	1.36	1.39
35	BA	864	A	C5'-C4'	5.19	1.57	1.51
35	BA	959	A	C6-N1	5.19	1.39	1.35
35	BA	1171	A	C2-N3	5.19	1.38	1.33
36	BB	59	A	C6-N1	-5.19	1.31	1.35
2	AB	40	U	C4-C5	5.19	1.48	1.43
2	AB	52	A	N9-C8	-5.19	1.33	1.37
2	AB	741	U	C4'-O4'	-5.19	1.38	1.45
2	AB	1652	A	C2-N3	5.19	1.38	1.33
2	AB	2745	C	N1-C6	5.19	1.40	1.37
35	BA	801	U	N1-C2	5.19	1.43	1.38
35	BA	1330	U	N1-C6	5.19	1.42	1.38
2	AB	529	A	C2'-O2'	5.19	1.48	1.41
2	AB	591	U	C5-C6	5.19	1.38	1.34
2	AB	1392	A	N7-C5	5.19	1.42	1.39
2	AB	1397	U	C3'-C2'	5.19	1.58	1.52
2	AB	1989	G	N7-C5	5.19	1.42	1.39
2	AB	2016	U	O4'-C1'	5.19	1.48	1.41
2	AB	2112	G	C5'-C4'	5.19	1.57	1.51
2	AB	2214	C	C5'-C4'	5.19	1.57	1.51
2	AB	2486	C	N1-C6	-5.19	1.34	1.37
35	BA	101	A	O4'-C1'	5.19	1.48	1.41
35	BA	347	G	N9-C4	5.19	1.42	1.38
35	BA	666	G	C6-N1	5.19	1.43	1.39
35	BA	1484	C	C2-O2	-5.19	1.19	1.24
2	AB	174	U	C5-C6	5.19	1.38	1.34
2	AB	1096	A	C3'-C2'	-5.19	1.47	1.52
35	BA	198	G	P-O5'	5.19	1.65	1.59
2	AB	143	C	O4'-C1'	5.18	1.48	1.41
2	AB	296	U	N1-C2	5.18	1.43	1.38
2	AB	537	G	C8-N7	5.18	1.34	1.30
2	AB	805	G	C6-N1	-5.18	1.35	1.39
2	AB	1205	A	C8-N7	-5.18	1.27	1.31
2	AB	1546	G	N9-C4	5.18	1.42	1.38
2	AB	1964	G	C6-N1	5.18	1.43	1.39
3	AC	125	GLY	N-CA	5.18	1.53	1.46
12	AL	66	GLY	CA-C	5.18	1.60	1.51
35	BA	286	C	C4'-C3'	5.18	1.58	1.53
35	BA	948	C	C5-C6	5.18	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	109	A	C2'-O2'	5.18	1.48	1.41
2	AB	196	A	C5-C6	5.18	1.45	1.41
2	AB	553	G	N9-C4	5.18	1.42	1.38
2	AB	785	G	N9-C8	5.18	1.41	1.37
2	AB	1288	G	N9-C4	5.18	1.42	1.38
2	AB	1821	A	C5-C4	-5.18	1.35	1.38
2	AB	2271	G	C6-N1	-5.18	1.35	1.39
2	AB	2384	U	O3'-P	-5.18	1.54	1.61
2	AB	2391	G	N9-C8	5.18	1.41	1.37
4	AD	11	GLY	N-CA	5.18	1.53	1.46
7	AG	60	SER	N-CA	5.18	1.56	1.46
35	BA	138	G	N7-C5	5.18	1.42	1.39
35	BA	491	G	N1-C2	5.18	1.41	1.37
35	BA	1127	G	C8-N7	-5.18	1.27	1.30
35	BA	1447	A	P-O5'	-5.18	1.54	1.59
36	BB	36	U	O3'-P	5.18	1.67	1.61
1	AA	103	U	C4-C5	5.18	1.48	1.43
2	AB	1891	G	C5-C4	5.18	1.42	1.38
2	AB	2633	G	C2-N3	5.18	1.36	1.32
2	AB	2715	C	O3'-P	5.18	1.67	1.61
35	BA	330	C	C1'-N1	5.18	1.56	1.48
35	BA	349	A	C5'-C4'	5.18	1.57	1.51
35	BA	876	C	O3'-P	5.18	1.67	1.61
37	BC	36	A	N3-C4	5.18	1.38	1.34
2	AB	103	A	C8-N7	-5.18	1.27	1.31
2	AB	246	C	N1-C6	5.18	1.40	1.37
2	AB	446	G	C4'-C3'	5.18	1.58	1.53
2	AB	461	C	N3-C4	5.18	1.37	1.33
2	AB	1116	G	C6-N1	5.18	1.43	1.39
2	AB	1368	G	P-O5'	5.18	1.65	1.59
2	AB	1781	U	C5'-C4'	5.18	1.57	1.51
2	AB	1965	C	O3'-P	5.18	1.67	1.61
2	AB	2430	A	O3'-P	5.18	1.67	1.61
2	AB	2725	A	N3-C4	5.18	1.38	1.34
35	BA	172	A	N3-C4	5.18	1.38	1.34
35	BA	392	C	C4-N4	5.18	1.38	1.33
35	BA	494	G	C8-N7	5.18	1.34	1.30
35	BA	665	A	N9-C8	5.18	1.41	1.37
35	BA	901	A	O3'-P	5.18	1.67	1.61
35	BA	1136	C	C4-N4	5.18	1.38	1.33
35	BA	1364	U	N1-C2	5.18	1.43	1.38
35	BA	1521	C	C4-N4	5.18	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	146	A	C4'-O4'	-5.18	1.38	1.45
2	AB	217	A	N9-C8	-5.18	1.33	1.37
2	AB	612	G	O4'-C1'	5.18	1.48	1.41
2	AB	980	A	P-O5'	5.18	1.65	1.59
2	AB	1126	A	N1-C2	-5.18	1.29	1.34
2	AB	1197	G	C5'-C4'	5.18	1.57	1.51
2	AB	1635	A	N7-C5	-5.18	1.36	1.39
2	AB	2180	U	N1-C6	-5.18	1.33	1.38
2	AB	2847	U	C3'-C2'	5.18	1.58	1.52
35	BA	159	G	N3-C4	5.18	1.39	1.35
35	BA	958	A	C5'-C4'	5.18	1.57	1.51
2	AB	375	G	C3'-C2'	5.18	1.58	1.52
2	AB	607	U	C5'-C4'	5.18	1.57	1.51
2	AB	800	A	C8-N7	-5.18	1.27	1.31
2	AB	1097	U	N1-C2	5.18	1.43	1.38
2	AB	1397	U	C2-N3	5.18	1.41	1.37
2	AB	2253	G	O3'-P	5.18	1.67	1.61
2	AB	2500	U	C2'-O2'	5.18	1.48	1.41
2	AB	2623	G	N7-C5	5.18	1.42	1.39
2	AB	2665	A	N3-C4	5.18	1.38	1.34
14	AN	41	ARG	NE-CZ	5.18	1.39	1.33
16	AP	64	ARG	CZ-NH1	5.18	1.39	1.33
35	BA	324	G	O5'-C5'	-5.18	1.34	1.42
35	BA	481	G	N9-C4	5.18	1.42	1.38
35	BA	499	A	N7-C5	5.18	1.42	1.39
35	BA	929	G	O3'-P	5.18	1.67	1.61
35	BA	1055	A	C4'-O4'	-5.18	1.38	1.45
35	BA	1283	U	N1-C2	-5.18	1.33	1.38
39	BE	160	GLU	CB-CG	5.18	1.61	1.52
2	AB	594	U	C5'-C4'	5.17	1.57	1.51
2	AB	1376	C	P-O5'	5.17	1.65	1.59
2	AB	1717	A	C5'-C4'	5.17	1.57	1.51
2	AB	2156	G	N3-C4	5.17	1.39	1.35
2	AB	2190	G	N3-C4	5.17	1.39	1.35
2	AB	2202	U	C5-C6	5.17	1.38	1.34
2	AB	2383	G	N9-C4	-5.17	1.33	1.38
2	AB	2472	G	N7-C5	5.17	1.42	1.39
2	AB	2497	A	C8-N7	5.17	1.35	1.31
2	AB	2644	G	N9-C8	5.17	1.41	1.37
2	AB	2716	C	O4'-C1'	5.17	1.48	1.41
8	AH	162	ARG	CD-NE	5.17	1.55	1.46
35	BA	181	A	C3'-O3'	-5.17	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	593	U	C1'-N1	5.17	1.56	1.48
35	BA	669	G	O3'-P	5.17	1.67	1.61
35	BA	1143	G	C1'-N9	5.17	1.56	1.48
35	BA	1443	C	C4'-C3'	5.17	1.58	1.53
35	BA	1474	U	N1-C6	5.17	1.42	1.38
35	BA	1477	U	C4'-C3'	5.17	1.58	1.53
2	AB	47	C	C2-N3	5.17	1.39	1.35
2	AB	2420	C	O4'-C1'	5.17	1.48	1.41
2	AB	2751	G	C2'-C1'	5.17	1.59	1.53
6	AF	180	LEU	CA-C	5.17	1.66	1.52
35	BA	1175	G	C5'-C4'	5.17	1.57	1.51
35	BA	1315	U	C2-N3	5.17	1.41	1.37
2	AB	111	A	C2'-O2'	5.17	1.48	1.41
2	AB	887	U	N1-C2	5.17	1.43	1.38
2	AB	2129	C	C2'-C1'	-5.17	1.47	1.53
2	AB	2169	A	C2-N3	-5.17	1.28	1.33
2	AB	2253	G	N9-C4	-5.17	1.33	1.38
2	AB	2546	U	O3'-P	-5.17	1.54	1.61
23	AW	12	VAL	CB-CG1	5.17	1.63	1.52
35	BA	665	A	C2-N3	-5.17	1.28	1.33
35	BA	774	G	C2-N3	5.17	1.36	1.32
35	BA	1106	G	C5'-C4'	5.17	1.57	1.51
45	BK	84	ARG	NE-CZ	5.17	1.39	1.33
48	BN	104	SER	CA-CB	5.17	1.60	1.52
2	AB	1517	G	C8-N7	-5.17	1.27	1.30
2	AB	1870	C	C2-O2	-5.17	1.19	1.24
2	AB	2295	C	C4'-O4'	-5.17	1.38	1.45
2	AB	2500	U	C5-C6	5.17	1.38	1.34
2	AB	2736	A	N3-C4	5.17	1.38	1.34
35	BA	338	A	N9-C4	5.17	1.41	1.37
2	AB	491	G	C6-N1	5.17	1.43	1.39
2	AB	550	C	O4'-C1'	5.17	1.48	1.41
2	AB	774	G	N9-C8	5.17	1.41	1.37
2	AB	907	G	N7-C5	-5.17	1.36	1.39
2	AB	972	A	O3'-P	5.17	1.67	1.61
2	AB	1204	A	P-O5'	5.17	1.65	1.59
2	AB	1349	C	C4-C5	-5.17	1.38	1.43
2	AB	1571	A	N3-C4	5.17	1.38	1.34
2	AB	1809	A	N1-C2	-5.17	1.29	1.34
2	AB	2516	A	C4'-O4'	-5.17	1.38	1.45
2	AB	2582	G	N1-C2	5.17	1.41	1.37
2	AB	2869	G	P-O5'	-5.17	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	267	C	C3'-C2'	-5.17	1.47	1.52
35	BA	477	C	C4'-C3'	5.17	1.58	1.53
35	BA	698	G	N3-C4	5.17	1.39	1.35
1	AA	99	A	N9-C4	5.17	1.41	1.37
2	AB	54	G	C3'-O3'	-5.17	1.34	1.42
2	AB	120	U	N1-C2	5.17	1.43	1.38
2	AB	1182	G	C4'-O4'	-5.17	1.38	1.45
2	AB	1202	G	C4'-O4'	-5.17	1.38	1.45
2	AB	1321	A	O3'-P	5.17	1.67	1.61
2	AB	1371	G	C5-C6	5.17	1.47	1.42
2	AB	1759	A	C8-N7	-5.17	1.27	1.31
2	AB	1977	A	C3'-O3'	-5.17	1.34	1.42
2	AB	2041	U	C2-O2	5.17	1.27	1.22
2	AB	2140	G	C2'-O2'	5.17	1.48	1.41
2	AB	2321	U	P-O5'	5.17	1.65	1.59
2	AB	2551	C	C4'-O4'	-5.17	1.38	1.45
2	AB	2723	C	C5'-C4'	5.17	1.57	1.51
35	BA	1347	G	N9-C8	5.17	1.41	1.37
2	AB	1163	G	C6-N1	5.17	1.43	1.39
2	AB	2086	U	P-O5'	5.17	1.65	1.59
35	BA	144	G	N9-C4	5.17	1.42	1.38
35	BA	628	G	C8-N7	-5.17	1.27	1.30
2	AB	455	C	N3-C4	5.16	1.37	1.33
2	AB	1679	A	C2-N3	5.16	1.38	1.33
2	AB	2257	U	P-O5'	5.16	1.65	1.59
2	AB	2505	G	N9-C8	-5.16	1.34	1.37
2	AB	2719	G	P-O5'	5.16	1.65	1.59
10	AJ	11	VAL	CA-CB	-5.16	1.44	1.54
35	BA	190	A	C4'-C3'	5.16	1.58	1.53
35	BA	636	U	C3'-C2'	5.16	1.58	1.52
35	BA	665	A	N1-C2	-5.16	1.29	1.34
35	BA	722	G	N9-C8	-5.16	1.34	1.37
35	BA	906	A	C2'-C1'	5.16	1.59	1.53
35	BA	1070	U	C2-N3	-5.16	1.34	1.37
35	BA	1071	C	P-O5'	5.16	1.65	1.59
35	BA	1140	C	C5-C6	-5.16	1.30	1.34
2	AB	793	A	C4'-O4'	-5.16	1.38	1.45
2	AB	2310	C	C5-C6	5.16	1.38	1.34
2	AB	2824	C	C5'-C4'	5.16	1.57	1.51
10	AJ	106	GLU	CD-OE2	5.16	1.31	1.25
37	BC	43	G	C3'-C2'	5.16	1.58	1.52
2	AB	727	A	C2-N3	5.16	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	824	U	C4-O4	5.16	1.27	1.23
2	AB	1402	U	N3-C4	5.16	1.43	1.38
2	AB	1718	G	C6-O6	-5.16	1.19	1.24
2	AB	1814	G	C8-N7	-5.16	1.27	1.30
2	AB	1935	G	N3-C4	-5.16	1.31	1.35
2	AB	2049	G	O3'-P	5.16	1.67	1.61
35	BA	15	G	N7-C5	5.16	1.42	1.39
35	BA	508	U	C5-C6	5.16	1.38	1.34
1	AA	54	G	C8-N7	5.16	1.34	1.30
1	AA	97	C	C4-N4	5.16	1.38	1.33
2	AB	808	G	N1-C2	5.16	1.41	1.37
2	AB	1280	G	C4'-O4'	-5.16	1.38	1.45
2	AB	1311	G	C1'-N9	5.16	1.56	1.48
2	AB	1343	G	N7-C5	-5.16	1.36	1.39
2	AB	1375	U	C3'-O3'	5.16	1.49	1.42
2	AB	2706	A	C5-C6	5.16	1.45	1.41
35	BA	357	G	N1-C2	5.16	1.41	1.37
35	BA	500	G	C8-N7	-5.16	1.27	1.30
35	BA	614	C	C3'-O3'	5.16	1.49	1.42
35	BA	648	A	C4'-O4'	-5.16	1.38	1.45
35	BA	940	C	C5'-C4'	5.16	1.57	1.51
35	BA	1132	C	C2'-C1'	5.16	1.59	1.53
35	BA	1280	A	C4'-O4'	-5.16	1.38	1.45
57	BW	68	ARG	CZ-NH2	5.16	1.39	1.33
2	AB	752	A	C3'-O3'	5.16	1.49	1.42
2	AB	1070	A	C2'-C1'	5.16	1.59	1.53
2	AB	2007	U	C5'-C4'	5.16	1.57	1.51
2	AB	2454	G	N1-C2	5.16	1.41	1.37
2	AB	2786	U	C3'-C2'	-5.16	1.47	1.52
35	BA	810	C	N1-C2	5.16	1.45	1.40
35	BA	1509	C	O3'-P	5.16	1.67	1.61
1	AA	69	G	N9-C4	5.16	1.42	1.38
2	AB	306	U	C2-O2	5.16	1.26	1.22
2	AB	763	G	N9-C8	-5.16	1.34	1.37
2	AB	1220	G	N9-C4	-5.16	1.33	1.38
2	AB	1393	A	C2'-C1'	5.16	1.59	1.53
2	AB	1455	G	C2-N3	5.16	1.36	1.32
2	AB	1879	C	C3'-C2'	-5.16	1.47	1.52
2	AB	2315	G	C3'-O3'	5.16	1.49	1.42
2	AB	2677	G	C6-N1	5.16	1.43	1.39
2	AB	2775	G	O4'-C1'	5.16	1.48	1.41
2	AB	2780	G	N7-C5	-5.16	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	115	G	C8-N7	5.16	1.34	1.30
35	BA	392	C	N1-C6	5.16	1.40	1.37
35	BA	427	U	C2-O2	5.16	1.26	1.22
35	BA	502	A	C5'-C4'	5.16	1.57	1.51
35	BA	514	C	N3-C4	5.16	1.37	1.33
35	BA	1151	A	N3-C4	5.16	1.38	1.34
35	BA	1499	A	O4'-C1'	5.16	1.48	1.41
2	AB	235	U	C5'-C4'	5.15	1.57	1.51
2	AB	571	U	N1-C6	5.15	1.42	1.38
2	AB	1615	C	C4-N4	5.15	1.38	1.33
2	AB	2540	C	C5'-C4'	5.15	1.57	1.51
35	BA	1013	G	C3'-C2'	5.15	1.58	1.52
2	AB	98	G	C4'-C3'	5.15	1.58	1.53
2	AB	271	G	C5-C4	5.15	1.42	1.38
2	AB	430	A	C2'-C1'	-5.15	1.47	1.53
2	AB	1105	U	N1-C2	5.15	1.43	1.38
2	AB	1222	U	C4'-O4'	-5.15	1.38	1.45
2	AB	2122	U	C2'-C1'	-5.15	1.47	1.53
2	AB	2647	U	C1'-N1	5.15	1.56	1.48
35	BA	67	C	N3-C4	5.15	1.37	1.33
35	BA	269	C	C2-N3	5.15	1.39	1.35
35	BA	375	U	N1-C2	5.15	1.43	1.38
35	BA	568	G	C2-N2	-5.15	1.29	1.34
1	AA	44	G	N1-C2	5.15	1.41	1.37
2	AB	331	C	C2-O2	-5.15	1.19	1.24
2	AB	517	C	C4'-C3'	-5.15	1.47	1.52
2	AB	1540	G	C5'-C4'	5.15	1.57	1.51
2	AB	1687	G	N3-C4	5.15	1.39	1.35
35	BA	151	A	P-O5'	5.15	1.65	1.59
35	BA	566	G	C2-N2	-5.15	1.29	1.34
35	BA	703	G	C2'-O2'	5.15	1.48	1.41
35	BA	769	G	O4'-C1'	5.15	1.48	1.41
35	BA	788	U	C1'-N1	5.15	1.56	1.48
35	BA	1137	C	N1-C6	5.15	1.40	1.37
35	BA	1427	C	C4-N4	5.15	1.38	1.33
35	BA	1502	A	N9-C4	-5.15	1.34	1.37
2	AB	150	U	C3'-O3'	-5.15	1.34	1.42
2	AB	621	A	O3'-P	-5.15	1.54	1.61
2	AB	2540	C	C4'-C3'	-5.15	1.47	1.52
35	BA	232	G	C2-N2	-5.15	1.29	1.34
35	BA	512	U	C2-N3	5.15	1.41	1.37
35	BA	1345	U	C5-C6	5.15	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	28	U	C2-N3	5.15	1.41	1.37
1	AA	19	C	P-O5'	5.15	1.64	1.59
1	AA	109	A	P-O5'	5.15	1.64	1.59
2	AB	1241	A	N1-C2	-5.15	1.29	1.34
2	AB	2530	A	C3'-O3'	-5.15	1.34	1.42
35	BA	152	A	P-O5'	5.15	1.64	1.59
35	BA	165	G	N1-C2	-5.15	1.33	1.37
35	BA	1153	G	N1-C2	5.15	1.41	1.37
37	BC	67	C	C2-O2	-5.15	1.19	1.24
2	AB	356	G	C4'-O4'	-5.15	1.38	1.45
2	AB	832	U	C2-O2	5.15	1.26	1.22
2	AB	1022	G	C2-N3	5.15	1.36	1.32
2	AB	2791	G	C4'-O4'	-5.15	1.38	1.45
2	AB	2825	G	C5-C6	5.15	1.47	1.42
35	BA	827	U	N3-C4	5.15	1.43	1.38
1	AA	56	G	C2'-C1'	5.14	1.59	1.53
2	AB	48	G	C5'-C4'	5.14	1.57	1.51
2	AB	183	C	C4'-C3'	-5.14	1.47	1.52
2	AB	208	C	O3'-P	5.14	1.67	1.61
2	AB	365	U	N1-C2	5.14	1.43	1.38
2	AB	393	C	N1-C6	5.14	1.40	1.37
2	AB	502	A	C6-N6	5.14	1.38	1.33
2	AB	1182	G	C6-O6	5.14	1.28	1.24
2	AB	1465	G	C5-C6	5.14	1.47	1.42
2	AB	1685	C	P-O5'	-5.14	1.54	1.59
2	AB	1786	A	N9-C4	5.14	1.41	1.37
35	BA	1165	U	N1-C2	5.14	1.43	1.38
40	BF	127	ARG	NE-CZ	5.14	1.39	1.33
2	AB	15	G	C2'-O2'	5.14	1.48	1.41
2	AB	207	A	N3-C4	-5.14	1.31	1.34
2	AB	1009	A	N3-C4	-5.14	1.31	1.34
2	AB	2141	G	N7-C5	5.14	1.42	1.39
2	AB	2390	U	C2-O2	5.14	1.26	1.22
2	AB	2700	A	C8-N7	-5.14	1.27	1.31
2	AB	2700	A	N1-C2	-5.14	1.29	1.34
2	AB	2741	A	C4'-O4'	-5.14	1.38	1.45
35	BA	90	C	C3'-C2'	-5.14	1.47	1.52
35	BA	766	A	N9-C8	-5.14	1.33	1.37
35	BA	1034	G	C2'-C1'	-5.14	1.47	1.53
35	BA	1093	A	C4'-O4'	-5.14	1.38	1.45
2	AB	1631	G	C2'-C1'	5.14	1.59	1.53
2	AB	2766	A	C5'-C4'	5.14	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	266	G	C2'-C1'	5.14	1.59	1.53
2	AB	67	U	C4-C5	5.14	1.48	1.43
2	AB	330	A	C3'-O3'	5.14	1.49	1.42
2	AB	1140	C	C4-C5	5.14	1.47	1.43
2	AB	1208	C	P-O5'	-5.14	1.54	1.59
2	AB	1532	A	O4'-C1'	5.14	1.48	1.41
2	AB	2545	G	C4'-O4'	-5.14	1.38	1.45
2	AB	2783	U	N1-C2	5.14	1.43	1.38
35	BA	327	A	C2'-C1'	5.14	1.59	1.53
35	BA	684	U	C4'-C3'	-5.14	1.47	1.52
35	BA	886	G	P-O5'	-5.14	1.54	1.59
35	BA	889	A	C8-N7	5.14	1.35	1.31
35	BA	1001	C	C3'-O3'	-5.14	1.34	1.42
35	BA	1045	C	O3'-P	5.14	1.67	1.61
35	BA	1292	G	N9-C4	-5.14	1.33	1.38
37	BC	12	G	N1-C2	-5.14	1.33	1.37
2	AB	1154	G	N7-C5	5.14	1.42	1.39
2	AB	1197	G	C2-N2	5.14	1.39	1.34
2	AB	1368	G	C4'-C3'	-5.14	1.47	1.52
35	BA	300	A	C6-N1	-5.14	1.31	1.35
35	BA	550	G	C8-N7	5.14	1.34	1.30
35	BA	735	C	C4-N4	-5.14	1.29	1.33
35	BA	780	A	C8-N7	5.14	1.35	1.31
39	BE	109	GLU	CB-CG	5.14	1.61	1.52
1	AA	50	A	N1-C2	-5.14	1.29	1.34
2	AB	585	G	C2-N3	5.14	1.36	1.32
2	AB	1318	U	C2'-C1'	-5.14	1.47	1.53
2	AB	1565	C	C3'-C2'	5.14	1.58	1.52
2	AB	1611	C	C4-N4	5.14	1.38	1.33
2	AB	2651	C	C4-C5	-5.14	1.38	1.43
2	AB	2724	U	C5-C6	5.14	1.38	1.34
2	AB	2878	U	C5-C6	5.14	1.38	1.34
35	BA	60	A	C4'-O4'	-5.14	1.38	1.45
35	BA	259	G	C8-N7	5.14	1.34	1.30
35	BA	1111	A	C6-N6	-5.14	1.29	1.33
35	BA	1294	G	N1-C2	5.14	1.41	1.37
1	AA	28	C	N1-C6	5.13	1.40	1.37
1	AA	57	A	C4'-O4'	-5.13	1.38	1.45
2	AB	941	A	C4'-O4'	-5.13	1.38	1.45
2	AB	1845	G	C5'-C4'	5.13	1.57	1.51
2	AB	1904	G	C5-C4	-5.13	1.34	1.38
2	AB	2645	G	N7-C5	5.13	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	70	U	O3'-P	5.13	1.67	1.61
35	BA	456	A	C8-N7	-5.13	1.27	1.31
35	BA	699	C	O3'-P	5.13	1.67	1.61
35	BA	1144	G	P-O5'	5.13	1.64	1.59
35	BA	1192	C	C4-C5	5.13	1.47	1.43
35	BA	1480	A	N1-C2	-5.13	1.29	1.34
2	AB	2713	U	C2-N3	5.13	1.41	1.37
35	BA	469	C	C3'-C2'	-5.13	1.47	1.52
35	BA	484	G	C4'-O4'	-5.13	1.38	1.45
2	AB	300	A	N3-C4	5.13	1.38	1.34
2	AB	929	U	N1-C2	5.13	1.43	1.38
2	AB	1191	G	C5'-C4'	5.13	1.57	1.51
2	AB	1385	A	C5'-C4'	5.13	1.57	1.51
2	AB	1601	G	C3'-C2'	-5.13	1.47	1.52
2	AB	1688	U	C3'-C2'	5.13	1.58	1.52
2	AB	2223	G	P-O5'	5.13	1.64	1.59
2	AB	2313	C	C3'-C2'	5.13	1.58	1.52
2	AB	2427	C	C5'-C4'	5.13	1.57	1.51
2	AB	2623	G	C5'-C4'	5.13	1.57	1.51
35	BA	271	C	C5'-C4'	5.13	1.57	1.51
35	BA	718	A	C3'-C2'	-5.13	1.47	1.52
35	BA	774	G	C8-N7	-5.13	1.27	1.30
35	BA	843	U	P-O5'	5.13	1.64	1.59
35	BA	1214	C	O3'-P	5.13	1.67	1.61
35	BA	1425	U	C2-O2	5.13	1.26	1.22
49	BO	22	TYR	CG-CD1	5.13	1.45	1.39
2	AB	500	G	C2-N2	5.13	1.39	1.34
2	AB	1481	U	P-O5'	5.13	1.64	1.59
35	BA	1006	G	N7-C5	5.13	1.42	1.39
35	BA	1089	G	P-O5'	-5.13	1.54	1.59
35	BA	1177	G	O3'-P	5.13	1.67	1.61
37	BC	12	G	C5-C4	5.13	1.42	1.38
2	AB	11	C	C4'-C3'	5.13	1.58	1.53
2	AB	68	G	N3-C4	-5.13	1.31	1.35
2	AB	265	A	O3'-P	5.13	1.67	1.61
2	AB	369	U	C4'-C3'	-5.13	1.47	1.52
2	AB	523	C	C5'-C4'	5.13	1.57	1.51
2	AB	899	A	N1-C2	-5.13	1.29	1.34
2	AB	1705	A	C3'-O3'	5.13	1.49	1.42
2	AB	1720	U	N1-C2	5.13	1.43	1.38
2	AB	2243	U	C2-N3	5.13	1.41	1.37
2	AB	2600	A	C8-N7	5.13	1.35	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	61	G	N9-C8	5.13	1.41	1.37
35	BA	262	A	C4'-O4'	-5.13	1.38	1.45
35	BA	408	A	P-O5'	5.13	1.64	1.59
35	BA	605	U	P-O5'	5.13	1.64	1.59
35	BA	635	A	C2'-C1'	-5.13	1.47	1.53
35	BA	1184	G	N1-C2	5.13	1.41	1.37
35	BA	1251	A	C2'-O2'	-5.13	1.34	1.41
2	AB	478	A	C3'-O3'	5.13	1.49	1.42
2	AB	804	A	C4'-O4'	-5.13	1.38	1.45
2	AB	1103	A	N9-C4	-5.13	1.34	1.37
2	AB	1759	A	C4'-O4'	-5.13	1.38	1.45
2	AB	2844	G	O4'-C1'	5.13	1.48	1.41
10	AJ	144	GLU	CG-CD	5.13	1.59	1.51
35	BA	369	G	O4'-C1'	-5.13	1.34	1.41
35	BA	907	A	P-O5'	5.13	1.64	1.59
35	BA	1287	A	N1-C2	-5.13	1.29	1.34
35	BA	1321	U	C4'-C3'	5.13	1.58	1.53
2	AB	658	U	C4'-O4'	-5.12	1.38	1.45
2	AB	889	C	C4-C5	-5.12	1.38	1.43
2	AB	1498	C	C4-N4	5.12	1.38	1.33
35	BA	209	U	O4'-C1'	5.12	1.48	1.41
35	BA	329	A	C6-N1	-5.12	1.31	1.35
35	BA	1526	G	C4'-O4'	-5.12	1.38	1.45
2	AB	289	G	N7-C5	5.12	1.42	1.39
2	AB	939	G	N3-C4	5.12	1.39	1.35
2	AB	1130	U	C2'-C1'	5.12	1.58	1.53
2	AB	1854	A	C4'-O4'	-5.12	1.38	1.45
2	AB	2056	G	C6-O6	-5.12	1.19	1.24
2	AB	2080	A	C5-C4	5.12	1.42	1.38
2	AB	2608	G	C2-N3	5.12	1.36	1.32
35	BA	164	G	N1-C2	5.12	1.41	1.37
35	BA	402	G	N1-C2	5.12	1.41	1.37
35	BA	860	A	C3'-O3'	-5.12	1.34	1.42
35	BA	992	U	C4'-C3'	5.12	1.58	1.53
35	BA	1026	G	C2-N3	5.12	1.36	1.32
35	BA	1042	A	N3-C4	5.12	1.38	1.34
45	BK	63	TYR	CG-CD2	5.12	1.45	1.39
2	AB	171	U	N1-C6	5.12	1.42	1.38
2	AB	666	A	C3'-C2'	5.12	1.58	1.52
2	AB	1054	A	N9-C4	5.12	1.41	1.37
2	AB	1155	A	C6-N6	5.12	1.38	1.33
2	AB	2051	A	C2-N3	5.12	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2238	G	N9-C8	-5.12	1.34	1.37
2	AB	2702	G	N3-C4	5.12	1.39	1.35
2	AB	2722	G	C4'-C3'	-5.12	1.47	1.52
35	BA	936	C	P-O5'	-5.12	1.54	1.59
2	AB	98	G	N1-C2	5.12	1.41	1.37
2	AB	1588	G	N9-C4	-5.12	1.33	1.38
2	AB	2155	U	N3-C4	-5.12	1.33	1.38
2	AB	2167	U	N1-C6	5.12	1.42	1.38
35	BA	293	G	C6-O6	-5.12	1.19	1.24
35	BA	328	C	C4-C5	5.12	1.47	1.43
35	BA	1138	G	N1-C2	5.12	1.41	1.37
35	BA	1204	A	N3-C4	5.12	1.38	1.34
35	BA	1400	C	N3-C4	5.12	1.37	1.33
1	AA	13	G	N7-C5	-5.12	1.36	1.39
1	AA	100	G	C5-C4	5.12	1.42	1.38
2	AB	74	A	C4'-C3'	-5.12	1.47	1.52
2	AB	583	G	C4'-O4'	-5.12	1.38	1.45
2	AB	948	C	C5'-C4'	5.12	1.57	1.51
2	AB	1481	U	C2-O2	5.12	1.26	1.22
2	AB	2138	G	C8-N7	5.12	1.34	1.30
2	AB	2191	A	C5-C4	-5.12	1.35	1.38
15	AO	50	ARG	CZ-NH2	5.12	1.39	1.33
35	BA	323	U	P-O5'	5.12	1.64	1.59
35	BA	395	C	N1-C6	5.12	1.40	1.37
35	BA	705	G	P-O5'	5.12	1.64	1.59
35	BA	923	A	N1-C2	5.12	1.39	1.34
35	BA	1320	C	C4-N4	-5.12	1.29	1.33
35	BA	1502	A	N3-C4	5.12	1.38	1.34
2	AB	1453	A	P-O5'	5.12	1.64	1.59
35	BA	371	A	N9-C4	5.12	1.41	1.37
35	BA	903	G	N1-C2	5.12	1.41	1.37
35	BA	1263	C	C2-N3	5.12	1.39	1.35
35	BA	1384	C	C4-N4	-5.12	1.29	1.33
2	AB	147	C	C4'-O4'	-5.12	1.38	1.45
2	AB	898	C	C2-N3	5.12	1.39	1.35
2	AB	929	U	C4-O4	-5.12	1.19	1.23
2	AB	990	A	C5-C6	5.12	1.45	1.41
2	AB	1486	U	N1-C6	-5.12	1.33	1.38
2	AB	1490	A	C8-N7	-5.12	1.27	1.31
2	AB	1814	G	C5-C4	5.12	1.42	1.38
2	AB	2047	C	C4'-O4'	-5.12	1.39	1.45
2	AB	2183	A	N7-C5	5.12	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2225	A	C3'-C2'	5.12	1.58	1.52
2	AB	2365	G	N3-C4	5.12	1.39	1.35
2	AB	2648	G	N1-C2	5.12	1.41	1.37
12	AL	27	ARG	NE-CZ	5.12	1.39	1.33
35	BA	46	G	C5-C4	-5.12	1.34	1.38
35	BA	546	A	O3'-P	5.12	1.67	1.61
35	BA	681	A	C4'-O4'	-5.12	1.38	1.45
35	BA	731	G	N9-C8	5.12	1.41	1.37
35	BA	777	A	C2'-O2'	-5.12	1.35	1.41
2	AB	10	A	O3'-P	5.11	1.67	1.61
2	AB	45	G	C2-N3	5.11	1.36	1.32
2	AB	143	C	O3'-P	5.11	1.67	1.61
2	AB	206	U	C4'-O4'	-5.11	1.39	1.45
2	AB	542	C	C3'-C2'	5.11	1.58	1.52
2	AB	615	U	C3'-C2'	5.11	1.58	1.52
2	AB	779	U	C2-O2	5.11	1.26	1.22
2	AB	1395	A	C4'-O4'	-5.11	1.39	1.45
2	AB	2613	U	N3-C4	5.11	1.43	1.38
28	A1	56	VAL	CB-CG1	5.11	1.63	1.52
35	BA	346	G	C8-N7	5.11	1.34	1.30
35	BA	546	A	C2'-O2'	5.11	1.48	1.41
35	BA	613	C	C4-N4	-5.11	1.29	1.33
35	BA	1042	A	C5-C6	5.11	1.45	1.41
35	BA	1200	C	C3'-C2'	5.11	1.58	1.52
35	BA	1507	A	C4'-O4'	-5.11	1.39	1.45
2	AB	368	A	C6-N6	-5.11	1.29	1.33
2	AB	377	G	C6-N1	-5.11	1.35	1.39
35	BA	327	A	C5-C4	-5.11	1.35	1.38
37	BC	57	C	O3'-P	5.11	1.67	1.61
2	AB	408	G	C2-N2	5.11	1.39	1.34
2	AB	561	G	C2'-C1'	-5.11	1.47	1.53
2	AB	1082	U	C4'-O4'	-5.11	1.39	1.45
2	AB	1192	G	N3-C4	-5.11	1.31	1.35
2	AB	2412	A	C8-N7	5.11	1.35	1.31
35	BA	632	U	P-O5'	5.11	1.64	1.59
35	BA	1255	G	P-O5'	5.11	1.64	1.59
35	BA	1285	A	N9-C8	-5.11	1.33	1.37
35	BA	1378	C	C2-O2	-5.11	1.19	1.24
1	AA	94	A	C6-N6	5.11	1.38	1.33
2	AB	582	A	C6-N1	-5.11	1.31	1.35
2	AB	1269	A	N7-C5	-5.11	1.36	1.39
35	BA	726	C	C2'-O2'	-5.11	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	49	C	P-O5'	5.11	1.64	1.59
1	AA	53	A	N3-C4	5.11	1.38	1.34
2	AB	953	G	C5-C6	5.11	1.47	1.42
2	AB	1598	A	N7-C5	-5.11	1.36	1.39
2	AB	1964	G	C3'-C2'	5.11	1.58	1.52
2	AB	2515	C	O4'-C1'	5.11	1.48	1.41
24	AX	82	TYR	CE2-CZ	5.11	1.45	1.38
35	BA	15	G	N3-C4	5.11	1.39	1.35
35	BA	60	A	N9-C8	5.11	1.41	1.37
35	BA	187	G	C2-N3	5.11	1.36	1.32
35	BA	279	A	O3'-P	5.11	1.67	1.61
35	BA	803	G	O3'-P	5.11	1.67	1.61
49	BO	2	ARG	CZ-NH2	5.11	1.39	1.33
2	AB	23	G	C3'-O3'	5.11	1.49	1.42
2	AB	588	U	C4-C5	5.11	1.48	1.43
2	AB	653	U	C1'-N1	5.11	1.56	1.48
2	AB	757	G	C3'-C2'	5.11	1.58	1.52
2	AB	883	G	N3-C4	5.11	1.39	1.35
2	AB	1143	A	C2-N3	-5.11	1.28	1.33
2	AB	1468	U	C5-C6	5.11	1.38	1.34
2	AB	1523	U	N1-C2	5.11	1.43	1.38
2	AB	2619	C	C4'-C3'	5.11	1.58	1.53
2	AB	2768	U	C2-O2	5.11	1.26	1.22
35	BA	1428	A	C3'-O3'	-5.11	1.35	1.42
35	BA	1505	G	C2-N3	5.11	1.36	1.32
35	BA	1515	G	N7-C5	5.11	1.42	1.39
2	AB	19	A	N3-C4	5.10	1.38	1.34
2	AB	1026	G	N9-C4	5.10	1.42	1.38
2	AB	1288	G	O4'-C1'	5.10	1.48	1.41
2	AB	1397	U	O4'-C1'	5.10	1.48	1.41
2	AB	2636	C	C3'-C2'	5.10	1.58	1.52
2	AB	2776	A	C2-N3	-5.10	1.28	1.33
2	AB	14	A	C2'-O2'	5.10	1.48	1.41
2	AB	301	G	C5'-C4'	5.10	1.57	1.51
2	AB	852	U	C5-C6	5.10	1.38	1.34
2	AB	860	U	O3'-P	5.10	1.67	1.61
2	AB	1038	G	C5-C4	-5.10	1.34	1.38
2	AB	1428	C	C4'-O4'	-5.10	1.39	1.45
2	AB	1702	G	N9-C8	5.10	1.41	1.37
2	AB	2154	A	N7-C5	5.10	1.42	1.39
2	AB	2510	C	C2-N3	5.10	1.39	1.35
2	AB	2757	A	C8-N7	-5.10	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2876	G	N1-C2	5.10	1.41	1.37
35	BA	252	U	C5'-C4'	-5.10	1.45	1.51
35	BA	504	C	O4'-C1'	5.10	1.48	1.41
35	BA	567	G	N9-C8	-5.10	1.34	1.37
35	BA	1212	U	N1-C2	5.10	1.43	1.38
35	BA	1455	G	N3-C4	5.10	1.39	1.35
2	AB	867	C	C4-N4	5.10	1.38	1.33
2	AB	1388	G	N9-C4	-5.10	1.33	1.38
2	AB	2093	G	C2'-C1'	-5.10	1.47	1.53
2	AB	2756	U	C2-N3	5.10	1.41	1.37
2	AB	308	G	C5'-C4'	5.10	1.57	1.51
2	AB	888	C	C2-N3	5.10	1.39	1.35
2	AB	989	G	C4'-O4'	-5.10	1.39	1.45
2	AB	1196	C	P-O5'	5.10	1.64	1.59
2	AB	1298	C	C4-C5	5.10	1.47	1.43
2	AB	1346	G	N3-C4	-5.10	1.31	1.35
2	AB	1840	G	P-O5'	5.10	1.64	1.59
35	BA	446	G	C6-N1	5.10	1.43	1.39
35	BA	1293	C	C4-N4	5.10	1.38	1.33
35	BA	1487	G	C4'-O4'	-5.10	1.39	1.45
1	AA	19	C	C5-C6	5.10	1.38	1.34
1	AA	59	A	C8-N7	-5.10	1.27	1.31
2	AB	534	U	N3-C4	5.10	1.43	1.38
2	AB	1017	G	C6-O6	-5.10	1.19	1.24
2	AB	2172	U	O3'-P	5.10	1.67	1.61
2	AB	2239	G	N3-C4	5.10	1.39	1.35
2	AB	2464	G	C5'-C4'	5.10	1.57	1.51
2	AB	2810	A	C6-N1	5.10	1.39	1.35
22	AV	27	SER	CB-OG	-5.10	1.35	1.42
35	BA	650	G	N3-C4	5.10	1.39	1.35
35	BA	753	A	C5-C4	-5.10	1.35	1.38
35	BA	782	A	C2-N3	-5.10	1.28	1.33
35	BA	1376	U	C4-C5	-5.10	1.39	1.43
2	AB	2124	G	C2-N3	5.10	1.36	1.32
2	AB	2358	A	O3'-P	5.10	1.67	1.61
35	BA	78	A	C4'-C3'	5.10	1.58	1.53
1	AA	99	A	N7-C5	-5.09	1.36	1.39
2	AB	14	A	N9-C8	5.09	1.41	1.37
2	AB	175	G	P-O5'	5.09	1.64	1.59
2	AB	344	A	N3-C4	5.09	1.38	1.34
2	AB	539	G	O3'-P	-5.09	1.55	1.61
2	AB	563	A	C2'-C1'	5.09	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2702	G	P-O5'	5.09	1.64	1.59
2	AB	2778	A	C2'-O2'	-5.09	1.35	1.41
2	AB	2804	U	C1'-N1	5.09	1.56	1.48
35	BA	66	A	C5'-C4'	5.09	1.57	1.51
35	BA	305	G	C2-N3	-5.09	1.28	1.32
35	BA	557	G	N7-C5	-5.09	1.36	1.39
35	BA	558	G	C5-C6	5.09	1.47	1.42
35	BA	968	A	C5-C4	-5.09	1.35	1.38
35	BA	1134	G	N9-C8	-5.09	1.34	1.37
35	BA	1231	G	C2'-C1'	5.09	1.58	1.53
1	AA	51	G	C2-N3	5.09	1.36	1.32
1	AA	66	A	O3'-P	5.09	1.67	1.61
1	AA	98	G	C5'-C4'	5.09	1.57	1.51
2	AB	311	A	N1-C2	-5.09	1.29	1.34
2	AB	921	C	C2'-C1'	5.09	1.58	1.53
35	BA	249	U	C2-N3	5.09	1.41	1.37
35	BA	1127	G	C1'-N9	5.09	1.56	1.48
2	AB	119	A	C5-C6	5.09	1.45	1.41
2	AB	347	A	C6-N1	-5.09	1.31	1.35
2	AB	491	G	C5-C6	5.09	1.47	1.42
2	AB	2141	G	C5'-C4'	5.09	1.57	1.51
2	AB	2502	G	P-O5'	5.09	1.64	1.59
2	AB	2526	G	C5-C4	-5.09	1.34	1.38
2	AB	2634	A	C3'-O3'	5.09	1.49	1.42
2	AB	2749	A	C8-N7	-5.09	1.27	1.31
2	AB	2756	U	P-O5'	5.09	1.64	1.59
2	AB	2774	C	C4-C5	-5.09	1.38	1.43
19	AS	35	PHE	CE1-CZ	5.09	1.47	1.37
35	BA	26	A	C4'-C3'	5.09	1.58	1.53
35	BA	217	C	C2-O2	-5.09	1.19	1.24
35	BA	285	C	N3-C4	5.09	1.37	1.33
35	BA	469	C	C4-C5	5.09	1.47	1.43
35	BA	921	U	N1-C6	5.09	1.42	1.38
54	BT	12	PHE	CG-CD1	5.09	1.46	1.38
2	AB	303	G	C4'-O4'	-5.09	1.39	1.45
2	AB	332	A	P-O5'	5.09	1.64	1.59
2	AB	1184	U	P-O5'	5.09	1.64	1.59
2	AB	1536	C	C4'-C3'	5.09	1.58	1.53
2	AB	1641	A	N3-C4	5.09	1.38	1.34
2	AB	2535	G	C2-N2	5.09	1.39	1.34
2	AB	2786	U	C5'-C4'	5.09	1.57	1.51
15	AO	38	ARG	CZ-NH1	5.09	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	261	U	C3'-C2'	5.09	1.58	1.52
35	BA	399	G	C5'-C4'	5.09	1.57	1.51
35	BA	439	U	O4'-C1'	5.09	1.48	1.41
35	BA	522	C	C3'-O3'	5.09	1.49	1.42
35	BA	1362	A	C5'-C4'	5.09	1.57	1.51
36	BB	41	A	C2-N3	5.09	1.38	1.33
2	AB	218	A	C6-N6	5.09	1.38	1.33
2	AB	616	A	C6-N1	5.09	1.39	1.35
2	AB	1596	A	C6-N6	-5.09	1.29	1.33
2	AB	2431	U	C4'-C3'	5.09	1.58	1.53
35	BA	495	A	N9-C4	5.09	1.41	1.37
35	BA	616	G	N9-C8	5.09	1.41	1.37
35	BA	1452	C	P-O5'	-5.09	1.54	1.59
36	BB	14	G	C5-C6	5.09	1.47	1.42
2	AB	86	G	C2-N3	5.09	1.36	1.32
2	AB	253	C	C5'-C4'	5.09	1.57	1.51
2	AB	740	C	C2-N3	5.09	1.39	1.35
2	AB	749	A	P-O5'	5.09	1.64	1.59
2	AB	1175	A	C4'-O4'	-5.09	1.39	1.45
2	AB	1864	U	C4-C5	5.09	1.48	1.43
2	AB	2355	G	N9-C8	-5.09	1.34	1.37
2	AB	2535	G	C2-N3	5.09	1.36	1.32
2	AB	2706	A	N3-C4	5.09	1.38	1.34
2	AB	2903	U	C5-C6	5.09	1.38	1.34
35	BA	513	C	C4-N4	5.09	1.38	1.33
35	BA	683	G	C2-N2	5.09	1.39	1.34
2	AB	774	G	C5'-C4'	5.08	1.57	1.51
2	AB	2703	C	C2'-O2'	-5.08	1.35	1.41
35	BA	368	U	C4'-O4'	-5.08	1.39	1.45
35	BA	579	A	C3'-O3'	5.08	1.49	1.42
35	BA	1356	G	N1-C2	5.08	1.41	1.37
37	BC	60	A	C3'-C2'	-5.08	1.47	1.52
45	BK	40	ARG	CZ-NH1	5.08	1.39	1.33
57	BW	36	PHE	CG-CD1	5.08	1.46	1.38
1	AA	81	G	P-O5'	5.08	1.64	1.59
2	AB	289	G	P-O5'	5.08	1.64	1.59
2	AB	748	G	C5-C6	5.08	1.47	1.42
2	AB	886	A	C4'-O4'	-5.08	1.39	1.45
2	AB	1175	A	C2'-C1'	5.08	1.58	1.53
2	AB	1268	A	O5'-C5'	-5.08	1.34	1.42
2	AB	1278	C	N1-C2	5.08	1.45	1.40
2	AB	1844	C	C2-O2	-5.08	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1862	G	C8-N7	-5.08	1.27	1.30
2	AB	1959	G	C5-C4	-5.08	1.34	1.38
2	AB	2163	A	C6-N1	5.08	1.39	1.35
2	AB	2619	C	N3-C4	5.08	1.37	1.33
2	AB	2777	G	N1-C2	5.08	1.41	1.37
35	BA	223	A	O4'-C1'	5.08	1.48	1.41
35	BA	276	G	O4'-C1'	5.08	1.48	1.41
35	BA	504	C	N3-C4	5.08	1.37	1.33
35	BA	918	A	C4'-O4'	-5.08	1.39	1.45
35	BA	1132	C	C2-N3	5.08	1.39	1.35
35	BA	1267	C	C4'-O4'	-5.08	1.39	1.45
55	BU	68	HIS	CB-CG	5.08	1.59	1.50
2	AB	47	C	N1-C2	-5.08	1.35	1.40
2	AB	489	G	C5'-C4'	-5.08	1.45	1.51
2	AB	1480	C	C4-N4	-5.08	1.29	1.33
2	AB	1605	C	N1-C6	-5.08	1.34	1.37
2	AB	1715	G	N9-C8	-5.08	1.34	1.37
2	AB	2031	A	P-O5'	5.08	1.64	1.59
2	AB	2111	U	N1-C6	-5.08	1.33	1.38
2	AB	2185	U	C5-C6	5.08	1.38	1.34
2	AB	2297	A	N3-C4	5.08	1.37	1.34
2	AB	2407	A	C6-N1	5.08	1.39	1.35
2	AB	2475	C	C4'-C3'	5.08	1.58	1.53
2	AB	2537	U	N1-C2	5.08	1.43	1.38
35	BA	316	C	O3'-P	-5.08	1.55	1.61
35	BA	760	G	N3-C4	5.08	1.39	1.35
35	BA	961	U	C4'-O4'	-5.08	1.39	1.45
35	BA	1000	A	C5-C4	-5.08	1.35	1.38
35	BA	1186	G	N3-C4	-5.08	1.31	1.35
35	BA	1395	C	C4-N4	5.08	1.38	1.33
2	AB	555	G	N1-C2	-5.08	1.33	1.37
2	AB	1998	A	C5-C6	5.08	1.45	1.41
2	AB	2465	C	C3'-O3'	-5.08	1.35	1.42
12	AL	16	TYR	CE1-CZ	5.08	1.45	1.38
35	BA	1063	C	C1'-N1	5.08	1.56	1.48
1	AA	18	G	N9-C8	-5.08	1.34	1.37
1	AA	117	G	C5'-C4'	5.08	1.57	1.51
2	AB	20	C	O3'-P	5.08	1.67	1.61
2	AB	335	C	N1-C6	5.08	1.40	1.37
2	AB	415	A	C2-N3	5.08	1.38	1.33
2	AB	493	G	N1-C2	5.08	1.41	1.37
2	AB	1098	A	O4'-C1'	-5.08	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1209	U	O4'-C1'	5.08	1.48	1.41
2	AB	1371	G	N9-C4	5.08	1.42	1.38
2	AB	1382	G	C2-N3	5.08	1.36	1.32
2	AB	1471	G	N7-C5	-5.08	1.36	1.39
2	AB	2589	A	C5-C6	5.08	1.45	1.41
35	BA	170	U	P-O5'	5.08	1.64	1.59
35	BA	212	G	O3'-P	5.08	1.67	1.61
35	BA	573	A	C8-N7	-5.08	1.27	1.31
35	BA	655	A	C2-N3	-5.08	1.28	1.33
35	BA	839	C	C3'-C2'	5.08	1.58	1.52
35	BA	1414	U	C4'-O4'	-5.08	1.39	1.45
2	AB	47	C	O4'-C1'	5.08	1.48	1.41
2	AB	442	G	C5-C6	5.08	1.47	1.42
2	AB	457	A	C6-N6	5.08	1.38	1.33
2	AB	1111	A	N1-C2	-5.08	1.29	1.34
35	BA	443	C	C2-N3	5.08	1.39	1.35
35	BA	801	U	C2-O2	5.08	1.26	1.22
35	BA	816	A	C5-C4	-5.08	1.35	1.38
35	BA	1006	G	O5'-C5'	-5.08	1.34	1.42
2	AB	785	G	C3'-C2'	5.08	1.58	1.52
2	AB	1365	A	C2'-O2'	-5.08	1.35	1.41
2	AB	1446	C	C3'-O3'	-5.08	1.35	1.42
2	AB	1641	A	N7-C5	5.08	1.42	1.39
2	AB	1988	G	C6-N1	5.08	1.43	1.39
2	AB	1990	C	C2-N3	-5.08	1.31	1.35
26	AZ	54	GLY	CA-C	5.08	1.59	1.51
35	BA	126	G	C5-C4	-5.08	1.34	1.38
35	BA	156	C	C5'-C4'	5.08	1.57	1.51
35	BA	885	G	C8-N7	5.08	1.33	1.30
35	BA	900	A	C2'-O2'	5.08	1.48	1.41
2	AB	153	U	C5'-C4'	5.07	1.57	1.51
2	AB	555	G	N9-C8	5.07	1.41	1.37
2	AB	753	A	P-O5'	5.07	1.64	1.59
2	AB	945	A	C4'-C3'	5.07	1.58	1.53
2	AB	1010	A	N7-C5	-5.07	1.36	1.39
2	AB	1624	U	C5'-C4'	5.07	1.57	1.51
2	AB	2315	G	P-O5'	5.07	1.64	1.59
2	AB	2407	A	O3'-P	5.07	1.67	1.61
2	AB	2426	A	N3-C4	5.07	1.37	1.34
2	AB	2509	G	N9-C4	5.07	1.42	1.38
20	AT	31	GLU	CD-OE1	5.07	1.31	1.25
35	BA	55	A	C8-N7	-5.07	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	493	A	C6-N6	5.07	1.38	1.33
35	BA	495	A	C6-N1	5.07	1.39	1.35
35	BA	922	G	N7-C5	5.07	1.42	1.39
35	BA	1306	A	O4'-C1'	5.07	1.48	1.41
35	BA	1312	G	C6-N1	-5.07	1.35	1.39
36	BB	25	U	C2-N3	5.07	1.41	1.37
2	AB	1568	G	C5'-C4'	5.07	1.57	1.51
2	AB	1605	C	C2-O2	-5.07	1.19	1.24
2	AB	2412	A	O3'-P	5.07	1.67	1.61
35	BA	717	U	N3-C4	5.07	1.43	1.38
35	BA	778	G	C5-C4	-5.07	1.34	1.38
43	BI	154	ARG	CZ-NH1	5.07	1.39	1.33
1	AA	88	C	C2-O2	-5.07	1.19	1.24
2	AB	51	G	P-O5'	5.07	1.64	1.59
2	AB	76	C	C4-N4	-5.07	1.29	1.33
2	AB	448	U	C4'-O4'	-5.07	1.39	1.45
2	AB	665	U	C3'-C2'	5.07	1.58	1.52
2	AB	928	A	C6-N1	5.07	1.39	1.35
2	AB	1355	G	C2'-O2'	-5.07	1.35	1.41
2	AB	1375	U	N1-C6	5.07	1.42	1.38
2	AB	1416	G	N7-C5	-5.07	1.36	1.39
2	AB	1527	G	P-O5'	5.07	1.64	1.59
2	AB	1795	C	C4'-O4'	-5.07	1.39	1.45
2	AB	1872	A	C8-N7	-5.07	1.28	1.31
2	AB	2380	C	C5'-C4'	5.07	1.57	1.51
2	AB	2518	A	N1-C2	5.07	1.39	1.34
2	AB	2632	A	N9-C8	5.07	1.41	1.37
2	AB	2664	G	C6-O6	-5.07	1.19	1.24
35	BA	349	A	P-O5'	5.07	1.64	1.59
35	BA	353	A	C4'-C3'	-5.07	1.47	1.52
35	BA	965	U	C4'-O4'	-5.07	1.39	1.45
35	BA	1481	U	C5'-C4'	5.07	1.57	1.51
36	BB	42	U	P-O5'	5.07	1.64	1.59
2	AB	1600	C	P-O5'	5.07	1.64	1.59
2	AB	2458	G	N9-C4	5.07	1.42	1.38
37	BC	39	A	N9-C4	5.07	1.40	1.37
1	AA	1	U	C2'-O2'	5.07	1.48	1.41
2	AB	129	C	C5-C6	5.07	1.38	1.34
2	AB	722	A	C2'-O2'	5.07	1.48	1.41
2	AB	1404	C	N3-C4	5.07	1.37	1.33
2	AB	1487	U	N3-C4	5.07	1.43	1.38
35	BA	1132	C	C5-C6	5.07	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	151	C	C5'-C4'	5.07	1.57	1.51
2	AB	228	C	P-O5'	5.07	1.64	1.59
2	AB	621	A	N9-C8	5.07	1.41	1.37
2	AB	882	G	O4'-C1'	-5.07	1.35	1.41
2	AB	1513	U	O3'-P	-5.07	1.55	1.61
2	AB	1576	U	C3'-O3'	-5.07	1.35	1.42
2	AB	1634	A	C5-C4	-5.07	1.35	1.38
2	AB	2293	G	C4'-O4'	-5.07	1.39	1.45
2	AB	2311	A	C4'-C3'	5.07	1.58	1.53
33	A6	63	TYR	CE2-CZ	5.07	1.45	1.38
35	BA	982	U	C2-O2	5.07	1.26	1.22
35	BA	1468	A	C2-N3	-5.07	1.28	1.33
2	AB	600	G	N3-C4	-5.06	1.31	1.35
2	AB	811	U	O5'-C5'	-5.06	1.34	1.42
2	AB	953	G	N1-C2	5.06	1.41	1.37
2	AB	1395	A	O4'-C1'	-5.06	1.35	1.41
2	AB	2518	A	O3'-P	5.06	1.67	1.61
2	AB	2774	C	C2-O2	-5.06	1.19	1.24
2	AB	2808	G	C5'-C4'	5.06	1.57	1.51
35	BA	177	G	C4'-O4'	-5.06	1.39	1.45
35	BA	579	A	C5-C6	5.06	1.45	1.41
35	BA	776	G	C4'-O4'	-5.06	1.39	1.45
35	BA	1513	A	C8-N7	5.06	1.35	1.31
37	BC	10	G	C8-N7	5.06	1.33	1.30
2	AB	277	G	C4'-O4'	-5.06	1.39	1.45
2	AB	287	G	N7-C5	-5.06	1.36	1.39
2	AB	287	G	N9-C8	5.06	1.41	1.37
2	AB	329	G	N1-C2	-5.06	1.33	1.37
2	AB	1157	G	N9-C8	5.06	1.41	1.37
2	AB	1238	G	N7-C5	-5.06	1.36	1.39
2	AB	1289	C	C4-C5	5.06	1.47	1.43
2	AB	1377	G	C8-N7	5.06	1.33	1.30
2	AB	1666	G	N1-C2	5.06	1.41	1.37
2	AB	2026	U	C4'-O4'	-5.06	1.39	1.45
2	AB	2458	G	N9-C8	-5.06	1.34	1.37
2	AB	2542	A	P-O5'	5.06	1.64	1.59
35	BA	82	G	N3-C4	5.06	1.39	1.35
35	BA	203	G	C5-C4	5.06	1.41	1.38
35	BA	274	A	C6-N6	5.06	1.38	1.33
35	BA	585	G	C2-N2	-5.06	1.29	1.34
35	BA	604	G	P-O5'	5.06	1.64	1.59
35	BA	833	G	N9-C8	-5.06	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1266	G	N1-C2	5.06	1.41	1.37
35	BA	1311	A	C2'-C1'	-5.06	1.47	1.53
35	BA	1419	G	C4'-O4'	-5.06	1.39	1.45
1	AA	25	U	O4'-C1'	-5.06	1.35	1.41
2	AB	588	U	C5-C6	5.06	1.38	1.34
2	AB	663	G	C4'-O4'	-5.06	1.39	1.45
2	AB	664	G	C5'-C4'	5.06	1.57	1.51
2	AB	748	G	C2-N3	5.06	1.36	1.32
35	BA	394	G	C4'-O4'	-5.06	1.39	1.45
35	BA	626	G	N3-C4	-5.06	1.31	1.35
35	BA	866	C	C5-C6	-5.06	1.30	1.34
2	AB	381	G	C5'-C4'	5.06	1.57	1.51
2	AB	863	A	C5'-C4'	5.06	1.57	1.51
2	AB	891	G	N7-C5	5.06	1.42	1.39
2	AB	984	A	C3'-C2'	5.06	1.58	1.52
2	AB	1177	G	O3'-P	5.06	1.67	1.61
2	AB	1317	G	C5-C4	-5.06	1.34	1.38
2	AB	1436	G	C2-N2	-5.06	1.29	1.34
2	AB	1890	A	C5-C4	5.06	1.42	1.38
2	AB	2037	A	C2-N3	5.06	1.38	1.33
2	AB	2578	G	C4'-O4'	-5.06	1.39	1.45
2	AB	2870	C	P-O5'	5.06	1.64	1.59
24	AX	82	TYR	CE1-CZ	5.06	1.45	1.38
35	BA	30	U	C4-C5	5.06	1.48	1.43
35	BA	124	C	C4'-C3'	5.06	1.58	1.53
35	BA	226	G	N1-C2	-5.06	1.33	1.37
35	BA	244	U	C4-C5	5.06	1.48	1.43
35	BA	366	A	P-OP1	5.06	1.57	1.49
2	AB	44	A	C2-N3	-5.06	1.28	1.33
2	AB	65	U	C4'-C3'	-5.06	1.47	1.52
2	AB	395	U	O3'-P	5.06	1.67	1.61
2	AB	517	C	N1-C6	-5.06	1.34	1.37
2	AB	523	C	C4-N4	5.06	1.38	1.33
2	AB	981	A	C6-N1	5.06	1.39	1.35
2	AB	1845	G	P-O5'	5.06	1.64	1.59
2	AB	2073	C	C4'-O4'	-5.06	1.39	1.45
2	AB	2366	A	C4'-O4'	-5.06	1.39	1.45
35	BA	3	A	C4'-O4'	-5.06	1.39	1.45
35	BA	71	A	N9-C8	5.06	1.41	1.37
35	BA	195	A	C6-N6	-5.06	1.29	1.33
35	BA	710	G	C5-C6	5.06	1.47	1.42
35	BA	1511	G	C6-N1	5.06	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	124	G	C5-C4	5.06	1.41	1.38
35	BA	398	U	P-O5'	5.06	1.64	1.59
35	BA	715	A	N7-C5	-5.06	1.36	1.39
35	BA	1211	U	C5-C6	5.06	1.38	1.34
1	AA	27	C	N1-C6	5.05	1.40	1.37
1	AA	73	A	P-O5'	5.05	1.64	1.59
2	AB	158	U	O4'-C1'	-5.05	1.35	1.41
2	AB	700	G	C5-C6	5.05	1.47	1.42
2	AB	850	U	C5-C6	5.05	1.38	1.34
2	AB	1441	G	C3'-C2'	5.05	1.58	1.52
2	AB	1468	U	C2-N3	5.05	1.41	1.37
2	AB	2205	A	N3-C4	5.05	1.37	1.34
2	AB	2285	C	C2-N3	5.05	1.39	1.35
2	AB	2406	A	C2'-C1'	-5.05	1.47	1.53
2	AB	2606	C	C1'-N1	5.05	1.56	1.48
2	AB	2816	G	O3'-P	5.05	1.67	1.61
11	AK	73	PRO	N-CD	-5.05	1.40	1.47
35	BA	327	A	N9-C4	-5.05	1.34	1.37
35	BA	647	C	O3'-P	-5.05	1.55	1.61
35	BA	1002	G	N1-C2	-5.05	1.33	1.37
35	BA	1387	G	C4'-C3'	-5.05	1.47	1.52
49	BO	111	PRO	N-CD	-5.05	1.40	1.47
1	AA	58	A	P-O5'	5.05	1.64	1.59
1	AA	98	G	N3-C4	5.05	1.39	1.35
2	AB	2	G	C5-C6	5.05	1.47	1.42
2	AB	443	A	P-O5'	5.05	1.64	1.59
2	AB	638	G	C3'-C2'	-5.05	1.47	1.52
2	AB	1777	U	C2-O2	5.05	1.26	1.22
35	BA	413	G	C3'-C2'	-5.05	1.47	1.52
35	BA	1152	A	P-O5'	5.05	1.64	1.59
35	BA	1214	C	N3-C4	5.05	1.37	1.33
44	BJ	87	ARG	CZ-NH1	5.05	1.39	1.33
2	AB	572	A	O3'-P	5.05	1.67	1.61
2	AB	708	G	C2-N2	5.05	1.39	1.34
2	AB	954	G	N3-C4	5.05	1.39	1.35
2	AB	1354	A	P-O5'	5.05	1.64	1.59
2	AB	1560	G	C5-C6	5.05	1.47	1.42
2	AB	2123	G	C5-C6	5.05	1.47	1.42
2	AB	2130	U	C5-C6	5.05	1.38	1.34
2	AB	2346	A	O3'-P	5.05	1.67	1.61
2	AB	2509	G	C4'-C3'	-5.05	1.47	1.52
2	AB	2590	A	O3'-P	5.05	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2637	U	C4-O4	5.05	1.27	1.23
35	BA	792	A	C4'-O4'	-5.05	1.39	1.45
36	BB	33	A	C2'-O2'	5.05	1.48	1.41
37	BC	4	G	P-O5'	5.05	1.64	1.59
2	AB	9	G	N7-C5	5.05	1.42	1.39
2	AB	211	C	C4'-O4'	-5.05	1.39	1.45
2	AB	450	G	N9-C8	5.05	1.41	1.37
2	AB	1358	G	C8-N7	-5.05	1.27	1.30
2	AB	1695	G	C8-N7	5.05	1.33	1.30
2	AB	1794	A	N3-C4	-5.05	1.31	1.34
2	AB	1926	U	N1-C6	5.05	1.42	1.38
2	AB	2128	G	C2'-C1'	5.05	1.58	1.53
35	BA	735	C	N1-C6	-5.05	1.34	1.37
35	BA	1030	U	C4-C5	5.05	1.48	1.43
35	BA	1101	A	C8-N7	-5.05	1.28	1.31
35	BA	1292	G	C2'-C1'	5.05	1.58	1.53
35	BA	1389	C	C4'-O4'	-5.05	1.39	1.45
36	BB	25	U	C2'-C1'	5.05	1.58	1.53
1	AA	28	C	C4'-O4'	-5.05	1.39	1.45
2	AB	413	C	P-O5'	5.05	1.64	1.59
2	AB	416	U	C2'-O2'	-5.05	1.35	1.41
2	AB	655	A	C4'-C3'	5.05	1.58	1.53
2	AB	1597	A	C8-N7	-5.05	1.28	1.31
2	AB	2227	A	C6-N1	5.05	1.39	1.35
2	AB	2904	U	C4-C5	5.05	1.48	1.43
35	BA	1239	A	C2'-O2'	5.05	1.48	1.41
35	BA	1453	G	O3'-P	5.05	1.67	1.61
2	AB	157	C	C4'-C3'	5.05	1.58	1.53
2	AB	673	C	C2'-C1'	-5.05	1.47	1.53
2	AB	1149	G	N7-C5	5.05	1.42	1.39
2	AB	1169	A	C2-N3	5.05	1.38	1.33
2	AB	1557	C	O4'-C1'	5.05	1.48	1.41
2	AB	1933	G	O3'-P	-5.05	1.55	1.61
2	AB	2059	A	P-O5'	5.05	1.64	1.59
2	AB	2123	G	C2'-C1'	5.05	1.58	1.53
2	AB	2175	C	C1'-N1	5.05	1.56	1.48
2	AB	2293	G	N3-C4	5.05	1.39	1.35
2	AB	2459	A	O3'-P	5.05	1.67	1.61
2	AB	2692	G	C3'-O3'	5.05	1.49	1.42
35	BA	99	C	C4-C5	5.05	1.47	1.43
35	BA	907	A	C8-N7	-5.05	1.28	1.31
35	BA	1084	G	N3-C4	5.05	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1350	A	N1-C2	-5.05	1.29	1.34
2	AB	389	G	N1-C2	5.04	1.41	1.37
2	AB	431	U	C5-C6	5.04	1.38	1.34
2	AB	788	A	N9-C4	5.04	1.40	1.37
2	AB	1770	G	N9-C4	5.04	1.42	1.38
2	AB	2242	G	C3'-O3'	-5.04	1.35	1.42
35	BA	1194	U	C2-N3	5.04	1.41	1.37
35	BA	1285	A	C3'-O3'	-5.04	1.35	1.42
35	BA	1526	G	N1-C2	5.04	1.41	1.37
2	AB	415	A	O3'-P	5.04	1.67	1.61
2	AB	466	A	C2'-O2'	5.04	1.48	1.41
2	AB	577	G	N9-C4	-5.04	1.33	1.38
2	AB	953	G	N7-C5	-5.04	1.36	1.39
2	AB	968	C	O3'-P	5.04	1.67	1.61
2	AB	1300	G	C6-O6	-5.04	1.19	1.24
2	AB	1841	U	N3-C4	5.04	1.43	1.38
2	AB	1937	A	C2'-C1'	5.04	1.58	1.53
2	AB	2653	U	C3'-C2'	5.04	1.58	1.52
35	BA	90	C	N1-C2	5.04	1.45	1.40
35	BA	466	A	C2-N3	5.04	1.38	1.33
35	BA	669	G	O4'-C1'	5.04	1.48	1.41
35	BA	1080	A	C3'-C2'	5.04	1.58	1.52
35	BA	1369	C	C2'-C1'	5.04	1.58	1.53
35	BA	1387	G	C4'-O4'	-5.04	1.39	1.45
35	BA	1515	G	C5-C6	5.04	1.47	1.42
1	AA	120	U	C5'-C4'	5.04	1.57	1.51
2	AB	715	A	C5'-C4'	5.04	1.57	1.51
2	AB	865	C	C4'-C3'	5.04	1.58	1.53
2	AB	941	A	C5-C4	-5.04	1.35	1.38
2	AB	1196	C	C2'-C1'	-5.04	1.47	1.53
2	AB	1233	C	C5'-C4'	5.04	1.57	1.51
2	AB	1339	G	N9-C4	5.04	1.42	1.38
2	AB	2357	G	N3-C4	5.04	1.39	1.35
2	AB	2524	G	C2-N3	5.04	1.36	1.32
2	AB	2702	G	C5'-C4'	5.04	1.57	1.51
35	BA	191	G	C8-N7	-5.04	1.27	1.30
35	BA	192	A	N7-C5	5.04	1.42	1.39
35	BA	1104	G	C3'-O3'	5.04	1.49	1.42
35	BA	1231	G	C2-N3	5.04	1.36	1.32
35	BA	1248	A	N7-C5	-5.04	1.36	1.39
53	BS	71	SER	CA-CB	5.04	1.60	1.52
2	AB	519	U	C2-O2	5.04	1.26	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	639	U	C4'-O4'	-5.04	1.39	1.45
2	AB	1653	G	N7-C5	5.04	1.42	1.39
2	AB	2154	A	N9-C4	-5.04	1.34	1.37
1	AA	111	U	P-O5'	5.04	1.64	1.59
2	AB	278	A	C5-C6	5.04	1.45	1.41
2	AB	510	C	N3-C4	-5.04	1.30	1.33
2	AB	629	G	C5-C4	-5.04	1.34	1.38
2	AB	768	G	C2-N3	5.04	1.36	1.32
2	AB	997	G	C4'-C3'	-5.04	1.47	1.52
2	AB	1517	G	C3'-O3'	-5.04	1.35	1.42
2	AB	1973	G	N9-C8	5.04	1.41	1.37
2	AB	2204	G	C3'-O3'	5.04	1.49	1.42
2	AB	2236	U	N1-C2	5.04	1.43	1.38
2	AB	2795	C	P-O5'	5.04	1.64	1.59
2	AB	2838	G	N3-C4	5.04	1.39	1.35
35	BA	468	A	N3-C4	5.04	1.37	1.34
35	BA	1049	U	O5'-C5'	-5.04	1.34	1.42
35	BA	1131	G	C2-N3	5.04	1.36	1.32
35	BA	1157	A	C2'-C1'	5.04	1.58	1.53
35	BA	1416	G	P-O5'	-5.04	1.54	1.59
35	BA	1433	A	C4'-C3'	5.04	1.58	1.53
35	BA	1510	C	C5'-C4'	5.04	1.57	1.51
2	AB	556	A	C3'-C2'	-5.04	1.47	1.52
2	AB	589	U	C3'-C2'	-5.04	1.47	1.52
2	AB	1395	A	P-O5'	5.04	1.64	1.59
2	AB	1981	A	C5-C4	-5.04	1.35	1.38
35	BA	1260	G	C6-N1	5.04	1.43	1.39
2	AB	146	A	N9-C8	-5.04	1.33	1.37
2	AB	233	A	C4'-C3'	5.04	1.58	1.53
2	AB	620	G	C6-O6	-5.04	1.19	1.24
2	AB	1920	C	C2-N3	5.04	1.39	1.35
13	AM	37	ASP	CB-CG	5.04	1.62	1.51
35	BA	99	C	O4'-C1'	5.04	1.48	1.41
35	BA	278	G	N1-C2	5.04	1.41	1.37
35	BA	926	G	C2'-C1'	5.04	1.58	1.53
35	BA	1184	G	C4'-C3'	5.04	1.58	1.53
41	BG	56	PRO	N-CD	-5.04	1.40	1.47
57	BW	1	PRO	N-CD	5.04	1.54	1.47
1	AA	73	A	C5-C6	5.03	1.45	1.41
2	AB	397	U	C2-N3	5.03	1.41	1.37
2	AB	1041	G	P-O5'	5.03	1.64	1.59
2	AB	1073	A	N1-C2	5.03	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	1118	C	O4'-C1'	5.03	1.48	1.41
2	AB	1216	G	C8-N7	-5.03	1.27	1.30
2	AB	1608	A	N1-C2	-5.03	1.29	1.34
2	AB	2015	A	C3'-C2'	5.03	1.58	1.52
2	AB	2469	A	O4'-C1'	5.03	1.48	1.41
2	AB	2800	A	C1'-N9	5.03	1.56	1.48
2	AB	2851	A	N3-C4	5.03	1.37	1.34
9	AI	136	SER	CB-OG	-5.03	1.35	1.42
35	BA	406	G	N3-C4	-5.03	1.31	1.35
35	BA	811	C	C4-C5	5.03	1.47	1.43
35	BA	866	C	N3-C4	-5.03	1.30	1.33
2	AB	424	G	C3'-C2'	5.03	1.58	1.52
2	AB	1981	A	N7-C5	-5.03	1.36	1.39
2	AB	2562	U	O4'-C1'	5.03	1.48	1.41
35	BA	839	C	N3-C4	5.03	1.37	1.33
35	BA	1304	G	N9-C4	-5.03	1.33	1.38
2	AB	107	G	N3-C4	5.03	1.39	1.35
2	AB	249	C	P-O5'	5.03	1.64	1.59
2	AB	417	C	C4-C5	5.03	1.47	1.43
2	AB	524	G	C4'-O4'	-5.03	1.39	1.45
2	AB	1025	G	C5-C4	5.03	1.41	1.38
2	AB	1161	C	O3'-P	5.03	1.67	1.61
2	AB	1811	G	C4'-O4'	-5.03	1.39	1.45
2	AB	2033	A	N7-C5	5.03	1.42	1.39
2	AB	2181	U	C4'-O4'	-5.03	1.39	1.45
2	AB	2675	A	C5'-C4'	5.03	1.57	1.51
35	BA	111	G	C3'-C2'	-5.03	1.47	1.52
35	BA	314	C	C3'-C2'	-5.03	1.47	1.52
2	AB	56	A	N9-C8	-5.03	1.33	1.37
2	AB	462	C	C4'-O4'	-5.03	1.39	1.45
2	AB	2186	G	N3-C4	5.03	1.39	1.35
2	AB	2744	G	C5-C4	5.03	1.41	1.38
2	AB	600	G	C2'-C1'	5.03	1.58	1.53
2	AB	1185	G	O3'-P	5.03	1.67	1.61
2	AB	1640	A	P-O5'	5.03	1.64	1.59
2	AB	1669	A	N7-C5	5.03	1.42	1.39
2	AB	2208	C	N3-C4	5.03	1.37	1.33
2	AB	2259	U	N3-C4	5.03	1.43	1.38
2	AB	2394	C	C4'-O4'	-5.03	1.39	1.45
2	AB	2635	A	C4'-O4'	-5.03	1.39	1.45
5	AE	45	TYR	CG-CD2	5.03	1.45	1.39
35	BA	98	A	C3'-O3'	5.03	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	384	G	N7-C5	5.03	1.42	1.39
35	BA	1043	G	C6-N1	5.03	1.43	1.39
35	BA	1281	C	P-O5'	5.03	1.64	1.59
35	BA	1323	G	O3'-P	5.03	1.67	1.61
35	BA	1505	G	N3-C4	5.03	1.39	1.35
2	AB	493	G	C8-N7	5.03	1.33	1.30
2	AB	821	A	N7-C5	-5.03	1.36	1.39
2	AB	1060	U	N1-C2	5.03	1.43	1.38
2	AB	1882	U	O3'-P	5.03	1.67	1.61
2	AB	2004	G	N3-C4	5.03	1.39	1.35
2	AB	2320	U	C2-N3	-5.03	1.34	1.37
6	AF	10	SER	CA-CB	5.03	1.60	1.52
35	BA	783	C	C5-C6	5.03	1.38	1.34
35	BA	900	A	N9-C8	5.03	1.41	1.37
35	BA	1023	U	C4'-C3'	5.03	1.58	1.53
35	BA	1132	C	P-O5'	5.03	1.64	1.59
35	BA	1199	U	C2-O2	5.03	1.26	1.22
2	AB	219	A	C8-N7	-5.02	1.28	1.31
2	AB	663	G	C6-O6	5.02	1.28	1.24
2	AB	845	A	N3-C4	5.02	1.37	1.34
2	AB	973	A	N1-C2	-5.02	1.29	1.34
2	AB	1169	A	C6-N1	5.02	1.39	1.35
2	AB	2230	G	N3-C4	5.02	1.39	1.35
2	AB	2894	G	C5-C6	5.02	1.47	1.42
35	BA	115	G	C2'-O2'	-5.02	1.35	1.41
35	BA	979	C	C4-N4	5.02	1.38	1.33
56	BV	25	SER	CB-OG	-5.02	1.35	1.42
2	AB	268	C	N1-C6	-5.02	1.34	1.37
2	AB	1276	A	C4'-O4'	-5.02	1.39	1.45
2	AB	1692	U	C4-C5	5.02	1.48	1.43
2	AB	1945	G	C4'-O4'	-5.02	1.39	1.45
2	AB	2010	G	O4'-C1'	5.02	1.48	1.41
2	AB	2135	A	C5-C4	5.02	1.42	1.38
2	AB	2567	G	C5'-C4'	5.02	1.57	1.51
2	AB	2747	G	P-O5'	-5.02	1.54	1.59
2	AB	2800	A	N9-C8	5.02	1.41	1.37
2	AB	578	G	C6-N1	-5.02	1.36	1.39
2	AB	1017	G	N3-C4	5.02	1.39	1.35
2	AB	2591	C	N1-C6	5.02	1.40	1.37
35	BA	376	G	C5-C4	5.02	1.41	1.38
35	BA	450	G	N1-C2	-5.02	1.33	1.37
2	AB	304	U	C1'-N1	5.02	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	319	G	C8-N7	-5.02	1.27	1.30
2	AB	478	A	O3'-P	5.02	1.67	1.61
2	AB	628	G	C2'-C1'	5.02	1.58	1.53
2	AB	1275	A	C8-N7	5.02	1.35	1.31
2	AB	1374	G	C6-N1	-5.02	1.36	1.39
2	AB	1478	G	C5-C6	5.02	1.47	1.42
2	AB	1534	U	P-O5'	5.02	1.64	1.59
2	AB	1620	G	O3'-P	-5.02	1.55	1.61
2	AB	1642	G	C2'-C1'	5.02	1.58	1.53
2	AB	2178	C	O3'-P	5.02	1.67	1.61
2	AB	2276	G	C5'-C4'	5.02	1.57	1.51
2	AB	2450	A	N3-C4	5.02	1.37	1.34
2	AB	2767	C	C4-C5	5.02	1.47	1.43
2	AB	2838	G	C5-C4	-5.02	1.34	1.38
35	BA	241	G	C6-N1	5.02	1.43	1.39
35	BA	957	U	C2-N3	5.02	1.41	1.37
35	BA	1065	U	C4-O4	-5.02	1.19	1.23
35	BA	1501	C	N1-C6	5.02	1.40	1.37
2	AB	566	U	C3'-O3'	5.02	1.49	1.42
2	AB	907	G	C2-N3	5.02	1.36	1.32
2	AB	1478	G	C2'-C1'	-5.02	1.47	1.53
2	AB	1555	G	P-O5'	5.02	1.64	1.59
2	AB	1604	C	C4'-C3'	-5.02	1.47	1.52
2	AB	2436	G	C2'-O2'	-5.02	1.35	1.41
2	AB	2663	G	C3'-C2'	5.02	1.58	1.52
35	BA	529	G	N7-C5	5.02	1.42	1.39
35	BA	582	C	N1-C2	-5.02	1.35	1.40
35	BA	630	A	C4'-O4'	-5.02	1.39	1.45
2	AB	386	G	C2'-O2'	5.02	1.48	1.41
2	AB	562	U	C4-O4	-5.02	1.19	1.23
2	AB	1172	C	C4-C5	-5.02	1.39	1.43
2	AB	1649	G	C2-N2	-5.02	1.29	1.34
2	AB	1651	G	C5-C4	5.02	1.41	1.38
2	AB	2091	C	C4-C5	5.02	1.47	1.43
2	AB	2696	U	C2'-C1'	5.02	1.58	1.53
35	BA	327	A	C3'-O3'	-5.02	1.35	1.42
35	BA	408	A	C2-N3	5.02	1.38	1.33
35	BA	971	G	N9-C8	5.02	1.41	1.37
35	BA	1199	U	C2'-C1'	5.02	1.58	1.53
35	BA	1214	C	C2-N3	5.02	1.39	1.35
35	BA	1285	A	N7-C5	-5.02	1.36	1.39
35	BA	1354	U	C2-N3	5.02	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1476	A	N7-C5	5.02	1.42	1.39
43	BI	153	TYR	CE1-CZ	5.02	1.45	1.38
2	AB	95	A	C6-N1	-5.01	1.32	1.35
2	AB	740	C	N3-C4	5.01	1.37	1.33
2	AB	774	G	C2'-O2'	5.01	1.48	1.41
2	AB	1603	A	P-O5'	-5.01	1.54	1.59
2	AB	2377	A	C2-N3	-5.01	1.29	1.33
2	AB	2696	U	C2-N3	5.01	1.41	1.37
24	AX	33	GLY	CA-C	5.01	1.59	1.51
35	BA	908	A	N3-C4	5.01	1.37	1.34
2	AB	843	G	C6-N1	5.01	1.43	1.39
2	AB	1311	G	C4'-C3'	5.01	1.58	1.53
2	AB	1335	C	C1'-N1	5.01	1.56	1.48
2	AB	1783	A	O5'-C5'	-5.01	1.34	1.42
2	AB	1792	G	N9-C4	-5.01	1.33	1.38
35	BA	279	A	N9-C8	5.01	1.41	1.37
36	BB	27	A	N7-C5	-5.01	1.36	1.39
2	AB	57	C	C4-C5	5.01	1.47	1.43
2	AB	593	U	P-O5'	5.01	1.64	1.59
2	AB	1090	A	C4'-O4'	-5.01	1.39	1.45
2	AB	1534	U	C4-O4	-5.01	1.19	1.23
2	AB	1793	C	O4'-C1'	5.01	1.48	1.41
2	AB	1817	G	N7-C5	-5.01	1.36	1.39
2	AB	2230	G	N9-C8	-5.01	1.34	1.37
35	BA	23	C	C5'-C4'	5.01	1.57	1.51
35	BA	231	U	C4-O4	5.01	1.27	1.23
35	BA	302	G	N7-C5	5.01	1.42	1.39
35	BA	479	U	C4-C5	5.01	1.48	1.43
35	BA	573	A	N9-C4	-5.01	1.34	1.37
35	BA	818	G	P-O5'	5.01	1.64	1.59
35	BA	1272	G	N1-C2	5.01	1.41	1.37
47	BM	121	ARG	CZ-NH1	5.01	1.39	1.33
1	AA	48	U	C5'-C4'	5.01	1.57	1.51
1	AA	98	G	C5-C6	5.01	1.47	1.42
2	AB	266	G	C4'-O4'	-5.01	1.39	1.45
2	AB	832	U	P-O5'	5.01	1.64	1.59
2	AB	1262	A	C5-C6	-5.01	1.36	1.41
2	AB	1574	C	C4-N4	5.01	1.38	1.33
2	AB	2025	C	C5-C6	5.01	1.38	1.34
2	AB	2186	G	C2'-O2'	5.01	1.48	1.41
35	BA	96	U	C3'-C2'	5.01	1.58	1.52
35	BA	156	C	N3-C4	5.01	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	613	C	C4'-O4'	-5.01	1.39	1.45
35	BA	657	U	C2-O2	5.01	1.26	1.22
35	BA	707	U	C5-C6	5.01	1.38	1.34
35	BA	778	G	C2-N3	5.01	1.36	1.32
35	BA	993	G	C8-N7	-5.01	1.27	1.30
43	BI	162	SER	CA-CB	-5.01	1.45	1.52
2	AB	291	G	O4'-C1'	5.01	1.48	1.41
2	AB	307	G	O4'-C1'	5.01	1.48	1.41
2	AB	389	G	C2-N3	5.01	1.36	1.32
2	AB	475	C	P-O5'	5.01	1.64	1.59
2	AB	673	C	C2-N3	-5.01	1.31	1.35
2	AB	2335	A	C2-N3	5.01	1.38	1.33
35	BA	1529	G	C5-C6	5.01	1.47	1.42
2	AB	14	A	C6-N1	5.01	1.39	1.35
2	AB	434	U	N1-C2	5.01	1.43	1.38
2	AB	628	G	N7-C5	5.01	1.42	1.39
2	AB	673	C	C4'-O4'	-5.01	1.39	1.45
2	AB	1077	A	O3'-P	5.01	1.67	1.61
2	AB	1239	G	C2-N3	5.01	1.36	1.32
2	AB	1337	G	N1-C2	-5.01	1.33	1.37
2	AB	1959	G	N3-C4	5.01	1.39	1.35
2	AB	2067	G	C2'-O2'	-5.01	1.35	1.41
8	AH	112	VAL	CB-CG2	5.01	1.63	1.52
35	BA	509	A	C6-N1	-5.01	1.32	1.35
35	BA	1073	U	C4-C5	5.01	1.48	1.43
36	BB	18	A	N7-C5	5.01	1.42	1.39
2	AB	53	A	C5-C6	5.00	1.45	1.41
2	AB	432	A	C4'-O4'	-5.00	1.39	1.45
2	AB	2633	G	N9-C4	5.00	1.42	1.38
35	BA	241	G	N9-C4	-5.00	1.33	1.38
35	BA	436	C	C4-N4	-5.00	1.29	1.33
35	BA	1013	G	C4'-C3'	-5.00	1.47	1.52
2	AB	423	A	C5-C4	-5.00	1.35	1.38
2	AB	557	C	P-O5'	5.00	1.64	1.59
2	AB	1039	A	C5-C6	5.00	1.45	1.41
2	AB	1164	C	C2-O2	5.00	1.28	1.24
2	AB	2149	U	C4-C5	5.00	1.48	1.43
2	AB	2528	U	C2'-C1'	-5.00	1.47	1.53
2	AB	2657	A	C4'-O4'	-5.00	1.39	1.45
2	AB	2857	G	C4'-O4'	-5.00	1.39	1.45
2	AB	2896	C	N1-C2	5.00	1.45	1.40
35	BA	254	G	N1-C2	5.00	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1334	G	N1-C2	5.00	1.41	1.37
35	BA	1360	A	C3'-C2'	5.00	1.58	1.52
2	AB	259	G	C8-N7	-5.00	1.27	1.30
2	AB	323	C	N3-C4	5.00	1.37	1.33
2	AB	526	A	O3'-P	5.00	1.67	1.61
2	AB	560	C	P-O5'	-5.00	1.54	1.59
2	AB	794	A	C3'-O3'	5.00	1.49	1.42
2	AB	1015	U	P-O5'	5.00	1.64	1.59
2	AB	1196	C	C5-C6	5.00	1.38	1.34
2	AB	1369	G	C2-N3	5.00	1.36	1.32
2	AB	1463	C	N1-C6	5.00	1.40	1.37
2	AB	1574	C	N1-C2	5.00	1.45	1.40
2	AB	2040	G	O3'-P	-5.00	1.55	1.61
2	AB	2074	U	C4-C5	5.00	1.48	1.43
2	AB	2203	U	N3-C4	5.00	1.43	1.38
2	AB	2719	G	N3-C4	5.00	1.39	1.35
35	BA	741	G	C8-N7	5.00	1.33	1.30
35	BA	1104	G	P-O5'	-5.00	1.54	1.59
47	BM	76	TYR	CB-CG	5.00	1.59	1.51

All (26586) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AL	120	ARG	NE-CZ-NH2	24.50	132.55	120.30
2	AB	1193	G	C8-N9-C4	-23.95	96.82	106.40
35	BA	581	G	N9-C4-C5	22.36	114.35	105.40
46	BL	45	ARG	NE-CZ-NH1	21.76	131.18	120.30
44	BJ	116	ARG	NE-CZ-NH2	-21.74	109.43	120.30
41	BG	19	ARG	NE-CZ-NH2	-21.63	109.49	120.30
46	BL	89	ARG	NE-CZ-NH1	21.59	131.09	120.30
2	AB	2396	G	C8-N9-C4	-21.40	97.84	106.40
2	AB	2057	G	N9-C4-C5	-20.91	97.03	105.40
2	AB	1099	G	C8-N9-C4	-20.34	98.26	106.40
2	AB	2396	G	N7-C8-N9	19.64	122.92	113.10
16	AP	45	ARG	NE-CZ-NH2	-19.61	110.50	120.30
2	AB	116	C	O4'-C1'-N1	19.56	123.85	108.20
2	AB	1294	U	O4'-C1'-N1	19.54	123.83	108.20
2	AB	2524	G	C8-N9-C4	-19.52	98.59	106.40
2	AB	1469	A	N1-C2-N3	19.38	138.99	129.30
2	AB	320	A	N9-C4-C5	-19.23	98.11	105.80
35	BA	22	G	N7-C8-N9	18.95	122.57	113.10
4	AD	261	ARG	NE-CZ-NH2	-18.92	110.84	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2524	G	N9-C4-C5	18.83	112.93	105.40
2	AB	1595	C	O4'-C1'-N1	18.76	123.21	108.20
2	AB	2752	C	C4-C5-C6	-18.55	108.13	117.40
35	BA	1175	G	C4-C5-N7	-18.43	103.43	110.80
21	AU	95	ARG	NE-CZ-NH1	18.36	129.48	120.30
2	AB	585	G	C8-N9-C4	-18.33	99.07	106.40
2	AB	1537	G	C8-N9-C4	-18.31	99.08	106.40
35	BA	79	G	C5-C6-O6	-18.25	117.65	128.60
2	AB	2752	C	N3-C4-C5	18.18	129.17	121.90
37	BC	13	C	N3-C4-C5	-18.14	114.64	121.90
35	BA	193	C	O4'-C1'-N1	18.13	122.71	108.20
2	AB	318	C	N3-C4-C5	-18.10	114.66	121.90
2	AB	285	G	C4-C5-N7	-18.06	103.58	110.80
2	AB	2597	G	N9-C4-C5	18.03	112.61	105.40
2	AB	1315	C	O4'-C1'-N1	17.99	122.59	108.20
2	AB	177	G	N3-C4-C5	-17.87	119.67	128.60
2	AB	335	C	O4'-C1'-N1	17.75	122.40	108.20
2	AB	2448	A	O4'-C1'-N9	17.74	122.39	108.20
2	AB	942	G	N9-C4-C5	17.73	112.49	105.40
2	AB	2422	C	C2-N3-C4	17.67	128.74	119.90
35	BA	902	G	C8-N9-C4	-17.56	99.38	106.40
2	AB	1149	G	O4'-C1'-N9	17.55	122.24	108.20
35	BA	1491	G	C8-N9-C4	-17.54	99.38	106.40
35	BA	212	G	C8-N9-C4	-17.52	99.39	106.40
2	AB	2597	G	C8-N9-C4	-17.43	99.43	106.40
35	BA	725	G	C2-N3-C4	17.43	120.61	111.90
2	AB	264	C	N3-C4-C5	-17.36	114.95	121.90
2	AB	700	G	C8-N9-C4	-17.35	99.46	106.40
2	AB	1610	A	C2-N3-C4	17.33	119.26	110.60
35	BA	242	G	C8-N9-C4	-17.29	99.48	106.40
35	BA	154	U	O4'-C1'-N1	17.23	121.98	108.20
46	BL	89	ARG	NE-CZ-NH2	-17.16	111.72	120.30
2	AB	1299	G	C8-N9-C4	-17.14	99.55	106.40
2	AB	2301	C	C2-N3-C4	17.11	128.46	119.90
35	BA	406	G	C8-N9-C4	-17.11	99.56	106.40
2	AB	1473	G	C8-N9-C4	-17.08	99.57	106.40
2	AB	1479	G	C8-N9-C4	-17.08	99.57	106.40
2	AB	2432	A	C8-N9-C4	-17.08	98.97	105.80
2	AB	621	A	N9-C4-C5	17.07	112.63	105.80
2	AB	321	U	O4'-C1'-N1	16.97	121.77	108.20
2	AB	1238	G	N1-C2-N2	16.95	131.46	116.20
35	BA	17	U	O4'-C1'-N1	16.90	121.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	460	A	C8-N9-C4	-16.90	99.04	105.80
2	AB	122	G	C8-N9-C4	-16.80	99.68	106.40
2	AB	1300	G	N9-C4-C5	16.79	112.12	105.40
35	BA	1101	A	C8-N9-C4	-16.75	99.10	105.80
2	AB	2872	A	N9-C4-C5	16.73	112.49	105.80
2	AB	2094	A	O4'-C1'-N9	16.71	121.56	108.20
1	AA	96	G	C5-C6-O6	-16.71	118.58	128.60
2	AB	1193	G	N9-C4-C5	16.69	112.08	105.40
2	AB	1483	G	C8-N9-C4	-16.69	99.72	106.40
2	AB	2844	G	C6-C5-N7	-16.68	120.39	130.40
4	AD	188	ARG	NE-CZ-NH2	16.67	128.63	120.30
35	BA	317	U	O4'-C1'-N1	16.66	121.53	108.20
35	BA	612	C	N3-C4-C5	-16.62	115.25	121.90
37	BC	29	C	O4'-C1'-N1	16.60	121.48	108.20
2	AB	1988	G	N9-C4-C5	16.56	112.02	105.40
2	AB	2258	C	C6-N1-C2	-16.56	113.67	120.30
35	BA	1265	C	N3-C4-C5	-16.53	115.29	121.90
2	AB	2057	G	C8-N9-C4	16.51	113.00	106.40
2	AB	533	G	C8-N9-C4	-16.50	99.80	106.40
2	AB	2792	A	O4'-C1'-N9	16.49	121.39	108.20
2	AB	301	G	C8-N9-C4	-16.48	99.81	106.40
35	BA	581	G	C4-C5-N7	-16.45	104.22	110.80
2	AB	2062	A	C8-N9-C4	-16.41	99.24	105.80
2	AB	978	G	N3-C4-C5	-16.39	120.41	128.60
35	BA	646	G	C4-C5-N7	-16.36	104.26	110.80
2	AB	472	A	N9-C4-C5	16.30	112.32	105.80
2	AB	2625	G	C8-N9-C4	-16.29	99.88	106.40
1	AA	93	C	N3-C4-C5	-16.23	115.41	121.90
35	BA	63	C	C6-N1-C2	16.22	126.79	120.30
37	BC	50	G	O4'-C1'-N9	16.21	121.17	108.20
35	BA	247	G	C8-N9-C4	-16.17	99.93	106.40
1	AA	59	A	O4'-C1'-N9	16.14	121.11	108.20
2	AB	408	G	C4-C5-N7	16.14	117.25	110.80
35	BA	1397	C	O4'-C1'-N1	16.11	121.09	108.20
2	AB	2165	C	O4'-C1'-N1	15.99	120.99	108.20
54	BT	52	ARG	NE-CZ-NH2	-15.98	112.31	120.30
2	AB	2524	G	N3-C2-N2	15.97	131.08	119.90
1	AA	81	G	C8-N9-C4	-15.96	100.02	106.40
2	AB	490	C	N3-C4-C5	-15.95	115.52	121.90
35	BA	657	U	O4'-C1'-N1	15.93	120.94	108.20
2	AB	176	A	C2-N3-C4	15.92	118.56	110.60
2	AB	1767	G	C8-N9-C4	-15.90	100.04	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AO	51	ARG	NE-CZ-NH1	15.89	128.24	120.30
2	AB	575	A	N1-C6-N6	15.89	128.13	118.60
2	AB	512	G	C8-N9-C4	-15.89	100.05	106.40
2	AB	1406	U	O4'-C1'-N1	15.87	120.90	108.20
1	AA	41	G	O4'-C1'-N9	15.86	120.89	108.20
16	AP	45	ARG	NE-CZ-NH1	15.85	128.22	120.30
2	AB	1164	C	O4'-C1'-N1	15.84	120.87	108.20
2	AB	2234	G	C8-N9-C4	-15.83	100.07	106.40
2	AB	720	U	O4'-C1'-N1	15.82	120.86	108.20
35	BA	742	G	C8-N9-C4	-15.81	100.08	106.40
2	AB	512	G	N3-C4-C5	-15.81	120.70	128.60
2	AB	1449	G	O4'-C1'-N9	15.80	120.84	108.20
2	AB	2112	G	C2-N3-C4	15.76	119.78	111.90
35	BA	761	G	C4-C5-N7	-15.76	104.50	110.80
2	AB	2528	U	O4'-C1'-N1	15.71	120.77	108.20
2	AB	1356	G	O4'-C1'-N9	15.67	120.74	108.20
19	AS	10	ARG	NE-CZ-NH1	15.67	128.13	120.30
19	AS	57	ARG	NE-CZ-NH1	15.67	128.13	120.30
2	AB	1753	G	C6-C5-N7	-15.65	121.01	130.40
2	AB	2466	C	O4'-C1'-N1	15.65	120.72	108.20
35	BA	120	A	N1-C6-N6	-15.64	109.22	118.60
2	AB	160	A	N1-C6-N6	-15.63	109.22	118.60
35	BA	1310	G	N3-C4-C5	-15.63	120.79	128.60
2	AB	1238	G	N3-C2-N2	-15.62	108.97	119.90
2	AB	2190	G	O4'-C1'-N9	15.61	120.69	108.20
35	BA	345	C	N3-C4-C5	-15.59	115.67	121.90
41	BG	28	ARG	NE-CZ-NH1	15.58	128.09	120.30
2	AB	2845	U	O4'-C1'-N1	15.57	120.66	108.20
2	AB	327	G	C8-N9-C4	-15.56	100.18	106.40
35	BA	109	A	O4'-C1'-N9	15.56	120.65	108.20
1	AA	86	G	N7-C8-N9	15.54	120.87	113.10
2	AB	1074	G	C4-C5-N7	-15.54	104.58	110.80
2	AB	861	A	O4'-C1'-N9	15.54	120.63	108.20
2	AB	1726	C	C6-N1-C2	15.54	126.51	120.30
2	AB	2442	C	N3-C4-C5	-15.53	115.69	121.90
2	AB	584	C	N1-C2-O2	15.53	128.22	118.90
2	AB	261	G	C8-N9-C4	-15.51	100.20	106.40
36	BB	53	G	O4'-C1'-N9	15.51	120.61	108.20
2	AB	942	G	C4-C5-N7	-15.50	104.60	110.80
35	BA	581	G	N3-C4-C5	-15.48	120.86	128.60
2	AB	1193	G	N7-C8-N9	15.47	120.84	113.10
35	BA	1306	A	C5-N7-C8	-15.47	96.17	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1272	G	C4-C5-N7	-15.46	104.62	110.80
35	BA	626	G	N7-C8-N9	15.45	120.82	113.10
2	AB	1444	G	O4'-C1'-N9	15.45	120.56	108.20
2	AB	515	A	C2-N3-C4	15.44	118.32	110.60
2	AB	1074	G	C5-N7-C8	15.43	112.02	104.30
2	AB	2376	A	C8-N9-C4	-15.42	99.63	105.80
2	AB	1358	G	C8-N9-C4	-15.42	100.23	106.40
2	AB	1918	A	N1-C6-N6	15.41	127.85	118.60
2	AB	1428	C	N3-C2-O2	-15.40	111.12	121.90
35	BA	46	G	C8-N9-C4	-15.40	100.24	106.40
2	AB	135	U	N3-C4-O4	15.39	130.18	119.40
2	AB	334	C	C5-C4-N4	-15.39	109.42	120.20
2	AB	1057	A	O4'-C1'-N9	15.38	120.51	108.20
35	BA	544	G	N9-C4-C5	15.38	111.55	105.40
37	BC	39	A	C5-N7-C8	15.37	111.58	103.90
2	AB	798	G	N3-C4-C5	-15.37	120.92	128.60
2	AB	1820	U	O4'-C1'-N1	15.37	120.50	108.20
2	AB	2316	G	N1-C6-O6	-15.37	110.68	119.90
2	AB	2638	G	O4'-C1'-N9	15.36	120.49	108.20
35	BA	1491	G	N9-C4-C5	15.35	111.54	105.40
2	AB	2039	U	O4'-C1'-N1	15.33	120.47	108.20
35	BA	476	U	O4'-C1'-N1	15.31	120.45	108.20
37	BC	16	C	C4-C5-C6	-15.31	109.74	117.40
35	BA	1400	C	O4'-C1'-N1	15.30	120.44	108.20
2	AB	1404	C	N3-C4-C5	-15.29	115.79	121.90
2	AB	1761	C	O4'-C1'-N1	15.28	120.43	108.20
2	AB	1404	C	O4'-C1'-N1	15.26	120.41	108.20
35	BA	447	G	C8-N9-C4	-15.25	100.30	106.40
2	AB	2402	U	O4'-C1'-N1	15.24	120.39	108.20
35	BA	307	C	O4'-C1'-N1	15.24	120.39	108.20
44	BJ	116	ARG	NE-CZ-NH1	15.24	127.92	120.30
2	AB	2867	G	N3-C4-C5	-15.21	120.99	128.60
2	AB	70	G	C4-C5-N7	-15.21	104.72	110.80
2	AB	834	G	C8-N9-C4	-15.21	100.32	106.40
2	AB	83	A	C8-N9-C4	-15.21	99.72	105.80
2	AB	1988	G	C4-C5-N7	-15.21	104.72	110.80
2	AB	2171	A	C8-N9-C4	-15.21	99.72	105.80
2	AB	2260	C	O4'-C1'-N1	15.20	120.36	108.20
35	BA	567	G	N7-C8-N9	15.20	120.70	113.10
2	AB	318	C	C6-N1-C2	-15.20	114.22	120.30
2	AB	1655	A	N7-C8-N9	15.20	121.40	113.80
2	AB	2084	C	C5-C6-N1	15.20	128.60	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1309	G	N3-C4-C5	-15.19	121.00	128.60
35	BA	836	G	N1-C6-O6	15.17	129.00	119.90
2	AB	1070	A	C8-N9-C4	-15.15	99.74	105.80
2	AB	1852	U	N3-C2-O2	-15.15	111.60	122.20
35	BA	1525	G	N3-C4-C5	-15.14	121.03	128.60
35	BA	163	C	N3-C4-C5	-15.13	115.85	121.90
35	BA	829	G	C2-N3-C4	15.11	119.46	111.90
2	AB	2567	G	C8-N9-C4	-15.11	100.36	106.40
2	AB	1797	G	C8-N9-C4	-15.10	100.36	106.40
43	BI	94	ARG	NE-CZ-NH2	-15.10	112.75	120.30
2	AB	229	C	N3-C4-C5	15.07	127.93	121.90
36	BB	55	A	C8-N9-C4	-15.07	99.77	105.80
2	AB	264	C	C6-N1-C2	-15.07	114.27	120.30
35	BA	128	G	C8-N9-C4	-15.06	100.38	106.40
2	AB	1243	C	N3-C2-O2	-15.05	111.36	121.90
2	AB	1469	A	C6-N1-C2	-15.04	109.57	118.60
4	AD	170	TYR	CB-CG-CD1	-15.03	111.98	121.00
2	AB	2238	G	N1-C6-O6	-14.99	110.90	119.90
2	AB	375	G	N1-C6-O6	14.99	128.89	119.90
2	AB	2433	A	N1-C2-N3	14.98	136.79	129.30
2	AB	977	G	C8-N9-C4	-14.97	100.41	106.40
35	BA	107	G	C8-N9-C4	-14.96	100.41	106.40
2	AB	2524	G	N3-C4-C5	-14.96	121.12	128.60
2	AB	2793	C	C5-C6-N1	14.95	128.48	121.00
35	BA	403	C	N3-C4-C5	-14.94	115.92	121.90
2	AB	1115	G	C8-N9-C4	-14.94	100.42	106.40
9	AI	27	ARG	NE-CZ-NH2	14.93	127.77	120.30
2	AB	2655	G	C2-N3-C4	14.93	119.36	111.90
2	AB	2877	G	C8-N9-C4	-14.92	100.43	106.40
2	AB	2507	C	O4'-C1'-N1	14.92	120.14	108.20
36	BB	14	G	C8-N9-C4	-14.91	100.44	106.40
2	AB	1630	A	C5-N7-C8	14.89	111.34	103.90
2	AB	2684	U	C5-C6-N1	-14.89	115.26	122.70
35	BA	631	C	N3-C4-C5	-14.88	115.95	121.90
37	BC	9	G	C8-N9-C4	-14.88	100.45	106.40
35	BA	232	G	N1-C6-O6	14.88	128.83	119.90
2	AB	1866	A	O4'-C1'-N9	14.87	120.09	108.20
2	AB	232	G	C8-N9-C4	14.86	112.34	106.40
2	AB	242	G	C4-C5-N7	-14.86	104.86	110.80
35	BA	742	G	N9-C4-C5	14.85	111.34	105.40
2	AB	1863	G	N9-C4-C5	14.84	111.34	105.40
2	AB	2565	A	O4'-C1'-N9	14.84	120.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2164	C	N3-C4-C5	-14.83	115.97	121.90
35	BA	305	G	O4'-C1'-N9	14.83	120.06	108.20
2	AB	2713	U	O4'-C1'-N1	14.82	120.06	108.20
1	AA	13	G	C8-N9-C4	-14.82	100.47	106.40
2	AB	2717	C	C6-N1-C2	-14.82	114.37	120.30
2	AB	1675	C	C6-N1-C2	-14.82	114.37	120.30
2	AB	1479	G	N7-C8-N9	14.79	120.50	113.10
2	AB	1998	A	O4'-C1'-N9	14.79	120.03	108.20
2	AB	2763	G	N3-C2-N2	14.79	130.26	119.90
2	AB	2867	G	C2-N3-C4	14.79	119.30	111.90
2	AB	849	A	N1-C2-N3	-14.79	121.91	129.30
19	AS	63	ARG	NE-CZ-NH2	-14.79	112.91	120.30
2	AB	132	G	C8-N9-C4	-14.78	100.49	106.40
37	BC	20	G	C2-N3-C4	14.77	119.29	111.90
2	AB	879	G	C8-N9-C4	-14.77	100.49	106.40
1	AA	86	G	C8-N9-C4	-14.76	100.49	106.40
1	AA	32	U	C4-C5-C6	14.76	128.56	119.70
35	BA	1482	G	N9-C4-C5	14.76	111.30	105.40
35	BA	254	G	C2-N3-C4	14.75	119.27	111.90
35	BA	1216	A	O4'-C1'-N9	14.75	120.00	108.20
35	BA	96	U	O4'-C1'-N1	14.75	120.00	108.20
35	BA	1336	C	N1-C2-O2	14.75	127.75	118.90
35	BA	698	G	C2-N3-C4	14.74	119.27	111.90
2	AB	1413	A	O4'-C1'-N9	14.74	119.99	108.20
35	BA	537	G	O4'-C1'-N9	14.73	119.99	108.20
35	BA	1381	U	C5-C4-O4	-14.73	117.06	125.90
2	AB	633	A	O4'-C1'-N9	14.72	119.98	108.20
35	BA	344	A	C2-N3-C4	14.72	117.96	110.60
2	AB	341	C	N1-C2-O2	14.70	127.72	118.90
35	BA	433	G	C6-N1-C2	-14.70	116.28	125.10
2	AB	1675	C	O4'-C1'-N1	14.70	119.96	108.20
28	A1	10	ARG	NE-CZ-NH1	-14.70	112.95	120.30
35	BA	1015	G	C8-N9-C4	-14.70	100.52	106.40
37	BC	45	A	N7-C8-N9	-14.70	106.45	113.80
35	BA	1164	G	C2-N3-C4	14.69	119.25	111.90
2	AB	605	G	O4'-C1'-N9	14.69	119.95	108.20
2	AB	1566	A	O4'-C1'-N9	14.68	119.94	108.20
35	BA	949	A	C8-N9-C4	-14.67	99.93	105.80
2	AB	816	C	N3-C4-N4	14.66	128.26	118.00
35	BA	22	G	C8-N9-C4	-14.66	100.53	106.40
2	AB	1259	G	C2-N3-C4	14.66	119.23	111.90
2	AB	2474	U	O4'-C1'-N1	14.65	119.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	264	C	C2-N3-C4	14.64	127.22	119.90
35	BA	97	G	C8-N9-C4	-14.64	100.55	106.40
35	BA	1253	G	C8-N9-C4	-14.64	100.55	106.40
2	AB	323	C	O4'-C1'-N1	14.63	119.91	108.20
12	AL	69	ARG	NE-CZ-NH1	14.63	127.61	120.30
2	AB	2573	C	N3-C2-O2	-14.63	111.66	121.90
2	AB	1707	G	N7-C8-N9	14.62	120.41	113.10
57	BW	16	ARG	NE-CZ-NH2	-14.62	112.99	120.30
2	AB	763	G	C5-N7-C8	-14.62	96.99	104.30
2	AB	406	G	C8-N9-C4	-14.61	100.56	106.40
1	AA	108	A	N9-C4-C5	14.60	111.64	105.80
2	AB	2490	G	N1-C2-N3	-14.60	115.14	123.90
2	AB	1086	A	N7-C8-N9	14.59	121.10	113.80
2	AB	1751	U	N3-C2-O2	-14.57	112.00	122.20
2	AB	2443	C	N3-C2-O2	-14.57	111.70	121.90
2	AB	2421	G	C6-N1-C2	-14.56	116.36	125.10
2	AB	1121	C	N3-C4-C5	-14.55	116.08	121.90
35	BA	639	G	O4'-C1'-N9	14.55	119.84	108.20
2	AB	573	U	C5-C4-O4	-14.53	117.18	125.90
2	AB	2047	C	O4'-C1'-N1	14.53	119.82	108.20
2	AB	2003	A	C5-C6-N1	14.52	124.96	117.70
2	AB	895	U	C4-C5-C6	14.52	128.41	119.70
2	AB	794	A	N7-C8-N9	-14.51	106.54	113.80
35	BA	461	A	N7-C8-N9	14.49	121.04	113.80
2	AB	898	C	N1-C2-O2	14.48	127.59	118.90
35	BA	406	G	N7-C8-N9	14.47	120.33	113.10
2	AB	341	C	N3-C2-O2	-14.46	111.78	121.90
2	AB	2740	A	C8-N9-C4	-14.45	100.02	105.80
2	AB	1536	C	C6-N1-C2	14.44	126.07	120.30
2	AB	76	C	N3-C4-C5	-14.43	116.13	121.90
2	AB	460	A	N7-C8-N9	14.43	121.01	113.80
2	AB	2783	U	O4'-C1'-N1	14.42	119.74	108.20
2	AB	1934	C	O4'-C1'-N1	14.42	119.73	108.20
2	AB	2686	G	C4-C5-N7	-14.41	105.03	110.80
2	AB	546	U	O4'-C1'-N1	14.40	119.72	108.20
2	AB	1135	C	O4'-C1'-N1	14.40	119.72	108.20
35	BA	725	G	N1-C2-N3	-14.39	115.27	123.90
35	BA	99	C	O4'-C1'-N1	14.38	119.71	108.20
35	BA	115	G	N3-C2-N2	-14.37	109.84	119.90
2	AB	1847	A	O4'-C1'-N9	14.37	119.70	108.20
2	AB	621	A	C8-N9-C4	-14.36	100.06	105.80
2	AB	1963	U	O4'-C1'-N1	14.34	119.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	AP	118	ARG	NE-CZ-NH2	-14.34	113.13	120.30
2	AB	2195	U	C4-C5-C6	14.32	128.29	119.70
2	AB	858	G	C8-N9-C4	-14.32	100.67	106.40
35	BA	277	C	O4'-C1'-N1	14.32	119.65	108.20
35	BA	1101	A	N7-C8-N9	14.31	120.96	113.80
35	BA	757	U	N3-C2-O2	-14.30	112.19	122.20
37	BC	70	C	O4'-C1'-N1	14.28	119.63	108.20
35	BA	1456	A	N9-C4-C5	14.28	111.51	105.80
1	AA	96	G	C6-N1-C2	-14.26	116.54	125.10
26	AZ	2	ARG	NE-CZ-NH2	14.26	127.43	120.30
2	AB	1099	G	N3-C4-C5	-14.26	121.47	128.60
35	BA	1164	G	N3-C4-C5	-14.25	121.47	128.60
35	BA	452	A	O4'-C1'-N9	14.24	119.59	108.20
37	BC	45	A	C8-N9-C4	14.23	111.49	105.80
1	AA	27	C	O4'-C1'-N1	14.22	119.58	108.20
35	BA	49	U	C5-C6-N1	-14.21	115.59	122.70
2	AB	1292	G	C4-C5-N7	-14.20	105.12	110.80
2	AB	285	G	O4'-C1'-N9	14.20	119.56	108.20
13	AM	18	ARG	NE-CZ-NH1	14.19	127.39	120.30
44	BJ	76	ARG	NE-CZ-NH2	-14.19	113.20	120.30
2	AB	940	G	C8-N9-C4	-14.19	100.73	106.40
12	AL	44	TYR	CB-CG-CD1	14.19	129.51	121.00
2	AB	1397	U	N3-C2-O2	-14.18	112.27	122.20
35	BA	1456	A	C8-N9-C4	-14.18	100.13	105.80
3	AC	74	ARG	NE-CZ-NH2	-14.18	113.21	120.30
2	AB	528	A	C8-N9-C4	-14.17	100.13	105.80
2	AB	1495	A	C8-N9-C4	14.17	111.47	105.80
2	AB	2520	C	O4'-C1'-N1	14.17	119.54	108.20
2	AB	2413	G	C8-N9-C4	-14.17	100.73	106.40
2	AB	1747	U	O4'-C1'-N1	14.16	119.53	108.20
2	AB	804	A	N1-C6-N6	-14.15	110.11	118.60
35	BA	1337	G	N3-C4-C5	-14.14	121.53	128.60
2	AB	1929	G	N9-C4-C5	14.14	111.06	105.40
2	AB	2357	G	C8-N9-C4	-14.14	100.74	106.40
35	BA	1066	C	C6-N1-C2	-14.14	114.64	120.30
2	AB	2614	A	O4'-C1'-N9	14.13	119.51	108.20
35	BA	9	G	C8-N9-C4	-14.13	100.75	106.40
35	BA	186	C	N3-C4-C5	-14.12	116.25	121.90
2	AB	2337	G	C2-N3-C4	14.12	118.96	111.90
2	AB	1532	A	N9-C4-C5	14.11	111.44	105.80
2	AB	2061	G	N3-C4-C5	-14.11	121.55	128.60
2	AB	554	U	O4'-C1'-N1	14.10	119.48	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	230	G	C8-N9-C4	-14.08	100.77	106.40
4	AD	261	ARG	NE-CZ-NH1	14.07	127.34	120.30
35	BA	489	C	O4'-C1'-N1	14.07	119.46	108.20
2	AB	2282	G	C8-N9-C4	-14.05	100.78	106.40
2	AB	245	G	C8-N9-C4	-14.05	100.78	106.40
35	BA	743	A	C8-N9-C4	-14.04	100.18	105.80
2	AB	1437	C	C3'-C2'-C1'	14.03	112.72	101.50
35	BA	694	A	N1-C2-N3	-14.03	122.29	129.30
35	BA	1132	C	N1-C2-O2	14.02	127.31	118.90
2	AB	1234	U	O4'-C1'-N1	14.02	119.42	108.20
10	AJ	124	ARG	NE-CZ-NH2	-14.02	113.29	120.30
35	BA	742	G	C2-N3-C4	14.02	118.91	111.90
2	AB	2193	G	C8-N9-C4	-14.01	100.80	106.40
35	BA	424	G	C8-N9-C4	-14.00	100.80	106.40
2	AB	75	G	O4'-C1'-N9	14.00	119.40	108.20
2	AB	2872	A	C4-C5-N7	-13.99	103.70	110.70
2	AB	2848	G	O4'-C1'-N9	13.99	119.39	108.20
2	AB	476	G	N9-C4-C5	13.98	110.99	105.40
2	AB	2893	A	N9-C4-C5	-13.98	100.21	105.80
1	AA	44	G	C1'-O4'-C4'	-13.97	98.72	109.90
35	BA	603	U	C5-C4-O4	-13.97	117.52	125.90
2	AB	228	C	N3-C4-C5	-13.96	116.31	121.90
2	AB	1003	G	C8-N9-C4	-13.93	100.83	106.40
3	AC	53	ARG	NE-CZ-NH1	13.93	127.26	120.30
35	BA	1110	A	C8-N9-C4	-13.93	100.23	105.80
2	AB	1455	G	C4-C5-N7	-13.93	105.23	110.80
2	AB	103	A	O4'-C1'-N9	13.92	119.34	108.20
35	BA	581	G	C8-N9-C4	-13.92	100.83	106.40
35	BA	434	U	O4'-C1'-N1	13.92	119.34	108.20
2	AB	1238	G	C8-N9-C4	-13.91	100.83	106.40
47	BM	97	ARG	NE-CZ-NH2	13.91	127.26	120.30
2	AB	631	A	C8-N9-C4	-13.90	100.24	105.80
2	AB	898	C	C2-N3-C4	13.90	126.85	119.90
35	BA	1115	U	O4'-C1'-N1	13.90	119.32	108.20
2	AB	1706	C	O4'-C1'-N1	13.90	119.32	108.20
2	AB	2113	U	O4'-C1'-N1	13.90	119.32	108.20
35	BA	364	A	C4-C5-C6	-13.90	110.05	117.00
2	AB	1394	U	N3-C2-O2	-13.89	112.48	122.20
2	AB	287	G	C8-N9-C4	-13.89	100.84	106.40
2	AB	553	G	C5-N7-C8	13.89	111.24	104.30
35	BA	985	C	N1-C2-O2	13.89	127.23	118.90
2	AB	379	G	O4'-C1'-N9	13.89	119.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2488	G	C8-N9-C4	-13.88	100.85	106.40
1	AA	33	G	N1-C6-O6	-13.88	111.57	119.90
51	BQ	63	ARG	NE-CZ-NH1	13.87	127.24	120.30
2	AB	2707	U	C5-C6-N1	-13.86	115.77	122.70
2	AB	1882	U	O4'-C1'-N1	13.85	119.28	108.20
2	AB	2851	A	C8-N9-C4	13.85	111.34	105.80
2	AB	2176	A	C5-C6-N1	13.85	124.62	117.70
35	BA	240	G	C8-N9-C4	-13.85	100.86	106.40
2	AB	1154	G	N7-C8-N9	13.84	120.02	113.10
2	AB	2061	G	C2-N3-C4	13.84	118.82	111.90
35	BA	359	G	N9-C4-C5	13.84	110.94	105.40
35	BA	666	G	N7-C8-N9	13.84	120.02	113.10
35	BA	1169	A	N7-C8-N9	-13.83	106.88	113.80
2	AB	2582	G	C8-N9-C4	-13.82	100.87	106.40
2	AB	2615	U	O4'-C1'-N1	13.82	119.25	108.20
2	AB	795	C	O4'-C1'-N1	13.80	119.24	108.20
35	BA	389	A	C8-N9-C4	-13.80	100.28	105.80
2	AB	1602	U	O4'-C1'-N1	13.80	119.24	108.20
2	AB	1738	G	C8-N9-C4	-13.79	100.88	106.40
2	AB	228	C	C2-N3-C4	13.79	126.79	119.90
2	AB	2276	G	N3-C4-C5	-13.79	121.71	128.60
8	AH	151	ARG	NE-CZ-NH1	13.78	127.19	120.30
2	AB	1964	G	C2-N3-C4	13.77	118.78	111.90
2	AB	469	G	N3-C4-C5	-13.77	121.72	128.60
35	BA	638	U	C5-C6-N1	13.76	129.58	122.70
2	AB	298	G	C2-N3-C4	13.75	118.78	111.90
35	BA	1487	G	C2-N3-C4	13.75	118.77	111.90
2	AB	36	G	C2-N3-C4	13.74	118.77	111.90
2	AB	2218	G	N1-C6-O6	-13.74	111.66	119.90
39	BE	131	ARG	NE-CZ-NH1	13.74	127.17	120.30
54	BT	52	ARG	NE-CZ-NH1	13.73	127.17	120.30
2	AB	1519	G	C2-N3-C4	13.73	118.76	111.90
35	BA	1031	C	O4'-C1'-N1	13.72	119.18	108.20
2	AB	1922	G	C5-C6-N1	13.72	118.36	111.50
19	AS	2	ARG	NE-CZ-NH2	13.72	127.16	120.30
35	BA	812	G	C2-N3-C4	13.72	118.76	111.90
2	AB	1069	A	C8-N9-C4	-13.71	100.31	105.80
2	AB	31	C	N3-C4-C5	13.71	127.38	121.90
2	AB	2182	U	C4-C5-C6	13.71	127.92	119.70
1	AA	51	G	C6-C5-N7	-13.70	122.18	130.40
35	BA	891	U	O4'-C1'-N1	13.70	119.16	108.20
2	AB	1157	G	C8-N9-C4	-13.69	100.92	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	595	A	C5-C6-N6	-13.68	112.75	123.70
2	AB	2647	U	N3-C2-O2	-13.68	112.62	122.20
2	AB	1023	U	C5-C6-N1	-13.68	115.86	122.70
2	AB	528	A	C3'-C2'-C1'	-13.67	90.56	101.50
2	AB	1728	C	C6-N1-C2	-13.67	114.83	120.30
19	AS	27	ARG	NE-CZ-NH1	13.66	127.13	120.30
2	AB	1313	U	C5-C6-N1	13.66	129.53	122.70
2	AB	565	C	N1-C2-O2	13.65	127.09	118.90
35	BA	1114	C	N3-C4-C5	-13.65	116.44	121.90
2	AB	2835	A	O4'-C1'-N9	13.65	119.12	108.20
2	AB	281	C	O4'-C1'-N1	13.64	119.11	108.20
2	AB	2502	G	N7-C8-N9	13.63	119.92	113.10
3	AC	164	ARG	NE-CZ-NH2	-13.63	113.48	120.30
35	BA	995	C	O4'-C1'-N1	13.63	119.10	108.20
35	BA	241	G	C2-N3-C4	13.62	118.71	111.90
35	BA	464	U	C5-C4-O4	-13.62	117.73	125.90
2	AB	2351	G	C3'-C2'-C1'	13.61	112.39	101.50
2	AB	2006	C	N3-C4-C5	-13.61	116.46	121.90
35	BA	1089	G	C4-C5-C6	13.61	126.97	118.80
2	AB	2282	G	C2-N3-C4	13.61	118.70	111.90
2	AB	2215	C	C5-C6-N1	13.61	127.80	121.00
2	AB	2361	G	O4'-C1'-N9	13.60	119.08	108.20
2	AB	2549	G	O4'-C1'-N9	13.60	119.08	108.20
35	BA	1085	U	O4'-C1'-N1	13.59	119.07	108.20
2	AB	1300	G	C8-N9-C4	-13.59	100.97	106.40
2	AB	2220	U	C5-C6-N1	-13.58	115.91	122.70
2	AB	1924	C	O4'-C1'-N1	13.57	119.06	108.20
2	AB	2110	G	C8-N9-C4	-13.57	100.97	106.40
35	BA	1355	G	N3-C4-C5	-13.56	121.82	128.60
2	AB	2277	G	N1-C6-O6	13.55	128.03	119.90
35	BA	481	G	N3-C4-C5	-13.55	121.83	128.60
2	AB	1437	C	O4'-C1'-N1	13.55	119.04	108.20
2	AB	1857	G	C8-N9-C4	-13.55	100.98	106.40
36	BB	22	G	O4'-C1'-N9	13.55	119.04	108.20
2	AB	2003	A	C4-C5-C6	-13.55	110.23	117.00
2	AB	744	U	O4'-C1'-N1	13.54	119.04	108.20
35	BA	1160	G	C8-N9-C4	-13.54	100.98	106.40
2	AB	840	C	N1-C2-O2	13.54	127.02	118.90
35	BA	985	C	N3-C2-O2	-13.54	112.42	121.90
35	BA	1255	G	C2-N3-C4	13.53	118.67	111.90
2	AB	1863	G	C4-C5-N7	-13.53	105.39	110.80
36	BB	56	G	O4'-C1'-N9	13.52	119.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	412	A	C2-N3-C4	13.52	117.36	110.60
2	AB	2442	C	C2-N3-C4	13.52	126.66	119.90
2	AB	406	G	N9-C4-C5	13.51	110.81	105.40
35	BA	706	A	C8-N9-C4	-13.51	100.39	105.80
2	AB	1552	A	O4'-C1'-N9	13.50	119.00	108.20
2	AB	2241	A	N1-C6-N6	-13.50	110.50	118.60
35	BA	1114	C	C2-N3-C4	13.50	126.65	119.90
2	AB	308	G	C8-N9-C4	-13.50	101.00	106.40
35	BA	665	A	C8-N9-C4	-13.49	100.40	105.80
2	AB	397	U	C4-C5-C6	13.49	127.79	119.70
35	BA	97	G	N7-C8-N9	13.49	119.84	113.10
2	AB	1099	G	N7-C8-N9	13.48	119.84	113.10
35	BA	544	G	C6-N1-C2	-13.48	117.01	125.10
35	BA	1456	A	N1-C2-N3	13.47	136.04	129.30
2	AB	1589	U	O4'-C1'-N1	13.47	118.97	108.20
2	AB	242	G	N9-C4-C5	13.46	110.78	105.40
6	AF	69	ARG	NE-CZ-NH2	-13.46	113.57	120.30
2	AB	1502	A	C4-C5-C6	-13.46	110.27	117.00
2	AB	2137	U	O4'-C1'-N1	13.46	118.96	108.20
2	AB	1358	G	N3-C4-C5	-13.45	121.88	128.60
2	AB	2688	G	N7-C8-N9	13.44	119.82	113.10
2	AB	2410	G	N3-C4-C5	-13.43	121.89	128.60
35	BA	494	G	N3-C4-C5	-13.43	121.89	128.60
2	AB	1997	C	O4'-C1'-N1	13.43	118.94	108.20
2	AB	1099	G	N9-C4-C5	13.42	110.77	105.40
2	AB	1610	A	N1-C2-N3	-13.42	122.59	129.30
2	AB	2306	C	N3-C4-C5	-13.41	116.53	121.90
2	AB	2083	G	O4'-C1'-N9	13.41	118.93	108.20
2	AB	1628	G	O4'-C1'-N9	13.41	118.93	108.20
35	BA	391	G	C4-C5-N7	13.41	116.16	110.80
2	AB	2237	G	C2-N3-C4	13.41	118.60	111.90
2	AB	1011	G	O4'-C1'-N9	13.40	118.92	108.20
35	BA	775	G	C8-N9-C4	-13.39	101.04	106.40
2	AB	2391	G	N9-C4-C5	13.39	110.76	105.40
35	BA	42	G	O4'-C1'-N9	13.39	118.91	108.20
35	BA	1276	G	O4'-C1'-N9	13.39	118.91	108.20
2	AB	2655	G	C5-C6-N1	13.38	118.19	111.50
2	AB	1290	C	N3-C2-O2	-13.38	112.53	121.90
2	AB	707	G	C4-C5-N7	-13.38	105.45	110.80
1	AA	68	C	C2-N3-C4	13.37	126.59	119.90
2	AB	2492	U	O4'-C1'-N1	13.36	118.89	108.20
35	BA	674	G	O4'-C1'-N9	13.36	118.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2425	A	C8-N9-C4	-13.36	100.46	105.80
35	BA	519	C	C2-N3-C4	13.36	126.58	119.90
35	BA	454	G	C8-N9-C4	-13.35	101.06	106.40
2	AB	1384	A	N1-C2-N3	-13.35	122.62	129.30
2	AB	2040	G	N9-C4-C5	13.35	110.74	105.40
2	AB	1348	C	O4'-C1'-N1	13.34	118.87	108.20
35	BA	417	G	C8-N9-C4	-13.34	101.07	106.40
35	BA	1353	G	C8-N9-C4	-13.33	101.07	106.40
35	BA	530	G	N3-C4-C5	-13.33	121.94	128.60
2	AB	240	C	N3-C4-C5	-13.33	116.57	121.90
2	AB	1753	G	O4'-C1'-N9	13.33	118.86	108.20
2	AB	221	A	N9-C4-C5	-13.32	100.47	105.80
2	AB	2120	G	N1-C2-N3	-13.32	115.91	123.90
2	AB	1158	C	N3-C4-C5	-13.31	116.57	121.90
35	BA	567	G	C8-N9-C4	-13.31	101.07	106.40
35	BA	742	G	N3-C4-C5	-13.31	121.94	128.60
35	BA	1338	G	O4'-C1'-N9	13.31	118.85	108.20
2	AB	1695	G	O4'-C1'-N9	13.31	118.85	108.20
35	BA	287	U	C5-C6-N1	-13.30	116.05	122.70
10	AJ	60	ARG	NE-CZ-NH2	-13.30	113.65	120.30
35	BA	1169	A	C5-N7-C8	13.30	110.55	103.90
2	AB	397	U	C5-C6-N1	-13.30	116.05	122.70
2	AB	1910	G	C8-N9-C4	-13.29	101.08	106.40
2	AB	2169	A	N3-C4-C5	-13.29	117.50	126.80
50	BP	62	ARG	NE-CZ-NH2	-13.29	113.65	120.30
35	BA	651	C	N3-C4-C5	-13.29	116.58	121.90
2	AB	1529	G	C8-N9-C4	-13.29	101.09	106.40
1	AA	68	C	N3-C4-C5	-13.28	116.59	121.90
2	AB	2255	G	C8-N9-C4	-13.28	101.09	106.40
2	AB	1897	G	C8-N9-C4	-13.27	101.09	106.40
1	AA	20	G	O4'-C1'-N9	13.27	118.81	108.20
2	AB	35	G	N3-C4-C5	-13.27	121.97	128.60
2	AB	672	C	C5-C4-N4	-13.27	110.91	120.20
50	BP	60	ARG	NE-CZ-NH2	-13.27	113.67	120.30
2	AB	957	C	N3-C4-C5	-13.26	116.59	121.90
2	AB	2053	G	N3-C4-C5	-13.26	121.97	128.60
2	AB	81	G	C5-C6-O6	-13.26	120.64	128.60
2	AB	2851	A	C6-N1-C2	13.26	126.55	118.60
2	AB	271	G	N9-C4-C5	13.25	110.70	105.40
35	BA	1361	G	C8-N9-C4	-13.25	101.10	106.40
2	AB	264	C	O4'-C1'-N1	13.25	118.80	108.20
2	AB	1630	A	C4-C5-N7	-13.25	104.08	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1033	G	O4'-C1'-N9	13.25	118.80	108.20
30	A3	9	ARG	NE-CZ-NH1	-13.25	113.68	120.30
1	AA	18	G	C5-N7-C8	-13.24	97.68	104.30
2	AB	16	C	O4'-C1'-N1	13.24	118.79	108.20
41	BG	19	ARG	NE-CZ-NH1	13.24	126.92	120.30
35	BA	821	G	N3-C4-C5	-13.24	121.98	128.60
2	AB	1181	U	O4'-C1'-N1	13.23	118.78	108.20
2	AB	308	G	N9-C4-C5	13.22	110.69	105.40
35	BA	1181	G	O4'-C1'-N9	13.21	118.77	108.20
36	BB	33	A	C2-N3-C4	13.21	117.20	110.60
2	AB	1822	C	C2-N3-C4	13.20	126.50	119.90
2	AB	5	A	C5-C6-N1	-13.20	111.10	117.70
2	AB	229	C	O4'-C1'-N1	13.20	118.76	108.20
2	AB	1250	G	C8-N9-C4	-13.20	101.12	106.40
2	AB	1380	G	N3-C4-C5	-13.20	122.00	128.60
49	BO	86	ARG	NE-CZ-NH2	-13.20	113.70	120.30
2	AB	2428	G	C8-N9-C4	-13.20	101.12	106.40
2	AB	194	G	C6-C5-N7	-13.19	122.48	130.40
2	AB	264	C	C5-C6-N1	13.19	127.59	121.00
2	AB	1168	G	N9-C4-C5	13.19	110.67	105.40
2	AB	2524	G	C4-C5-N7	-13.19	105.53	110.80
2	AB	2407	A	N7-C8-N9	13.19	120.39	113.80
2	AB	1544	A	C8-N9-C4	13.17	111.07	105.80
2	AB	804	A	C5-C6-N1	13.16	124.28	117.70
2	AB	1339	G	N9-C4-C5	-13.16	100.13	105.40
2	AB	1345	C	N3-C4-C5	13.16	127.17	121.90
2	AB	1158	C	C4-C5-C6	13.16	123.98	117.40
35	BA	479	U	C2-N3-C4	-13.15	119.11	127.00
35	BA	274	A	N9-C4-C5	13.14	111.06	105.80
2	AB	1741	C	O4'-C1'-N1	13.14	118.71	108.20
2	AB	963	U	C5-C6-N1	-13.14	116.13	122.70
2	AB	1518	C	C2-N3-C4	13.13	126.47	119.90
35	BA	1240	U	C5-C6-N1	-13.13	116.14	122.70
23	AW	21	ARG	NE-CZ-NH2	13.12	126.86	120.30
35	BA	927	G	C8-N9-C4	-13.13	101.15	106.40
37	BC	13	C	N3-C4-N4	13.13	127.19	118.00
2	AB	798	G	C2-N3-C4	13.12	118.46	111.90
2	AB	1771	C	C6-N1-C2	-13.12	115.05	120.30
35	BA	1129	C	N3-C4-C5	-13.12	116.65	121.90
35	BA	1253	G	N3-C4-C5	-13.12	122.04	128.60
2	AB	2902	C	N3-C2-O2	-13.11	112.72	121.90
2	AB	2710	C	C6-N1-C2	-13.11	115.06	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1072	C	C4-C5-C6	-13.11	110.85	117.40
2	AB	2255	G	N3-C2-N2	-13.11	110.73	119.90
2	AB	132	G	N3-C4-C5	-13.10	122.05	128.60
2	AB	1822	C	O4'-C1'-N1	13.10	118.68	108.20
2	AB	2614	A	C2-N3-C4	13.10	117.15	110.60
2	AB	2819	G	C2-N3-C4	13.10	118.45	111.90
35	BA	163	C	N1-C2-O2	13.10	126.76	118.90
35	BA	679	C	O4'-C1'-N1	13.10	118.68	108.20
35	BA	662	U	C5-C6-N1	-13.09	116.15	122.70
37	BC	48	U	N3-C2-O2	-13.09	113.04	122.20
2	AB	2205	A	C2-N3-C4	-13.09	104.06	110.60
2	AB	2867	G	C4-C5-N7	-13.08	105.57	110.80
2	AB	1485	U	O4'-C1'-N1	13.08	118.66	108.20
2	AB	1165	A	N1-C6-N6	-13.07	110.76	118.60
2	AB	2796	U	O4'-C1'-N1	13.07	118.66	108.20
35	BA	94	G	N7-C8-N9	-13.07	106.56	113.10
2	AB	879	G	N7-C8-N9	13.07	119.63	113.10
2	AB	1861	G	C8-N9-C4	13.06	111.62	106.40
15	AO	59	ARG	NE-CZ-NH1	-13.06	113.77	120.30
35	BA	530	G	C8-N9-C4	-13.06	101.17	106.40
2	AB	1349	C	C5'-C4'-O4'	13.06	124.77	109.10
35	BA	1034	G	N3-C4-C5	-13.06	122.07	128.60
2	AB	2253	G	N9-C4-C5	13.06	110.62	105.40
2	AB	515	A	N9-C4-C5	13.05	111.02	105.80
2	AB	725	G	N3-C4-C5	-13.05	122.08	128.60
2	AB	1250	G	N3-C4-C5	-13.05	122.08	128.60
2	AB	2177	C	N3-C4-C5	13.04	127.12	121.90
35	BA	1415	G	C8-N9-C4	-13.04	101.18	106.40
2	AB	461	C	C4-C5-C6	-13.04	110.88	117.40
2	AB	2704	C	C5-C4-N4	-13.04	111.07	120.20
35	BA	1076	U	C6-N1-C2	-13.04	113.17	121.00
2	AB	877	A	O4'-C1'-N9	13.04	118.63	108.20
2	AB	1233	C	N1-C2-O2	13.04	126.72	118.90
35	BA	380	G	O4'-C1'-N9	13.04	118.63	108.20
2	AB	69	C	C6-N1-C2	-13.03	115.09	120.30
35	BA	974	A	C8-N9-C4	-13.03	100.59	105.80
2	AB	597	G	N1-C6-O6	-13.01	112.09	119.90
2	AB	1456	G	C8-N9-C4	-13.01	101.19	106.40
35	BA	751	U	O4'-C1'-N1	13.01	118.61	108.20
2	AB	1650	A	N1-C2-N3	-13.01	122.79	129.30
35	BA	1195	C	O4'-C1'-N1	13.01	118.61	108.20
37	BC	71	G	C5-N7-C8	-13.01	97.80	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AV	69	ARG	NE-CZ-NH2	13.01	126.80	120.30
2	AB	1382	G	C5-C6-O6	13.00	136.40	128.60
35	BA	1063	C	N1-C2-O2	13.00	126.70	118.90
2	AB	1858	A	C8-N9-C4	-13.00	100.60	105.80
2	AB	1837	C	O4'-C1'-N1	13.00	118.60	108.20
2	AB	901	C	O4'-C1'-N1	13.00	118.60	108.20
2	AB	1697	G	N3-C4-C5	-12.99	122.10	128.60
2	AB	2051	A	O4'-C1'-N9	12.99	118.59	108.20
1	AA	108	A	C8-N9-C4	-12.99	100.60	105.80
2	AB	481	G	O4'-C1'-N9	12.99	118.59	108.20
2	AB	269	C	N3-C4-C5	12.98	127.09	121.90
35	BA	991	U	O4'-C1'-N1	12.98	118.58	108.20
35	BA	161	A	O4'-C1'-N9	12.98	118.58	108.20
2	AB	2581	G	C8-N9-C4	-12.97	101.21	106.40
2	AB	549	G	C4-C5-N7	-12.97	105.61	110.80
2	AB	810	U	C5-C6-N1	-12.97	116.22	122.70
2	AB	2159	G	C2-N3-C4	12.97	118.39	111.90
2	AB	2405	G	O4'-C1'-N9	12.97	118.58	108.20
2	AB	522	A	C6-N1-C2	-12.97	110.82	118.60
2	AB	1463	C	C2-N3-C4	12.97	126.38	119.90
2	AB	189	G	O4'-C1'-N9	12.96	118.57	108.20
2	AB	31	C	C4-C5-C6	-12.96	110.92	117.40
2	AB	1508	A	N7-C8-N9	12.96	120.28	113.80
2	AB	271	G	C4-C5-N7	-12.96	105.62	110.80
2	AB	2208	C	C4-C5-C6	-12.96	110.92	117.40
35	BA	399	G	C4-C5-N7	12.96	115.98	110.80
1	AA	91	C	O4'-C1'-N1	12.95	118.56	108.20
2	AB	602	A	N1-C6-N6	-12.95	110.83	118.60
2	AB	1131	G	C4-C5-N7	-12.95	105.62	110.80
2	AB	473	G	N3-C4-C5	-12.94	122.13	128.60
2	AB	257	C	N3-C4-C5	-12.94	116.72	121.90
2	AB	2656	U	O4'-C1'-N1	12.94	118.55	108.20
35	BA	847	G	C8-N9-C4	-12.93	101.23	106.40
2	AB	2726	A	C8-N9-C4	-12.93	100.63	105.80
35	BA	459	A	O4'-C1'-N9	12.93	118.54	108.20
2	AB	1382	G	N1-C6-O6	-12.92	112.15	119.90
2	AB	855	G	N1-C6-O6	12.92	127.65	119.90
2	AB	1950	G	C8-N9-C4	-12.92	101.23	106.40
2	AB	849	A	C8-N9-C4	12.91	110.97	105.80
35	BA	1160	G	N9-C4-C5	12.91	110.56	105.40
2	AB	1742	U	N3-C2-O2	-12.91	113.16	122.20
35	BA	22	G	C5-N7-C8	-12.91	97.84	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1525	G	C4-C5-N7	-12.90	105.64	110.80
2	AB	232	G	N9-C4-C5	-12.90	100.24	105.40
7	AG	177	ARG	NE-CZ-NH2	-12.90	113.85	120.30
48	BN	30	ARG	NE-CZ-NH2	-12.90	113.85	120.30
35	BA	1052	U	C2-N3-C4	-12.89	119.27	127.00
2	AB	1250	G	N7-C8-N9	12.89	119.55	113.10
2	AB	2411	A	C8-N9-C4	12.89	110.95	105.80
35	BA	1262	C	N3-C4-N4	12.88	127.02	118.00
2	AB	1710	G	C8-N9-C4	-12.87	101.25	106.40
35	BA	258	G	C4-C5-N7	12.87	115.95	110.80
1	AA	51	G	N7-C8-N9	12.86	119.53	113.10
45	BK	123	ARG	NE-CZ-NH1	-12.86	113.87	120.30
2	AB	1689	A	C2-N3-C4	-12.86	104.17	110.60
2	AB	2863	C	C4-C5-C6	-12.86	110.97	117.40
35	BA	257	G	N9-C4-C5	12.85	110.54	105.40
36	BB	41	A	N1-C6-N6	-12.84	110.90	118.60
39	BE	106	ARG	NE-CZ-NH2	-12.84	113.88	120.30
2	AB	846	U	N3-C4-O4	12.83	128.38	119.40
37	BC	13	C	O4'-C1'-N1	12.83	118.47	108.20
2	AB	2169	A	C2-N3-C4	12.83	117.01	110.60
35	BA	1517	G	N7-C8-N9	12.83	119.51	113.10
2	AB	813	U	O4'-C1'-N1	12.82	118.46	108.20
37	BC	32	G	O4'-C1'-N9	12.81	118.45	108.20
1	AA	51	G	C5-N7-C8	-12.81	97.89	104.30
35	BA	793	U	O4'-C1'-N1	12.81	118.45	108.20
2	AB	1360	G	O4'-C1'-N9	12.81	118.45	108.20
2	AB	1569	A	C4-C5-C6	-12.81	110.60	117.00
35	BA	1015	G	C6-N1-C2	-12.81	117.42	125.10
2	AB	70	G	N9-C4-C5	12.81	110.52	105.40
2	AB	1032	A	C4-C5-C6	-12.80	110.60	117.00
2	AB	979	A	C5-N7-C8	-12.80	97.50	103.90
53	BS	10	ARG	NE-CZ-NH2	-12.80	113.90	120.30
2	AB	1187	G	C8-N9-C4	-12.80	101.28	106.40
2	AB	1888	G	O4'-C1'-N9	12.80	118.44	108.20
2	AB	2623	G	N3-C2-N2	-12.80	110.94	119.90
2	AB	114	U	C2-N3-C4	-12.79	119.32	127.00
2	AB	2141	G	O4'-C1'-N9	12.79	118.43	108.20
2	AB	1157	G	N9-C4-C5	12.78	110.51	105.40
2	AB	1251	C	C4-C5-C6	-12.78	111.01	117.40
2	AB	1968	G	C4-C5-N7	-12.78	105.69	110.80
35	BA	361	G	C2-N3-C4	12.78	118.29	111.90
2	AB	658	U	O4'-C1'-N1	12.78	118.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1270	G	C8-N9-C4	-12.78	101.29	106.40
35	BA	1164	G	C8-N9-C4	-12.77	101.29	106.40
35	BA	102	G	N3-C4-C5	-12.77	122.22	128.60
35	BA	1073	U	O4'-C1'-N1	12.77	118.41	108.20
2	AB	837	C	C2-N3-C4	12.77	126.28	119.90
2	AB	1864	U	O4'-C1'-N1	12.77	118.41	108.20
2	AB	259	G	N7-C8-N9	12.76	119.48	113.10
2	AB	523	C	O4'-C1'-N1	12.76	118.41	108.20
2	AB	2863	C	O4'-C1'-N1	12.76	118.41	108.20
2	AB	1178	C	O4'-C1'-N1	12.76	118.41	108.20
2	AB	1364	G	C4-C5-N7	-12.76	105.69	110.80
35	BA	469	C	N1-C2-O2	12.76	126.56	118.90
2	AB	893	C	O4'-C1'-N1	12.75	118.40	108.20
35	BA	1353	G	N3-C4-C5	-12.75	122.22	128.60
1	AA	4	C	O4'-C1'-N1	12.75	118.40	108.20
2	AB	2792	A	C8-N9-C4	-12.75	100.70	105.80
2	AB	721	A	O4'-C1'-N9	12.74	118.39	108.20
26	AZ	71	ARG	NE-CZ-NH2	12.74	126.67	120.30
2	AB	1001	A	C2-N3-C4	12.74	116.97	110.60
2	AB	76	C	C2-N3-C4	12.74	126.27	119.90
2	AB	1624	U	C4-C5-C6	12.74	127.34	119.70
35	BA	817	C	C4-C5-C6	-12.74	111.03	117.40
2	AB	2093	G	C8-N9-C4	-12.73	101.31	106.40
2	AB	2003	A	N1-C6-N6	-12.73	110.96	118.60
35	BA	1188	A	N9-C4-C5	12.73	110.89	105.80
2	AB	2407	A	C5-N7-C8	-12.72	97.54	103.90
35	BA	104	G	C6-N1-C2	-12.72	117.47	125.10
35	BA	836	G	C5-C6-N1	-12.72	105.14	111.50
2	AB	1667	G	C8-N9-C4	-12.72	101.31	106.40
2	AB	769	U	C5-C4-O4	-12.72	118.27	125.90
2	AB	1669	A	C2-N3-C4	12.72	116.96	110.60
35	BA	1097	C	N1-C2-O2	12.71	126.53	118.90
2	AB	2868	A	N1-C6-N6	-12.71	110.98	118.60
35	BA	1037	C	O4'-C1'-N1	12.71	118.37	108.20
35	BA	1182	G	N3-C4-C5	-12.71	122.25	128.60
35	BA	1314	C	O4'-C1'-N1	12.71	118.36	108.20
35	BA	1349	A	C5-C6-N1	12.70	124.05	117.70
35	BA	122	G	N3-C4-C5	-12.70	122.25	128.60
52	BR	14	ARG	NE-CZ-NH2	-12.69	113.95	120.30
2	AB	1455	G	C8-N9-C4	-12.69	101.32	106.40
2	AB	969	G	C8-N9-C4	-12.69	101.33	106.40
2	AB	1194	A	N9-C4-C5	12.69	110.88	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	AD	170	TYR	CB-CG-CD2	12.67	128.60	121.00
35	BA	491	G	C5-C6-N1	12.67	117.84	111.50
35	BA	1034	G	C8-N9-C4	-12.67	101.33	106.40
35	BA	1280	A	N9-C4-C5	12.67	110.87	105.80
37	BC	46	G	N3-C4-C5	-12.67	122.26	128.60
1	AA	96	G	C5-C6-N1	12.67	117.83	111.50
2	AB	2205	A	N1-C6-N6	12.67	126.20	118.60
35	BA	460	A	O4'-C1'-N9	12.67	118.33	108.20
35	BA	1175	G	C5-N7-C8	12.67	110.63	104.30
2	AB	511	U	N3-C2-O2	-12.66	113.33	122.20
35	BA	398	U	C5-C6-N1	-12.66	116.37	122.70
37	BC	59	A	N9-C4-C5	12.66	110.86	105.80
35	BA	1188	A	C8-N9-C4	-12.66	100.74	105.80
2	AB	2567	G	N7-C8-N9	12.65	119.43	113.10
2	AB	2890	G	N7-C8-N9	12.65	119.42	113.10
35	BA	1511	G	C2-N3-C4	12.64	118.22	111.90
43	BI	4	ARG	NE-CZ-NH1	12.64	126.62	120.30
35	BA	710	G	C5-C6-N1	12.64	117.82	111.50
2	AB	2453	A	N1-C6-N6	-12.64	111.02	118.60
2	AB	1337	G	C8-N9-C4	-12.64	101.35	106.40
2	AB	2084	C	C6-N1-C2	-12.63	115.25	120.30
35	BA	1041	G	C4-C5-N7	-12.63	105.75	110.80
2	AB	1095	A	O4'-C1'-N9	12.63	118.30	108.20
2	AB	2567	G	O4'-C1'-N9	12.62	118.30	108.20
38	BD	221	ARG	NE-CZ-NH2	-12.62	113.99	120.30
2	AB	1075	C	C5-C4-N4	-12.61	111.38	120.20
2	AB	98	G	N9-C4-C5	12.60	110.44	105.40
14	AN	69	ARG	NE-CZ-NH2	-12.59	114.00	120.30
2	AB	553	G	C4-C5-N7	-12.59	105.76	110.80
2	AB	538	A	N9-C4-C5	-12.59	100.77	105.80
35	BA	910	C	C5-C4-N4	-12.58	111.39	120.20
2	AB	1190	G	C2-N3-C4	12.58	118.19	111.90
2	AB	511	U	N1-C2-N3	12.57	122.44	114.90
2	AB	940	G	C2-N3-C4	12.57	118.19	111.90
35	BA	667	G	N3-C4-C5	-12.57	122.32	128.60
2	AB	1032	A	C5-C6-N1	12.56	123.98	117.70
2	AB	2581	G	N7-C8-N9	12.56	119.38	113.10
35	BA	807	A	N1-C2-N3	-12.56	123.02	129.30
35	BA	813	U	N3-C4-C5	-12.56	107.07	114.60
2	AB	1025	G	C1'-O4'-C4'	12.55	119.94	109.90
2	AB	2648	G	C8-N9-C4	-12.55	101.38	106.40
2	AB	1707	G	C5-N7-C8	-12.55	98.03	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1620	G	C6-C5-N7	-12.54	122.88	130.40
2	AB	2851	A	N9-C4-C5	-12.54	100.79	105.80
35	BA	609	A	N7-C8-N9	-12.53	107.53	113.80
2	AB	2261	C	O4'-C1'-N1	12.53	118.22	108.20
2	AB	86	G	N1-C6-O6	-12.52	112.39	119.90
2	AB	1493	C	O4'-C1'-N1	12.52	118.22	108.20
35	BA	479	U	N1-C2-N3	12.52	122.41	114.90
2	AB	930	G	N9-C4-C5	12.52	110.41	105.40
2	AB	1905	C	C6-N1-C2	-12.52	115.29	120.30
2	AB	585	G	N9-C4-C5	12.52	110.41	105.40
35	BA	620	C	O4'-C1'-N1	12.52	118.21	108.20
2	AB	1836	C	C5-C6-N1	-12.51	114.74	121.00
2	AB	2238	G	N3-C4-C5	-12.51	122.34	128.60
35	BA	703	G	O4'-C1'-N9	12.51	118.21	108.20
2	AB	2595	G	C4-C5-N7	12.51	115.80	110.80
2	AB	978	G	C2-N3-C4	12.50	118.15	111.90
35	BA	264	C	N1-C2-O2	12.50	126.40	118.90
2	AB	1945	G	C5-C6-N1	12.49	117.75	111.50
2	AB	1070	A	N7-C8-N9	12.49	120.05	113.80
2	AB	1836	C	C4-C5-C6	12.49	123.65	117.40
2	AB	2401	U	O4'-C1'-N1	12.49	118.19	108.20
35	BA	23	C	C6-N1-C2	-12.49	115.30	120.30
35	BA	842	U	O4'-C1'-N1	12.49	118.19	108.20
2	AB	1217	U	O4'-C1'-N1	12.48	118.19	108.20
35	BA	1538	C	N1-C2-O2	12.48	126.39	118.90
2	AB	546	U	N3-C2-O2	-12.48	113.46	122.20
2	AB	2366	A	N1-C2-N3	-12.48	123.06	129.30
2	AB	228	C	N1-C2-O2	12.47	126.38	118.90
2	AB	1364	G	N9-C4-C5	12.47	110.39	105.40
2	AB	2005	A	N9-C4-C5	-12.47	100.81	105.80
37	BC	20	G	N1-C6-O6	-12.47	112.42	119.90
2	AB	178	G	O4'-C1'-N9	12.46	118.17	108.20
2	AB	258	G	C8-N9-C4	-12.46	101.42	106.40
2	AB	1153	C	C5-C4-N4	-12.46	111.48	120.20
25	AY	38	ARG	NE-CZ-NH2	-12.46	114.07	120.30
2	AB	287	G	N9-C4-C5	12.46	110.38	105.40
2	AB	1074	G	N7-C8-N9	-12.46	106.87	113.10
35	BA	1138	G	O4'-C1'-N9	12.46	118.17	108.20
44	BJ	79	ARG	NE-CZ-NH1	12.46	126.53	120.30
2	AB	1795	C	N3-C4-C5	-12.45	116.92	121.90
2	AB	2090	A	C8-N9-C4	-12.45	100.82	105.80
35	BA	455	G	C1'-O4'-C4'	-12.45	99.94	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1832	C	C6-N1-C2	-12.44	115.32	120.30
36	BB	22	G	C5-N7-C8	-12.44	98.08	104.30
2	AB	843	G	N9-C4-C5	12.44	110.38	105.40
2	AB	2413	G	N7-C8-N9	12.44	119.32	113.10
2	AB	2870	C	O4'-C1'-N1	12.43	118.15	108.20
2	AB	979	A	N7-C8-N9	12.43	120.02	113.80
35	BA	115	G	N3-C4-C5	-12.43	122.39	128.60
35	BA	855	U	C5-C6-N1	-12.43	116.49	122.70
35	BA	413	G	N1-C2-N3	-12.43	116.44	123.90
35	BA	1453	G	O4'-C1'-N9	12.42	118.14	108.20
37	BC	77	A	N1-C2-N3	-12.42	123.09	129.30
2	AB	2735	G	N3-C4-C5	-12.41	122.39	128.60
2	AB	2481	G	O4'-C1'-N9	12.41	118.13	108.20
35	BA	1484	C	O4'-C1'-N1	12.41	118.13	108.20
2	AB	986	C	N1-C2-O2	12.41	126.34	118.90
35	BA	311	C	C5-C6-N1	12.41	127.20	121.00
35	BA	544	G	C5-C6-N1	12.41	117.70	111.50
2	AB	2171	A	N7-C8-N9	12.40	120.00	113.80
43	BI	176	TYR	CB-CG-CD1	-12.40	113.56	121.00
35	BA	219	U	C4-C5-C6	12.40	127.14	119.70
35	BA	544	G	C5-C6-O6	-12.40	121.16	128.60
35	BA	951	G	O4'-C1'-N9	12.40	118.12	108.20
2	AB	1929	G	C4-C5-N7	-12.40	105.84	110.80
2	AB	1988	G	N3-C4-C5	-12.39	122.41	128.60
35	BA	1468	A	N9-C4-C5	12.39	110.76	105.80
2	AB	1858	A	C5-C6-N1	12.39	123.89	117.70
2	AB	2502	G	C8-N9-C4	-12.39	101.44	106.40
2	AB	1655	A	C5-N7-C8	-12.39	97.71	103.90
36	BB	45	G	O4'-C1'-N9	12.38	118.10	108.20
2	AB	1056	G	C5-C6-N1	12.38	117.69	111.50
2	AB	930	G	C8-N9-C4	-12.37	101.45	106.40
35	BA	247	G	N7-C8-N9	12.37	119.28	113.10
2	AB	1384	A	C2-N3-C4	12.37	116.78	110.60
35	BA	1101	A	C5-N7-C8	-12.37	97.72	103.90
2	AB	585	G	C5-C6-N1	12.37	117.68	111.50
2	AB	2839	G	N1-C6-O6	-12.36	112.48	119.90
2	AB	1757	A	C8-N9-C4	-12.36	100.86	105.80
36	BB	23	C	C5-C6-N1	-12.36	114.82	121.00
2	AB	1527	G	N3-C2-N2	-12.36	111.25	119.90
2	AB	514	A	N1-C2-N3	12.35	135.48	129.30
37	BC	63	C	O4'-C1'-N1	12.35	118.08	108.20
2	AB	1262	A	O4'-C1'-N9	12.35	118.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1754	A	N1-C2-N3	12.35	135.47	129.30
35	BA	267	C	C4-C5-C6	12.35	123.58	117.40
2	AB	2040	G	N3-C4-C5	-12.35	122.43	128.60
2	AB	2176	A	C6-N1-C2	-12.35	111.19	118.60
35	BA	867	G	C4'-C3'-C2'	-12.34	90.26	102.60
1	AA	35	C	O4'-C1'-N1	12.34	118.07	108.20
35	BA	858	G	C4-C5-N7	-12.34	105.86	110.80
2	AB	361	G	N3-C4-C5	-12.34	122.43	128.60
2	AB	487	C	O4'-C1'-N1	12.34	118.07	108.20
2	AB	1433	A	N9-C4-C5	12.33	110.73	105.80
35	BA	644	U	O4'-C1'-N1	12.33	118.07	108.20
2	AB	1519	G	O4'-C1'-N9	12.33	118.06	108.20
2	AB	1893	C	O4'-C1'-N1	12.33	118.06	108.20
2	AB	2524	G	C2-N3-C4	12.32	118.06	111.90
35	BA	584	G	C2-N3-C4	12.32	118.06	111.90
2	AB	304	U	O4'-C1'-N1	12.32	118.06	108.20
2	AB	136	G	C4-C5-N7	-12.32	105.87	110.80
35	BA	1412	C	O4'-C1'-N1	12.32	118.06	108.20
2	AB	1498	C	N1-C2-O2	12.32	126.29	118.90
35	BA	1141	C	O4'-C1'-N1	12.32	118.06	108.20
2	AB	1318	U	O4'-C1'-N1	12.31	118.05	108.20
2	AB	147	C	N3-C4-N4	12.30	126.61	118.00
35	BA	1130	A	N9-C4-C5	12.30	110.72	105.80
35	BA	115	G	C8-N9-C4	-12.30	101.48	106.40
35	BA	1362	A	C6-N1-C2	12.30	125.98	118.60
2	AB	928	A	O4'-C1'-N9	12.30	118.04	108.20
35	BA	106	C	C1'-O4'-C4'	12.30	119.74	109.90
35	BA	971	G	C4-C5-N7	-12.30	105.88	110.80
2	AB	836	G	N1-C6-O6	-12.29	112.52	119.90
2	AB	1491	G	N3-C2-N2	-12.29	111.30	119.90
2	AB	1228	G	N3-C4-C5	-12.29	122.46	128.60
2	AB	2859	G	C8-N9-C4	-12.29	101.48	106.40
2	AB	2890	G	C8-N9-C4	-12.29	101.48	106.40
2	AB	357	C	N3-C2-O2	-12.29	113.30	121.90
2	AB	233	A	N1-C6-N6	12.28	125.97	118.60
28	A1	30	ARG	NE-CZ-NH1	12.28	126.44	120.30
2	AB	498	G	O4'-C1'-N9	12.28	118.02	108.20
2	AB	328	U	O4'-C1'-N1	12.27	118.02	108.20
2	AB	198	C	C2-N3-C4	-12.27	113.77	119.90
35	BA	475	C	O4'-C1'-N1	12.27	118.02	108.20
35	BA	1166	G	C2-N3-C4	12.27	118.03	111.90
2	AB	2530	A	O4'-C1'-N9	12.27	118.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	71	G	N7-C8-N9	12.26	119.23	113.10
2	AB	1395	A	N1-C2-N3	12.26	135.43	129.30
35	BA	691	G	C3'-C2'-C1'	-12.26	91.69	101.50
2	AB	404	A	C8-N9-C4	-12.25	100.90	105.80
2	AB	995	C	C4-C5-C6	12.25	123.52	117.40
2	AB	2638	G	N3-C4-C5	-12.25	122.48	128.60
35	BA	1315	U	C2-N3-C4	-12.25	119.65	127.00
35	BA	96	U	C5-C6-N1	-12.24	116.58	122.70
35	BA	231	U	O4'-C1'-N1	12.24	118.00	108.20
35	BA	413	G	C2-N3-C4	12.24	118.02	111.90
35	BA	1048	G	N3-C2-N2	-12.24	111.33	119.90
2	AB	1780	A	C8-N9-C4	-12.24	100.90	105.80
2	AB	643	A	C8-N9-C4	-12.23	100.91	105.80
2	AB	670	A	N1-C6-N6	12.23	125.94	118.60
35	BA	1010	U	C6-N1-C2	-12.23	113.66	121.00
35	BA	1244	G	C6-N1-C2	-12.23	117.76	125.10
35	BA	1523	G	C8-N9-C4	-12.23	101.51	106.40
36	BB	35	G	C6-N1-C2	-12.23	117.76	125.10
53	BS	61	ARG	NE-CZ-NH1	12.23	126.42	120.30
2	AB	2531	A	N1-C6-N6	12.23	125.94	118.60
1	AA	52	A	C1'-O4'-C4'	-12.23	100.12	109.90
2	AB	248	G	C2-N3-C4	12.23	118.01	111.90
2	AB	1196	C	N1-C2-O2	12.23	126.24	118.90
2	AB	2306	C	C4-C5-C6	12.23	123.51	117.40
2	AB	2740	A	C5-N7-C8	12.23	110.01	103.90
2	AB	2114	A	C5-C6-N1	12.22	123.81	117.70
37	BC	42	C	O4'-C1'-N1	12.22	117.98	108.20
2	AB	1529	G	C3'-C2'-C1'	12.22	111.27	101.50
2	AB	1660	G	O4'-C1'-N9	12.22	117.97	108.20
35	BA	38	G	C8-N9-C4	-12.21	101.51	106.40
32	A5	35	ARG	NE-CZ-NH1	12.21	126.41	120.30
2	AB	1943	U	O4'-C1'-N1	12.21	117.97	108.20
2	AB	2778	A	N7-C8-N9	12.21	119.91	113.80
35	BA	1525	G	C2-N3-C4	12.21	118.00	111.90
2	AB	2088	A	N9-C4-C5	-12.20	100.92	105.80
2	AB	2432	A	N9-C4-C5	12.20	110.68	105.80
2	AB	388	G	O4'-C1'-N9	12.20	117.96	108.20
2	AB	684	G	C4-C5-N7	-12.20	105.92	110.80
2	AB	2764	A	C8-N9-C4	-12.20	100.92	105.80
35	BA	627	G	N3-C4-C5	-12.20	122.50	128.60
35	BA	557	G	N3-C4-C5	-12.19	122.50	128.60
1	AA	7	G	C5-C6-O6	-12.19	121.28	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	743	A	N1-C6-N6	12.19	125.91	118.60
2	AB	2601	C	C6-N1-C2	-12.19	115.42	120.30
35	BA	710	G	C6-C5-N7	12.19	137.71	130.40
35	BA	1288	A	C5-N7-C8	-12.19	97.81	103.90
2	AB	1086	A	O4'-C1'-N9	12.18	117.94	108.20
2	AB	470	A	O4'-C1'-N9	12.17	117.94	108.20
2	AB	1232	G	O4'-C1'-N9	12.17	117.94	108.20
2	AB	1502	A	C5-C6-N1	12.17	123.79	117.70
2	AB	2411	A	N9-C4-C5	-12.17	100.93	105.80
39	BE	64	ARG	NE-CZ-NH2	-12.17	114.21	120.30
2	AB	1879	C	N3-C4-C5	-12.17	117.03	121.90
2	AB	2740	A	N9-C4-C5	12.17	110.67	105.80
2	AB	215	G	O4'-C1'-N9	12.17	117.94	108.20
2	AB	534	U	C6-N1-C2	-12.17	113.70	121.00
1	AA	59	A	C8-N9-C4	-12.16	100.93	105.80
2	AB	1899	A	N1-C6-N6	-12.16	111.30	118.60
2	AB	2380	C	C6-N1-C2	12.15	125.16	120.30
2	AB	1845	G	N3-C4-C5	-12.15	122.52	128.60
37	BC	43	G	C5-C6-O6	-12.15	121.31	128.60
2	AB	1829	A	N9-C4-C5	-12.14	100.94	105.80
35	BA	212	G	N9-C4-C5	12.13	110.25	105.40
2	AB	2391	G	C1'-O4'-C4'	12.13	119.61	109.90
2	AB	1455	G	N9-C4-C5	12.13	110.25	105.40
35	BA	738	C	O4'-C1'-N1	12.13	117.90	108.20
2	AB	1872	A	C8-N9-C4	-12.12	100.95	105.80
1	AA	7	G	C8-N9-C4	-12.12	101.55	106.40
2	AB	798	G	O4'-C1'-N9	12.12	117.90	108.20
35	BA	399	G	N3-C4-N9	12.12	133.27	126.00
2	AB	2829	A	N1-C6-N6	12.12	125.87	118.60
35	BA	202	G	C5-C6-N1	12.12	117.56	111.50
2	AB	2276	G	C2-N3-C4	12.11	117.96	111.90
2	AB	2708	G	N3-C2-N2	-12.11	111.42	119.90
2	AB	510	C	O4'-C1'-N1	12.11	117.89	108.20
2	AB	1092	C	O4'-C1'-N1	12.11	117.89	108.20
35	BA	506	G	C5-C6-N1	12.11	117.55	111.50
1	AA	33	G	C6-N1-C2	-12.11	117.84	125.10
2	AB	403	U	O4'-C1'-N1	12.11	117.89	108.20
2	AB	2895	G	O4'-C1'-N9	12.11	117.88	108.20
35	BA	444	G	C5-C6-O6	-12.11	121.34	128.60
35	BA	792	A	C2-N3-C4	12.11	116.65	110.60
35	BA	753	A	N9-C4-C5	12.10	110.64	105.80
2	AB	2122	U	N3-C2-O2	-12.10	113.73	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2281	A	N1-C6-N6	12.10	125.86	118.60
35	BA	34	C	C6-N1-C2	-12.10	115.46	120.30
35	BA	433	G	N3-C4-C5	-12.10	122.55	128.60
2	AB	1023	U	O4'-C1'-N1	12.10	117.88	108.20
2	AB	2597	G	C2-N3-C4	12.10	117.95	111.90
35	BA	228	A	O4'-C1'-N9	12.10	117.88	108.20
35	BA	812	G	N3-C4-C5	-12.09	122.55	128.60
2	AB	801	G	N7-C8-N9	12.09	119.14	113.10
2	AB	2652	C	C2-N3-C4	12.09	125.94	119.90
2	AB	1668	A	N7-C8-N9	-12.09	107.76	113.80
2	AB	2176	A	N1-C6-N6	-12.09	111.35	118.60
35	BA	306	A	C5-C6-N1	12.09	123.74	117.70
2	AB	1537	G	N3-C4-C5	-12.08	122.56	128.60
35	BA	691	G	C4-C5-N7	-12.08	105.97	110.80
2	AB	1904	G	C5-C6-N1	12.08	117.54	111.50
35	BA	647	C	O4'-C1'-N1	12.08	117.86	108.20
1	AA	58	A	C2-N3-C4	12.08	116.64	110.60
2	AB	932	U	C4'-C3'-C2'	-12.08	90.52	102.60
2	AB	2677	G	N9-C4-C5	12.08	110.23	105.40
35	BA	68	G	C8-N9-C4	-12.07	101.57	106.40
1	AA	85	G	C5-N7-C8	-12.07	98.27	104.30
2	AB	383	C	N3-C4-C5	-12.07	117.07	121.90
2	AB	1516	G	C8-N9-C4	-12.07	101.57	106.40
2	AB	1929	G	C8-N9-C4	-12.07	101.57	106.40
2	AB	1433	A	C8-N9-C4	-12.07	100.97	105.80
2	AB	584	C	N3-C2-O2	-12.06	113.46	121.90
38	BD	73	ARG	NE-CZ-NH1	12.06	126.33	120.30
1	AA	15	A	O4'-C1'-N9	12.05	117.84	108.20
2	AB	2287	A	C2-N3-C4	12.05	116.63	110.60
2	AB	219	A	C8-N9-C4	-12.04	100.98	105.80
35	BA	1074	G	N3-C4-C5	-12.04	122.58	128.60
35	BA	1156	G	C8-N9-C4	-12.04	101.58	106.40
35	BA	410	G	O4'-C1'-N9	12.04	117.83	108.20
2	AB	365	U	O4'-C1'-N1	12.04	117.83	108.20
2	AB	1675	C	N3-C4-C5	-12.03	117.09	121.90
4	AD	100	ARG	NE-CZ-NH1	12.03	126.31	120.30
35	BA	184	G	N9-C4-C5	12.03	110.21	105.40
2	AB	2057	G	N3-C4-N9	12.03	133.22	126.00
35	BA	705	G	C2-N3-C4	12.03	117.91	111.90
35	BA	1004	A	O4'-C1'-N9	-12.03	98.58	108.20
2	AB	2412	A	C8-N9-C4	-12.03	100.99	105.80
35	BA	1405	G	C6-N1-C2	-12.02	117.89	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	1162	C	N1-C2-O2	12.02	126.11	118.90
2	AB	645	C	C2-N3-C4	12.02	125.91	119.90
2	AB	2761	A	N7-C8-N9	12.02	119.81	113.80
35	BA	1089	G	C4-C5-N7	-12.02	105.99	110.80
37	BC	59	A	C4-C5-N7	-12.02	104.69	110.70
2	AB	2671	G	C2-N3-C4	12.01	117.91	111.90
35	BA	559	A	O4'-C1'-N9	12.01	117.81	108.20
2	AB	118	A	N7-C8-N9	12.01	119.81	113.80
35	BA	1187	G	C4-C5-N7	-12.01	106.00	110.80
35	BA	625	U	O4'-C1'-N1	12.01	117.80	108.20
2	AB	1004	U	O4'-C1'-N1	12.00	117.80	108.20
35	BA	765	G	O4'-C1'-N9	12.00	117.80	108.20
2	AB	32	C	C3'-C2'-C1'	12.00	111.10	101.50
2	AB	2803	G	N9-C4-C5	12.00	110.20	105.40
2	AB	2429	G	C4-C5-N7	-12.00	106.00	110.80
2	AB	2106	U	C5-C4-O4	-11.98	118.71	125.90
2	AB	621	A	N9-C1'-C2'	-11.98	98.43	114.00
2	AB	1126	A	C2-N3-C4	11.98	116.59	110.60
2	AB	326	G	C8-N9-C4	-11.97	101.61	106.40
2	AB	1673	G	N7-C8-N9	-11.97	107.11	113.10
2	AB	2573	C	N1-C2-O2	11.97	126.08	118.90
35	BA	165	G	N9-C4-C5	11.97	110.19	105.40
2	AB	372	G	N3-C4-C5	-11.97	122.62	128.60
2	AB	1988	G	C8-N9-C4	-11.97	101.61	106.40
35	BA	1089	G	N3-C4-C5	-11.97	122.62	128.60
2	AB	1212	G	O4'-C1'-N9	11.96	117.77	108.20
2	AB	1532	A	C5-C6-N1	-11.96	111.72	117.70
2	AB	2269	G	C5-C6-O6	-11.96	121.42	128.60
35	BA	64	G	C8-N9-C4	-11.96	101.62	106.40
2	AB	406	G	C4-C5-N7	-11.96	106.02	110.80
35	BA	563	A	C8-N9-C4	-11.96	101.02	105.80
2	AB	1651	G	C8-N9-C4	-11.95	101.62	106.40
2	AB	2193	G	N7-C8-N9	11.95	119.08	113.10
35	BA	161	A	N1-C2-N3	-11.95	123.32	129.30
2	AB	784	G	O4'-C1'-N9	11.95	117.76	108.20
2	AB	2667	C	N3-C4-C5	-11.95	117.12	121.90
16	AP	8	ARG	NE-CZ-NH2	11.95	126.27	120.30
2	AB	1422	G	C2-N3-C4	11.94	117.87	111.90
2	AB	1992	G	O4'-C1'-N9	11.94	117.75	108.20
2	AB	1985	C	N3-C4-N4	11.94	126.36	118.00
2	AB	332	A	C5-C6-N1	11.94	123.67	117.70
35	BA	610	U	O4'-C1'-N1	11.93	117.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1102	C	O4'-C1'-N1	11.93	117.75	108.20
2	AB	2168	G	N3-C2-N2	-11.93	111.55	119.90
35	BA	769	G	C5-N7-C8	-11.93	98.33	104.30
35	BA	21	G	N3-C4-C5	-11.93	122.64	128.60
35	BA	1354	U	C5-C6-N1	-11.93	116.74	122.70
2	AB	2801	G	C8-N9-C4	-11.93	101.63	106.40
35	BA	584	G	C4-C5-N7	-11.93	106.03	110.80
35	BA	497	G	C5-C6-O6	11.92	135.75	128.60
35	BA	1504	G	O4'-C1'-N9	11.92	117.73	108.20
45	BK	94	ARG	NE-CZ-NH1	11.92	126.26	120.30
35	BA	445	G	C8-N9-C4	-11.91	101.64	106.40
35	BA	1397	C	N1-C2-O2	11.91	126.05	118.90
2	AB	1525	A	C5-N7-C8	11.91	109.85	103.90
2	AB	1782	U	O4'-C1'-N1	11.90	117.72	108.20
2	AB	2396	G	O4'-C1'-N9	11.90	117.72	108.20
35	BA	849	G	C4-C5-N7	-11.90	106.04	110.80
35	BA	1351	U	C5-C6-N1	-11.90	116.75	122.70
2	AB	662	G	O4'-C1'-N9	11.90	117.72	108.20
2	AB	2536	G	C4-C5-N7	11.90	115.56	110.80
35	BA	764	C	N3-C4-C5	-11.90	117.14	121.90
2	AB	522	A	N1-C6-N6	-11.89	111.47	118.60
2	AB	1284	A	N9-C4-C5	11.89	110.56	105.80
2	AB	1560	G	C8-N9-C4	-11.89	101.64	106.40
2	AB	2107	G	O4'-C1'-N9	11.89	117.71	108.20
2	AB	989	G	N7-C8-N9	11.89	119.04	113.10
37	BC	1	C	C6-N1-C2	11.89	125.06	120.30
2	AB	1473	G	N9-C4-C5	11.88	110.15	105.40
35	BA	723	U	N3-C4-O4	11.88	127.72	119.40
2	AB	2806	C	O4'-C1'-N1	11.88	117.70	108.20
2	AB	283	G	C2-N3-C4	11.88	117.84	111.90
2	AB	1232	G	C8-N9-C4	-11.88	101.65	106.40
2	AB	409	G	N9-C4-C5	11.88	110.15	105.40
35	BA	388	G	O4'-C1'-N9	11.88	117.70	108.20
35	BA	1491	G	C2-N3-C4	11.87	117.83	111.90
2	AB	794	A	C5-N7-C8	11.86	109.83	103.90
2	AB	2340	A	C4-C5-N7	-11.86	104.77	110.70
35	BA	541	G	O4'-C1'-N9	11.86	117.69	108.20
2	AB	2048	G	N3-C4-C5	-11.86	122.67	128.60
40	BF	69	ARG	NE-CZ-NH1	11.86	126.23	120.30
2	AB	2246	G	C2-N3-C4	11.85	117.83	111.90
2	AB	2416	C	C6-N1-C2	-11.85	115.56	120.30
2	AB	2714	G	C8-N9-C4	-11.85	101.66	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2237	G	C5-C6-O6	-11.85	121.49	128.60
35	BA	258	G	C4'-C3'-C2'	-11.85	90.75	102.60
2	AB	254	G	N3-C4-C5	-11.85	122.68	128.60
2	AB	912	C	N3-C2-O2	-11.85	113.61	121.90
2	AB	1995	U	N1-C2-O2	11.85	131.09	122.80
2	AB	1581	G	N9-C4-C5	11.84	110.14	105.40
2	AB	1228	G	N1-C6-O6	-11.84	112.80	119.90
2	AB	2422	C	N1-C2-O2	11.84	126.00	118.90
35	BA	822	U	N3-C2-O2	-11.84	113.91	122.20
35	BA	1000	A	N1-C2-N3	-11.84	123.38	129.30
2	AB	2719	G	C8-N9-C4	-11.84	101.67	106.40
35	BA	1526	G	C4-C5-N7	-11.84	106.07	110.80
2	AB	5	A	C5-N7-C8	11.83	109.82	103.90
2	AB	183	C	C5-C6-N1	11.83	126.92	121.00
2	AB	2349	G	N3-C4-C5	-11.83	122.68	128.60
35	BA	17	U	N3-C2-O2	-11.82	113.92	122.20
35	BA	471	U	O4'-C1'-N1	11.82	117.66	108.20
35	BA	41	G	N3-C4-C5	-11.82	122.69	128.60
35	BA	1406	U	O4'-C1'-N1	11.82	117.66	108.20
2	AB	1056	G	C2-N3-C4	11.82	117.81	111.90
2	AB	1303	G	N3-C4-C5	-11.82	122.69	128.60
44	BJ	113	ARG	NE-CZ-NH2	11.81	126.21	120.30
1	AA	18	G	C6-C5-N7	-11.81	123.31	130.40
2	AB	1458	U	C6-N1-C2	-11.81	113.91	121.00
2	AB	2435	A	C5-C6-N1	-11.81	111.80	117.70
2	AB	878	A	N1-C6-N6	11.80	125.68	118.60
2	AB	1368	G	N9-C4-C5	11.81	110.12	105.40
35	BA	1092	A	N1-C2-N3	-11.81	123.40	129.30
37	BC	16	C	C5-C6-N1	11.80	126.90	121.00
2	AB	1388	G	N3-C4-C5	-11.80	122.70	128.60
2	AB	2544	G	C5-C6-O6	-11.80	121.52	128.60
35	BA	9	G	O4'-C1'-N9	11.80	117.64	108.20
35	BA	436	C	C6-N1-C2	-11.80	115.58	120.30
35	BA	1228	C	O4'-C1'-N1	11.80	117.64	108.20
2	AB	1023	U	C2-N3-C4	-11.80	119.92	127.00
35	BA	880	C	N1-C2-O2	11.79	125.98	118.90
35	BA	700	G	N3-C4-C5	-11.79	122.70	128.60
2	AB	1277	G	N1-C6-O6	-11.79	112.83	119.90
35	BA	742	G	N7-C8-N9	11.79	118.99	113.10
35	BA	1171	A	O4'-C1'-N9	11.79	117.63	108.20
2	AB	1655	A	C8-N9-C4	-11.79	101.09	105.80
2	AB	2195	U	O4'-C1'-N1	11.78	117.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	113	G	C8-N9-C4	-11.79	101.69	106.40
35	BA	623	C	C4-C5-C6	-11.79	111.51	117.40
35	BA	1191	A	C4-C5-C6	-11.79	111.11	117.00
2	AB	1101	U	O4'-C1'-N1	11.78	117.62	108.20
2	AB	1533	C	C5-C6-N1	11.78	126.89	121.00
2	AB	2177	C	N3-C2-O2	-11.78	113.65	121.90
35	BA	668	G	C6-C5-N7	-11.78	123.33	130.40
35	BA	869	G	C8-N9-C4	-11.78	101.69	106.40
35	BA	584	G	N3-C4-C5	-11.78	122.71	128.60
2	AB	700	G	O4'-C1'-N9	11.77	117.62	108.20
35	BA	97	G	N3-C4-C5	-11.77	122.71	128.60
2	AB	1028	A	N9-C4-C5	-11.77	101.09	105.80
2	AB	2080	A	N1-C2-N3	-11.77	123.42	129.30
2	AB	235	U	O4'-C1'-N1	11.77	117.61	108.20
2	AB	2755	C	N3-C4-C5	-11.77	117.19	121.90
2	AB	2844	G	C4-C5-N7	11.77	115.51	110.80
35	BA	19	A	C3'-C2'-C1'	-11.76	92.09	101.50
35	BA	43	C	N3-C2-O2	-11.76	113.67	121.90
35	BA	901	A	N1-C2-N3	-11.76	123.42	129.30
35	BA	1382	C	N3-C4-C5	-11.76	117.19	121.90
2	AB	727	A	O4'-C1'-N9	11.76	117.61	108.20
2	AB	1268	A	O4'-C1'-N9	11.76	117.61	108.20
2	AB	121	G	C6-N1-C2	-11.76	118.04	125.10
2	AB	2391	G	C8-N9-C4	-11.76	101.70	106.40
2	AB	2559	C	N1-C2-O2	11.76	125.95	118.90
2	AB	2	G	N3-C4-N9	11.75	133.05	126.00
35	BA	410	G	C8-N9-C4	-11.75	101.70	106.40
2	AB	1567	G	C8-N9-C4	-11.75	101.70	106.40
2	AB	2819	G	N3-C4-C5	-11.75	122.72	128.60
2	AB	2893	A	C4-C5-N7	11.75	116.58	110.70
35	BA	1240	U	C4-C5-C6	11.75	126.75	119.70
2	AB	2217	G	C8-N9-C4	-11.75	101.70	106.40
35	BA	894	G	N9-C4-C5	11.75	110.10	105.40
2	AB	418	C	O4'-C1'-N1	11.74	117.59	108.20
2	AB	1303	G	C2-N3-C4	11.74	117.77	111.90
2	AB	514	A	C5-C6-N1	-11.74	111.83	117.70
2	AB	923	G	C8-N9-C4	-11.74	101.70	106.40
2	AB	423	A	C2-N3-C4	11.74	116.47	110.60
2	AB	689	A	N1-C2-N3	-11.74	123.43	129.30
8	AH	93	TYR	CB-CG-CD1	-11.74	113.96	121.00
35	BA	568	G	N3-C4-C5	-11.73	122.73	128.60
40	BF	75	TYR	CB-CG-CD2	-11.73	113.96	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	974	A	N9-C4-C5	11.73	110.49	105.80
2	AB	1967	C	O4'-C1'-N1	11.72	117.58	108.20
35	BA	199	A	C8-N9-C4	-11.72	101.11	105.80
35	BA	1059	C	O4'-C1'-N1	11.72	117.58	108.20
35	BA	1094	G	N1-C2-N3	-11.72	116.86	123.90
2	AB	1422	G	N1-C2-N3	-11.72	116.87	123.90
2	AB	2341	G	C8-N9-C4	-11.72	101.71	106.40
2	AB	622	G	C5-C6-O6	-11.72	121.57	128.60
35	BA	506	G	N1-C6-O6	-11.72	112.87	119.90
2	AB	759	G	C5-N7-C8	-11.72	98.44	104.30
2	AB	2234	G	C2-N3-C4	11.71	117.76	111.90
2	AB	2153	C	N3-C4-C5	-11.71	117.22	121.90
35	BA	1048	G	C2-N3-C4	11.71	117.76	111.90
2	AB	1476	U	O4'-C1'-N1	11.71	117.57	108.20
2	AB	1479	G	N9-C4-C5	11.71	110.08	105.40
35	BA	989	U	O4'-C1'-N1	11.71	117.56	108.20
35	BA	1169	A	C4'-C3'-C2'	-11.71	90.89	102.60
2	AB	126	A	O4'-C1'-N9	11.70	117.56	108.20
35	BA	1048	G	N3-C4-C5	-11.70	122.75	128.60
35	BA	779	C	N3-C4-C5	11.70	126.58	121.90
2	AB	340	A	N1-C2-N3	-11.70	123.45	129.30
35	BA	1397	C	C3'-C2'-C1'	11.70	110.86	101.50
2	AB	370	G	O4'-C1'-N9	11.69	117.56	108.20
2	AB	2735	G	C4-C5-C6	11.70	125.82	118.80
35	BA	1373	G	C5-C6-O6	-11.70	121.58	128.60
2	AB	726	G	O4'-C1'-N9	11.69	117.55	108.20
35	BA	1164	G	N7-C8-N9	11.69	118.94	113.10
2	AB	2773	C	C4'-C3'-C2'	-11.69	90.91	102.60
35	BA	951	G	N1-C6-O6	-11.68	112.89	119.90
2	AB	146	A	O4'-C1'-N9	11.68	117.54	108.20
2	AB	22	C	O4'-C1'-N1	11.68	117.54	108.20
2	AB	493	G	C8-N9-C4	-11.67	101.73	106.40
2	AB	876	C	C6-N1-C2	11.67	124.97	120.30
2	AB	2871	U	C1'-O4'-C4'	-11.67	100.56	109.90
35	BA	865	A	C4-C5-C6	11.67	122.83	117.00
35	BA	1490	U	O4'-C1'-N1	11.67	117.53	108.20
42	BH	112	ARG	NE-CZ-NH2	-11.66	114.47	120.30
35	BA	415	A	N1-C2-N3	-11.66	123.47	129.30
2	AB	1390	U	C4-C5-C6	11.66	126.69	119.70
2	AB	361	G	C2-N3-C4	11.65	117.72	111.90
2	AB	1428	C	N1-C2-O2	11.65	125.89	118.90
2	AB	2663	G	O4'-C1'-N9	11.65	117.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	804	A	O4'-C1'-N9	11.64	117.52	108.20
2	AB	2094	A	C2-N3-C4	-11.64	104.78	110.60
2	AB	2582	G	C6-N1-C2	-11.64	118.11	125.10
52	BR	32	PHE	CB-CG-CD1	-11.64	112.65	120.80
2	AB	269	C	N3-C4-N4	-11.64	109.85	118.00
35	BA	1260	G	C8-N9-C4	-11.64	101.74	106.40
35	BA	880	C	C6-N1-C2	11.64	124.95	120.30
35	BA	973	G	C8-N9-C4	-11.64	101.75	106.40
35	BA	778	G	C5-C6-O6	-11.64	121.62	128.60
35	BA	802	A	O4'-C1'-N9	11.64	117.51	108.20
2	AB	2131	U	O4'-C1'-N1	11.63	117.51	108.20
2	AB	1897	G	N9-C4-C5	11.63	110.05	105.40
2	AB	2708	G	O4'-C1'-N9	11.63	117.50	108.20
2	AB	134	G	C1'-O4'-C4'	-11.63	100.60	109.90
2	AB	1972	G	N1-C6-O6	-11.63	112.92	119.90
2	AB	2697	G	N3-C4-C5	-11.63	122.79	128.60
2	AB	1077	A	C8-N9-C4	-11.63	101.15	105.80
2	AB	1226	A	N1-C6-N6	-11.62	111.63	118.60
35	BA	758	C	O4'-C1'-N1	11.62	117.50	108.20
35	BA	1048	G	N9-C4-C5	11.62	110.05	105.40
2	AB	969	G	N3-C4-C5	-11.62	122.79	128.60
35	BA	601	G	C6-N1-C2	-11.62	118.13	125.10
48	BN	37	TYR	CB-CG-CD1	11.62	127.97	121.00
39	BE	39	ARG	NE-CZ-NH1	11.62	126.11	120.30
2	AB	512	G	C2-N3-C4	11.61	117.71	111.90
35	BA	453	G	N9-C4-C5	-11.62	100.75	105.40
16	AP	118	ARG	NE-CZ-NH1	11.61	126.11	120.30
35	BA	902	G	N9-C4-C5	11.61	110.05	105.40
35	BA	209	U	C5-C6-N1	-11.61	116.89	122.70
2	AB	1743	G	N7-C8-N9	11.61	118.90	113.10
2	AB	1606	C	C4-C5-C6	-11.61	111.60	117.40
35	BA	1401	G	O4'-C1'-N9	11.61	117.48	108.20
35	BA	1403	C	O4'-C1'-N1	11.61	117.48	108.20
2	AB	1236	G	N3-C4-C5	-11.60	122.80	128.60
35	BA	530	G	N3-C2-N2	-11.60	111.78	119.90
35	BA	1288	A	N7-C8-N9	11.60	119.60	113.80
2	AB	1129	A	C5-C6-N1	11.60	123.50	117.70
2	AB	1685	C	N1-C2-O2	11.59	125.86	118.90
2	AB	1095	A	C2-N3-C4	11.59	116.40	110.60
2	AB	1279	G	N3-C4-N9	11.59	132.96	126.00
2	AB	2271	G	C5-N7-C8	-11.59	98.50	104.30
2	AB	1948	G	N1-C2-N3	11.59	130.85	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1247	A	C8-N9-C4	-11.59	101.17	105.80
2	AB	859	G	C2-N3-C4	11.59	117.69	111.90
2	AB	1555	G	C8-N9-C4	-11.59	101.77	106.40
2	AB	177	G	C2-N3-C4	11.58	117.69	111.90
2	AB	1748	C	O4'-C1'-N1	11.58	117.47	108.20
2	AB	2035	G	O4'-C1'-N9	11.58	117.47	108.20
2	AB	1332	G	C5-N7-C8	-11.58	98.51	104.30
15	AO	38	ARG	NE-CZ-NH1	11.58	126.09	120.30
2	AB	2315	G	C8-N9-C4	-11.58	101.77	106.40
35	BA	178	C	C4-C5-C6	-11.57	111.61	117.40
2	AB	2753	A	O4'-C1'-N9	11.57	117.46	108.20
2	AB	1055	G	C4-C5-N7	-11.57	106.17	110.80
35	BA	461	A	C8-N9-C4	-11.57	101.17	105.80
2	AB	236	C	N1-C2-O2	11.57	125.84	118.90
35	BA	41	G	C2-N3-C4	11.57	117.68	111.90
2	AB	1121	C	C4-C5-C6	11.57	123.18	117.40
35	BA	288	A	N7-C8-N9	11.57	119.58	113.80
35	BA	873	A	C8-N9-C4	-11.57	101.17	105.80
2	AB	969	G	N3-C2-N2	-11.56	111.80	119.90
2	AB	2886	A	C5-C6-N1	11.56	123.48	117.70
2	AB	2708	G	C5-C6-O6	-11.56	121.66	128.60
43	BI	118	ARG	NE-CZ-NH1	11.56	126.08	120.30
32	A5	3	ARG	NE-CZ-NH1	-11.56	114.52	120.30
35	BA	340	U	C5-C6-N1	-11.56	116.92	122.70
35	BA	971	G	C5-N7-C8	11.56	110.08	104.30
35	BA	1328	C	C5-C4-N4	-11.56	112.11	120.20
2	AB	11	C	C6-N1-C2	-11.55	115.68	120.30
2	AB	375	G	C5-C6-O6	-11.55	121.67	128.60
2	AB	684	G	C5-C6-O6	-11.55	121.67	128.60
2	AB	758	C	O4'-C1'-N1	11.55	117.44	108.20
26	AZ	2	ARG	NE-CZ-NH1	-11.55	114.52	120.30
35	BA	245	U	C4-C5-C6	11.55	126.63	119.70
35	BA	1066	C	N3-C4-C5	-11.55	117.28	121.90
1	AA	87	U	C5-C4-O4	11.55	132.83	125.90
2	AB	482	A	N7-C8-N9	11.55	119.58	113.80
37	BC	41	C	O4'-C1'-N1	11.55	117.44	108.20
35	BA	861	G	O4'-C1'-N9	11.55	117.44	108.20
2	AB	67	U	N1-C2-N3	11.55	121.83	114.90
2	AB	363	G	N3-C4-C5	-11.54	122.83	128.60
2	AB	570	G	N3-C4-N9	11.54	132.93	126.00
2	AB	1772	A	C2-N3-C4	11.54	116.37	110.60
2	AB	1862	G	C6-N1-C2	-11.54	118.18	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	286	C	C2-N3-C4	11.54	125.67	119.90
2	AB	2186	G	C4-C5-N7	-11.53	106.19	110.80
35	BA	361	G	C8-N9-C4	-11.53	101.79	106.40
2	AB	991	C	N3-C4-C5	-11.53	117.29	121.90
2	AB	1980	G	C1'-O4'-C4'	11.53	119.12	109.90
35	BA	508	U	C5'-C4'-O4'	11.53	122.93	109.10
2	AB	588	U	C5-C6-N1	-11.52	116.94	122.70
2	AB	1170	C	N3-C4-C5	-11.52	117.29	121.90
2	AB	1975	G	C5-C6-N1	11.52	117.26	111.50
35	BA	757	U	O4'-C1'-N1	11.52	117.42	108.20
2	AB	108	G	O4'-C1'-N9	11.52	117.42	108.20
2	AB	2447	G	N1-C6-O6	-11.52	112.99	119.90
35	BA	711	G	C4-C5-C6	11.52	125.71	118.80
8	AH	151	ARG	NE-CZ-NH2	-11.51	114.54	120.30
2	AB	2063	C	N3-C4-C5	-11.51	117.30	121.90
2	AB	2114	A	C4-C5-C6	-11.51	111.25	117.00
2	AB	1246	A	O4'-C1'-N9	11.51	117.41	108.20
2	AB	2479	U	C5-C6-N1	-11.51	116.95	122.70
35	BA	196	A	N1-C2-N3	-11.51	123.55	129.30
35	BA	1253	G	N9-C4-C5	11.51	110.00	105.40
2	AB	1566	A	C3'-C2'-C1'	11.50	110.70	101.50
7	AG	94	ARG	NE-CZ-NH2	11.50	126.05	120.30
2	AB	2341	G	N9-C4-C5	11.50	110.00	105.40
1	AA	4	C	N3-C4-C5	-11.50	117.30	121.90
2	AB	1780	A	N9-C4-C5	11.50	110.40	105.80
2	AB	455	C	C5-C6-N1	11.49	126.75	121.00
2	AB	1630	A	C2-N3-C4	11.49	116.35	110.60
35	BA	217	C	N3-C4-C5	11.49	126.50	121.90
2	AB	1663	G	N1-C6-O6	11.49	126.79	119.90
6	AF	170	ARG	NE-CZ-NH1	11.49	126.05	120.30
2	AB	332	A	N1-C6-N6	-11.49	111.71	118.60
2	AB	2419	U	O4'-C1'-N1	11.49	117.39	108.20
2	AB	427	U	N3-C2-O2	-11.49	114.16	122.20
2	AB	927	A	N1-C6-N6	-11.49	111.71	118.60
2	AB	2315	G	N7-C8-N9	11.49	118.84	113.10
2	AB	1124	G	N1-C6-O6	-11.48	113.01	119.90
2	AB	2234	G	N9-C4-C5	11.48	109.99	105.40
35	BA	190	A	C8-N9-C4	-11.48	101.21	105.80
2	AB	1806	C	N3-C4-C5	-11.48	117.31	121.90
2	AB	2801	G	C5-C6-N1	11.48	117.24	111.50
35	BA	1365	G	C8-N9-C4	-11.48	101.81	106.40
2	AB	1017	G	O4'-C1'-N9	11.48	117.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	326	G	N7-C8-N9	11.48	118.84	113.10
2	AB	1042	G	C5-N7-C8	-11.48	98.56	104.30
35	BA	972	C	C5-C6-N1	-11.48	115.26	121.00
2	AB	241	A	O4'-C1'-N9	11.47	117.38	108.20
2	AB	2855	C	C5-C4-N4	-11.47	112.17	120.20
35	BA	107	G	N7-C8-N9	11.47	118.84	113.10
53	BS	10	ARG	NE-CZ-NH1	11.47	126.04	120.30
2	AB	583	G	N3-C4-C5	-11.47	122.86	128.60
35	BA	499	A	O4'-C1'-N9	11.47	117.38	108.20
2	AB	52	A	N9-C4-C5	-11.47	101.21	105.80
2	AB	459	U	O4'-C1'-N1	11.47	117.38	108.20
2	AB	1483	G	N9-C4-C5	11.47	109.99	105.40
2	AB	855	G	C5-C6-O6	-11.47	121.72	128.60
2	AB	2056	G	C4-C5-N7	11.47	115.39	110.80
35	BA	272	C	C1'-O4'-C4'	-11.47	100.73	109.90
1	AA	56	G	C3'-C2'-C1'	11.47	110.67	101.50
2	AB	1459	G	N7-C8-N9	11.46	118.83	113.10
2	AB	2270	A	N9-C4-C5	11.46	110.39	105.80
2	AB	448	U	C5-C6-N1	11.46	128.43	122.70
2	AB	42	A	C2-N3-C4	11.46	116.33	110.60
2	AB	1259	G	N3-C4-C5	-11.46	122.87	128.60
2	AB	2021	C	C6-N1-C2	-11.46	115.72	120.30
35	BA	264	C	C4-C5-C6	-11.45	111.67	117.40
2	AB	1055	G	C1'-O4'-C4'	-11.45	100.74	109.90
2	AB	2164	C	C4-C5-C6	11.45	123.12	117.40
35	BA	1351	U	O4'-C1'-N1	11.45	117.36	108.20
2	AB	283	G	N1-C2-N3	-11.45	117.03	123.90
35	BA	1154	G	C4-C5-N7	11.45	115.38	110.80
2	AB	881	G	N7-C8-N9	11.44	118.82	113.10
2	AB	1226	A	C5-C6-N1	11.44	123.42	117.70
2	AB	2395	C	C6-N1-C2	-11.44	115.72	120.30
2	AB	2823	A	N9-C4-C5	11.44	110.38	105.80
35	BA	1531	A	N9-C4-C5	11.44	110.38	105.80
35	BA	585	G	N7-C8-N9	11.43	118.82	113.10
2	AB	99	U	O4'-C1'-N1	11.43	117.34	108.20
2	AB	315	G	N3-C4-C5	-11.43	122.89	128.60
35	BA	245	U	C5-C6-N1	-11.43	116.99	122.70
35	BA	1046	A	C2-N3-C4	11.43	116.31	110.60
35	BA	1208	C	N1-C2-O2	11.42	125.75	118.90
2	AB	46	G	C5-N7-C8	11.42	110.01	104.30
2	AB	490	C	C4-C5-C6	11.42	123.11	117.40
35	BA	108	G	N9-C4-C5	11.42	109.97	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	544	G	C8-N9-C4	-11.42	101.83	106.40
2	AB	594	U	C5-C6-N1	-11.42	116.99	122.70
2	AB	1992	G	N3-C4-C5	-11.42	122.89	128.60
2	AB	1274	A	C3'-C2'-C1'	-11.42	92.37	101.50
2	AB	2116	G	C2-N3-C4	11.41	117.61	111.90
35	BA	375	U	N3-C2-O2	-11.41	114.21	122.20
2	AB	1401	G	C5-C6-N1	11.41	117.20	111.50
35	BA	520	A	C5-N7-C8	-11.41	98.19	103.90
35	BA	1069	C	C3'-C2'-C1'	11.41	110.63	101.50
35	BA	1533	C	N1-C2-O2	11.41	125.75	118.90
2	AB	605	G	C8-N9-C4	-11.41	101.84	106.40
2	AB	1542	U	C2-N3-C4	-11.41	120.16	127.00
2	AB	2026	U	O4'-C1'-N1	11.41	117.33	108.20
2	AB	2218	G	C5-C6-O6	11.41	135.44	128.60
2	AB	728	G	O4'-C1'-N9	11.40	117.32	108.20
2	AB	1925	C	N3-C4-C5	11.40	126.46	121.90
35	BA	1479	C	O4'-C1'-N1	11.40	117.32	108.20
2	AB	2800	A	C2-N3-C4	-11.40	104.90	110.60
35	BA	1166	G	C8-N9-C4	-11.40	101.84	106.40
2	AB	356	G	N3-C4-C5	-11.40	122.90	128.60
2	AB	1623	G	C8-N9-C4	-11.40	101.84	106.40
2	AB	1843	C	O4'-C1'-N1	11.40	117.32	108.20
35	BA	1108	G	C4-C5-N7	-11.40	106.24	110.80
37	BC	50	G	C8-N9-C4	-11.40	101.84	106.40
35	BA	47	C	C2-N3-C4	11.39	125.60	119.90
35	BA	84	U	O4'-C1'-N1	11.39	117.32	108.20
2	AB	712	G	N1-C2-N3	-11.39	117.06	123.90
35	BA	589	U	C5-C4-O4	-11.39	119.06	125.90
2	AB	1082	U	O4'-C1'-N1	11.39	117.31	108.20
2	AB	1918	A	C5-C6-N6	-11.39	114.59	123.70
35	BA	1367	C	O4'-C1'-N1	11.39	117.31	108.20
2	AB	1888	G	N3-C4-C5	-11.38	122.91	128.60
35	BA	585	G	N3-C4-C5	-11.39	122.91	128.60
2	AB	1040	A	C3'-C2'-C1'	-11.38	92.39	101.50
29	A2	63	ARG	NE-CZ-NH2	-11.38	114.61	120.30
2	AB	1148	U	C5-C6-N1	-11.38	117.01	122.70
35	BA	1216	A	N9-C4-C5	11.38	110.35	105.80
2	AB	2348	U	N1-C2-N3	11.38	121.73	114.90
35	BA	812	G	C5-C6-N1	11.38	117.19	111.50
35	BA	545	C	C5-C6-N1	11.38	126.69	121.00
2	AB	1228	G	C5-C6-O6	11.37	135.43	128.60
2	AB	1112	G	C8-N9-C4	-11.37	101.85	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2788	C	N3-C2-O2	-11.37	113.94	121.90
35	BA	1014	A	C8-N9-C4	-11.37	101.25	105.80
2	AB	1243	C	C6-N1-C2	-11.37	115.75	120.30
2	AB	1429	G	N3-C4-N9	11.37	132.82	126.00
2	AB	2619	C	C6-N1-C2	11.37	124.85	120.30
35	BA	190	A	N9-C4-C5	11.37	110.35	105.80
2	AB	1071	G	N3-C4-C5	-11.37	122.92	128.60
2	AB	2688	G	C8-N9-C4	-11.37	101.85	106.40
2	AB	229	C	C4-C5-C6	-11.36	111.72	117.40
2	AB	1689	A	N1-C2-N3	11.36	134.98	129.30
2	AB	2533	U	O4'-C1'-N1	11.36	117.29	108.20
36	BB	18	A	N7-C8-N9	11.36	119.48	113.80
2	AB	50	U	N3-C2-O2	-11.36	114.25	122.20
2	AB	1639	C	C2-N3-C4	11.36	125.58	119.90
35	BA	965	U	O4'-C1'-N1	11.36	117.29	108.20
37	BC	67	C	C5-C6-N1	11.36	126.68	121.00
35	BA	675	A	C6-C5-N7	-11.36	124.35	132.30
2	AB	786	C	O4'-C1'-N1	11.35	117.28	108.20
35	BA	1155	A	N1-C2-N3	11.35	134.98	129.30
2	AB	1276	A	C2-N3-C4	11.35	116.28	110.60
2	AB	1491	G	N9-C4-C5	11.35	109.94	105.40
2	AB	1588	G	N3-C4-C5	-11.35	122.92	128.60
35	BA	215	C	O4'-C1'-N1	11.35	117.28	108.20
2	AB	1411	U	O4'-C1'-N1	11.35	117.28	108.20
2	AB	2297	A	C5-C6-N1	-11.35	112.03	117.70
2	AB	2875	C	N1-C2-O2	11.35	125.71	118.90
35	BA	1510	C	C6-N1-C2	-11.35	115.76	120.30
35	BA	1104	G	N3-C4-C5	-11.34	122.93	128.60
2	AB	1870	C	N3-C4-C5	-11.34	117.36	121.90
2	AB	2788	C	N1-C2-O2	11.34	125.70	118.90
35	BA	113	G	N9-C4-C5	11.34	109.94	105.40
35	BA	591	U	C5-C6-N1	-11.34	117.03	122.70
2	AB	864	G	C5-C6-N1	-11.34	105.83	111.50
2	AB	563	A	O4'-C1'-N9	11.33	117.27	108.20
2	AB	834	G	C5-N7-C8	-11.33	98.63	104.30
2	AB	2324	U	C5-C4-O4	-11.33	119.10	125.90
2	AB	2508	G	N3-C4-C5	-11.33	122.93	128.60
8	AH	162	ARG	NE-CZ-NH1	-11.33	114.64	120.30
35	BA	1349	A	C4-C5-C6	-11.33	111.33	117.00
47	BM	36	ARG	NE-CZ-NH1	11.33	125.96	120.30
35	BA	396	C	N3-C4-C5	-11.33	117.37	121.90
2	AB	1749	A	N9-C4-C5	11.32	110.33	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2495	G	N3-C4-N9	11.32	132.79	126.00
2	AB	2752	C	N1-C2-O2	11.32	125.69	118.90
2	AB	1823	G	C6-C5-N7	-11.32	123.61	130.40
2	AB	1238	G	N7-C8-N9	11.32	118.76	113.10
2	AB	27	G	C3'-C2'-C1'	11.31	110.55	101.50
2	AB	1828	G	O4'-C1'-N9	11.31	117.25	108.20
2	AB	2465	C	C5-C6-N1	11.31	126.66	121.00
35	BA	1311	A	C4-C5-N7	11.31	116.36	110.70
1	AA	47	C	O4'-C1'-N1	11.31	117.25	108.20
2	AB	45	G	O4'-C1'-N9	11.31	117.25	108.20
2	AB	490	C	C6-N1-C2	-11.31	115.78	120.30
2	AB	889	C	O4'-C1'-N1	11.31	117.25	108.20
2	AB	1654	A	C4-C5-C6	-11.31	111.35	117.00
2	AB	2551	C	C5-C4-N4	-11.31	112.28	120.20
2	AB	2740	A	C4-C5-N7	-11.30	105.05	110.70
39	BE	64	ARG	NE-CZ-NH1	11.30	125.95	120.30
2	AB	2101	A	C4-C5-C6	-11.30	111.35	117.00
2	AB	36	G	N3-C4-C5	-11.30	122.95	128.60
35	BA	79	G	N3-C4-C5	-11.29	122.95	128.60
2	AB	202	U	C5-C6-N1	-11.29	117.05	122.70
2	AB	481	G	N3-C4-C5	-11.29	122.95	128.60
35	BA	1181	G	C8-N9-C4	-11.29	101.88	106.40
2	AB	1191	G	O4'-C1'-N9	11.29	117.23	108.20
2	AB	1898	U	O4'-C1'-N1	11.29	117.23	108.20
2	AB	2062	A	C5-C6-N1	11.29	123.34	117.70
35	BA	378	G	C5-N7-C8	-11.29	98.66	104.30
2	AB	1018	U	O4'-C1'-N1	11.29	117.23	108.20
27	A0	26	PHE	CB-CG-CD2	11.29	128.70	120.80
35	BA	1057	G	N9-C4-C5	11.29	109.92	105.40
35	BA	1076	U	C5-C6-N1	11.29	128.34	122.70
2	AB	1272	A	O4'-C1'-N9	11.28	117.23	108.20
2	AB	2323	G	C5-C6-N1	11.28	117.14	111.50
35	BA	947	G	C5-N7-C8	-11.28	98.66	104.30
35	BA	1235	U	O4'-C1'-N1	11.28	117.23	108.20
36	BB	15	G	C2-N3-C4	11.28	117.54	111.90
2	AB	518	G	C8-N9-C4	-11.28	101.89	106.40
2	AB	1425	G	N3-C4-C5	-11.28	122.96	128.60
2	AB	320	A	C4-C5-N7	11.28	116.34	110.70
35	BA	743	A	C5-C6-N1	-11.28	112.06	117.70
35	BA	786	G	C2-N3-C4	11.28	117.54	111.90
2	AB	2752	C	O4'-C1'-N1	11.27	117.22	108.20
35	BA	1362	A	N7-C8-N9	11.27	119.44	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1448	C	C6-N1-C2	-11.27	115.79	120.30
2	AB	1935	G	O4'-C1'-N9	11.27	117.22	108.20
2	AB	73	A	C1'-O4'-C4'	-11.27	100.88	109.90
2	AB	1622	G	C8-N9-C4	11.27	110.91	106.40
35	BA	94	G	C5-N7-C8	11.27	109.94	104.30
2	AB	1344	U	N3-C2-O2	-11.27	114.31	122.20
2	AB	556	A	C1'-O4'-C4'	-11.26	100.89	109.90
2	AB	1982	U	O4'-C1'-N1	11.26	117.21	108.20
35	BA	43	C	C5-C4-N4	-11.26	112.32	120.20
35	BA	1514	G	N7-C8-N9	11.26	118.73	113.10
2	AB	518	G	C5-C6-O6	-11.26	121.84	128.60
2	AB	248	G	N1-C6-O6	-11.26	113.14	119.90
2	AB	461	C	N3-C4-C5	11.26	126.40	121.90
35	BA	27	G	C4-C5-N7	-11.26	106.30	110.80
35	BA	1041	G	C6-N1-C2	-11.26	118.34	125.10
1	AA	99	A	C8-N9-C4	-11.26	101.30	105.80
2	AB	1010	A	C8-N9-C4	-11.26	101.30	105.80
2	AB	1423	G	O4'-C1'-N9	11.26	117.21	108.20
35	BA	581	G	C4-C5-C6	11.25	125.55	118.80
2	AB	647	G	N3-C4-N9	11.25	132.75	126.00
2	AB	1525	A	N7-C8-N9	-11.25	108.17	113.80
2	AB	683	U	C2-N3-C4	-11.25	120.25	127.00
2	AB	2673	G	C5-C6-N1	11.25	117.12	111.50
2	AB	700	G	C2-N3-C4	11.25	117.52	111.90
2	AB	966	G	C6-N1-C2	-11.25	118.35	125.10
35	BA	230	G	C4-C5-N7	-11.25	106.30	110.80
37	BC	77	A	C2-N3-C4	11.24	116.22	110.60
2	AB	1840	G	C2-N3-C4	11.24	117.52	111.90
2	AB	1515	A	O4'-C1'-N9	11.24	117.19	108.20
35	BA	84	U	N3-C2-O2	-11.24	114.33	122.20
2	AB	2357	G	N9-C4-C5	11.24	109.89	105.40
35	BA	1065	U	N3-C2-O2	-11.24	114.33	122.20
35	BA	1152	A	C4-C5-C6	-11.24	111.38	117.00
35	BA	1360	A	N9-C4-C5	11.24	110.29	105.80
2	AB	2243	U	O4'-C1'-N1	11.23	117.19	108.20
2	AB	2101	A	C5-C6-N1	11.23	123.32	117.70
2	AB	1601	G	C5-C6-N1	11.23	117.11	111.50
2	AB	2412	A	N9-C4-C5	11.23	110.29	105.80
2	AB	944	C	N1-C2-O2	11.23	125.64	118.90
43	BI	91	ARG	NE-CZ-NH2	11.23	125.91	120.30
2	AB	2057	G	C4-C5-N7	11.22	115.29	110.80
23	AW	6	ARG	NE-CZ-NH2	11.22	125.91	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	386	C	N1-C2-O2	11.22	125.63	118.90
35	BA	394	G	C2-N3-C4	11.22	117.51	111.90
35	BA	711	G	C8-N9-C4	-11.22	101.91	106.40
2	AB	1743	G	C8-N9-C4	-11.22	101.91	106.40
35	BA	1331	G	C2-N3-C4	11.22	117.51	111.90
35	BA	631	C	N1-C2-O2	11.22	125.63	118.90
2	AB	1735	A	C6-C5-N7	11.22	140.15	132.30
52	BR	51	ARG	NE-CZ-NH2	-11.22	114.69	120.30
2	AB	1864	U	C3'-C2'-C1'	11.21	110.47	101.50
1	AA	13	G	N9-C4-C5	11.21	109.88	105.40
2	AB	2301	C	N3-C4-C5	-11.21	117.42	121.90
35	BA	1482	G	C8-N9-C4	-11.21	101.92	106.40
2	AB	2200	C	O4'-C1'-N1	11.21	117.17	108.20
35	BA	534	U	O4'-C1'-N1	11.21	117.17	108.20
2	AB	318	C	O4'-C1'-N1	11.21	117.17	108.20
2	AB	584	C	O4'-C1'-N1	11.21	117.17	108.20
2	AB	2515	C	O4'-C1'-N1	11.21	117.16	108.20
35	BA	1053	G	C8-N9-C4	-11.21	101.92	106.40
2	AB	1003	G	N3-C4-C5	-11.20	123.00	128.60
2	AB	1177	G	N3-C2-N2	-11.20	112.06	119.90
2	AB	1776	G	C8-N9-C4	-11.20	101.92	106.40
2	AB	362	A	N9-C4-C5	-11.19	101.32	105.80
2	AB	514	A	C2-N3-C4	-11.19	105.00	110.60
35	BA	18	C	C3'-C2'-C1'	-11.20	92.54	101.50
2	AB	484	C	C4-C5-C6	-11.19	111.80	117.40
2	AB	707	G	C8-N9-C4	-11.19	101.92	106.40
2	AB	859	G	N1-C2-N3	-11.19	117.19	123.90
2	AB	1358	G	C4-C5-N7	-11.19	106.32	110.80
35	BA	776	G	C2-N3-C4	11.19	117.50	111.90
2	AB	1320	C	N1-C2-O2	11.19	125.61	118.90
2	AB	1630	A	C4-C5-C6	11.19	122.59	117.00
35	BA	27	G	C6-C5-N7	11.19	137.11	130.40
2	AB	308	G	C4-C5-N7	-11.19	106.33	110.80
2	AB	2738	A	C8-N9-C4	-11.19	101.33	105.80
2	AB	1095	A	N1-C2-N3	-11.18	123.71	129.30
2	AB	737	C	O4'-C1'-N1	11.18	117.14	108.20
2	AB	2026	U	N3-C2-O2	-11.18	114.37	122.20
2	AB	54	G	C2-N3-C4	11.18	117.49	111.90
2	AB	1345	C	O4'-C1'-N1	11.18	117.14	108.20
2	AB	2425	A	N9-C4-C5	11.18	110.27	105.80
2	AB	2581	G	C4-C5-N7	-11.18	106.33	110.80
2	AB	2096	C	N1-C2-O2	11.18	125.61	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1072	C	C5-C6-N1	11.17	126.59	121.00
2	AB	846	U	C1'-O4'-C4'	-11.17	100.96	109.90
2	AB	1848	A	C8-N9-C4	-11.17	101.33	105.80
35	BA	670	G	C6-N1-C2	-11.17	118.40	125.10
2	AB	185	G	C6-N1-C2	-11.17	118.40	125.10
2	AB	212	G	N9-C1'-C2'	-11.17	99.48	114.00
2	AB	431	U	C4'-C3'-C2'	-11.17	91.43	102.60
2	AB	1037	G	N7-C8-N9	11.17	118.68	113.10
2	AB	629	G	C8-N9-C4	-11.16	101.93	106.40
35	BA	468	A	C5'-C4'-O4'	11.16	122.50	109.10
35	BA	1361	G	N7-C8-N9	11.16	118.68	113.10
2	AB	872	U	C3'-C2'-C1'	11.16	110.43	101.50
37	BC	6	G	C5-C6-N1	11.16	117.08	111.50
2	AB	1733	G	C5-C6-O6	-11.16	121.90	128.60
2	AB	2358	A	C5-N7-C8	-11.16	98.32	103.90
35	BA	739	C	N3-C4-N4	11.16	125.81	118.00
2	AB	812	C	N3-C4-C5	-11.16	117.44	121.90
2	AB	588	U	C2-N3-C4	-11.15	120.31	127.00
2	AB	748	G	O4'-C1'-N9	11.15	117.12	108.20
2	AB	2462	C	C4-C5-C6	-11.15	111.82	117.40
2	AB	2847	U	C4-C5-C6	11.15	126.39	119.70
2	AB	2357	G	N3-C4-C5	-11.15	123.02	128.60
2	AB	2437	G	C2-N3-C4	11.15	117.47	111.90
2	AB	152	A	N7-C8-N9	11.15	119.37	113.80
2	AB	634	C	C6-N1-C2	-11.15	115.84	120.30
35	BA	964	A	C6-C5-N7	11.15	140.10	132.30
35	BA	918	A	C8-N9-C4	11.15	110.26	105.80
2	AB	2050	C	N3-C4-C5	-11.14	117.44	121.90
2	AB	1569	A	C5-C6-N1	11.14	123.27	117.70
2	AB	2654	A	C6-C5-N7	11.14	140.10	132.30
35	BA	475	C	N3-C4-C5	-11.14	117.44	121.90
2	AB	2532	G	C8-N9-C4	-11.14	101.94	106.40
2	AB	2615	U	C5-C4-O4	-11.14	119.22	125.90
35	BA	800	G	C5-N7-C8	-11.14	98.73	104.30
35	BA	486	U	O4'-C1'-N1	11.14	117.11	108.20
35	BA	1085	U	N3-C2-O2	-11.14	114.40	122.20
35	BA	1126	U	N3-C2-O2	-11.13	114.41	122.20
35	BA	766	A	C6-C5-N7	11.13	140.09	132.30
2	AB	1296	G	C8-N9-C4	-11.13	101.95	106.40
2	AB	2127	G	C2-N3-C4	11.13	117.46	111.90
35	BA	110	C	C1'-O4'-C4'	-11.13	101.00	109.90
2	AB	546	U	C5-C6-N1	-11.12	117.14	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1016	A	N7-C8-N9	11.12	119.36	113.80
2	AB	132	G	N9-C4-C5	11.12	109.85	105.40
2	AB	517	C	O4'-C1'-N1	11.12	117.10	108.20
35	BA	573	A	C4-C5-C6	-11.12	111.44	117.00
35	BA	1349	A	N1-C6-N6	-11.12	111.93	118.60
2	AB	1138	G	C5-C6-O6	-11.12	121.93	128.60
2	AB	1273	U	O4'-C1'-N1	11.11	117.09	108.20
35	BA	674	G	N9-C4-C5	11.12	109.85	105.40
35	BA	1155	A	C2-N3-C4	-11.12	105.04	110.60
1	AA	67	G	C5-C6-O6	-11.11	121.93	128.60
35	BA	210	C	N3-C4-C5	-11.11	117.46	121.90
2	AB	642	U	O4'-C1'-N1	11.11	117.09	108.20
2	AB	795	C	C2-N3-C4	11.11	125.45	119.90
2	AB	1580	A	N7-C8-N9	11.11	119.36	113.80
2	AB	83	A	N9-C4-C5	11.11	110.24	105.80
2	AB	758	C	C4-C5-C6	11.11	122.95	117.40
2	AB	768	G	C8-N9-C4	-11.10	101.96	106.40
2	AB	2025	C	C6-N1-C2	-11.10	115.86	120.30
2	AB	1000	A	C5'-C4'-O4'	11.10	122.42	109.10
2	AB	983	A	O4'-C1'-N9	11.10	117.08	108.20
2	AB	2443	C	N1-C2-O2	11.10	125.56	118.90
2	AB	2825	G	N9-C4-C5	11.10	109.84	105.40
10	AJ	152	ARG	NE-CZ-NH1	11.10	125.85	120.30
35	BA	160	A	C8-N9-C4	-11.10	101.36	105.80
1	AA	111	U	O4'-C1'-N1	11.09	117.08	108.20
35	BA	1023	U	C5-C6-N1	-11.09	117.16	122.70
35	BA	766	A	C5-C6-N1	11.09	123.24	117.70
2	AB	2638	G	N3-C4-N9	11.09	132.65	126.00
2	AB	2407	A	C8-N9-C4	-11.08	101.37	105.80
35	BA	626	G	C5-N7-C8	-11.08	98.76	104.30
35	BA	706	A	N9-C4-C5	11.08	110.23	105.80
37	BC	48	U	O4'-C1'-N1	11.08	117.06	108.20
35	BA	1510	C	C5-C6-N1	11.08	126.54	121.00
2	AB	339	U	O4'-C1'-N1	11.08	117.06	108.20
2	AB	1520	U	C2-N3-C4	-11.08	120.35	127.00
2	AB	2846	G	O4'-C1'-N9	11.08	117.06	108.20
2	AB	971	G	N9-C4-C5	11.07	109.83	105.40
35	BA	639	G	N9-C4-C5	11.07	109.83	105.40
39	BE	228	ARG	NE-CZ-NH1	11.07	125.84	120.30
2	AB	364	C	N1-C2-O2	11.07	125.54	118.90
2	AB	1275	A	O4'-C1'-N9	11.07	117.06	108.20
2	AB	1945	G	C5-N7-C8	-11.07	98.76	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	223	A	N7-C8-N9	11.07	119.33	113.80
35	BA	606	G	O4'-C1'-N9	-11.07	99.34	108.20
1	AA	8	C	N3-C4-C5	11.07	126.33	121.90
35	BA	1000	A	C4-C5-C6	-11.07	111.47	117.00
2	AB	531	C	N3-C4-C5	-11.07	117.47	121.90
35	BA	273	U	C4-C5-C6	11.06	126.34	119.70
9	AI	68	ARG	NE-CZ-NH1	11.06	125.83	120.30
35	BA	956	U	C2-N3-C4	-11.06	120.36	127.00
35	BA	1157	A	N1-C2-N3	-11.06	123.77	129.30
36	BB	36	U	O4'-C1'-N1	11.06	117.05	108.20
45	BK	37	TYR	CB-CG-CD1	-11.06	114.36	121.00
2	AB	2466	C	N3-C4-N4	11.06	125.74	118.00
2	AB	2812	G	N3-C4-C5	-11.06	123.07	128.60
35	BA	755	G	C4-C5-N7	-11.06	106.38	110.80
35	BA	993	G	C6-C5-N7	-11.06	123.77	130.40
45	BK	129	ARG	NE-CZ-NH2	-11.06	114.77	120.30
2	AB	2181	U	O4'-C1'-N1	11.06	117.05	108.20
2	AB	2585	U	O4'-C1'-N1	11.05	117.04	108.20
1	AA	106	G	O4'-C1'-N9	11.05	117.04	108.20
35	BA	374	A	N7-C8-N9	11.05	119.33	113.80
35	BA	1437	A	N1-C2-N3	11.05	134.82	129.30
2	AB	257	C	N3-C2-O2	-11.04	114.17	121.90
2	AB	1284	A	O4'-C1'-N9	11.04	117.03	108.20
2	AB	2127	G	N3-C4-C5	-11.04	123.08	128.60
2	AB	2321	U	C5-C4-O4	11.04	132.52	125.90
35	BA	214	C	N1-C2-O2	11.04	125.52	118.90
35	BA	884	U	O4'-C1'-N1	11.04	117.03	108.20
1	AA	34	A	N9-C4-C5	-11.04	101.39	105.80
2	AB	80	G	O4'-C1'-N9	11.03	117.03	108.20
35	BA	53	A	C8-N9-C4	-11.03	101.39	105.80
35	BA	518	C	O4'-C1'-N1	11.03	117.03	108.20
2	AB	1620	G	N1-C2-N2	11.03	126.12	116.20
35	BA	769	G	C4-C5-N7	11.03	115.21	110.80
35	BA	1517	G	C8-N9-C4	-11.03	101.99	106.40
2	AB	1290	C	C5-C6-N1	-11.02	115.49	121.00
2	AB	1968	G	O4'-C1'-N9	11.02	117.02	108.20
2	AB	467	G	C4-C5-N7	-11.02	106.39	110.80
2	AB	1747	U	N3-C2-O2	-11.02	114.48	122.20
36	BB	28	U	C1'-O4'-C4'	-11.02	101.08	109.90
1	AA	110	C	N3-C4-N4	11.02	125.71	118.00
2	AB	890	C	N3-C4-N4	11.02	125.71	118.00
2	AB	2487	G	C8-N9-C4	-11.02	101.99	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	885	G	C8-N9-C4	-11.02	101.99	106.40
35	BA	895	G	N3-C2-N2	11.02	127.61	119.90
35	BA	1100	C	N3-C4-C5	-11.02	117.49	121.90
2	AB	164	C	O4'-C1'-N1	11.02	117.01	108.20
2	AB	2777	G	C2-N3-C4	11.02	117.41	111.90
35	BA	1252	A	C2-N3-C4	-11.02	105.09	110.60
2	AB	763	G	N7-C8-N9	11.02	118.61	113.10
2	AB	1928	A	N1-C6-N6	-11.02	111.99	118.60
2	AB	2670	A	C5'-C4'-O4'	11.02	122.32	109.10
35	BA	539	A	C8-N9-C4	11.02	110.21	105.80
35	BA	1048	G	N1-C2-N2	11.02	126.11	116.20
2	AB	526	A	O4'-C1'-N9	-11.01	99.39	108.20
2	AB	2237	G	C1'-O4'-C4'	-11.01	101.09	109.90
18	AR	98	TYR	CB-CG-CD2	-11.01	114.39	121.00
35	BA	826	C	O4'-C1'-N1	11.01	117.01	108.20
35	BA	930	C	C5-C4-N4	-11.01	112.49	120.20
57	BW	68	ARG	NE-CZ-NH2	-11.01	114.79	120.30
2	AB	612	G	C4-C5-N7	-11.01	106.40	110.80
33	A6	12	ARG	NE-CZ-NH1	11.01	125.80	120.30
2	AB	1585	C	O4'-C1'-N1	11.01	117.01	108.20
2	AB	1153	C	N3-C4-N4	11.01	125.70	118.00
2	AB	1798	U	N1-C1'-C2'	-11.01	99.69	114.00
2	AB	1386	C	C4-C5-C6	-11.00	111.90	117.40
35	BA	1355	G	N3-C4-N9	11.00	132.60	126.00
2	AB	1179	G	C8-N9-C4	-11.00	102.00	106.40
2	AB	1811	G	N3-C4-C5	-11.00	123.10	128.60
57	BW	65	ARG	NE-CZ-NH2	-11.00	114.80	120.30
2	AB	8	C	C1'-O4'-C4'	11.00	118.70	109.90
2	AB	2518	A	N1-C2-N3	-11.00	123.80	129.30
26	AZ	28	PHE	CB-CG-CD1	-11.00	113.10	120.80
35	BA	1048	G	C8-N9-C4	-11.00	102.00	106.40
35	BA	1198	G	O4'-C1'-N9	11.00	117.00	108.20
50	BP	74	ARG	NE-CZ-NH2	-11.00	114.80	120.30
2	AB	738	G	N3-C4-C5	-10.99	123.10	128.60
2	AB	2789	C	N3-C4-N4	10.99	125.70	118.00
2	AB	1358	G	C2-N3-C4	10.99	117.40	111.90
35	BA	766	A	N1-C6-N6	-10.99	112.00	118.60
35	BA	819	A	N7-C8-N9	10.99	119.30	113.80
2	AB	152	A	C5-C6-N1	-10.99	112.21	117.70
2	AB	723	C	N3-C4-C5	-10.99	117.50	121.90
35	BA	758	C	C2-N3-C4	10.99	125.39	119.90
40	BF	19	PHE	CB-CG-CD1	10.99	128.49	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1001	A	C6-C5-N7	10.99	139.99	132.30
2	AB	2490	G	C2-N3-C4	10.99	117.39	111.90
35	BA	777	A	C8-N9-C4	-10.99	101.41	105.80
2	AB	759	G	N7-C8-N9	10.98	118.59	113.10
35	BA	1065	U	N1-C2-O2	10.98	130.49	122.80
2	AB	1640	A	C8-N9-C4	-10.98	101.41	105.80
2	AB	1737	G	C2-N3-C4	10.98	117.39	111.90
35	BA	1009	U	O4'-C1'-N1	10.98	116.98	108.20
35	BA	865	A	C5-N7-C8	10.97	109.39	103.90
2	AB	1872	A	N9-C4-C5	10.97	110.19	105.80
35	BA	1147	C	C6-N1-C2	-10.97	115.91	120.30
2	AB	864	G	C6-C5-N7	-10.97	123.82	130.40
35	BA	574	A	C2-N3-C4	10.97	116.09	110.60
37	BC	4	G	O4'-C1'-N9	10.97	116.98	108.20
2	AB	1910	G	N7-C8-N9	10.97	118.58	113.10
2	AB	647	G	N9-C4-C5	-10.97	101.01	105.40
2	AB	2029	G	N3-C2-N2	10.97	127.58	119.90
2	AB	866	A	N1-C6-N6	10.96	125.18	118.60
2	AB	2391	G	O4'-C1'-N9	10.96	116.97	108.20
35	BA	530	G	C4-C5-C6	10.96	125.38	118.80
37	BC	50	G	N9-C4-C5	10.96	109.78	105.40
47	BM	10	ARG	NE-CZ-NH1	-10.96	114.82	120.30
35	BA	877	G	N9-C1'-C2'	-10.96	99.76	114.00
2	AB	1703	G	N3-C4-C5	-10.95	123.12	128.60
2	AB	2102	G	C4-C5-N7	10.95	115.18	110.80
35	BA	603	U	N3-C4-O4	10.95	127.07	119.40
41	BG	53	ARG	NE-CZ-NH1	10.95	125.78	120.30
2	AB	350	G	C8-N9-C4	-10.95	102.02	106.40
2	AB	1075	C	N3-C4-C5	10.95	126.28	121.90
2	AB	1897	G	N3-C4-C5	-10.95	123.12	128.60
35	BA	630	A	O4'-C1'-N9	10.95	116.96	108.20
37	BC	42	C	N3-C4-N4	10.95	125.66	118.00
2	AB	2751	G	C5-C6-N1	10.95	116.97	111.50
35	BA	1313	U	O4'-C1'-N1	10.95	116.96	108.20
37	BC	64	G	N3-C4-C5	-10.95	123.13	128.60
2	AB	1532	A	C4-C5-N7	-10.94	105.23	110.70
2	AB	810	U	C2-N3-C4	-10.94	120.44	127.00
2	AB	1569	A	N1-C6-N6	-10.94	112.04	118.60
2	AB	2009	A	N1-C6-N6	-10.94	112.04	118.60
2	AB	2070	A	N9-C4-C5	-10.94	101.42	105.80
35	BA	2	A	C4-C5-N7	-10.94	105.23	110.70
35	BA	940	C	C6-N1-C2	-10.94	115.93	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	671	C	O4'-C1'-N1	10.93	116.95	108.20
35	BA	564	C	O4'-C1'-N1	10.93	116.95	108.20
35	BA	273	U	N3-C4-C5	-10.93	108.04	114.60
35	BA	1280	A	C8-N9-C4	-10.93	101.43	105.80
2	AB	637	A	N1-C6-N6	-10.93	112.04	118.60
2	AB	1599	U	O4'-C1'-N1	10.93	116.94	108.20
2	AB	1980	G	N7-C8-N9	10.93	118.56	113.10
2	AB	2662	A	C8-N9-C4	-10.93	101.43	105.80
2	AB	2864	G	N7-C8-N9	10.93	118.56	113.10
35	BA	800	G	N7-C8-N9	10.93	118.56	113.10
2	AB	498	G	C5-C6-N1	10.93	116.96	111.50
2	AB	2529	G	C2-N3-C4	10.93	117.36	111.90
2	AB	97	C	N1-C2-O2	10.92	125.45	118.90
2	AB	2324	U	N3-C4-O4	10.92	127.05	119.40
35	BA	595	A	N1-C6-N6	10.92	125.15	118.60
2	AB	98	G	C4-C5-C6	10.92	125.35	118.80
2	AB	1663	G	C5-C6-O6	-10.92	122.05	128.60
35	BA	274	A	C4-C5-N7	-10.92	105.24	110.70
35	BA	1033	G	C2-N3-C4	10.92	117.36	111.90
35	BA	1269	A	C2-N3-C4	10.92	116.06	110.60
2	AB	31	C	C5'-C4'-O4'	10.91	122.20	109.10
2	AB	370	G	N3-C4-C5	-10.91	123.14	128.60
2	AB	763	G	C4-C5-N7	10.91	115.17	110.80
2	AB	2421	G	N3-C4-C5	-10.91	123.14	128.60
2	AB	2623	G	N1-C2-N3	10.91	130.45	123.90
35	BA	1291	U	N3-C2-O2	-10.91	114.56	122.20
2	AB	532	A	N7-C8-N9	10.91	119.25	113.80
35	BA	998	C	C5-C6-N1	10.91	126.46	121.00
2	AB	1351	C	O4'-C1'-N1	10.91	116.93	108.20
35	BA	936	C	C4-C5-C6	-10.91	111.94	117.40
35	BA	816	A	C5-N7-C8	-10.91	98.45	103.90
2	AB	759	G	C8-N9-C4	-10.91	102.04	106.40
49	BO	91	ARG	NE-CZ-NH2	-10.91	114.85	120.30
2	AB	1905	C	C1'-O4'-C4'	-10.90	101.18	109.90
35	BA	79	G	N1-C6-O6	10.90	126.44	119.90
35	BA	809	G	C4'-C3'-C2'	-10.90	91.70	102.60
35	BA	1275	A	N7-C8-N9	10.90	119.25	113.80
2	AB	2261	C	C5-C4-N4	-10.90	112.57	120.20
35	BA	1381	U	N3-C4-C5	10.90	121.14	114.60
2	AB	2655	G	N1-C6-O6	-10.90	113.36	119.90
27	A0	47	ARG	NE-CZ-NH1	-10.90	114.85	120.30
35	BA	101	A	N1-C2-N3	-10.90	123.85	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	573	A	N1-C6-N6	-10.90	112.06	118.60
35	BA	816	A	C8-N9-C4	-10.90	101.44	105.80
35	BA	352	C	N3-C4-C5	-10.90	117.54	121.90
2	AB	261	G	C6-N1-C2	-10.89	118.56	125.10
2	AB	2539	C	C6-N1-C2	-10.89	115.94	120.30
2	AB	2737	G	N3-C4-C5	-10.89	123.15	128.60
48	BN	120	ARG	NE-CZ-NH1	10.89	125.75	120.30
2	AB	1337	G	N9-C4-C5	10.89	109.76	105.40
35	BA	1365	G	O4'-C1'-N9	10.89	116.91	108.20
2	AB	265	A	N1-C2-N3	-10.88	123.86	129.30
2	AB	1085	A	C4-C5-C6	-10.88	111.56	117.00
2	AB	1495	A	N7-C8-N9	-10.88	108.36	113.80
2	AB	1601	G	C2-N3-C4	10.88	117.34	111.90
2	AB	1986	C	O4'-C1'-N1	10.89	116.91	108.20
35	BA	301	G	N9-C4-C5	10.88	109.75	105.40
35	BA	831	A	C4-C5-N7	-10.88	105.26	110.70
35	BA	917	G	N7-C8-N9	10.88	118.54	113.10
2	AB	154	U	C2-N3-C4	-10.88	120.47	127.00
35	BA	221	C	O4'-C1'-N1	10.88	116.91	108.20
35	BA	305	G	C5-N7-C8	-10.88	98.86	104.30
35	BA	690	G	N1-C2-N3	10.88	130.43	123.90
35	BA	1370	G	C2-N3-C4	10.88	117.34	111.90
2	AB	892	A	C2-N3-C4	-10.88	105.16	110.60
2	AB	1841	U	O4'-C1'-N1	10.88	116.90	108.20
35	BA	667	G	C2-N3-C4	10.88	117.34	111.90
35	BA	1475	G	O4'-C1'-N9	10.88	116.90	108.20
37	BC	51	U	O4'-C1'-N1	10.88	116.90	108.20
52	BR	28	ARG	NE-CZ-NH2	10.87	125.74	120.30
2	AB	2	G	N3-C4-C5	-10.87	123.16	128.60
2	AB	985	C	N3-C4-C5	-10.87	117.55	121.90
2	AB	1248	G	N7-C8-N9	-10.87	107.67	113.10
2	AB	2076	U	O4'-C1'-N1	10.87	116.90	108.20
9	AI	123	ARG	NE-CZ-NH1	10.87	125.74	120.30
2	AB	1574	C	N1-C2-O2	-10.87	112.38	118.90
35	BA	1435	G	C8-N9-C4	10.87	110.75	106.40
2	AB	2362	C	C2-N3-C4	10.87	125.33	119.90
2	AB	2775	G	O4'-C1'-N9	10.87	116.89	108.20
35	BA	1466	C	C6-N1-C2	-10.87	115.95	120.30
2	AB	2859	G	N7-C8-N9	10.86	118.53	113.10
35	BA	1306	A	C4-C5-N7	10.86	116.13	110.70
2	AB	420	C	C5-C6-N1	10.86	126.43	121.00
2	AB	834	G	N7-C8-N9	10.86	118.53	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	BI	142	ARG	NE-CZ-NH1	10.86	125.73	120.30
2	AB	1016	G	C5-N7-C8	10.86	109.73	104.30
35	BA	201	G	C4-C5-N7	10.86	115.14	110.80
37	BC	36	A	C5-C6-N1	10.86	123.13	117.70
2	AB	2250	G	C5-N7-C8	-10.85	98.87	104.30
2	AB	2453	A	C2-N3-C4	10.85	116.03	110.60
2	AB	2237	G	N3-C4-N9	10.85	132.51	126.00
2	AB	2650	U	O4'-C1'-N1	10.85	116.88	108.20
35	BA	690	G	O4'-C1'-N9	10.85	116.88	108.20
57	BW	33	ARG	NE-CZ-NH2	-10.85	114.87	120.30
2	AB	412	A	N3-C4-C5	-10.85	119.21	126.80
2	AB	552	U	O4'-C1'-N1	10.84	116.87	108.20
35	BA	404	G	N7-C8-N9	10.84	118.52	113.10
2	AB	782	A	C1'-O4'-C4'	-10.84	101.23	109.90
2	AB	1537	G	N7-C8-N9	10.84	118.52	113.10
35	BA	558	G	C5'-C4'-O4'	10.84	122.11	109.10
2	AB	1623	G	N9-C4-C5	10.84	109.74	105.40
2	AB	2545	G	C2-N3-C4	10.84	117.32	111.90
5	AE	184	ARG	NE-CZ-NH2	10.84	125.72	120.30
35	BA	691	G	C5-N7-C8	10.84	109.72	104.30
2	AB	804	A	C6-N1-C2	-10.84	112.10	118.60
2	AB	2277	G	O4'-C1'-N9	10.84	116.87	108.20
35	BA	1308	U	O4'-C1'-N1	10.84	116.87	108.20
2	AB	471	A	N7-C8-N9	10.83	119.21	113.80
2	AB	2774	C	C5-C4-N4	-10.83	112.62	120.20
35	BA	698	G	N3-C4-C5	-10.83	123.19	128.60
35	BA	1312	G	C4-C5-N7	-10.83	106.47	110.80
2	AB	1425	G	C6-C5-N7	-10.83	123.90	130.40
35	BA	386	C	C6-N1-C2	10.83	124.63	120.30
35	BA	1444	U	N1-C2-O2	-10.83	115.22	122.80
2	AB	1554	U	O4'-C1'-N1	10.82	116.86	108.20
2	AB	2473	U	N3-C2-O2	-10.82	114.62	122.20
35	BA	129	A	N1-C6-N6	-10.82	112.11	118.60
35	BA	987	G	O4'-C1'-N9	10.82	116.86	108.20
2	AB	168	G	N1-C6-O6	10.82	126.39	119.90
2	AB	1870	C	C2-N3-C4	10.82	125.31	119.90
2	AB	1874	C	O4'-C1'-N1	10.82	116.86	108.20
35	BA	330	C	N1-C2-O2	10.82	125.39	118.90
37	BC	36	A	N1-C6-N6	-10.82	112.11	118.60
2	AB	211	C	O4'-C1'-N1	10.82	116.85	108.20
2	AB	322	A	N9-C4-C5	-10.82	101.47	105.80
35	BA	254	G	N1-C2-N3	-10.82	117.41	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1248	A	O4'-C1'-N9	10.82	116.85	108.20
2	AB	685	A	N1-C2-N3	-10.81	123.89	129.30
7	AG	124	ARG	NE-CZ-NH2	-10.81	114.89	120.30
2	AB	888	C	N3-C4-C5	-10.81	117.58	121.90
2	AB	1325	U	C5-C4-O4	-10.81	119.41	125.90
2	AB	1546	G	C2-N3-C4	10.81	117.31	111.90
35	BA	316	C	C6-N1-C2	-10.81	115.98	120.30
35	BA	350	G	N7-C8-N9	10.81	118.50	113.10
35	BA	450	G	N3-C4-C5	-10.81	123.19	128.60
2	AB	1459	G	C5-C6-N1	10.81	116.90	111.50
2	AB	2588	G	N1-C6-O6	10.81	126.39	119.90
23	AW	6	ARG	NE-CZ-NH1	-10.81	114.89	120.30
1	AA	50	A	N1-C6-N6	10.81	125.08	118.60
2	AB	1250	G	C2-N3-C4	10.81	117.30	111.90
2	AB	1620	G	C2-N3-C4	10.81	117.30	111.90
2	AB	2249	U	N3-C2-O2	-10.81	114.64	122.20
35	BA	1361	G	O4'-C1'-N9	10.81	116.84	108.20
2	AB	2098	U	N1-C2-N3	10.80	121.38	114.90
2	AB	2361	G	N7-C8-N9	10.80	118.50	113.10
2	AB	2719	G	N3-C4-C5	-10.80	123.20	128.60
35	BA	545	C	C4-C5-C6	-10.80	112.00	117.40
37	BC	17	C	O4'-C1'-N1	10.80	116.84	108.20
2	AB	1210	G	C6-C5-N7	10.80	136.88	130.40
36	BB	26	U	N3-C2-O2	-10.80	114.64	122.20
2	AB	2814	A	N1-C2-N3	-10.80	123.90	129.30
2	AB	2087	G	C2-N3-C4	10.79	117.30	111.90
35	BA	33	A	C5-N7-C8	-10.79	98.50	103.90
35	BA	1065	U	C1'-O4'-C4'	-10.79	101.27	109.90
35	BA	164	G	C5-C6-N1	10.79	116.90	111.50
35	BA	1526	G	N3-C4-C5	-10.79	123.20	128.60
2	AB	1034	G	N3-C4-C5	-10.79	123.21	128.60
2	AB	2094	A	N3-C4-N9	-10.79	118.77	127.40
35	BA	558	G	N9-C1'-C2'	-10.79	99.97	114.00
2	AB	732	C	O4'-C1'-N1	10.79	116.83	108.20
2	AB	1373	A	N1-C2-N3	-10.79	123.91	129.30
2	AB	2333	A	C6-C5-N7	10.79	139.85	132.30
2	AB	2684	U	N3-C2-O2	-10.79	114.65	122.20
35	BA	530	G	O4'-C1'-N9	-10.79	99.57	108.20
2	AB	873	C	N3-C4-C5	-10.78	117.59	121.90
2	AB	1824	G	O4'-C1'-N9	10.78	116.83	108.20
35	BA	481	G	N3-C4-N9	10.78	132.47	126.00
2	AB	156	A	N1-C2-N3	10.78	134.69	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2664	G	C4-C5-N7	-10.78	106.49	110.80
2	AB	2048	G	C8-N9-C4	-10.78	102.09	106.40
2	AB	2453	A	N1-C2-N3	-10.78	123.91	129.30
35	BA	345	C	N3-C4-N4	10.78	125.55	118.00
1	AA	54	G	C2-N3-C4	10.78	117.29	111.90
2	AB	829	A	O4'-C1'-N9	10.78	116.82	108.20
35	BA	530	G	C6-N1-C2	-10.78	118.64	125.10
37	BC	40	C	C5-C6-N1	10.78	126.39	121.00
2	AB	2292	U	C4-C5-C6	10.77	126.17	119.70
2	AB	2678	C	N1-C2-O2	10.77	125.36	118.90
35	BA	764	C	C6-N1-C2	-10.77	115.99	120.30
37	BC	4	G	C8-N9-C4	-10.77	102.09	106.40
2	AB	1176	U	O4'-C1'-N1	10.77	116.82	108.20
35	BA	816	A	N7-C8-N9	10.77	119.19	113.80
2	AB	1418	G	C2-N3-C4	10.77	117.28	111.90
2	AB	1250	G	C5-C6-N1	10.77	116.88	111.50
35	BA	956	U	N3-C2-O2	-10.76	114.67	122.20
2	AB	2199	A	C8-N9-C4	-10.76	101.50	105.80
35	BA	494	G	N3-C4-N9	10.76	132.46	126.00
2	AB	546	U	N1-C2-O2	10.76	130.33	122.80
2	AB	1307	A	N7-C8-N9	10.76	119.18	113.80
2	AB	2785	C	C5-C4-N4	-10.76	112.67	120.20
20	AT	2	TYR	CB-CG-CD1	-10.76	114.55	121.00
35	BA	1511	G	C5-C6-N1	10.76	116.88	111.50
2	AB	135	U	N3-C4-C5	-10.75	108.15	114.60
2	AB	563	A	N1-C2-N3	-10.75	123.92	129.30
35	BA	46	G	N9-C4-C5	10.75	109.70	105.40
2	AB	2624	G	N3-C2-N2	-10.75	112.37	119.90
2	AB	1773	A	N1-C6-N6	10.75	125.05	118.60
35	BA	1175	G	C6-C5-N7	10.75	136.85	130.40
2	AB	2191	A	N1-C2-N3	-10.75	123.92	129.30
35	BA	949	A	N9-C4-C5	10.75	110.10	105.80
1	AA	44	G	N3-C4-N9	10.75	132.45	126.00
2	AB	1203	U	O4'-C1'-N1	10.75	116.80	108.20
37	BC	59	A	C8-N9-C4	-10.75	101.50	105.80
2	AB	1837	C	C6-N1-C2	-10.74	116.00	120.30
2	AB	1999	C	O4'-C1'-N1	10.74	116.79	108.20
2	AB	2273	A	N1-C6-N6	-10.74	112.16	118.60
35	BA	791	G	C4-C5-N7	10.74	115.10	110.80
2	AB	1374	G	C2-N3-C4	10.74	117.27	111.90
2	AB	1276	A	O4'-C1'-N9	10.74	116.79	108.20
2	AB	1150	C	O4'-C1'-N1	10.73	116.79	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1897	G	N7-C8-N9	10.73	118.47	113.10
35	BA	1247	U	O4'-C1'-N1	10.73	116.79	108.20
35	BA	344	A	N9-C4-C5	10.73	110.09	105.80
2	AB	1266	G	C6-C5-N7	-10.73	123.96	130.40
2	AB	1621	U	C5-C4-O4	10.73	132.34	125.90
35	BA	865	A	C4-C5-N7	-10.73	105.34	110.70
2	AB	2254	C	N3-C4-C5	-10.73	117.61	121.90
35	BA	502	A	C4'-C3'-C2'	-10.73	91.87	102.60
2	AB	76	C	C5-C4-N4	10.72	127.71	120.20
2	AB	1580	A	C5-N7-C8	-10.72	98.54	103.90
2	AB	2597	G	C3'-C2'-C1'	10.72	110.08	101.50
35	BA	85	U	O4'-C1'-N1	10.72	116.78	108.20
35	BA	502	A	N9-C4-C5	10.72	110.09	105.80
2	AB	1049	C	C6-N1-C2	-10.72	116.01	120.30
35	BA	1074	G	C4-C5-C6	10.72	125.23	118.80
2	AB	468	G	O4'-C1'-N9	10.71	116.77	108.20
35	BA	1376	U	O4'-C1'-N1	10.71	116.77	108.20
37	BC	43	G	C5-C6-N1	10.71	116.86	111.50
2	AB	796	C	C6-N1-C2	-10.71	116.02	120.30
35	BA	565	U	O4'-C1'-N1	10.71	116.77	108.20
35	BA	998	C	C6-N1-C2	-10.71	116.02	120.30
56	BV	9	ARG	NE-CZ-NH1	10.71	125.65	120.30
2	AB	217	A	N3-C4-C5	-10.71	119.31	126.80
35	BA	51	A	O4'-C1'-N9	10.71	116.76	108.20
2	AB	1965	C	N1-C2-O2	10.70	125.32	118.90
2	AB	741	U	C2-N3-C4	-10.70	120.58	127.00
2	AB	1585	C	N3-C4-C5	-10.70	117.62	121.90
2	AB	2054	A	N7-C8-N9	10.69	119.15	113.80
2	AB	739	A	O4'-C1'-N9	10.69	116.75	108.20
2	AB	1086	A	C8-N9-C4	-10.69	101.52	105.80
2	AB	1849	G	N3-C4-C5	-10.69	123.26	128.60
2	AB	2070	A	C4-C5-N7	10.69	116.05	110.70
35	BA	254	G	N1-C2-N2	10.69	125.82	116.20
37	BC	44	A	O4'-C1'-N9	10.69	116.75	108.20
2	AB	2113	U	C3'-C2'-C1'	10.69	110.05	101.50
2	AB	2388	A	C2-N3-C4	10.69	115.94	110.60
35	BA	465	A	C5-C6-N6	-10.69	115.15	123.70
2	AB	2444	G	C4-C5-N7	10.68	115.07	110.80
35	BA	69	G	C2-N3-C4	10.68	117.24	111.90
2	AB	515	A	C4-C5-N7	-10.68	105.36	110.70
2	AB	2707	U	C4-C5-C6	10.68	126.11	119.70
35	BA	1270	G	N7-C8-N9	10.68	118.44	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1321	U	C4-C5-C6	10.68	126.11	119.70
46	BL	72	ARG	NE-CZ-NH2	-10.68	114.96	120.30
2	AB	366	C	C3'-C2'-C1'	10.68	110.04	101.50
2	AB	1776	G	C4-C5-N7	-10.68	106.53	110.80
1	AA	33	G	C5-C6-N1	10.68	116.84	111.50
2	AB	1482	G	C5-C6-O6	-10.68	122.19	128.60
2	AB	2545	G	C8-N9-C4	-10.68	102.13	106.40
35	BA	278	G	C8-N9-C4	-10.68	102.13	106.40
35	BA	1167	A	O4'-C1'-N9	10.68	116.74	108.20
2	AB	632	A	C6-N1-C2	10.67	125.00	118.60
2	AB	2521	C	C2-N3-C4	10.67	125.23	119.90
35	BA	1081	A	O4'-C1'-N9	10.67	116.74	108.20
2	AB	1252	G	C4-C5-N7	-10.67	106.53	110.80
2	AB	2515	C	C6-N1-C2	-10.67	116.03	120.30
2	AB	792	A	C8-N9-C4	-10.66	101.53	105.80
2	AB	577	G	N3-C4-C5	-10.66	123.27	128.60
2	AB	1716	U	O4'-C1'-N1	10.66	116.73	108.20
2	AB	1730	C	C6-N1-C2	-10.66	116.03	120.30
2	AB	1860	G	O4'-C1'-N9	10.66	116.73	108.20
2	AB	2237	G	N3-C4-C5	-10.66	123.27	128.60
35	BA	35	G	N7-C8-N9	10.66	118.43	113.10
2	AB	64	A	C8-N9-C4	-10.66	101.54	105.80
2	AB	2048	G	N9-C4-C5	10.66	109.66	105.40
2	AB	1248	G	C5-N7-C8	10.66	109.63	104.30
43	BI	78	ARG	NE-CZ-NH2	-10.66	114.97	120.30
2	AB	1922	G	N1-C6-O6	-10.66	113.51	119.90
2	AB	2764	A	N9-C4-C5	10.66	110.06	105.80
2	AB	953	G	C8-N9-C4	-10.65	102.14	106.40
2	AB	1754	A	C5-N7-C8	-10.65	98.57	103.90
2	AB	1857	G	N3-C4-C5	-10.65	123.27	128.60
2	AB	1736	U	N1-C2-N3	10.65	121.29	114.90
35	BA	1158	C	N1-C2-O2	10.65	125.29	118.90
35	BA	222	C	O4'-C1'-N1	10.65	116.72	108.20
35	BA	844	G	C4-C5-N7	-10.65	106.54	110.80
2	AB	704	G	C5-C6-N1	10.65	116.82	111.50
2	AB	1110	G	O4'-C1'-N9	10.65	116.72	108.20
2	AB	1784	A	C8-N9-C4	-10.65	101.54	105.80
35	BA	208	U	N3-C4-O4	10.65	126.85	119.40
35	BA	866	C	C5-C6-N1	10.65	126.32	121.00
37	BC	19	G	C4-C5-N7	10.65	115.06	110.80
2	AB	1552	A	N7-C8-N9	-10.64	108.48	113.80
35	BA	694	A	C2-N3-C4	10.64	115.92	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	37	U	C5-C6-N1	-10.64	117.38	122.70
1	AA	86	G	C5-N7-C8	-10.64	98.98	104.30
2	AB	1767	G	N9-C4-C5	10.64	109.66	105.40
35	BA	1327	C	N3-C4-C5	-10.64	117.64	121.90
35	BA	1332	A	C6-N1-C2	-10.64	112.22	118.60
2	AB	629	G	C4-C5-N7	-10.64	106.55	110.80
2	AB	1122	G	C2-N3-C4	10.64	117.22	111.90
2	AB	1807	G	C8-N9-C4	-10.64	102.14	106.40
35	BA	66	A	C8-N9-C4	-10.63	101.55	105.80
35	BA	1160	G	C4-C5-N7	-10.63	106.55	110.80
1	AA	61	G	C8-N9-C4	-10.63	102.15	106.40
2	AB	2869	G	N1-C2-N3	-10.63	117.52	123.90
35	BA	447	G	N7-C8-N9	10.63	118.42	113.10
35	BA	711	G	N9-C4-C5	10.63	109.65	105.40
35	BA	926	G	O4'-C1'-N9	10.63	116.70	108.20
35	BA	305	G	N7-C8-N9	10.63	118.42	113.10
2	AB	1652	A	O4'-C1'-N9	10.63	116.70	108.20
35	BA	700	G	C8-N9-C4	-10.63	102.15	106.40
35	BA	706	A	C5-C6-N1	10.63	123.01	117.70
35	BA	1454	G	C4-C5-N7	-10.63	106.55	110.80
2	AB	314	C	O4'-C1'-N1	10.62	116.70	108.20
2	AB	1393	A	O4'-C1'-N9	-10.62	99.70	108.20
2	AB	2791	G	N3-C4-C5	-10.62	123.29	128.60
6	AF	49	ARG	NE-CZ-NH2	10.62	125.61	120.30
2	AB	315	G	C4-C5-N7	-10.62	106.55	110.80
2	AB	473	G	C6-N1-C2	-10.62	118.73	125.10
2	AB	1091	G	O4'-C1'-N9	10.62	116.69	108.20
2	AB	2394	C	O4'-C1'-N1	10.62	116.69	108.20
35	BA	1269	A	N1-C2-N3	-10.62	123.99	129.30
2	AB	916	G	C4-C5-N7	-10.61	106.56	110.80
35	BA	65	A	O4'-C1'-N9	10.61	116.69	108.20
35	BA	127	G	N3-C4-N9	10.61	132.37	126.00
2	AB	1360	G	N3-C4-C5	-10.61	123.30	128.60
35	BA	593	U	C3'-C2'-C1'	10.61	109.99	101.50
35	BA	1459	G	N3-C4-C5	-10.61	123.30	128.60
2	AB	25	U	C4-C5-C6	10.61	126.06	119.70
2	AB	2545	G	C4-C5-N7	-10.61	106.56	110.80
35	BA	1500	A	C5-C6-N1	10.61	123.00	117.70
2	AB	1971	U	C5'-C4'-O4'	10.60	121.82	109.10
2	AB	2895	G	C2-N3-C4	10.60	117.20	111.90
2	AB	789	A	C4-C5-C6	10.60	122.30	117.00
35	BA	574	A	N1-C2-N3	-10.60	124.00	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	817	C	C3'-C2'-C1'	-10.60	93.02	101.50
35	BA	916	U	N3-C2-O2	-10.60	114.78	122.20
2	AB	740	C	O4'-C1'-N1	10.60	116.68	108.20
2	AB	2027	G	C5-N7-C8	-10.60	99.00	104.30
2	AB	1303	G	C4-C5-C6	10.59	125.16	118.80
2	AB	2228	G	C8-N9-C4	-10.59	102.16	106.40
35	BA	942	G	C2-N3-C4	10.59	117.20	111.90
35	BA	1021	A	N1-C6-N6	-10.59	112.24	118.60
35	BA	1283	U	O4'-C1'-N1	10.59	116.67	108.20
35	BA	1479	C	C2-N3-C4	-10.59	114.60	119.90
2	AB	540	C	O4'-C1'-N1	10.59	116.67	108.20
2	AB	1360	G	N1-C6-O6	-10.59	113.55	119.90
35	BA	288	A	C5-N7-C8	-10.59	98.61	103.90
35	BA	465	A	N1-C6-N6	10.59	124.95	118.60
2	AB	108	G	C8-N9-C4	-10.59	102.17	106.40
2	AB	1021	A	C8-N9-C4	-10.59	101.57	105.80
35	BA	192	A	C4-C5-C6	-10.59	111.71	117.00
2	AB	1413	A	C4-C5-N7	-10.59	105.41	110.70
2	AB	1669	A	N1-C2-N3	-10.59	124.01	129.30
2	AB	2522	U	O4'-C1'-N1	10.59	116.67	108.20
35	BA	1166	G	N3-C4-C5	-10.59	123.31	128.60
35	BA	521	G	C5-N7-C8	10.58	109.59	104.30
35	BA	232	G	C3'-C2'-C1'	10.58	109.97	101.50
2	AB	2337	G	C6-N1-C2	-10.58	118.75	125.10
2	AB	424	G	N9-C4-C5	10.58	109.63	105.40
35	BA	344	A	N1-C2-N3	-10.58	124.01	129.30
35	BA	1084	G	C5-C6-O6	-10.58	122.25	128.60
2	AB	2738	A	N9-C4-C5	10.57	110.03	105.80
35	BA	139	A	C5-C6-N1	10.57	122.99	117.70
35	BA	1177	G	C8-N9-C4	-10.57	102.17	106.40
2	AB	2585	U	C5-C4-O4	10.57	132.24	125.90
2	AB	1531	C	N1-C2-O2	10.57	125.24	118.90
2	AB	2661	G	C8-N9-C4	-10.57	102.17	106.40
35	BA	38	G	C2-N3-C4	10.57	117.18	111.90
2	AB	31	C	N3-C2-O2	-10.56	114.50	121.90
2	AB	830	G	N3-C4-C5	-10.56	123.32	128.60
2	AB	1496	A	C8-N9-C4	-10.56	101.57	105.80
35	BA	128	G	C4-C5-N7	10.56	115.03	110.80
35	BA	258	G	C6-C5-N7	-10.56	124.06	130.40
2	AB	1171	G	C8-N9-C4	-10.56	102.18	106.40
2	AB	2277	G	C5-C6-O6	-10.56	122.26	128.60
2	AB	2744	G	C4-C5-N7	-10.56	106.58	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1362	C	C4-C5-C6	-10.56	112.12	117.40
1	AA	86	G	N9-C4-C5	10.56	109.62	105.40
2	AB	796	C	O4'-C1'-N1	10.56	116.65	108.20
2	AB	2009	A	C6-N1-C2	-10.56	112.27	118.60
2	AB	63	A	C1'-O4'-C4'	-10.55	101.46	109.90
28	A1	15	ARG	NE-CZ-NH1	10.55	125.58	120.30
35	BA	328	C	C2-N3-C4	10.55	125.18	119.90
35	BA	584	G	C8-N9-C4	-10.55	102.18	106.40
35	BA	1321	U	C5-C6-N1	-10.55	117.42	122.70
2	AB	1508	A	O4'-C1'-N9	10.55	116.64	108.20
2	AB	1927	A	N1-C2-N3	-10.55	124.03	129.30
2	AB	2534	A	C5-C6-N1	-10.55	112.43	117.70
35	BA	257	G	N3-C4-C5	-10.55	123.33	128.60
35	BA	1159	U	O4'-C1'-N1	10.55	116.64	108.20
2	AB	1506	U	C2-N3-C4	-10.55	120.67	127.00
2	AB	68	G	N3-C4-C5	10.54	133.87	128.60
35	BA	289	G	O4'-C1'-N9	10.54	116.64	108.20
35	BA	332	G	N3-C4-N9	-10.54	119.67	126.00
35	BA	787	A	C1'-O4'-C4'	-10.54	101.46	109.90
35	BA	1099	G	C5-N7-C8	-10.54	99.03	104.30
35	BA	1332	A	N1-C2-N3	10.54	134.57	129.30
2	AB	1488	C	O4'-C1'-N1	10.54	116.63	108.20
2	AB	1723	G	O4'-C1'-N9	10.54	116.63	108.20
1	AA	51	G	C8-N9-C4	-10.54	102.19	106.40
35	BA	848	C	C6-N1-C2	-10.54	116.09	120.30
35	BA	972	C	O4'-C1'-N1	10.54	116.63	108.20
37	BC	22	A	N9-C4-C5	-10.54	101.59	105.80
1	AA	33	G	O4'-C1'-N9	10.53	116.63	108.20
2	AB	2056	G	C6-C5-N7	-10.53	124.08	130.40
2	AB	2825	G	N3-C4-C5	-10.53	123.33	128.60
2	AB	320	A	C8-N9-C4	10.53	110.01	105.80
2	AB	1822	C	N3-C2-O2	10.53	129.27	121.90
2	AB	2720	U	C4-C5-C6	10.53	126.02	119.70
2	AB	2602	A	C8-N9-C4	-10.53	101.59	105.80
2	AB	2630	G	N1-C6-O6	10.53	126.22	119.90
2	AB	2864	G	C8-N9-C4	-10.53	102.19	106.40
35	BA	691	G	C2-N3-C4	10.53	117.17	111.90
2	AB	1610	A	C4-C5-C6	-10.53	111.74	117.00
2	AB	1612	C	N1-C2-O2	10.53	125.22	118.90
2	AB	2527	C	C6-N1-C2	-10.53	116.09	120.30
2	AB	2679	A	C8-N9-C4	-10.53	101.59	105.80
2	AB	225	C	C6-N1-C2	10.53	124.51	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	254	G	N3-C4-N9	10.53	132.32	126.00
2	AB	2081	U	O4'-C1'-N1	10.53	116.62	108.20
35	BA	899	C	N3-C2-O2	-10.53	114.53	121.90
28	A1	29	ARG	NE-CZ-NH2	10.53	125.56	120.30
35	BA	1052	U	N1-C2-N3	10.53	121.22	114.90
35	BA	1326	U	N1-C2-N3	10.53	121.22	114.90
45	BK	44	ARG	NE-CZ-NH1	10.53	125.56	120.30
2	AB	2586	U	O4'-C4'-C3'	10.52	114.52	104.00
2	AB	258	G	N9-C4-C5	10.52	109.61	105.40
35	BA	156	C	C4-C5-C6	10.52	122.66	117.40
35	BA	1063	C	N3-C4-C5	-10.52	117.69	121.90
35	BA	1334	G	C6-C5-N7	-10.52	124.09	130.40
35	BA	1254	A	N1-C6-N6	10.52	124.91	118.60
2	AB	1927	A	C2-N3-C4	10.52	115.86	110.60
2	AB	1952	A	C5-C6-N1	10.52	122.96	117.70
2	AB	751	A	C4-C5-C6	-10.52	111.74	117.00
2	AB	993	G	C5-C6-O6	-10.52	122.29	128.60
2	AB	1006	C	O4'-C1'-N1	10.52	116.61	108.20
35	BA	743	A	C6-N1-C2	10.52	124.91	118.60
50	BP	52	ARG	NE-CZ-NH1	10.52	125.56	120.30
2	AB	518	G	N1-C6-O6	10.51	126.21	119.90
2	AB	185	G	N3-C4-C5	-10.51	123.35	128.60
35	BA	742	G	N1-C6-O6	-10.51	113.60	119.90
1	AA	120	U	O4'-C1'-N1	10.51	116.60	108.20
2	AB	1037	G	O4'-C1'-N9	10.51	116.61	108.20
35	BA	519	C	C4-C5-C6	-10.51	112.15	117.40
2	AB	2441	U	C5-C6-N1	-10.50	117.45	122.70
35	BA	282	A	N1-C6-N6	-10.50	112.30	118.60
36	BB	29	G	N3-C4-C5	-10.50	123.35	128.60
2	AB	1980	G	C8-N9-C4	-10.50	102.20	106.40
35	BA	266	G	N3-C4-C5	-10.50	123.35	128.60
35	BA	1512	U	C4-C5-C6	10.50	126.00	119.70
2	AB	297	G	N3-C4-N9	10.50	132.30	126.00
2	AB	409	G	C8-N9-C4	-10.50	102.20	106.40
2	AB	570	G	N1-C2-N3	-10.50	117.60	123.90
2	AB	2134	A	O4'-C1'-N9	10.50	116.60	108.20
27	A0	47	ARG	NE-CZ-NH2	10.50	125.55	120.30
2	AB	2177	C	N1-C2-O2	10.49	125.20	118.90
2	AB	2269	G	N9-C4-C5	-10.49	101.20	105.40
2	AB	2882	A	N7-C8-N9	-10.49	108.55	113.80
35	BA	776	G	C5-C6-N1	10.49	116.75	111.50
35	BA	955	U	O4'-C1'-N1	10.49	116.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	334	C	N3-C4-N4	10.49	125.34	118.00
2	AB	436	C	N1-C2-O2	10.49	125.19	118.90
35	BA	1217	C	N1-C2-O2	10.49	125.19	118.90
2	AB	2126	A	C5-N7-C8	-10.49	98.66	103.90
35	BA	306	A	C8-N9-C4	-10.48	101.61	105.80
2	AB	1003	G	O4'-C1'-N9	10.48	116.58	108.20
35	BA	220	G	C2-N3-C4	10.48	117.14	111.90
35	BA	402	G	C5-N7-C8	10.48	109.54	104.30
51	BQ	52	ARG	NE-CZ-NH1	10.48	125.54	120.30
2	AB	198	C	N1-C2-N3	10.48	126.53	119.20
2	AB	338	G	C4-C5-N7	10.48	114.99	110.80
2	AB	1040	A	O4'-C1'-C2'	10.48	117.03	107.60
35	BA	799	G	C2-N3-C4	10.48	117.14	111.90
2	AB	1091	G	C8-N9-C4	-10.47	102.21	106.40
35	BA	530	G	N9-C4-C5	10.47	109.59	105.40
7	AG	113	PHE	CB-CG-CD2	-10.47	113.47	120.80
2	AB	2398	U	O4'-C1'-N1	10.46	116.57	108.20
35	BA	799	G	C5-C6-O6	-10.46	122.32	128.60
2	AB	175	G	C5-C6-N1	10.46	116.73	111.50
2	AB	2051	A	N9-C4-C5	10.46	109.98	105.80
35	BA	1162	C	N3-C2-O2	-10.46	114.58	121.90
35	BA	286	C	N1-C2-O2	10.46	125.18	118.90
35	BA	539	A	C2-N3-C4	-10.46	105.37	110.60
2	AB	2659	G	N3-C4-C5	-10.46	123.37	128.60
35	BA	767	A	N9-C4-C5	10.46	109.98	105.80
2	AB	320	A	C4-C5-C6	-10.46	111.77	117.00
2	AB	73	A	N7-C8-N9	-10.46	108.57	113.80
2	AB	464	U	C5-C4-O4	-10.46	119.63	125.90
2	AB	556	A	O4'-C4'-C3'	10.45	114.46	106.10
2	AB	2375	G	N3-C4-C5	-10.45	123.37	128.60
2	AB	713	G	N3-C4-C5	-10.45	123.37	128.60
35	BA	1512	U	N3-C2-O2	-10.45	114.88	122.20
2	AB	738	G	C6-N1-C2	-10.45	118.83	125.10
2	AB	1177	G	N3-C4-C5	-10.45	123.38	128.60
35	BA	771	G	N3-C4-C5	-10.45	123.38	128.60
2	AB	2389	G	C2-N3-C4	10.45	117.12	111.90
35	BA	383	A	C8-N9-C4	-10.45	101.62	105.80
2	AB	562	U	C2-N3-C4	-10.44	120.73	127.00
2	AB	1620	G	C4-C5-C6	10.44	125.06	118.80
35	BA	479	U	C5-C4-O4	-10.44	119.64	125.90
35	BA	1191	A	N9-C4-C5	-10.44	101.62	105.80
35	BA	411	A	C1'-O4'-C4'	10.44	118.25	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1624	U	N3-C2-O2	-10.44	114.89	122.20
2	AB	1845	G	N1-C2-N3	10.44	130.16	123.90
7	AG	109	ARG	NE-CZ-NH2	-10.43	115.08	120.30
35	BA	1450	U	C5-C4-O4	-10.43	119.64	125.90
2	AB	274	C	N1-C2-O2	10.43	125.16	118.90
2	AB	2617	U	C4-C5-C6	10.43	125.96	119.70
8	AH	57	TYR	CB-CG-CD2	-10.43	114.74	121.00
35	BA	364	A	O4'-C1'-N9	10.43	116.55	108.20
2	AB	1657	U	C5-C6-N1	-10.43	117.49	122.70
2	AB	2603	G	C2-N3-C4	10.43	117.11	111.90
35	BA	10	A	N9-C4-C5	10.43	109.97	105.80
35	BA	357	G	C8-N9-C4	-10.43	102.23	106.40
35	BA	746	A	O4'-C1'-N9	10.43	116.54	108.20
35	BA	1310	G	C2-N3-C4	10.43	117.11	111.90
2	AB	1671	U	C6-N1-C2	-10.43	114.74	121.00
2	AB	2319	G	C2-N3-C4	10.43	117.11	111.90
2	AB	2114	A	N9-C4-C5	-10.43	101.63	105.80
35	BA	191	G	O4'-C1'-N9	10.43	116.54	108.20
35	BA	612	C	C4-C5-C6	10.43	122.61	117.40
35	BA	1431	A	C4-C5-C6	-10.43	111.79	117.00
2	AB	370	G	C2-N3-C4	10.42	117.11	111.90
2	AB	914	G	N3-C4-C5	-10.42	123.39	128.60
35	BA	867	G	C6-C5-N7	-10.42	124.15	130.40
35	BA	602	A	C5-N7-C8	10.42	109.11	103.90
2	AB	1659	G	C6-N1-C2	-10.42	118.85	125.10
35	BA	1089	G	N9-C4-C5	10.42	109.57	105.40
35	BA	1146	A	N9-C4-C5	10.42	109.97	105.80
37	BC	39	A	N7-C8-N9	-10.42	108.59	113.80
2	AB	1128	G	N3-C4-C5	-10.42	123.39	128.60
2	AB	2169	A	C4-C5-C6	10.42	122.21	117.00
2	AB	98	G	C5-C6-N1	-10.41	106.29	111.50
2	AB	2102	G	O4'-C1'-N9	10.41	116.53	108.20
35	BA	740	U	O4'-C1'-N1	10.41	116.53	108.20
2	AB	916	G	N3-C4-C5	-10.41	123.39	128.60
35	BA	1456	A	C6-N1-C2	-10.41	112.35	118.60
48	BN	109	ARG	NE-CZ-NH1	10.41	125.51	120.30
2	AB	2566	A	O4'-C1'-N9	10.41	116.53	108.20
2	AB	1420	A	N3-C4-C5	-10.41	119.52	126.80
2	AB	1698	A	C8-N9-C4	-10.41	101.64	105.80
2	AB	2384	U	C1'-O4'-C4'	10.41	118.23	109.90
35	BA	815	A	C1'-O4'-C4'	-10.41	101.57	109.90
2	AB	1661	G	N9-C4-C5	10.40	109.56	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1852	U	N1-C2-N3	10.40	121.14	114.90
35	BA	844	G	N3-C4-C5	-10.40	123.40	128.60
35	BA	1502	A	C2-N3-C4	10.40	115.80	110.60
35	BA	264	C	N3-C2-O2	-10.40	114.62	121.90
35	BA	1347	G	N9-C4-C5	10.40	109.56	105.40
2	AB	838	C	O4'-C1'-N1	10.40	116.52	108.20
2	AB	1953	A	C5-N7-C8	10.40	109.10	103.90
37	BC	12	G	N3-C4-C5	-10.40	123.40	128.60
2	AB	712	G	O4'-C1'-N9	10.39	116.51	108.20
35	BA	786	G	C8-N9-C4	-10.39	102.24	106.40
2	AB	1687	G	N1-C6-O6	-10.38	113.67	119.90
2	AB	748	G	C3'-C2'-C1'	10.38	109.81	101.50
2	AB	159	G	O4'-C1'-N9	10.38	116.50	108.20
2	AB	1020	A	C8-N9-C4	-10.38	101.65	105.80
2	AB	2536	G	O4'-C1'-N9	10.38	116.51	108.20
35	BA	34	C	C5-C6-N1	10.38	126.19	121.00
35	BA	421	U	C5-C6-N1	-10.38	117.51	122.70
35	BA	1222	G	C3'-C2'-C1'	10.38	109.81	101.50
35	BA	477	C	C5-C6-N1	10.38	126.19	121.00
35	BA	1500	A	C2-N3-C4	10.38	115.79	110.60
2	AB	68	G	C5-N7-C8	-10.38	99.11	104.30
2	AB	625	G	C5-C6-O6	-10.38	122.37	128.60
2	AB	1545	A	C5-N7-C8	-10.38	98.71	103.90
2	AB	2502	G	C5-N7-C8	-10.38	99.11	104.30
35	BA	1188	A	C4-C5-N7	-10.38	105.51	110.70
2	AB	624	C	N3-C4-N4	10.38	125.26	118.00
2	AB	1042	G	N7-C8-N9	10.37	118.29	113.10
1	AA	32	U	C5-C6-N1	-10.37	117.51	122.70
35	BA	750	C	N3-C4-N4	10.37	125.26	118.00
2	AB	252	G	C5-C6-O6	-10.37	122.38	128.60
2	AB	2159	G	C4-C5-N7	-10.37	106.65	110.80
35	BA	1469	C	N3-C4-C5	-10.37	117.75	121.90
54	BT	6	ARG	NE-CZ-NH2	-10.37	115.12	120.30
2	AB	1206	G	C5-N7-C8	-10.37	99.12	104.30
35	BA	1520	C	O4'-C1'-N1	10.36	116.49	108.20
2	AB	1544	A	C5'-C4'-O4'	10.36	121.53	109.10
2	AB	2314	A	N9-C4-C5	-10.36	101.66	105.80
2	AB	2770	G	N1-C6-O6	-10.36	113.68	119.90
2	AB	2880	C	C6-N1-C2	-10.36	116.16	120.30
35	BA	207	C	O4'-C1'-N1	10.36	116.49	108.20
35	BA	1069	C	C6-N1-C2	-10.36	116.16	120.30
2	AB	1576	U	O4'-C1'-N1	10.36	116.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2645	G	C2-N3-C4	10.36	117.08	111.90
35	BA	343	U	N3-C4-O4	10.36	126.65	119.40
2	AB	2139	U	C5-C4-O4	-10.36	119.69	125.90
2	AB	700	G	N9-C4-C5	10.36	109.54	105.40
2	AB	1938	A	N1-C2-N3	10.36	134.48	129.30
35	BA	609	A	N1-C2-N3	-10.36	124.12	129.30
35	BA	846	G	N7-C8-N9	10.36	118.28	113.10
35	BA	922	G	C5-C6-O6	-10.36	122.39	128.60
35	BA	1278	G	N7-C8-N9	10.36	118.28	113.10
35	BA	621	A	N1-C2-N3	-10.35	124.12	129.30
35	BA	1395	C	C1'-O4'-C4'	-10.35	101.62	109.90
2	AB	1949	G	C5-C6-N1	10.35	116.67	111.50
2	AB	2496	C	N1-C2-O2	10.35	125.11	118.90
35	BA	618	C	C5-C4-N4	-10.35	112.95	120.20
35	BA	1255	G	N1-C2-N3	-10.35	117.69	123.90
35	BA	1526	G	C4-C5-C6	10.35	125.01	118.80
2	AB	304	U	C2-N3-C4	-10.35	120.79	127.00
35	BA	591	U	C4-C5-C6	10.35	125.91	119.70
35	BA	1015	G	P-O3'-C3'	10.35	132.12	119.70
2	AB	526	A	N1-C2-N3	-10.35	124.13	129.30
35	BA	473	U	O4'-C1'-N1	10.35	116.48	108.20
35	BA	415	A	C2-N3-C4	10.35	115.77	110.60
2	AB	1518	C	O4'-C1'-N1	10.35	116.48	108.20
35	BA	422	C	N3-C4-C5	10.35	126.04	121.90
35	BA	685	G	N3-C2-N2	10.35	127.14	119.90
1	AA	95	U	O4'-C1'-N1	10.34	116.48	108.20
2	AB	554	U	N1-C2-N3	10.34	121.11	114.90
2	AB	889	C	C6-N1-C2	-10.34	116.16	120.30
2	AB	2844	G	C5-N7-C8	-10.34	99.13	104.30
2	AB	869	G	C5-C6-O6	-10.34	122.39	128.60
35	BA	132	C	C3'-C2'-C1'	10.34	109.77	101.50
35	BA	551	U	O4'-C1'-N1	10.34	116.47	108.20
35	BA	804	U	O4'-C1'-N1	10.34	116.47	108.20
35	BA	609	A	C2-N3-C4	10.34	115.77	110.60
35	BA	405	U	C5'-C4'-O4'	10.34	121.51	109.10
2	AB	467	G	N9-C4-C5	10.34	109.53	105.40
2	AB	730	A	N7-C8-N9	10.34	118.97	113.80
2	AB	858	G	N7-C8-N9	10.34	118.27	113.10
2	AB	2098	U	N3-C2-O2	-10.34	114.97	122.20
35	BA	634	C	C5-C4-N4	10.34	127.44	120.20
35	BA	505	G	N9-C4-C5	10.33	109.53	105.40
1	AA	79	G	C6-N1-C2	-10.33	118.90	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1837	C	C5-C4-N4	-10.33	112.97	120.20
35	BA	649	A	C8-N9-C4	-10.33	101.67	105.80
35	BA	1160	G	N3-C4-C5	-10.33	123.43	128.60
2	AB	1323	C	O4'-C1'-N1	10.33	116.46	108.20
2	AB	2009	A	C5-C6-N1	10.33	122.86	117.70
2	AB	2234	G	N1-C2-N3	-10.33	117.70	123.90
35	BA	972	C	N3-C2-O2	-10.33	114.67	121.90
35	BA	1250	A	O4'-C1'-N9	10.33	116.46	108.20
1	AA	101	A	C4-C5-C6	10.32	122.16	117.00
35	BA	227	G	N1-C2-N3	-10.32	117.70	123.90
1	AA	116	G	N1-C6-O6	-10.32	113.71	119.90
2	AB	413	C	N1-C1'-C2'	-10.32	100.58	114.00
2	AB	2475	C	C2-N3-C4	10.32	125.06	119.90
35	BA	376	G	N9-C1'-C2'	-10.32	100.58	114.00
35	BA	675	A	O4'-C1'-N9	-10.32	99.94	108.20
37	BC	76	C	C5'-C4'-O4'	10.32	121.49	109.10
2	AB	966	G	C5-C6-N1	10.32	116.66	111.50
35	BA	1342	C	O4'-C1'-N1	10.32	116.45	108.20
35	BA	1401	G	N3-C4-C5	-10.32	123.44	128.60
2	AB	315	G	N9-C4-C5	10.32	109.53	105.40
2	AB	788	A	C8-N9-C4	-10.32	101.67	105.80
35	BA	308	C	C2-N3-C4	-10.32	114.74	119.90
37	BC	64	G	C2-N3-C4	10.32	117.06	111.90
35	BA	606	G	N9-C4-C5	10.32	109.53	105.40
1	AA	14	U	O4'-C1'-N1	10.31	116.45	108.20
2	AB	1273	U	N3-C2-O2	-10.31	114.98	122.20
2	AB	35	G	C4-C5-N7	-10.31	106.67	110.80
2	AB	1210	G	P-O3'-C3'	10.31	132.08	119.70
35	BA	143	A	O4'-C1'-N9	10.31	116.45	108.20
2	AB	253	C	N3-C4-C5	10.31	126.03	121.90
35	BA	117	G	C2-N3-C4	10.31	117.06	111.90
35	BA	548	G	C2-N3-C4	10.31	117.06	111.90
35	BA	725	G	C5-C6-O6	-10.31	122.41	128.60
34	A7	24	ARG	NE-CZ-NH1	10.31	125.45	120.30
2	AB	426	C	N3-C4-C5	-10.31	117.78	121.90
2	AB	811	U	O4'-C4'-C3'	10.31	114.35	106.10
2	AB	1510	G	C8-N9-C4	-10.31	102.28	106.40
2	AB	1647	U	O4'-C1'-N1	10.31	116.45	108.20
1	AA	53	A	N7-C8-N9	-10.30	108.65	113.80
2	AB	141	G	N7-C8-N9	10.30	118.25	113.10
2	AB	833	A	C8-N9-C4	-10.30	101.68	105.80
2	AB	1128	G	C8-N9-C4	-10.30	102.28	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1566	A	C8-N9-C4	-10.30	101.68	105.80
2	AB	2281	A	C5-C6-N6	-10.30	115.46	123.70
2	AB	816	C	N1-C2-O2	10.30	125.08	118.90
2	AB	859	G	C4-C5-N7	-10.30	106.68	110.80
35	BA	979	C	O4'-C1'-N1	10.30	116.44	108.20
35	BA	1077	G	C8-N9-C4	-10.30	102.28	106.40
2	AB	1479	G	N3-C4-C5	-10.30	123.45	128.60
2	AB	2002	G	C8-N9-C4	10.30	110.52	106.40
41	BG	68	ARG	NE-CZ-NH1	10.30	125.45	120.30
45	BK	105	ARG	NE-CZ-NH2	-10.30	115.15	120.30
2	AB	608	A	N1-C6-N6	-10.29	112.42	118.60
2	AB	725	G	C2-N3-C4	10.29	117.05	111.90
35	BA	436	C	N3-C4-C5	-10.29	117.78	121.90
36	BB	55	A	N7-C8-N9	10.29	118.95	113.80
1	AA	91	C	N3-C4-C5	-10.29	117.78	121.90
2	AB	1168	G	C8-N9-C4	-10.29	102.28	106.40
35	BA	1272	G	N9-C4-C5	10.29	109.52	105.40
2	AB	1377	G	C5-N7-C8	-10.29	99.15	104.30
2	AB	2113	U	C4'-C3'-C2'	-10.29	92.31	102.60
35	BA	96	U	N1-C2-N3	10.29	121.08	114.90
2	AB	1192	G	N3-C2-N2	-10.29	112.70	119.90
2	AB	2263	C	N3-C4-C5	-10.29	117.78	121.90
2	AB	981	A	C8-N9-C4	-10.29	101.69	105.80
2	AB	1380	G	C5-N7-C8	-10.29	99.16	104.30
2	AB	1854	A	O4'-C1'-N9	10.28	116.43	108.20
35	BA	684	U	C5-C6-N1	-10.28	117.56	122.70
2	AB	1789	A	C8-N9-C4	-10.28	101.69	105.80
35	BA	434	U	N3-C2-O2	-10.28	115.00	122.20
35	BA	972	C	N1-C2-O2	10.28	125.07	118.90
36	BB	59	A	N1-C6-N6	10.28	124.77	118.60
2	AB	261	G	N9-C4-C5	10.28	109.51	105.40
35	BA	101	A	C6-N1-C2	10.28	124.77	118.60
2	AB	2021	C	O4'-C1'-N1	10.28	116.42	108.20
35	BA	28	A	N1-C6-N6	10.28	124.77	118.60
2	AB	42	A	O4'-C1'-N9	10.28	116.42	108.20
2	AB	1128	G	C5-C6-O6	10.28	134.77	128.60
36	BB	32	U	N3-C2-O2	-10.28	115.01	122.20
53	BS	27	PHE	CB-CG-CD1	10.28	127.99	120.80
2	AB	1243	C	N1-C2-O2	10.28	125.06	118.90
35	BA	1469	C	C6-N1-C2	-10.28	116.19	120.30
2	AB	399	U	O4'-C1'-N1	10.27	116.42	108.20
2	AB	753	A	O4'-C1'-N9	10.27	116.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1793	C	O4'-C1'-N1	10.27	116.42	108.20
35	BA	551	U	C5-C6-N1	10.27	127.84	122.70
35	BA	1382	C	C5-C6-N1	-10.27	115.86	121.00
2	AB	791	C	O4'-C1'-N1	10.27	116.42	108.20
35	BA	52	C	O4'-C1'-N1	10.27	116.42	108.20
35	BA	364	A	C5-C6-N1	10.27	122.83	117.70
35	BA	819	A	C8-N9-C4	-10.27	101.69	105.80
35	BA	1311	A	C4-C5-C6	-10.27	111.87	117.00
2	AB	816	C	C5-C4-N4	-10.27	113.01	120.20
2	AB	971	G	N3-C4-C5	-10.27	123.47	128.60
35	BA	292	G	C6-N1-C2	-10.27	118.94	125.10
2	AB	1933	G	N1-C2-N3	-10.27	117.74	123.90
35	BA	1104	G	C2-N3-C4	10.27	117.03	111.90
2	AB	1441	G	C5-C6-O6	-10.26	122.44	128.60
2	AB	1673	G	C5-N7-C8	10.26	109.43	104.30
2	AB	2894	G	C6-N1-C2	-10.26	118.94	125.10
35	BA	1482	G	C6-N1-C2	-10.26	118.94	125.10
2	AB	219	A	N7-C8-N9	10.26	118.93	113.80
2	AB	1546	G	N1-C2-N3	-10.26	117.74	123.90
35	BA	480	U	O4'-C1'-N1	10.26	116.41	108.20
2	AB	1934	C	C4-C5-C6	-10.26	112.27	117.40
2	AB	2536	G	C6-C5-N7	-10.26	124.25	130.40
35	BA	32	A	O4'-C1'-N9	10.26	116.40	108.20
35	BA	1352	C	C4'-C3'-C2'	-10.26	92.34	102.60
2	AB	2697	G	C4-C5-C6	10.25	124.95	118.80
35	BA	973	G	C6-N1-C2	-10.25	118.95	125.10
37	BC	28	U	C4-C5-C6	10.25	125.85	119.70
2	AB	351	C	N3-C4-C5	-10.25	117.80	121.90
2	AB	742	A	C5-C6-N6	-10.25	115.50	123.70
2	AB	2073	C	C2-N3-C4	10.25	125.03	119.90
35	BA	1394	A	N7-C8-N9	10.25	118.93	113.80
35	BA	1015	G	N3-C2-N2	-10.25	112.73	119.90
2	AB	2524	G	C4-C5-C6	10.25	124.95	118.80
2	AB	2825	G	C4-C5-C6	10.25	124.95	118.80
35	BA	1422	G	C8-N9-C4	-10.25	102.30	106.40
2	AB	1047	G	C2-N3-C4	10.24	117.02	111.90
35	BA	212	G	C4-C5-N7	-10.24	106.70	110.80
35	BA	379	C	C6-N1-C2	10.24	124.40	120.30
2	AB	268	C	C5-C4-N4	-10.24	113.03	120.20
2	AB	898	C	C5-C6-N1	10.24	126.12	121.00
2	AB	1003	G	N7-C8-N9	10.24	118.22	113.10
2	AB	1233	C	N3-C4-C5	10.24	126.00	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2509	G	C8-N9-C4	-10.24	102.30	106.40
2	AB	2761	A	C5-N7-C8	-10.24	98.78	103.90
2	AB	1491	G	C8-N9-C4	-10.24	102.31	106.40
2	AB	2854	G	N3-C4-C5	-10.24	123.48	128.60
35	BA	1541	U	N3-C4-O4	10.24	126.57	119.40
2	AB	1555	G	O4'-C1'-N9	10.24	116.39	108.20
2	AB	1636	U	O4'-C1'-N1	10.24	116.39	108.20
2	AB	1844	C	N1-C2-O2	10.24	125.04	118.90
2	AB	660	C	O4'-C1'-N1	10.24	116.39	108.20
2	AB	50	U	N1-C2-O2	10.23	129.96	122.80
2	AB	1254	A	N1-C6-N6	10.23	124.74	118.60
2	AB	1847	A	C4-C5-C6	10.23	122.12	117.00
2	AB	1862	G	O4'-C1'-N9	10.23	116.39	108.20
35	BA	49	U	C6-N1-C2	10.23	127.14	121.00
35	BA	134	G	C4-C5-N7	-10.23	106.71	110.80
35	BA	1190	G	N3-C4-C5	-10.23	123.48	128.60
35	BA	1408	A	C1'-O4'-C4'	-10.23	101.72	109.90
2	AB	848	C	C5-C4-N4	10.23	127.36	120.20
2	AB	1105	U	O4'-C1'-N1	10.23	116.38	108.20
2	AB	211	C	C1'-O4'-C4'	10.23	118.08	109.90
35	BA	2	A	C8-N9-C4	-10.23	101.71	105.80
35	BA	46	G	C5-C6-N1	10.23	116.61	111.50
35	BA	737	C	C2-N3-C4	10.23	125.01	119.90
35	BA	666	G	C6-C5-N7	-10.22	124.27	130.40
2	AB	773	U	N3-C2-O2	-10.22	115.04	122.20
2	AB	1280	G	N3-C4-C5	-10.22	123.49	128.60
2	AB	1380	G	O4'-C1'-N9	10.22	116.38	108.20
2	AB	2430	A	N7-C8-N9	-10.22	108.69	113.80
2	AB	267	C	C3'-C2'-C1'	10.22	109.68	101.50
2	AB	467	G	C5-C6-N1	10.22	116.61	111.50
2	AB	802	A	C2-N3-C4	10.22	115.71	110.60
2	AB	1624	U	N1-C2-N3	10.22	121.03	114.90
35	BA	107	G	C5-C6-N1	10.22	116.61	111.50
35	BA	463	U	N1-C2-N3	10.22	121.03	114.90
35	BA	517	G	O4'-C1'-N9	10.22	116.37	108.20
35	BA	810	C	O4'-C1'-N1	10.22	116.37	108.20
35	BA	1444	U	C4-C5-C6	10.21	125.83	119.70
2	AB	1185	G	C5-C6-O6	-10.21	122.47	128.60
2	AB	1453	A	N9-C4-C5	10.21	109.89	105.80
2	AB	1913	A	N1-C6-N6	-10.21	112.47	118.60
35	BA	73	C	O4'-C1'-N1	10.21	116.37	108.20
2	AB	1024	G	N3-C4-C5	10.21	133.70	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2745	C	N1-C1'-C2'	-10.21	100.73	114.00
35	BA	803	G	C5-C6-N1	10.21	116.60	111.50
2	AB	2825	G	C5-C6-N1	-10.21	106.40	111.50
2	AB	1472	C	O4'-C1'-N1	10.20	116.36	108.20
2	AB	2170	A	N7-C8-N9	10.20	118.90	113.80
2	AB	2177	C	C2-N3-C4	-10.20	114.80	119.90
39	BE	125	ARG	NE-CZ-NH1	10.20	125.40	120.30
2	AB	856	G	N3-C2-N2	-10.20	112.76	119.90
35	BA	866	C	N3-C4-N4	10.20	125.14	118.00
2	AB	1374	G	N3-C4-N9	10.20	132.12	126.00
2	AB	2623	G	N3-C4-C5	-10.20	123.50	128.60
35	BA	882	C	O4'-C1'-N1	10.19	116.36	108.20
2	AB	1940	U	O4'-C1'-N1	10.19	116.35	108.20
2	AB	2221	G	C8-N9-C4	-10.19	102.32	106.40
2	AB	1690	A	O4'-C1'-N9	10.19	116.35	108.20
35	BA	1288	A	C8-N9-C4	-10.19	101.72	105.80
49	BO	89	ARG	NE-CZ-NH2	-10.19	115.20	120.30
2	AB	1210	G	C5-C6-N1	10.19	116.59	111.50
2	AB	1645	G	C8-N9-C4	-10.19	102.32	106.40
2	AB	778	G	C2-N3-C4	10.19	116.99	111.90
35	BA	126	G	C5-N7-C8	-10.19	99.20	104.30
35	BA	280	C	C4-C5-C6	-10.19	112.31	117.40
35	BA	489	C	N3-C4-N4	10.19	125.13	118.00
2	AB	312	G	O4'-C1'-N9	10.19	116.35	108.20
2	AB	1032	A	N1-C6-N6	-10.19	112.49	118.60
35	BA	9	G	N9-C4-C5	10.19	109.47	105.40
35	BA	61	G	C5-C6-O6	10.19	134.71	128.60
35	BA	496	A	N7-C8-N9	10.19	118.89	113.80
2	AB	1248	G	C4-C5-N7	-10.18	106.73	110.80
2	AB	1444	G	C2-N3-C4	-10.18	106.81	111.90
2	AB	2011	U	O4'-C1'-N1	10.18	116.35	108.20
2	AB	2016	U	C5-C4-O4	10.18	132.01	125.90
2	AB	2331	G	N9-C4-C5	-10.18	101.33	105.40
35	BA	849	G	C8-N9-C4	-10.18	102.33	106.40
35	BA	159	G	C3'-C2'-C1'	-10.18	93.36	101.50
2	AB	233	A	C8-N9-C4	-10.18	101.73	105.80
2	AB	285	G	N3-C4-C5	-10.18	123.51	128.60
6	AF	79	ARG	NE-CZ-NH1	10.18	125.39	120.30
35	BA	1175	G	N7-C8-N9	-10.18	108.01	113.10
37	BC	39	A	C4-C5-N7	-10.18	105.61	110.70
2	AB	331	C	C6-N1-C2	-10.18	116.23	120.30
2	AB	929	U	C5-C6-N1	-10.18	117.61	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	863	U	O4'-C1'-N1	10.18	116.34	108.20
35	BA	799	G	C5-C6-N1	10.17	116.59	111.50
35	BA	1311	A	N9-C4-C5	-10.17	101.73	105.80
40	BF	13	ARG	NE-CZ-NH1	-10.17	115.21	120.30
2	AB	1001	A	N1-C2-N3	-10.17	124.22	129.30
35	BA	165	G	C8-N9-C4	-10.17	102.33	106.40
35	BA	387	U	O4'-C1'-N1	10.17	116.33	108.20
35	BA	1156	G	O4'-C1'-N9	10.17	116.34	108.20
2	AB	720	U	C5-C6-N1	-10.17	117.62	122.70
2	AB	287	G	N3-C4-C5	-10.17	123.52	128.60
2	AB	1701	A	N1-C6-N6	10.16	124.70	118.60
2	AB	2691	C	C5-C6-N1	10.16	126.08	121.00
2	AB	2376	A	N9-C4-C5	10.16	109.86	105.80
2	AB	1397	U	N1-C2-O2	10.16	129.91	122.80
35	BA	505	G	C8-N9-C4	-10.16	102.33	106.40
35	BA	791	G	C5-C6-N1	10.16	116.58	111.50
35	BA	809	G	C1'-O4'-C4'	-10.16	101.77	109.90
35	BA	1222	G	O4'-C1'-N9	10.16	116.33	108.20
35	BA	1005	A	O4'-C1'-N9	10.16	116.33	108.20
35	BA	1209	C	O4'-C1'-N1	10.16	116.33	108.20
35	BA	1343	G	N1-C2-N2	10.16	125.34	116.20
2	AB	223	A	N1-C2-N3	10.15	134.38	129.30
2	AB	1480	C	C4-C5-C6	-10.15	112.32	117.40
2	AB	1941	C	N1-C2-O2	10.15	124.99	118.90
2	AB	2614	A	N1-C2-N3	-10.15	124.22	129.30
35	BA	463	U	O4'-C1'-N1	10.15	116.32	108.20
2	AB	2679	A	N1-C2-N3	-10.15	124.22	129.30
35	BA	50	A	C8-N9-C4	-10.15	101.74	105.80
35	BA	301	G	C8-N9-C4	-10.15	102.34	106.40
2	AB	2078	C	C5'-C4'-O4'	10.15	121.28	109.10
18	AR	102	ARG	NE-CZ-NH2	-10.15	115.23	120.30
35	BA	1463	U	O4'-C1'-N1	10.15	116.32	108.20
2	AB	1879	C	C4-C5-C6	10.15	122.47	117.40
2	AB	2092	U	O4'-C1'-N1	10.15	116.32	108.20
35	BA	356	A	N1-C6-N6	10.15	124.69	118.60
35	BA	781	A	O4'-C1'-N9	10.14	116.31	108.20
35	BA	836	G	C6-N1-C2	10.14	131.19	125.10
35	BA	1449	C	C5-C4-N4	-10.14	113.10	120.20
2	AB	2346	A	C1'-O4'-C4'	-10.14	101.79	109.90
36	BB	38	G	O4'-C1'-N9	10.14	116.31	108.20
2	AB	1352	U	O4'-C1'-N1	10.14	116.31	108.20
2	AB	19	A	C4-C5-N7	-10.14	105.63	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1533	C	N1-C2-O2	10.14	124.98	118.90
1	AA	44	G	C4-C5-N7	10.14	114.86	110.80
2	AB	722	A	C8-N9-C4	-10.14	101.75	105.80
2	AB	1206	G	N7-C8-N9	10.14	118.17	113.10
2	AB	2863	C	C5-C6-N1	10.14	126.07	121.00
36	BB	15	G	N3-C4-C5	-10.14	123.53	128.60
2	AB	2270	A	C6-N1-C2	-10.13	112.52	118.60
35	BA	168	G	N7-C8-N9	10.14	118.17	113.10
46	BL	13	PHE	CB-CG-CD1	10.13	127.89	120.80
2	AB	663	G	C4-C5-N7	-10.13	106.75	110.80
2	AB	2825	G	C8-N9-C4	-10.13	102.35	106.40
2	AB	1006	C	C5-C4-N4	-10.13	113.11	120.20
35	BA	2	A	N9-C4-C5	10.13	109.85	105.80
2	AB	2761	A	C4-C5-C6	-10.13	111.94	117.00
35	BA	534	U	O4'-C4'-C3'	-10.13	93.87	104.00
35	BA	1289	A	C8-N9-C4	-10.13	101.75	105.80
2	AB	578	G	C5-C6-O6	-10.13	122.52	128.60
2	AB	412	A	O4'-C1'-N9	10.13	116.30	108.20
2	AB	419	U	N1-C2-O2	-10.13	115.71	122.80
35	BA	393	A	C2-N3-C4	10.13	115.66	110.60
2	AB	540	C	C6-N1-C2	-10.12	116.25	120.30
2	AB	700	G	N7-C8-N9	10.12	118.16	113.10
35	BA	1055	A	N1-C2-N3	-10.12	124.24	129.30
2	AB	439	A	C5-C6-N1	10.12	122.76	117.70
2	AB	2269	G	N1-C6-O6	10.12	125.97	119.90
2	AB	2399	G	N3-C4-C5	-10.12	123.54	128.60
2	AB	2488	G	N7-C8-N9	10.12	118.16	113.10
35	BA	208	U	C5-C4-O4	-10.12	119.83	125.90
35	BA	612	C	C3'-C2'-C1'	10.12	109.60	101.50
2	AB	2473	U	O4'-C1'-N1	10.12	116.30	108.20
35	BA	513	C	O4'-C1'-N1	10.12	116.29	108.20
2	AB	1134	A	O4'-C4'-C3'	10.12	114.19	106.10
2	AB	1129	A	C4-C5-C6	-10.11	111.94	117.00
35	BA	245	U	N3-C4-O4	10.11	126.48	119.40
35	BA	659	U	O4'-C1'-N1	10.11	116.29	108.20
2	AB	2041	U	O4'-C1'-N1	10.11	116.29	108.20
35	BA	700	G	N9-C4-C5	10.11	109.44	105.40
35	BA	1137	C	O4'-C1'-N1	10.11	116.29	108.20
2	AB	42	A	C8-N9-C4	-10.11	101.76	105.80
2	AB	1668	A	C5-N7-C8	10.11	108.95	103.90
35	BA	1082	A	C3'-C2'-C1'	10.11	109.59	101.50
2	AB	2340	A	N1-C2-N3	-10.11	124.25	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	460	A	C5-C6-N1	10.11	122.75	117.70
35	BA	681	A	N9-C4-C5	10.11	109.84	105.80
36	BB	59	A	C8-N9-C4	-10.11	101.76	105.80
2	AB	693	A	C5-C6-N1	10.11	122.75	117.70
2	AB	1771	C	C5-C6-N1	10.11	126.05	121.00
2	AB	624	C	C5-C4-N4	-10.10	113.13	120.20
2	AB	1630	A	N3-C4-C5	-10.10	119.73	126.80
2	AB	2507	C	N3-C2-O2	-10.10	114.83	121.90
36	BB	53	G	C6-N1-C2	-10.10	119.04	125.10
2	AB	62	U	C4-C5-C6	10.10	125.76	119.70
35	BA	1053	G	C4-C5-N7	-10.10	106.76	110.80
4	AD	213	ARG	NE-CZ-NH2	-10.10	115.25	120.30
2	AB	886	A	C5-N7-C8	-10.10	98.85	103.90
35	BA	597	G	C8-N9-C4	-10.10	102.36	106.40
2	AB	952	G	O4'-C1'-N9	10.10	116.28	108.20
38	BD	89	PHE	CB-CG-CD2	-10.10	113.73	120.80
2	AB	916	G	N9-C4-C5	10.09	109.44	105.40
2	AB	1112	G	C6-N1-C2	-10.09	119.04	125.10
2	AB	1983	G	O4'-C1'-N9	10.09	116.28	108.20
2	AB	2676	C	C6-N1-C2	10.09	124.34	120.30
35	BA	1156	G	N7-C8-N9	10.09	118.15	113.10
35	BA	1480	A	N1-C6-N6	10.09	124.66	118.60
2	AB	427	U	C2-N3-C4	-10.09	120.95	127.00
2	AB	2036	C	C6-N1-C2	-10.09	116.26	120.30
2	AB	2208	C	C5-C6-N1	10.09	126.05	121.00
2	AB	2609	U	N3-C2-O2	-10.09	115.14	122.20
35	BA	326	G	C8-N9-C4	-10.09	102.36	106.40
2	AB	96	C	N3-C4-C5	-10.09	117.86	121.90
2	AB	1882	U	N1-C2-N3	-10.09	108.85	114.90
2	AB	2035	G	C8-N9-C4	-10.09	102.36	106.40
35	BA	1315	U	C5-C6-N1	-10.09	117.66	122.70
2	AB	2186	G	N9-C4-C5	10.09	109.43	105.40
29	A2	25	ARG	NE-CZ-NH2	-10.09	115.26	120.30
2	AB	675	A	C4'-C3'-C2'	-10.08	92.52	102.60
2	AB	756	A	O4'-C1'-N9	10.08	116.27	108.20
2	AB	1445	G	O4'-C1'-N9	10.08	116.27	108.20
2	AB	1828	G	C3'-C2'-C1'	-10.08	93.43	101.50
2	AB	1425	G	N3-C4-N9	10.08	132.05	126.00
4	AD	269	ARG	NE-CZ-NH2	10.08	125.34	120.30
35	BA	1082	A	N9-C4-C5	10.08	109.83	105.80
2	AB	1266	G	C6-N1-C2	-10.08	119.05	125.10
2	AB	2220	U	N1-C1'-C2'	-10.08	100.90	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	666	G	C5-N7-C8	-10.08	99.26	104.30
35	BA	783	C	O4'-C1'-N1	10.08	116.26	108.20
2	AB	327	G	N7-C8-N9	10.08	118.14	113.10
2	AB	1971	U	O4'-C1'-N1	10.08	116.26	108.20
2	AB	2156	G	C4-C5-N7	10.08	114.83	110.80
35	BA	1440	U	C5-C6-N1	-10.08	117.66	122.70
2	AB	468	G	N3-C2-N2	10.07	126.95	119.90
2	AB	2753	A	C8-N9-C4	-10.07	101.77	105.80
2	AB	2735	G	N1-C6-O6	10.07	125.94	119.90
35	BA	1041	G	N3-C4-C5	-10.07	123.56	128.60
2	AB	1146	C	C5-C6-N1	10.07	126.03	121.00
2	AB	1512	C	O4'-C1'-N1	10.07	116.26	108.20
2	AB	2144	G	N7-C8-N9	-10.07	108.06	113.10
4	AD	220	ARG	NE-CZ-NH1	10.07	125.34	120.30
2	AB	1251	C	C5-C6-N1	10.07	126.03	121.00
2	AB	1936	A	N9-C4-C5	-10.07	101.77	105.80
2	AB	2343	U	N3-C2-O2	-10.07	115.15	122.20
35	BA	41	G	N3-C4-N9	10.07	132.04	126.00
2	AB	2009	A	N9-C1'-C2'	-10.07	100.91	114.00
35	BA	758	C	C4'-C3'-C2'	-10.07	92.53	102.60
2	AB	1437	C	O4'-C1'-C2'	-10.07	95.73	105.80
2	AB	85	G	C4-C5-N7	-10.06	106.77	110.80
2	AB	1091	G	C2-N3-C4	10.06	116.93	111.90
2	AB	2126	A	C4-C5-N7	10.06	115.73	110.70
35	BA	618	C	C1'-O4'-C4'	-10.06	101.85	109.90
35	BA	1077	G	N9-C4-C5	10.06	109.43	105.40
2	AB	288	U	O4'-C1'-N1	10.06	116.25	108.20
2	AB	177	G	N9-C4-C5	10.06	109.42	105.40
2	AB	475	C	N3-C4-N4	10.06	125.04	118.00
2	AB	1640	A	N1-C6-N6	-10.06	112.56	118.60
35	BA	807	A	C2-N3-C4	10.06	115.63	110.60
36	BB	44	U	C5'-C4'-O4'	10.06	121.17	109.10
2	AB	2237	G	C4'-C3'-C2'	-10.06	92.54	102.60
2	AB	2353	G	C8-N9-C4	-10.06	102.38	106.40
35	BA	381	C	C3'-C2'-C1'	10.06	109.55	101.50
35	BA	704	A	C8-N9-C4	-10.06	101.78	105.80
2	AB	227	A	N7-C8-N9	10.05	118.83	113.80
35	BA	421	U	C4-C5-C6	10.06	125.73	119.70
2	AB	480	A	P-O3'-C3'	10.05	131.76	119.70
2	AB	577	G	N9-C4-C5	10.05	109.42	105.40
2	AB	1228	G	N3-C4-N9	10.05	132.03	126.00
2	AB	2594	C	C6-N1-C2	-10.05	116.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	639	G	N3-C4-C5	-10.05	123.57	128.60
35	BA	128	G	C3'-C2'-C1'	-10.05	93.46	101.50
35	BA	202	G	C6-C5-N7	10.05	136.43	130.40
2	AB	1282	U	C1'-O4'-C4'	-10.05	101.86	109.90
2	AB	1481	U	O4'-C1'-N1	10.05	116.24	108.20
2	AB	2302	U	C5-C4-O4	-10.04	119.87	125.90
2	AB	591	U	C4-C5-C6	10.04	125.72	119.70
2	AB	1175	A	N1-C6-N6	10.04	124.63	118.60
2	AB	1313	U	C6-N1-C2	-10.04	114.97	121.00
2	AB	763	G	C8-N9-C4	-10.04	102.38	106.40
2	AB	1794	A	N1-C2-N3	10.04	134.32	129.30
2	AB	316	C	O4'-C1'-N1	10.04	116.23	108.20
2	AB	348	A	C4-C5-C6	-10.04	111.98	117.00
2	AB	596	U	N3-C2-O2	-10.04	115.17	122.20
2	AB	857	G	C4-C5-N7	-10.04	106.78	110.80
2	AB	1989	G	C4-C5-N7	-10.04	106.78	110.80
2	AB	2133	G	C2-N3-C4	10.04	116.92	111.90
2	AB	2273	A	C1'-O4'-C4'	10.04	117.93	109.90
2	AB	2505	G	O4'-C1'-N9	10.04	116.23	108.20
35	BA	274	A	O4'-C1'-N9	10.04	116.23	108.20
35	BA	393	A	N3-C4-C5	-10.04	119.77	126.80
35	BA	1355	G	C2-N3-C4	10.04	116.92	111.90
2	AB	482	A	N9-C4-C5	-10.04	101.79	105.80
2	AB	899	A	O4'-C1'-N9	10.04	116.23	108.20
35	BA	142	G	N3-C4-C5	-10.04	123.58	128.60
2	AB	1050	A	C5-N7-C8	10.03	108.92	103.90
35	BA	394	G	N3-C4-C5	-10.04	123.58	128.60
2	AB	1844	C	N3-C2-O2	-10.03	114.88	121.90
35	BA	1	A	N7-C8-N9	10.03	118.82	113.80
35	BA	102	G	C4-C5-C6	10.03	124.82	118.80
35	BA	1095	U	C5-C6-N1	-10.03	117.68	122.70
2	AB	2859	G	O4'-C1'-N9	10.03	116.22	108.20
35	BA	921	U	O4'-C1'-N1	10.03	116.23	108.20
35	BA	1449	C	C6-N1-C2	-10.03	116.29	120.30
1	AA	79	G	C5-C6-N1	10.03	116.52	111.50
2	AB	2813	A	N7-C8-N9	10.03	118.81	113.80
2	AB	2829	A	C5-C6-N6	-10.03	115.68	123.70
8	AH	34	ARG	NE-CZ-NH1	10.03	125.31	120.30
35	BA	287	U	C6-N1-C2	10.03	127.02	121.00
35	BA	766	A	C4-C5-C6	-10.03	111.99	117.00
35	BA	86	G	N7-C8-N9	10.03	118.11	113.10
2	AB	515	A	N1-C2-N3	-10.03	124.29	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1074	G	C6-N1-C2	-10.03	119.08	125.10
2	AB	1695	G	N1-C2-N3	-10.03	117.88	123.90
2	AB	2049	G	C1'-O4'-C4'	-10.03	101.88	109.90
35	BA	822	U	N1-C2-O2	10.03	129.82	122.80
20	AT	68	ARG	NE-CZ-NH2	10.03	125.31	120.30
35	BA	672	U	O4'-C1'-N1	10.03	116.22	108.20
2	AB	385	C	N1-C2-O2	10.02	124.91	118.90
2	AB	2508	G	C8-N9-C4	-10.02	102.39	106.40
35	BA	584	G	N9-C4-C5	10.02	109.41	105.40
35	BA	606	G	C5-C6-N1	-10.02	106.49	111.50
2	AB	436	C	N3-C4-C5	-10.02	117.89	121.90
2	AB	2499	C	O4'-C1'-N1	10.02	116.22	108.20
2	AB	2708	G	N3-C4-C5	-10.02	123.59	128.60
35	BA	544	G	N3-C4-C5	-10.02	123.59	128.60
37	BC	73	A	O4'-C1'-N9	10.02	116.22	108.20
2	AB	118	A	C5-N7-C8	-10.02	98.89	103.90
2	AB	1046	A	O4'-C1'-N9	10.02	116.21	108.20
2	AB	2595	G	C5-N7-C8	-10.02	99.29	104.30
35	BA	581	G	C2-N3-C4	10.02	116.91	111.90
35	BA	188	C	N3-C4-C5	-10.02	117.89	121.90
2	AB	1087	G	N9-C4-C5	10.01	109.41	105.40
35	BA	919	A	C4-C5-C6	-10.01	111.99	117.00
2	AB	217	A	C8-N9-C4	-10.01	101.80	105.80
35	BA	1451	U	N1-C2-N3	10.01	120.91	114.90
2	AB	1750	G	C5-N7-C8	10.01	109.30	104.30
2	AB	1852	U	C4-C5-C6	10.01	125.71	119.70
35	BA	178	C	N3-C4-C5	10.01	125.90	121.90
2	AB	732	C	N3-C2-O2	-10.01	114.89	121.90
41	BG	111	ARG	NE-CZ-NH2	-10.01	115.30	120.30
2	AB	867	C	C5-C4-N4	-10.01	113.20	120.20
2	AB	921	C	C5-C4-N4	-10.01	113.20	120.20
2	AB	2259	U	N3-C4-O4	10.01	126.40	119.40
2	AB	2476	A	N7-C8-N9	10.01	118.80	113.80
2	AB	2877	G	N9-C4-C5	10.01	109.40	105.40
35	BA	1168	U	C5'-C4'-O4'	10.01	121.11	109.10
2	AB	1745	A	O4'-C1'-N9	10.00	116.20	108.20
35	BA	462	G	C8-N9-C4	-10.00	102.40	106.40
35	BA	1174	G	N9-C4-C5	-10.00	101.40	105.40
1	AA	98	G	N3-C4-C5	-10.00	123.60	128.60
2	AB	79	C	N3-C2-O2	-10.00	114.90	121.90
4	AD	237	ARG	NE-CZ-NH1	10.00	125.30	120.30
35	BA	1019	A	N9-C4-C5	-10.00	101.80	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	31	G	O4'-C1'-N9	10.00	116.20	108.20
2	AB	895	U	C5-C6-N1	-10.00	117.70	122.70
35	BA	196	A	C8-N9-C4	-10.00	101.80	105.80
2	AB	1072	C	O4'-C1'-N1	9.99	116.19	108.20
2	AB	422	A	C5-C6-N1	9.99	122.70	117.70
2	AB	1236	G	C2-N3-C4	9.99	116.90	111.90
2	AB	2331	G	C5-N7-C8	-9.99	99.30	104.30
35	BA	667	G	N3-C4-N9	9.99	132.00	126.00
35	BA	1182	G	C4-C5-N7	-9.99	106.80	110.80
2	AB	1754	A	N7-C8-N9	9.99	118.80	113.80
35	BA	268	U	C4-C5-C6	-9.99	113.71	119.70
35	BA	410	G	N7-C8-N9	9.99	118.09	113.10
35	BA	752	G	C4-C5-N7	-9.99	106.80	110.80
35	BA	1249	C	C5-C6-N1	9.99	125.99	121.00
2	AB	538	A	C8-N9-C4	9.99	109.80	105.80
2	AB	1369	G	O4'-C1'-N9	9.99	116.19	108.20
2	AB	471	A	C8-N9-C4	-9.99	101.81	105.80
2	AB	1581	G	C8-N9-C4	-9.99	102.41	106.40
2	AB	2677	G	C2-N3-C4	9.99	116.89	111.90
35	BA	161	A	C2-N3-C4	9.99	115.59	110.60
35	BA	1411	C	O4'-C1'-N1	9.99	116.19	108.20
37	BC	23	G	C5-N7-C8	-9.99	99.31	104.30
45	BK	122	ARG	NE-CZ-NH2	-9.99	115.31	120.30
2	AB	2727	A	C8-N9-C4	-9.98	101.81	105.80
2	AB	1857	G	N3-C2-N2	9.98	126.89	119.90
35	BA	1239	A	N1-C2-N3	-9.98	124.31	129.30
2	AB	451	U	O4'-C1'-N1	9.98	116.19	108.20
35	BA	983	A	N1-C2-N3	-9.98	124.31	129.30
2	AB	1038	G	O4'-C1'-N9	9.98	116.18	108.20
2	AB	1840	G	N3-C4-C5	-9.98	123.61	128.60
35	BA	370	C	O4'-C1'-N1	9.98	116.18	108.20
2	AB	262	A	C8-N9-C4	-9.97	101.81	105.80
2	AB	1644	C	O4'-C1'-N1	9.97	116.18	108.20
2	AB	2280	G	C4'-C3'-C2'	-9.97	92.63	102.60
4	AD	13	ARG	NE-CZ-NH1	9.97	125.29	120.30
2	AB	511	U	C2-N3-C4	-9.97	121.02	127.00
35	BA	123	U	O4'-C1'-N1	9.97	116.18	108.20
2	AB	49	A	C5-C6-N1	-9.97	112.72	117.70
2	AB	69	C	C2-N3-C4	9.97	124.88	119.90
35	BA	449	G	O4'-C1'-N9	9.97	116.17	108.20
35	BA	760	G	C5-C6-N1	9.97	116.48	111.50
2	AB	816	C	C2-N3-C4	9.96	124.88	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
48	BN	8	ARG	NE-CZ-NH1	9.97	125.28	120.30
2	AB	583	G	C2-N3-C4	9.96	116.88	111.90
2	AB	2455	G	C6-N1-C2	-9.96	119.12	125.10
35	BA	169	C	O4'-C1'-N1	9.96	116.17	108.20
2	AB	912	C	C2-N3-C4	-9.96	114.92	119.90
2	AB	1712	U	O4'-C1'-N1	9.96	116.17	108.20
2	AB	1918	A	O4'-C1'-N9	9.96	116.17	108.20
2	AB	2524	G	N7-C8-N9	9.96	118.08	113.10
2	AB	2554	U	O4'-C1'-N1	9.96	116.17	108.20
2	AB	2735	G	C5-C6-N1	-9.96	106.52	111.50
2	AB	2814	A	C2-N3-C4	9.96	115.58	110.60
35	BA	501	C	C5-C6-N1	9.96	125.98	121.00
35	BA	917	G	C5-N7-C8	-9.96	99.32	104.30
35	BA	1077	G	N3-C4-C5	-9.96	123.62	128.60
2	AB	843	G	C4-C5-N7	-9.96	106.82	110.80
2	AB	2337	G	C5-C6-O6	-9.96	122.62	128.60
35	BA	707	U	N1-C2-N3	9.96	120.88	114.90
1	AA	1	U	C5-C6-N1	-9.96	117.72	122.70
2	AB	191	A	O4'-C1'-N9	9.96	116.17	108.20
2	AB	261	G	C4-C5-N7	-9.96	106.82	110.80
2	AB	1472	C	N1-C2-O2	9.96	124.87	118.90
2	AB	1619	G	C4-C5-N7	-9.96	106.82	110.80
35	BA	569	C	O4'-C1'-N1	9.96	116.16	108.20
2	AB	2741	A	C1'-O4'-C4'	9.95	117.86	109.90
35	BA	810	C	C1'-O4'-C4'	9.96	117.86	109.90
2	AB	599	A	C4'-C3'-C2'	-9.95	92.65	102.60
2	AB	1061	U	C3'-C2'-C1'	9.95	109.46	101.50
2	AB	1088	A	C8-N9-C4	-9.95	101.82	105.80
35	BA	1403	C	N3-C4-N4	-9.95	111.03	118.00
2	AB	1638	C	C2-N3-C4	9.95	124.88	119.90
35	BA	673	A	C8-N9-C4	-9.95	101.82	105.80
36	BB	34	U	O4'-C4'-C3'	9.95	114.06	106.10
37	BC	38	A	O4'-C1'-N9	9.95	116.16	108.20
2	AB	2255	G	N1-C2-N3	9.95	129.87	123.90
35	BA	497	G	C2-N3-C4	9.95	116.87	111.90
2	AB	1511	G	C6-N1-C2	-9.95	119.13	125.10
2	AB	1839	G	C2-N3-C4	9.95	116.87	111.90
2	AB	2282	G	N3-C4-C5	-9.94	123.63	128.60
35	BA	84	U	C3'-C2'-C1'	9.95	109.46	101.50
35	BA	1049	U	C3'-C2'-C1'	9.95	109.46	101.50
35	BA	1411	C	N1-C1'-C2'	-9.95	101.06	112.00
1	AA	41	G	N3-C4-C5	-9.94	123.63	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	818	G	C8-N9-C4	-9.94	102.42	106.40
2	AB	952	G	C5-C6-O6	-9.94	122.64	128.60
2	AB	1390	U	C5-C6-N1	-9.94	117.73	122.70
2	AB	1475	G	C6-N1-C2	-9.94	119.14	125.10
2	AB	1869	G	C8-N9-C4	-9.94	102.42	106.40
2	AB	1878	G	C2-N3-C4	-9.94	106.93	111.90
2	AB	1961	C	N1-C2-O2	9.94	124.86	118.90
2	AB	2535	G	P-O3'-C3'	9.94	131.63	119.70
2	AB	1324	G	N1-C6-O6	-9.94	113.94	119.90
2	AB	2172	U	N1-C2-O2	-9.94	115.84	122.80
2	AB	2872	A	C5-C6-N1	-9.94	112.73	117.70
35	BA	85	U	N3-C4-C5	-9.94	108.64	114.60
35	BA	177	G	N7-C8-N9	-9.94	108.13	113.10
35	BA	817	C	C5-C6-N1	9.94	125.97	121.00
35	BA	1431	A	N7-C8-N9	9.94	118.77	113.80
2	AB	629	G	N9-C4-C5	9.94	109.38	105.40
2	AB	1420	A	C2-N3-C4	9.94	115.57	110.60
2	AB	1733	G	C8-N9-C4	-9.94	102.43	106.40
2	AB	2195	U	N1-C2-N3	9.94	120.86	114.90
35	BA	1267	C	N3-C4-C5	-9.94	117.93	121.90
37	BC	62	C	O4'-C1'-N1	9.94	116.15	108.20
37	BC	71	G	C8-N9-C4	-9.94	102.43	106.40
2	AB	15	G	O4'-C1'-N9	9.93	116.15	108.20
2	AB	1620	G	N3-C2-N2	-9.93	112.95	119.90
2	AB	1659	G	N9-C4-C5	9.93	109.37	105.40
2	AB	2354	C	O4'-C1'-N1	9.93	116.15	108.20
2	AB	2388	A	N1-C2-N3	-9.93	124.33	129.30
2	AB	2449	H2U	P-O3'-C3'	9.93	131.62	119.70
2	AB	2768	U	C5-C6-N1	9.93	127.67	122.70
2	AB	85	G	N3-C2-N2	-9.93	112.95	119.90
2	AB	253	C	C5-C6-N1	9.93	125.97	121.00
2	AB	575	A	C5-C6-N6	-9.93	115.75	123.70
2	AB	2238	G	C5-C6-O6	9.93	134.56	128.60
35	BA	312	C	N3-C4-C5	9.93	125.87	121.90
2	AB	147	C	C5-C4-N4	-9.93	113.25	120.20
16	AP	67	PHE	CB-CG-CD1	-9.93	113.85	120.80
35	BA	74	A	N9-C4-C5	-9.93	101.83	105.80
35	BA	307	C	C2-N3-C4	9.92	124.86	119.90
2	AB	71	A	O4'-C1'-N9	9.92	116.14	108.20
2	AB	1262	A	O4'-C4'-C3'	9.92	114.03	106.10
2	AB	1637	A	N7-C8-N9	-9.92	108.84	113.80
2	AB	1861	G	O4'-C1'-N9	9.92	116.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2567	G	N3-C4-C5	-9.92	123.64	128.60
2	AB	2675	A	C6-N1-C2	-9.92	112.65	118.60
35	BA	1486	G	C5-C6-N1	9.92	116.46	111.50
2	AB	811	U	C3'-C2'-C1'	9.92	109.43	101.50
2	AB	2391	G	N3-C4-C5	-9.92	123.64	128.60
2	AB	2901	C	C6-N1-C2	-9.92	116.33	120.30
48	BN	93	ARG	NE-CZ-NH1	9.92	125.26	120.30
2	AB	2043	C	N3-C2-O2	-9.91	114.96	121.90
2	AB	2421	G	C8-N9-C4	-9.91	102.43	106.40
2	AB	2431	U	O4'-C1'-N1	9.91	116.13	108.20
35	BA	1044	A	C5-C6-N1	-9.91	112.74	117.70
2	AB	1262	A	C4'-C3'-C2'	-9.91	92.69	102.60
2	AB	1811	G	C5-C6-N1	9.91	116.46	111.50
2	AB	2321	U	C5-C6-N1	-9.91	117.75	122.70
2	AB	1299	G	N9-C4-C5	9.91	109.36	105.40
35	BA	328	C	O4'-C1'-N1	9.91	116.13	108.20
45	BK	123	ARG	NE-CZ-NH2	9.91	125.25	120.30
2	AB	611	C	N3-C2-O2	-9.91	114.97	121.90
2	AB	1016	G	N1-C6-O6	9.90	125.84	119.90
2	AB	1313	U	C4-C5-C6	-9.90	113.76	119.70
36	BB	31	U	C4-C5-C6	9.90	125.64	119.70
2	AB	1749	A	C4-C5-N7	-9.90	105.75	110.70
35	BA	364	A	C5-N7-C8	-9.90	98.95	103.90
2	AB	2588	G	C5-C6-O6	-9.90	122.66	128.60
47	BM	52	ARG	NE-CZ-NH2	-9.90	115.35	120.30
2	AB	244	A	C5-C6-N1	9.90	122.65	117.70
2	AB	571	U	C4-C5-C6	9.90	125.64	119.70
2	AB	629	G	N1-C2-N3	-9.90	117.96	123.90
2	AB	1013	C	N1-C2-O2	9.90	124.84	118.90
2	AB	1974	C	O4'-C1'-N1	9.90	116.12	108.20
2	AB	1600	C	N3-C2-O2	-9.90	114.97	121.90
2	AB	202	U	N3-C2-O2	-9.89	115.27	122.20
35	BA	483	C	N1-C2-O2	9.89	124.84	118.90
35	BA	847	G	C5-C6-O6	-9.89	122.66	128.60
35	BA	1034	G	C6-N1-C2	-9.89	119.16	125.10
2	AB	1146	C	C5-C4-N4	9.89	127.12	120.20
29	A2	25	ARG	NE-CZ-NH1	9.89	125.25	120.30
35	BA	371	A	C8-N9-C4	-9.89	101.84	105.80
2	AB	111	A	N7-C8-N9	9.89	118.74	113.80
2	AB	943	A	C5-N7-C8	-9.88	98.96	103.90
2	AB	2289	G	C5-C6-N1	9.88	116.44	111.50
2	AB	2654	A	C4-C5-N7	-9.89	105.76	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	975	A	C5-C6-N1	-9.88	112.76	117.70
2	AB	1828	G	C4-C5-N7	-9.88	106.85	110.80
35	BA	491	G	C2-N3-C4	9.88	116.84	111.90
2	AB	1005	C	N1-C2-O2	9.88	124.83	118.90
2	AB	1433	A	C4-C5-C6	9.88	121.94	117.00
2	AB	2182	U	N1-C2-N3	9.88	120.83	114.90
35	BA	602	A	N7-C8-N9	-9.88	108.86	113.80
35	BA	1018	G	C5-C6-N1	9.88	116.44	111.50
36	BB	59	A	O4'-C1'-N9	9.88	116.11	108.20
51	BQ	63	ARG	NE-CZ-NH2	-9.88	115.36	120.30
2	AB	846	U	O4'-C1'-N1	9.88	116.10	108.20
2	AB	1757	A	N9-C4-C5	9.88	109.75	105.80
2	AB	2220	U	O4'-C1'-N1	9.88	116.10	108.20
35	BA	8	A	N1-C2-N3	-9.88	124.36	129.30
35	BA	1294	G	O4'-C1'-N9	9.88	116.10	108.20
2	AB	257	C	C6-N1-C2	-9.88	116.35	120.30
35	BA	36	C	C1'-O4'-C4'	-9.88	102.00	109.90
2	AB	357	C	N1-C2-N3	9.87	126.11	119.20
2	AB	2554	U	N3-C2-O2	-9.88	115.29	122.20
2	AB	2799	A	C5-N7-C8	-9.88	98.96	103.90
35	BA	151	A	O4'-C1'-N9	9.88	116.10	108.20
35	BA	907	A	N1-C6-N6	-9.88	112.67	118.60
35	BA	329	A	O4'-C1'-N9	9.87	116.10	108.20
2	AB	1560	G	C5'-C4'-O4'	9.87	120.94	109.10
35	BA	1103	C	N1-C2-O2	9.87	124.82	118.90
41	BG	44	ARG	NE-CZ-NH2	-9.87	115.36	120.30
7	AG	147	ARG	NE-CZ-NH2	-9.87	115.36	120.30
8	AH	93	TYR	CB-CG-CD2	9.87	126.92	121.00
2	AB	1904	G	C4-C5-N7	-9.87	106.85	110.80
37	BC	58	A	N9-C4-C5	9.87	109.75	105.80
2	AB	97	C	C2-N3-C4	9.87	124.83	119.90
2	AB	633	A	C8-N9-C4	9.87	109.75	105.80
2	AB	1111	A	C8-N9-C4	-9.86	101.85	105.80
2	AB	2057	G	N7-C8-N9	-9.86	108.17	113.10
35	BA	881	G	N7-C8-N9	9.87	118.03	113.10
35	BA	972	C	C2-N3-C4	-9.87	114.97	119.90
37	BC	20	G	N3-C4-C5	-9.86	123.67	128.60
2	AB	716	A	N9-C4-C5	9.86	109.75	105.80
2	AB	931	U	O4'-C1'-N1	9.86	116.09	108.20
35	BA	13	U	N3-C4-O4	9.86	126.30	119.40
35	BA	359	G	C4-C5-N7	-9.86	106.86	110.80
2	AB	251	A	N1-C2-N3	9.86	134.23	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1054	A	O4'-C1'-N9	9.86	116.09	108.20
2	AB	2061	G	N3-C4-N9	9.86	131.91	126.00
2	AB	2083	G	N3-C2-N2	-9.86	113.00	119.90
1	AA	54	G	N3-C4-C5	-9.86	123.67	128.60
2	AB	770	G	C5-N7-C8	-9.86	99.37	104.30
2	AB	2286	G	O4'-C4'-C3'	9.86	113.99	106.10
2	AB	803	U	C4-C5-C6	9.86	125.61	119.70
2	AB	2006	C	N1-C2-O2	9.86	124.81	118.90
36	BB	34	U	N3-C4-C5	-9.86	108.69	114.60
2	AB	105	C	N3-C4-C5	-9.85	117.96	121.90
2	AB	2112	G	C5-N7-C8	9.85	109.23	104.30
2	AB	2118	U	N3-C2-O2	-9.85	115.30	122.20
2	AB	2363	G	N3-C4-C5	-9.85	123.67	128.60
2	AB	2853	C	O4'-C1'-N1	9.85	116.08	108.20
40	BF	3	TYR	CB-CG-CD1	-9.85	115.09	121.00
1	AA	79	G	C8-N9-C4	-9.85	102.46	106.40
2	AB	40	U	C2-N3-C4	-9.85	121.09	127.00
2	AB	2286	G	C4-C5-N7	-9.85	106.86	110.80
2	AB	2739	U	O4'-C1'-N1	9.85	116.08	108.20
35	BA	874	G	C5-N7-C8	9.85	109.22	104.30
37	BC	2	G	C6-N1-C2	-9.85	119.19	125.10
35	BA	1219	A	N3-C4-N9	9.85	135.28	127.40
2	AB	2198	A	C8-N9-C4	-9.85	101.86	105.80
12	AL	99	ARG	NE-CZ-NH1	9.85	125.22	120.30
35	BA	1099	G	N7-C8-N9	9.85	118.02	113.10
35	BA	302	G	C8-N9-C4	-9.85	102.46	106.40
2	AB	576	U	C5-C4-O4	-9.84	119.99	125.90
2	AB	789	A	C3'-C2'-C1'	9.84	109.38	101.50
2	AB	2681	C	N3-C2-O2	-9.84	115.01	121.90
2	AB	1325	U	O4'-C1'-N1	9.84	116.07	108.20
2	AB	2700	A	C2-N3-C4	9.84	115.52	110.60
2	AB	2	G	C5-N7-C8	9.84	109.22	104.30
2	AB	142	A	N1-C2-N3	-9.84	124.38	129.30
35	BA	1395	C	C4-C5-C6	9.84	122.32	117.40
2	AB	193	U	C5-C4-O4	-9.84	120.00	125.90
35	BA	964	A	C4-C5-C6	-9.84	112.08	117.00
35	BA	1278	G	C4-C5-N7	9.84	114.74	110.80
2	AB	1639	C	C3'-C2'-C1'	9.84	109.37	101.50
35	BA	574	A	C8-N9-C4	-9.84	101.86	105.80
2	AB	284	U	O4'-C1'-N1	9.84	116.07	108.20
35	BA	821	G	N3-C4-N9	9.84	131.90	126.00
2	AB	151	C	O4'-C1'-N1	9.83	116.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	295	G	O4'-C1'-N9	9.83	116.07	108.20
2	AB	2535	G	N9-C4-C5	9.83	109.33	105.40
2	AB	2891	U	O4'-C1'-N1	9.83	116.07	108.20
35	BA	1272	G	N3-C4-C5	-9.83	123.68	128.60
35	BA	1347	G	C8-N9-C4	-9.83	102.47	106.40
2	AB	1461	C	O4'-C1'-N1	9.83	116.06	108.20
2	AB	2070	A	O4'-C1'-N9	9.83	116.06	108.20
35	BA	847	G	C5-N7-C8	-9.83	99.39	104.30
2	AB	2652	C	O4'-C1'-N1	9.83	116.06	108.20
35	BA	163	C	C2-N3-C4	9.83	124.81	119.90
35	BA	668	G	C4-C5-N7	9.83	114.73	110.80
35	BA	1152	A	N1-C6-N6	-9.83	112.70	118.60
2	AB	612	G	N9-C4-C5	9.82	109.33	105.40
2	AB	853	C	N1-C2-O2	9.82	124.80	118.90
2	AB	860	U	O4'-C1'-N1	9.82	116.06	108.20
2	AB	1920	C	N3-C4-C5	-9.82	117.97	121.90
2	AB	2067	G	O4'-C1'-N9	9.82	116.06	108.20
2	AB	2480	C	O4'-C1'-N1	9.82	116.06	108.20
1	AA	117	G	C8-N9-C4	9.82	110.33	106.40
2	AB	239	C	O4'-C1'-N1	9.82	116.06	108.20
2	AB	533	G	N7-C8-N9	9.82	118.01	113.10
2	AB	2217	G	N9-C4-C5	9.82	109.33	105.40
2	AB	2621	G	O4'-C1'-N9	9.82	116.06	108.20
2	AB	2838	G	C8-N9-C4	-9.82	102.47	106.40
35	BA	528	C	C5'-C4'-O4'	9.82	120.89	109.10
35	BA	729	A	C8-N9-C4	-9.82	101.87	105.80
37	BC	40	C	O4'-C1'-N1	9.82	116.06	108.20
2	AB	1761	C	C3'-C2'-C1'	9.82	109.36	101.50
2	AB	2120	G	O4'-C1'-N9	9.82	116.06	108.20
35	BA	122	G	C2-N3-C4	9.82	116.81	111.90
35	BA	168	G	C5-C6-O6	-9.82	122.71	128.60
35	BA	1278	G	C5-N7-C8	-9.82	99.39	104.30
2	AB	100	U	N3-C2-O2	-9.82	115.33	122.20
2	AB	399	U	C5'-C4'-O4'	9.82	120.88	109.10
2	AB	930	G	C4-C5-N7	-9.82	106.87	110.80
2	AB	1382	G	C2-N3-C4	9.82	116.81	111.90
35	BA	1353	G	N9-C4-C5	9.82	109.33	105.40
1	AA	110	C	O4'-C1'-N1	9.81	116.05	108.20
35	BA	1053	G	N9-C4-C5	9.81	109.33	105.40
1	AA	85	G	N7-C8-N9	9.81	118.00	113.10
2	AB	211	C	C6-N1-C2	-9.81	116.38	120.30
2	AB	1360	G	C2-N3-C4	9.81	116.81	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2848	G	N3-C4-C5	-9.81	123.69	128.60
35	BA	1080	A	O4'-C1'-N9	9.81	116.05	108.20
2	AB	518	G	N3-C4-N9	-9.81	120.11	126.00
35	BA	761	G	C5-N7-C8	9.81	109.20	104.30
2	AB	106	C	N1-C2-O2	9.80	124.78	118.90
2	AB	1776	G	N9-C4-C5	9.80	109.32	105.40
35	BA	162	A	C5-N7-C8	-9.81	99.00	103.90
2	AB	212	G	N1-C2-N3	-9.80	118.02	123.90
2	AB	383	C	C2-N3-C4	9.80	124.80	119.90
2	AB	2126	A	O4'-C1'-N9	-9.80	100.36	108.20
35	BA	357	G	N7-C8-N9	9.80	118.00	113.10
2	AB	2560	A	C5'-C4'-O4'	9.80	120.86	109.10
2	AB	1533	C	C4-C5-C6	-9.80	112.50	117.40
35	BA	115	G	C6-N1-C2	-9.80	119.22	125.10
35	BA	361	G	N7-C8-N9	9.80	118.00	113.10
2	AB	683	U	C5-C4-O4	-9.79	120.02	125.90
35	BA	714	G	N1-C2-N3	-9.80	118.02	123.90
35	BA	755	G	N3-C2-N2	9.79	126.76	119.90
2	AB	1151	A	C8-N9-C4	9.79	109.72	105.80
35	BA	63	C	N1-C2-N3	-9.79	112.34	119.20
2	AB	716	A	C8-N9-C4	-9.79	101.88	105.80
2	AB	636	G	C5-N7-C8	-9.79	99.41	104.30
2	AB	2422	C	N3-C4-C5	-9.79	117.98	121.90
18	AR	50	ARG	NE-CZ-NH2	9.79	125.19	120.30
22	AV	12	ARG	NE-CZ-NH1	9.79	125.19	120.30
2	AB	377	G	C5-C6-N1	9.79	116.39	111.50
2	AB	749	A	N1-C6-N6	9.79	124.47	118.60
2	AB	2115	G	C5-C6-N1	9.79	116.39	111.50
2	AB	1845	G	N3-C2-N2	-9.78	113.05	119.90
11	AK	64	ARG	NE-CZ-NH1	-9.78	115.41	120.30
35	BA	304	U	N3-C2-O2	-9.79	115.35	122.20
35	BA	666	G	C8-N9-C4	-9.78	102.49	106.40
35	BA	1414	U	N3-C2-O2	-9.78	115.35	122.20
35	BA	1404	C	C2-N3-C4	9.78	124.79	119.90
2	AB	124	G	C4-C5-N7	-9.78	106.89	110.80
2	AB	778	G	C5-C6-N1	9.78	116.39	111.50
35	BA	291	U	C5-C6-N1	-9.78	117.81	122.70
2	AB	1426	G	C2-N3-C4	-9.78	107.01	111.90
2	AB	2693	G	N7-C8-N9	-9.78	108.21	113.10
35	BA	684	U	O4'-C1'-N1	9.78	116.02	108.20
35	BA	960	U	P-O3'-C3'	9.78	131.44	119.70
2	AB	2126	A	N9-C4-C5	-9.78	101.89	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1407	G	C5-N7-C8	-9.78	99.41	104.30
2	AB	2208	C	O4'-C1'-N1	9.78	116.02	108.20
2	AB	422	A	N1-C2-N3	-9.77	124.41	129.30
2	AB	2073	C	O4'-C1'-N1	9.77	116.02	108.20
2	AB	2259	U	C5-C4-O4	-9.77	120.03	125.90
2	AB	2597	G	C5-C6-O6	-9.77	122.73	128.60
35	BA	1373	G	N3-C4-N9	9.77	131.86	126.00
2	AB	1127	A	O4'-C1'-N9	-9.77	100.38	108.20
2	AB	2204	G	C5-C6-N1	9.77	116.39	111.50
36	BB	23	C	N3-C4-C5	-9.77	117.99	121.90
35	BA	361	G	O4'-C1'-N9	9.77	116.02	108.20
37	BC	61	U	C2-N3-C4	-9.77	121.14	127.00
1	AA	27	C	N3-C4-C5	-9.77	117.99	121.90
2	AB	1045	C	C5-C4-N4	9.77	127.04	120.20
2	AB	1904	G	N9-C1'-C2'	-9.77	101.25	112.00
35	BA	1240	U	O4'-C1'-N1	9.77	116.02	108.20
2	AB	1074	G	O4'-C1'-N9	9.77	116.01	108.20
2	AB	1346	G	C4'-C3'-C2'	-9.77	92.83	102.60
2	AB	1424	G	N7-C8-N9	9.77	117.98	113.10
2	AB	1427	A	C3'-C2'-C1'	-9.77	93.69	101.50
2	AB	725	G	N3-C4-N9	9.76	131.86	126.00
2	AB	1999	C	N3-C2-O2	-9.76	115.06	121.90
2	AB	1757	A	O4'-C1'-N9	9.76	116.01	108.20
1	AA	97	C	O4'-C1'-N1	9.76	116.01	108.20
2	AB	1056	G	N1-C6-O6	-9.76	114.05	119.90
2	AB	2603	G	N3-C4-C5	-9.76	123.72	128.60
35	BA	805	C	N3-C4-C5	-9.76	118.00	121.90
2	AB	258	G	N7-C8-N9	9.76	117.98	113.10
2	AB	476	G	C8-N9-C4	-9.76	102.50	106.40
2	AB	1529	G	C4'-C3'-C2'	-9.76	92.84	102.60
2	AB	2747	G	N9-C1'-C2'	-9.76	101.27	112.00
35	BA	1471	U	O4'-C1'-N1	9.76	116.01	108.20
2	AB	2181	U	N3-C2-O2	-9.76	115.37	122.20
2	AB	2667	C	N3-C2-O2	-9.76	115.07	121.90
35	BA	376	G	C8-N9-C4	-9.76	102.50	106.40
35	BA	1039	G	O4'-C1'-N9	9.76	116.00	108.20
37	BC	50	G	N3-C4-C5	-9.76	123.72	128.60
2	AB	275	C	C6-N1-C2	-9.75	116.40	120.30
2	AB	1557	C	N1-C2-O2	9.75	124.75	118.90
2	AB	1564	C	N3-C4-C5	-9.75	118.00	121.90
2	AB	1828	G	C8-N9-C4	-9.75	102.50	106.40
35	BA	10	A	O4'-C1'-N9	9.75	116.00	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2176	A	C4-C5-C6	-9.75	112.12	117.00
35	BA	1034	G	C2-N3-C4	9.75	116.78	111.90
35	BA	299	G	C6-N1-C2	-9.75	119.25	125.10
2	AB	1450	G	C5-C6-N1	9.75	116.37	111.50
2	AB	1970	A	N9-C4-C5	9.75	109.70	105.80
2	AB	2129	C	O4'-C1'-N1	9.75	116.00	108.20
2	AB	2551	C	N3-C4-N4	9.75	124.82	118.00
35	BA	1398	A	C5-C6-N1	9.75	122.57	117.70
36	BB	44	U	C4-C5-C6	9.75	125.55	119.70
1	AA	7	G	C5-C6-N1	9.74	116.37	111.50
2	AB	869	G	C5-C6-N1	9.74	116.37	111.50
2	AB	926	G	N3-C2-N2	-9.74	113.08	119.90
2	AB	2308	G	C8-N9-C4	-9.74	102.50	106.40
35	BA	441	A	C4'-C3'-C2'	-9.74	92.86	102.60
35	BA	606	G	C4-C5-N7	-9.74	106.90	110.80
35	BA	623	C	C5-C6-N1	9.74	125.87	121.00
2	AB	293	U	O4'-C1'-N1	9.74	115.99	108.20
35	BA	125	U	N1-C2-N3	9.74	120.75	114.90
35	BA	1092	A	C2-N3-C4	9.74	115.47	110.60
2	AB	2668	G	C5-C6-O6	-9.74	122.75	128.60
2	AB	2698	U	O4'-C1'-N1	9.74	115.99	108.20
35	BA	447	G	N9-C4-C5	9.74	109.30	105.40
35	BA	705	G	N3-C4-C5	-9.74	123.73	128.60
35	BA	1015	G	C5-C6-N1	9.74	116.37	111.50
36	BB	13	A	C4-C5-N7	-9.74	105.83	110.70
2	AB	170	U	N3-C4-O4	9.74	126.22	119.40
2	AB	214	G	C1'-O4'-C4'	9.74	117.69	109.90
2	AB	1285	A	N1-C6-N6	-9.74	112.76	118.60
2	AB	2333	A	N9-C4-C5	9.74	109.69	105.80
2	AB	2675	A	C5-N7-C8	9.74	108.77	103.90
35	BA	1130	A	C8-N9-C4	-9.74	101.91	105.80
2	AB	970	U	C6-N1-C2	-9.73	115.16	121.00
2	AB	1260	A	C4-C5-N7	-9.73	105.83	110.70
2	AB	1574	C	C3'-C2'-C1'	9.73	109.29	101.50
2	AB	2111	U	N3-C2-O2	-9.73	115.39	122.20
35	BA	752	G	C8-N9-C4	-9.73	102.51	106.40
2	AB	742	A	C8-N9-C4	-9.73	101.91	105.80
2	AB	1501	G	C8-N9-C4	-9.73	102.51	106.40
2	AB	1515	A	N1-C2-N3	-9.73	124.44	129.30
2	AB	1626	A	O4'-C1'-N9	9.73	115.98	108.20
35	BA	833	G	N1-C6-O6	-9.73	114.06	119.90
2	AB	2514	U	O4'-C1'-N1	9.73	115.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	194	G	C4-C5-N7	9.73	114.69	110.80
2	AB	1674	G	N1-C2-N3	-9.73	118.06	123.90
35	BA	321	A	O4'-C1'-N9	9.73	115.98	108.20
35	BA	1042	A	N1-C2-N3	9.73	134.16	129.30
2	AB	1586	A	C1'-O4'-C4'	-9.72	102.12	109.90
2	AB	2785	C	C2-N3-C4	9.72	124.76	119.90
35	BA	375	U	N1-C2-O2	9.72	129.61	122.80
35	BA	1270	G	C2-N3-C4	9.72	116.76	111.90
2	AB	314	C	C6-N1-C2	-9.72	116.41	120.30
2	AB	994	C	O4'-C1'-N1	9.72	115.98	108.20
35	BA	111	G	N3-C4-C5	-9.72	123.74	128.60
37	BC	42	C	C5-C4-N4	-9.72	113.40	120.20
1	AA	117	G	N3-C2-N2	-9.72	113.10	119.90
26	AZ	17	ARG	NE-CZ-NH1	9.72	125.16	120.30
2	AB	540	C	N1-C2-O2	-9.72	113.07	118.90
35	BA	678	U	O4'-C1'-N1	9.72	115.97	108.20
35	BA	856	C	N1-C2-O2	9.72	124.73	118.90
35	BA	1385	G	C5-C6-N1	9.72	116.36	111.50
2	AB	539	G	N9-C4-C5	9.72	109.29	105.40
2	AB	2000	C	C6-N1-C2	-9.72	116.41	120.30
1	AA	81	G	N7-C8-N9	9.71	117.96	113.10
2	AB	2256	G	N1-C6-O6	-9.71	114.07	119.90
2	AB	2607	G	C5-C6-N1	9.72	116.36	111.50
2	AB	2360	G	C2-N3-C4	9.71	116.76	111.90
35	BA	805	C	N3-C2-O2	-9.71	115.10	121.90
35	BA	1491	G	N3-C4-C5	-9.71	123.74	128.60
2	AB	45	G	C4-C5-N7	-9.71	106.92	110.80
2	AB	882	G	C8-N9-C4	-9.71	102.52	106.40
2	AB	1119	U	C4-C5-C6	9.71	125.53	119.70
2	AB	1563	U	O4'-C1'-N1	9.71	115.97	108.20
2	AB	2246	G	N1-C2-N3	-9.71	118.07	123.90
2	AB	575	A	N9-C1'-C2'	-9.71	101.32	112.00
2	AB	874	G	N1-C6-O6	9.71	125.73	119.90
2	AB	1336	A	O4'-C1'-N9	9.71	115.97	108.20
2	AB	133	U	C4-C5-C6	9.71	125.53	119.70
35	BA	58	C	O4'-C1'-N1	9.71	115.97	108.20
2	AB	89	A	N1-C2-N3	9.71	134.15	129.30
2	AB	1508	A	C8-N9-C4	-9.71	101.92	105.80
35	BA	169	C	C6-N1-C2	9.71	124.18	120.30
35	BA	257	G	C2-N3-C4	9.71	116.75	111.90
35	BA	855	U	O4'-C1'-N1	9.71	115.97	108.20
35	BA	1262	C	C5-C4-N4	-9.71	113.41	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	553	G	C1'-O4'-C4'	-9.71	102.14	109.90
2	AB	1317	G	C4-C5-N7	-9.71	106.92	110.80
2	AB	1590	A	N1-C2-N3	-9.71	124.45	129.30
2	AB	1874	C	N1-C2-O2	9.70	124.72	118.90
2	AB	2721	A	C8-N9-C4	9.70	109.68	105.80
2	AB	2727	A	C4-C5-N7	-9.70	105.85	110.70
1	AA	52	A	O4'-C1'-C2'	9.70	116.33	107.60
2	AB	418	C	C2-N3-C4	9.70	124.75	119.90
2	AB	1168	G	C4-C5-N7	-9.70	106.92	110.80
2	AB	2287	A	C5-C6-N1	9.70	122.55	117.70
35	BA	247	G	O4'-C1'-N9	-9.70	100.44	108.20
35	BA	393	A	C4-C5-N7	-9.70	105.85	110.70
35	BA	916	U	N1-C2-N3	9.70	120.72	114.90
2	AB	206	U	N3-C4-C5	-9.70	108.78	114.60
2	AB	287	G	C2-N3-C4	9.70	116.75	111.90
2	AB	1797	G	N9-C4-C5	9.70	109.28	105.40
2	AB	2297	A	C2-N3-C4	-9.70	105.75	110.60
35	BA	573	A	N1-C2-N3	-9.70	124.45	129.30
35	BA	1489	G	C5-C6-O6	9.70	134.42	128.60
2	AB	965	C	C5-C6-N1	9.69	125.85	121.00
2	AB	2221	G	N9-C1'-C2'	-9.69	101.34	112.00
5	AE	33	ARG	NE-CZ-NH1	-9.69	115.45	120.30
35	BA	606	G	C8-N9-C4	-9.69	102.52	106.40
35	BA	691	G	N9-C4-C5	9.70	109.28	105.40
35	BA	700	G	C5'-C4'-O4'	9.70	120.73	109.10
37	BC	48	U	N1-C2-O2	9.70	129.59	122.80
48	BN	30	ARG	NE-CZ-NH1	9.69	125.15	120.30
2	AB	420	C	C6-N1-C2	-9.69	116.42	120.30
35	BA	843	U	C4-C5-C6	9.69	125.52	119.70
2	AB	2628	C	C6-N1-C2	9.69	124.18	120.30
2	AB	2717	C	N3-C4-C5	-9.69	118.02	121.90
2	AB	2846	G	C8-N9-C4	-9.69	102.52	106.40
35	BA	1204	A	C2-N3-C4	9.69	115.45	110.60
2	AB	2903	U	C4-C5-C6	-9.69	113.89	119.70
2	AB	816	C	C4'-C3'-C2'	-9.69	92.91	102.60
15	AO	55	ARG	NE-CZ-NH1	9.69	125.14	120.30
35	BA	771	G	N3-C4-N9	9.69	131.81	126.00
35	BA	229	U	N1-C2-N3	9.69	120.71	114.90
2	AB	336	C	N1-C2-O2	9.68	124.71	118.90
2	AB	1317	G	C2-N3-C4	9.68	116.74	111.90
2	AB	1433	A	C5-N7-C8	9.68	108.74	103.90
2	AB	882	G	N3-C4-C5	-9.68	123.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1850	G	C5-N7-C8	9.68	109.14	104.30
2	AB	130	C	O4'-C1'-N1	9.68	115.94	108.20
2	AB	1026	G	C2-N3-C4	9.68	116.74	111.90
2	AB	1052	C	C6-N1-C2	-9.68	116.43	120.30
2	AB	1529	G	N7-C8-N9	9.68	117.94	113.10
2	AB	1986	C	C5'-C4'-O4'	9.68	120.72	109.10
2	AB	2238	G	C2-N3-C4	9.68	116.74	111.90
35	BA	219	U	C5-C6-N1	-9.68	117.86	122.70
35	BA	869	G	N7-C8-N9	9.68	117.94	113.10
35	BA	1374	A	C5-C6-N1	9.68	122.54	117.70
36	BB	39	U	P-O3'-C3'	9.68	131.31	119.70
2	AB	2110	G	C4-C5-N7	9.68	114.67	110.80
2	AB	2774	C	N3-C4-C5	9.68	125.77	121.90
35	BA	108	G	C5-C6-N1	9.68	116.34	111.50
2	AB	40	U	O4'-C1'-N1	9.67	115.94	108.20
2	AB	836	G	C5-C6-O6	9.67	134.40	128.60
2	AB	1075	C	C4-C5-C6	-9.67	112.56	117.40
2	AB	1858	A	N1-C6-N6	-9.67	112.80	118.60
2	AB	2337	G	N3-C4-C5	-9.67	123.76	128.60
2	AB	2785	C	C4-C5-C6	-9.67	112.56	117.40
2	AB	382	A	N9-C4-C5	-9.67	101.93	105.80
2	AB	1084	A	C2-N3-C4	9.67	115.44	110.60
2	AB	1582	C	N1-C2-O2	9.67	124.70	118.90
2	AB	2719	G	N9-C4-C5	9.67	109.27	105.40
35	BA	822	U	O4'-C1'-N1	9.67	115.94	108.20
35	BA	876	C	C5'-C4'-O4'	9.67	120.70	109.10
1	AA	26	C	C2-N3-C4	9.67	124.73	119.90
2	AB	752	A	N1-C6-N6	-9.67	112.80	118.60
2	AB	900	A	P-O3'-C3'	9.67	131.30	119.70
2	AB	997	G	C8-N9-C4	-9.67	102.53	106.40
35	BA	711	G	C3'-C2'-C1'	-9.67	93.77	101.50
35	BA	1184	G	C8-N9-C4	9.66	110.27	106.40
2	AB	473	G	C4-C5-C6	9.66	124.60	118.80
2	AB	2795	C	O4'-C1'-N1	9.66	115.93	108.20
2	AB	1576	U	C5-C4-O4	-9.66	120.11	125.90
2	AB	1720	U	O5'-P-OP2	-9.66	97.01	105.70
51	BQ	53	ARG	NE-CZ-NH2	9.66	125.13	120.30
1	AA	79	G	N7-C8-N9	9.66	117.93	113.10
2	AB	2695	U	C5-C4-O4	9.65	131.69	125.90
2	AB	1704	C	N3-C4-C5	-9.65	118.04	121.90
2	AB	1943	U	N1-C2-O2	9.65	129.56	122.80
35	BA	1072	G	O4'-C1'-N9	9.65	115.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1412	U	C5-C4-O4	-9.65	120.11	125.90
2	AB	1615	C	N3-C4-C5	-9.65	118.04	121.90
2	AB	1728	C	C1'-O4'-C4'	9.65	117.62	109.90
2	AB	1985	C	C5-C4-N4	-9.65	113.44	120.20
2	AB	2221	G	C5'-C4'-O4'	9.65	120.68	109.10
35	BA	1015	G	N9-C4-C5	9.65	109.26	105.40
2	AB	1118	C	N1-C2-O2	9.65	124.69	118.90
2	AB	1684	G	C2-N3-C4	9.65	116.72	111.90
2	AB	2043	C	O4'-C1'-N1	9.65	115.92	108.20
2	AB	2343	U	N1-C2-O2	9.65	129.55	122.80
37	BC	16	C	O4'-C1'-N1	9.64	115.92	108.20
2	AB	1536	C	N1-C2-O2	9.64	124.69	118.90
2	AB	2643	G	N7-C8-N9	9.64	117.92	113.10
2	AB	1883	U	O4'-C1'-N1	9.64	115.91	108.20
2	AB	2183	A	C5-C6-N1	9.64	122.52	117.70
2	AB	2334	U	O4'-C1'-N1	9.64	115.91	108.20
2	AB	6	A	C2-N3-C4	9.64	115.42	110.60
2	AB	633	A	N1-C6-N6	9.64	124.38	118.60
2	AB	1566	A	C4'-C3'-C2'	-9.64	92.96	102.60
2	AB	1821	A	C6-N1-C2	-9.64	112.82	118.60
2	AB	2839	G	C5-C6-N1	9.64	116.32	111.50
35	BA	1182	G	C2-N3-C4	9.64	116.72	111.90
2	AB	2465	C	N3-C4-C5	9.64	125.75	121.90
2	AB	480	A	C5'-C4'-O4'	9.63	120.66	109.10
2	AB	1555	G	C5'-C4'-O4'	9.63	120.66	109.10
35	BA	316	C	N3-C2-O2	-9.63	115.16	121.90
35	BA	1220	G	C8-N9-C4	-9.63	102.55	106.40
35	BA	509	A	C8-N9-C4	-9.63	101.95	105.80
2	AB	2877	G	N7-C8-N9	9.63	117.91	113.10
49	BO	2	ARG	NE-CZ-NH1	-9.63	115.48	120.30
35	BA	866	C	C6-N1-C2	-9.63	116.45	120.30
35	BA	949	A	O4'-C1'-N9	9.63	115.90	108.20
36	BB	32	U	C4'-C3'-C2'	-9.63	92.97	102.60
2	AB	1185	G	C5-C6-N1	9.62	116.31	111.50
35	BA	847	G	C5-C6-N1	9.63	116.31	111.50
2	AB	1065	U	C5-C6-N1	-9.62	117.89	122.70
2	AB	1349	C	O4'-C1'-N1	9.62	115.90	108.20
35	BA	155	A	C4-C5-N7	-9.62	105.89	110.70
35	BA	1373	G	C2-N3-C4	9.62	116.71	111.90
35	BA	1395	C	O4'-C1'-C2'	9.62	116.26	107.60
35	BA	1457	G	C5-C6-N1	9.62	116.31	111.50
1	AA	29	A	C5'-C4'-C3'	-9.62	100.61	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2321	U	C4-C5-C6	9.62	125.47	119.70
2	AB	1292	G	N3-C4-C5	-9.62	123.79	128.60
2	AB	2472	G	C3'-C2'-C1'	9.62	109.19	101.50
2	AB	772	C	N3-C4-C5	-9.62	118.05	121.90
2	AB	2472	G	C4'-C3'-C2'	-9.62	92.98	102.60
35	BA	240	G	N7-C8-N9	9.62	117.91	113.10
35	BA	1034	G	C5-C6-N1	9.62	116.31	111.50
2	AB	1509	A	C2-N3-C4	9.61	115.41	110.60
35	BA	410	G	C5-N7-C8	-9.61	99.49	104.30
35	BA	921	U	C5-C6-N1	-9.62	117.89	122.70
35	BA	1202	U	C1'-O4'-C4'	9.61	117.59	109.90
35	BA	856	C	C6-N1-C2	9.61	124.14	120.30
35	BA	1024	G	N9-C4-C5	-9.61	101.56	105.40
35	BA	1175	G	N9-C4-C5	9.61	109.24	105.40
35	BA	1221	G	N1-C2-N3	-9.61	118.13	123.90
35	BA	1435	G	N3-C4-N9	9.61	131.77	126.00
1	AA	98	G	C4-C5-N7	-9.61	106.96	110.80
2	AB	1953	A	C4-C5-N7	-9.61	105.89	110.70
2	AB	266	G	N1-C2-N3	-9.61	118.14	123.90
2	AB	1223	G	N3-C4-C5	-9.61	123.80	128.60
2	AB	1750	G	C4-C5-N7	-9.61	106.96	110.80
2	AB	2198	A	N9-C4-C5	9.61	109.64	105.80
38	BD	203	ASP	CB-CG-OD1	-9.61	109.65	118.30
35	BA	232	G	C4'-C3'-C2'	-9.61	92.99	102.60
2	AB	898	C	N1-C2-N3	-9.61	112.48	119.20
2	AB	2442	C	C5-C4-N4	9.61	126.92	120.20
35	BA	266	G	N3-C4-N9	9.61	131.76	126.00
35	BA	410	G	N3-C4-N9	-9.61	120.24	126.00
35	BA	1272	G	C6-C5-N7	9.61	136.16	130.40
35	BA	1487	G	C1'-O4'-C4'	9.61	117.59	109.90
2	AB	940	G	N3-C4-C5	-9.60	123.80	128.60
2	AB	1897	G	C4-C5-C6	9.60	124.56	118.80
2	AB	2167	U	C5-C6-N1	-9.60	117.90	122.70
2	AB	2671	G	C5-N7-C8	-9.60	99.50	104.30
35	BA	183	C	O4'-C1'-N1	9.60	115.88	108.20
35	BA	1188	A	O4'-C1'-N9	9.60	115.88	108.20
35	BA	1380	U	N3-C2-O2	-9.60	115.48	122.20
1	AA	55	U	O4'-C1'-N1	9.60	115.88	108.20
2	AB	1905	C	N3-C4-C5	-9.60	118.06	121.90
1	AA	23	G	C2-N3-C4	-9.60	107.10	111.90
2	AB	1266	G	N3-C4-N9	9.60	131.76	126.00
2	AB	2429	G	N9-C4-C5	9.60	109.24	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	917	A	N9-C4-C5	-9.60	101.96	105.80
2	AB	1395	A	N7-C8-N9	-9.60	109.00	113.80
2	AB	1121	C	N3-C4-N4	9.60	124.72	118.00
2	AB	1674	G	C2-N3-C4	9.60	116.70	111.90
2	AB	2785	C	N1-C2-O2	9.60	124.66	118.90
2	AB	351	C	N3-C4-N4	9.59	124.72	118.00
2	AB	1211	C	C5-C6-N1	9.59	125.80	121.00
2	AB	2579	C	O4'-C1'-N1	9.59	115.88	108.20
2	AB	194	G	C5-N7-C8	-9.59	99.50	104.30
2	AB	1014	A	N9-C4-C5	-9.59	101.96	105.80
1	AA	39	A	N9-C4-C5	9.59	109.64	105.80
2	AB	2345	G	C6-N1-C2	-9.59	119.35	125.10
35	BA	662	U	C4'-C3'-C2'	-9.59	93.01	102.60
35	BA	812	G	C6-N1-C2	-9.59	119.35	125.10
35	BA	1220	G	N7-C8-N9	9.59	117.89	113.10
2	AB	734	A	N1-C2-N3	9.59	134.09	129.30
2	AB	1753	G	C4-C5-C6	9.59	124.55	118.80
35	BA	322	C	C4-C5-C6	9.59	122.19	117.40
2	AB	74	A	N9-C4-C5	-9.59	101.97	105.80
2	AB	585	G	C2-N3-C4	9.59	116.69	111.90
2	AB	1857	G	O4'-C1'-N9	9.59	115.87	108.20
2	AB	2094	A	N3-C4-C5	9.59	133.51	126.80
2	AB	2171	A	N9-C4-C5	9.59	109.63	105.80
35	BA	812	G	N3-C4-N9	9.59	131.75	126.00
1	AA	21	G	C2-N3-C4	9.58	116.69	111.90
2	AB	315	G	O4'-C1'-N9	9.58	115.87	108.20
2	AB	1520	U	O4'-C1'-N1	9.58	115.87	108.20
2	AB	1676	A	C8-N9-C4	-9.58	101.97	105.80
2	AB	2446	G	C8-N9-C4	-9.58	102.57	106.40
2	AB	421	C	N3-C4-C5	-9.58	118.07	121.90
2	AB	826	U	O4'-C1'-N1	9.58	115.86	108.20
2	AB	1469	A	O4'-C1'-N9	9.58	115.86	108.20
2	AB	1783	A	C8-N9-C4	-9.58	101.97	105.80
2	AB	1902	C	O4'-C1'-N1	9.58	115.86	108.20
35	BA	895	G	C5'-C4'-O4'	9.58	120.59	109.10
2	AB	2265	U	N3-C2-O2	-9.58	115.50	122.20
35	BA	521	G	C4-C5-N7	-9.58	106.97	110.80
35	BA	1278	G	C8-N9-C4	-9.58	102.57	106.40
2	AB	980	A	C3'-C2'-C1'	9.57	109.16	101.50
35	BA	1070	U	N1-C2-N3	9.57	120.64	114.90
2	AB	2052	A	N1-C6-N6	-9.57	112.86	118.60
35	BA	427	U	O4'-C1'-N1	9.57	115.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	921	U	C4-C5-C6	9.57	125.44	119.70
35	BA	935	A	N7-C8-N9	9.57	118.59	113.80
35	BA	1019	A	N9-C1'-C2'	-9.57	101.47	112.00
35	BA	1286	U	C2-N1-C1'	9.57	129.19	117.70
2	AB	961	C	C4-C5-C6	9.57	122.19	117.40
2	AB	2292	U	N3-C4-C5	-9.57	108.86	114.60
35	BA	820	U	C5-C4-O4	-9.57	120.16	125.90
35	BA	1090	U	N3-C4-O4	9.57	126.10	119.40
2	AB	154	U	C5-C6-N1	-9.57	117.92	122.70
2	AB	629	G	C5-C6-O6	-9.57	122.86	128.60
2	AB	742	A	N1-C6-N6	9.57	124.34	118.60
2	AB	1005	C	N3-C2-O2	-9.57	115.20	121.90
2	AB	2816	G	C5-N7-C8	-9.57	99.52	104.30
35	BA	229	U	C6-N1-C2	-9.57	115.26	121.00
35	BA	1435	G	N7-C8-N9	-9.57	108.31	113.10
2	AB	1796	U	C4-C5-C6	9.57	125.44	119.70
2	AB	295	G	C2-N3-C4	9.57	116.68	111.90
2	AB	1156	A	N1-C2-N3	-9.57	124.52	129.30
2	AB	1620	G	N3-C4-C5	-9.57	123.82	128.60
2	AB	2070	A	C4-C5-C6	-9.57	112.22	117.00
35	BA	453	G	O4'-C1'-N9	9.57	115.85	108.20
2	AB	202	U	C4-C5-C6	9.56	125.44	119.70
2	AB	693	A	N1-C6-N6	-9.56	112.86	118.60
2	AB	2880	C	C5'-C4'-O4'	9.56	120.58	109.10
35	BA	1078	U	N3-C4-O4	9.56	126.10	119.40
2	AB	202	U	N1-C2-N3	9.56	120.64	114.90
2	AB	1681	G	C2-N3-C4	9.56	116.68	111.90
2	AB	2093	G	N3-C4-C5	-9.56	123.82	128.60
2	AB	2734	A	N9-C4-C5	-9.56	101.98	105.80
35	BA	1470	U	O4'-C1'-N1	9.56	115.85	108.20
2	AB	798	G	C8-N9-C4	-9.56	102.58	106.40
35	BA	572	A	C4-C5-N7	9.56	115.48	110.70
2	AB	478	A	N1-C2-N3	-9.56	124.52	129.30
2	AB	623	C	N1-C2-O2	9.56	124.63	118.90
35	BA	681	A	C8-N9-C4	-9.56	101.98	105.80
2	AB	383	C	C5-C4-N4	9.55	126.89	120.20
2	AB	1245	G	O4'-C1'-N9	9.55	115.84	108.20
2	AB	2461	A	C2-N3-C4	-9.55	105.82	110.60
2	AB	2737	G	C2-N3-C4	9.55	116.68	111.90
2	AB	137	U	N3-C4-C5	9.55	120.33	114.60
2	AB	1404	C	C4-C5-C6	9.55	122.18	117.40
35	BA	468	A	N9-C4-C5	-9.55	101.98	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2169	A	N9-C4-C5	9.55	109.62	105.80
35	BA	1236	A	N9-C4-C5	9.55	109.62	105.80
2	AB	2448	A	N1-C2-N3	9.55	134.07	129.30
1	AA	98	G	C2-N3-C4	9.54	116.67	111.90
2	AB	612	G	C8-N9-C4	-9.54	102.58	106.40
2	AB	995	C	C5-C6-N1	-9.54	116.23	121.00
2	AB	1639	C	N1-C2-N3	-9.54	112.52	119.20
35	BA	1030	U	O4'-C1'-N1	9.55	115.84	108.20
2	AB	147	C	N3-C4-C5	-9.54	118.08	121.90
2	AB	423	A	O4'-C1'-N9	9.54	115.83	108.20
2	AB	460	A	N9-C4-C5	9.54	109.62	105.80
2	AB	1852	U	C6-N1-C2	-9.54	115.28	121.00
2	AB	2412	A	C5'-C4'-O4'	9.54	120.55	109.10
2	AB	2792	A	N7-C8-N9	9.54	118.57	113.80
37	BC	74	A	O4'-C1'-N9	9.54	115.83	108.20
39	BE	167	TYR	CB-CG-CD1	-9.54	115.27	121.00
35	BA	520	A	N1-C2-N3	-9.54	124.53	129.30
2	AB	384	A	C2-N3-C4	9.54	115.37	110.60
2	AB	818	G	N1-C2-N3	-9.54	118.18	123.90
2	AB	2172	U	O4'-C1'-N1	9.54	115.83	108.20
2	AB	952	G	C5-C6-N1	9.54	116.27	111.50
2	AB	2439	A	C5-C6-N1	9.54	122.47	117.70
35	BA	977	A	O4'-C1'-N9	9.54	115.83	108.20
2	AB	1128	G	C4-C5-C6	9.53	124.52	118.80
35	BA	463	U	C4'-C3'-C2'	-9.53	93.07	102.60
35	BA	1486	G	C5-N7-C8	-9.53	99.53	104.30
35	BA	1503	A	O4'-C1'-N9	9.53	115.83	108.20
37	BC	30	G	N3-C2-N2	9.53	126.57	119.90
2	AB	2894	G	O4'-C1'-N9	9.53	115.83	108.20
35	BA	184	G	N3-C4-N9	-9.53	120.28	126.00
35	BA	1222	G	P-O3'-C3'	9.53	131.14	119.70
36	BB	18	A	C8-N9-C4	-9.53	101.99	105.80
2	AB	11	C	C4-C5-C6	-9.53	112.64	117.40
2	AB	212	G	O4'-C1'-N9	9.53	115.82	108.20
2	AB	672	C	N3-C4-N4	9.53	124.67	118.00
35	BA	777	A	C3'-C2'-C1'	9.53	109.12	101.50
2	AB	1491	G	N3-C4-C5	-9.53	123.84	128.60
2	AB	2838	G	N1-C6-O6	9.53	125.62	119.90
35	BA	391	G	N1-C2-N3	-9.53	118.18	123.90
35	BA	711	G	C6-C5-N7	-9.53	124.68	130.40
2	AB	2157	G	C4-C5-N7	-9.53	106.99	110.80
2	AB	2451	A	C5'-C4'-O4'	9.53	120.53	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	691	G	C4'-C3'-C2'	9.53	112.12	102.60
2	AB	69	C	N3-C4-C5	-9.52	118.09	121.90
2	AB	1302	A	C6-N1-C2	9.52	124.31	118.60
2	AB	1391	U	O4'-C1'-N1	9.52	115.82	108.20
1	AA	18	G	C4-C5-N7	9.52	114.61	110.80
2	AB	2187	U	O4'-C1'-N1	9.52	115.82	108.20
35	BA	1465	A	O4'-C1'-N9	9.52	115.82	108.20
2	AB	733	G	C2-N3-C4	9.52	116.66	111.90
2	AB	1563	U	C4-C5-C6	-9.52	113.99	119.70
1	AA	18	G	N7-C8-N9	9.52	117.86	113.10
2	AB	1070	A	C5-N7-C8	-9.52	99.14	103.90
2	AB	2322	A	N9-C4-C5	9.52	109.61	105.80
2	AB	2245	U	N1-C2-N3	9.52	120.61	114.90
13	AM	31	ARG	NE-CZ-NH2	9.52	125.06	120.30
35	BA	340	U	O4'-C1'-N1	9.52	115.81	108.20
39	BE	106	ARG	NE-CZ-NH1	9.52	125.06	120.30
49	BO	2	ARG	NE-CZ-NH2	9.52	125.06	120.30
35	BA	649	A	N1-C6-N6	9.51	124.31	118.60
35	BA	690	G	C6-N1-C2	-9.51	119.39	125.10
2	AB	1003	G	C5'-C4'-O4'	9.51	120.52	109.10
35	BA	176	C	O4'-C1'-N1	9.51	115.81	108.20
35	BA	797	C	N3-C4-C5	-9.51	118.09	121.90
35	BA	818	G	O4'-C1'-N9	9.51	115.81	108.20
2	AB	1288	G	C2-N3-C4	-9.51	107.14	111.90
2	AB	1532	A	N3-C4-N9	-9.51	119.79	127.40
2	AB	2326	C	C5-C4-N4	-9.51	113.54	120.20
35	BA	731	G	N1-C2-N3	-9.51	118.19	123.90
2	AB	66	C	C2-N3-C4	9.51	124.65	119.90
2	AB	968	C	C4-C5-C6	9.51	122.15	117.40
37	BC	50	G	C4-C5-N7	-9.51	107.00	110.80
2	AB	312	G	N3-C4-N9	9.51	131.70	126.00
2	AB	1498	C	C5-C4-N4	-9.51	113.55	120.20
2	AB	464	U	N3-C2-O2	-9.51	115.55	122.20
2	AB	1083	U	C3'-C2'-C1'	9.51	109.10	101.50
2	AB	2119	A	C5-C6-N1	9.51	122.45	117.70
2	AB	2180	U	C3'-C2'-C1'	9.51	109.10	101.50
2	AB	2607	G	N3-C4-C5	-9.51	123.85	128.60
2	AB	2642	G	C8-N9-C4	-9.51	102.60	106.40
36	BB	30	U	C4'-C3'-C2'	-9.51	93.09	102.60
2	AB	2447	G	N3-C4-N9	9.50	131.70	126.00
2	AB	864	G	N3-C2-N2	-9.50	113.25	119.90
2	AB	1374	G	C5-C6-N1	9.50	116.25	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1914	C	O4'-C1'-N1	9.50	115.80	108.20
35	BA	485	U	O4'-C1'-N1	9.50	115.80	108.20
2	AB	2396	G	C5-N7-C8	-9.50	99.55	104.30
2	AB	1190	G	C5-C6-N1	9.50	116.25	111.50
2	AB	2422	C	N3-C4-N4	9.50	124.65	118.00
35	BA	1067	A	N1-C6-N6	9.50	124.30	118.60
2	AB	2535	G	C8-N9-C4	-9.50	102.60	106.40
35	BA	1148	U	C2-N3-C4	-9.50	121.30	127.00
1	AA	101	A	C5-C6-N6	9.49	131.29	123.70
2	AB	867	C	N3-C4-C5	9.49	125.70	121.90
2	AB	979	A	C8-N9-C4	-9.49	102.00	105.80
2	AB	1056	G	C8-N9-C4	-9.49	102.60	106.40
2	AB	1248	G	N3-C2-N2	-9.49	113.25	119.90
2	AB	2465	C	C4-C5-C6	-9.49	112.65	117.40
2	AB	205	G	O4'-C1'-N9	9.49	115.79	108.20
2	AB	536	G	N3-C4-C5	-9.49	123.85	128.60
2	AB	2735	G	N9-C4-C5	9.49	109.20	105.40
2	AB	1443	U	O4'-C1'-N1	9.49	115.79	108.20
2	AB	1484	U	C5-C6-N1	-9.49	117.95	122.70
2	AB	1355	G	C8-N9-C4	-9.49	102.61	106.40
35	BA	347	G	C5-C6-O6	-9.49	122.91	128.60
50	BP	23	ARG	NE-CZ-NH1	9.49	125.05	120.30
2	AB	2786	U	N3-C2-O2	-9.49	115.56	122.20
35	BA	763	G	N1-C2-N3	-9.49	118.21	123.90
2	AB	1450	G	N3-C4-C5	-9.49	123.86	128.60
2	AB	2832	U	N3-C2-O2	-9.49	115.56	122.20
35	BA	1312	G	C2-N3-C4	9.49	116.64	111.90
35	BA	1482	G	C4-C5-C6	9.49	124.49	118.80
1	AA	13	G	C4-C5-C6	9.48	124.49	118.80
2	AB	1796	U	C2-N3-C4	-9.48	121.31	127.00
2	AB	2159	G	C5-C6-N1	9.48	116.24	111.50
2	AB	2246	G	N1-C6-O6	-9.48	114.21	119.90
35	BA	293	G	C4'-C3'-C2'	-9.48	93.12	102.60
35	BA	296	U	O4'-C1'-N1	9.48	115.79	108.20
35	BA	519	C	C5-C6-N1	9.48	125.74	121.00
35	BA	1324	A	C4'-C3'-C2'	-9.48	93.12	102.60
2	AB	878	A	O4'-C1'-N9	9.48	115.78	108.20
35	BA	82	G	C3'-C2'-C1'	-9.48	93.91	101.50
1	AA	44	G	C6-C5-N7	-9.48	124.71	130.40
2	AB	2597	G	N3-C4-C5	-9.48	123.86	128.60
35	BA	89	U	C5-C6-N1	-9.48	117.96	122.70
35	BA	567	G	C3'-C2'-C1'	9.48	109.08	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	45	G	C5-C6-N1	9.48	116.24	111.50
2	AB	254	G	C6-C5-N7	-9.48	124.71	130.40
35	BA	289	G	C2-N3-C4	9.48	116.64	111.90
35	BA	381	C	O4'-C1'-N1	9.48	115.78	108.20
35	BA	1061	G	N3-C4-N9	-9.48	120.31	126.00
2	AB	2078	C	N1-C2-O2	9.48	124.58	118.90
35	BA	352	C	C6-N1-C2	-9.48	116.51	120.30
35	BA	1166	G	C5-C6-N1	9.48	116.24	111.50
35	BA	1484	C	C5-C4-N4	-9.47	113.57	120.20
2	AB	2823	A	C4-C5-N7	-9.47	105.96	110.70
35	BA	628	G	N3-C2-N2	-9.47	113.27	119.90
2	AB	242	G	O4'-C1'-N9	9.47	115.78	108.20
2	AB	770	G	N1-C2-N3	-9.47	118.22	123.90
2	AB	966	G	C8-N9-C4	-9.47	102.61	106.40
2	AB	2527	C	N3-C4-C5	-9.47	118.11	121.90
2	AB	2632	A	C2-N3-C4	9.47	115.34	110.60
2	AB	2597	G	O4'-C1'-N9	9.47	115.78	108.20
2	AB	1410	G	N3-C4-C5	-9.47	123.86	128.60
2	AB	11	C	C5-C6-N1	9.47	125.73	121.00
2	AB	934	U	O4'-C1'-N1	9.47	115.77	108.20
2	AB	1129	A	N1-C6-N6	-9.47	112.92	118.60
2	AB	2031	A	O4'-C1'-N9	9.47	115.77	108.20
2	AB	2346	A	O4'-C4'-C3'	9.47	113.67	106.10
35	BA	849	G	N9-C4-C5	9.47	109.19	105.40
2	AB	1418	G	N3-C4-C5	-9.46	123.87	128.60
2	AB	1858	A	C6-N1-C2	-9.47	112.92	118.60
2	AB	2206	C	O4'-C1'-N1	9.46	115.77	108.20
35	BA	690	G	N3-C4-C5	-9.47	123.87	128.60
35	BA	736	C	C5-C6-N1	9.47	125.73	121.00
35	BA	1103	C	O4'-C1'-N1	9.47	115.77	108.20
35	BA	1174	G	N3-C4-N9	9.46	131.68	126.00
36	BB	49	U	N1-C1'-C2'	-9.46	101.59	112.00
2	AB	1112	G	O4'-C1'-N9	-9.46	100.63	108.20
2	AB	2025	C	C5'-C4'-O4'	9.46	120.45	109.10
2	AB	2682	A	C2-N3-C4	9.46	115.33	110.60
35	BA	1094	G	N3-C2-N2	9.46	126.52	119.90
2	AB	495	G	C5-C6-O6	-9.46	122.93	128.60
2	AB	2840	C	N1-C2-O2	9.46	124.57	118.90
2	AB	2639	A	C5-N7-C8	9.46	108.63	103.90
2	AB	222	A	O4'-C1'-N9	9.45	115.76	108.20
2	AB	1159	U	C3'-C2'-C1'	9.46	109.06	101.50
2	AB	1677	A	C4-C5-N7	-9.45	105.97	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	168	G	C8-N9-C4	-9.46	102.62	106.40
35	BA	1524	C	C2-N3-C4	9.46	124.63	119.90
2	AB	787	C	O4'-C1'-N1	9.45	115.76	108.20
2	AB	1381	G	O4'-C1'-N9	9.45	115.76	108.20
2	AB	1807	G	N3-C4-N9	-9.45	120.33	126.00
2	AB	12	U	N3-C4-O4	9.45	126.02	119.40
2	AB	743	A	C4-C5-C6	9.45	121.72	117.00
2	AB	557	C	C5-C4-N4	-9.45	113.59	120.20
2	AB	645	C	O4'-C1'-N1	9.45	115.76	108.20
2	AB	1736	U	N1-C2-O2	-9.45	116.19	122.80
2	AB	1961	C	N3-C4-C5	-9.45	118.12	121.90
41	BG	92	ARG	NE-CZ-NH2	9.45	125.02	120.30
2	AB	2584	U	C3'-C2'-C1'	9.45	109.06	101.50
2	AB	2895	G	C5-C6-O6	-9.45	122.93	128.60
35	BA	402	G	C5'-C4'-O4'	9.45	120.44	109.10
35	BA	942	G	N3-C4-C5	-9.45	123.88	128.60
35	BA	1417	G	C5'-C4'-O4'	9.44	120.43	109.10
2	AB	1657	U	C2-N3-C4	-9.44	121.33	127.00
2	AB	981	A	C2-N3-C4	9.44	115.32	110.60
2	AB	1174	U	C5-C6-N1	-9.44	117.98	122.70
2	AB	1308	A	N9-C4-C5	9.44	109.58	105.80
2	AB	1317	G	N1-C2-N3	-9.44	118.23	123.90
2	AB	1606	C	C2-N3-C4	9.44	124.62	119.90
2	AB	2373	G	C5-C6-N1	9.44	116.22	111.50
2	AB	2855	C	N3-C4-N4	9.44	124.61	118.00
35	BA	394	G	C5-C6-N1	9.44	116.22	111.50
35	BA	1193	G	O4'-C1'-N9	9.44	115.75	108.20
35	BA	1525	G	N9-C4-C5	9.44	109.18	105.40
35	BA	89	U	O4'-C1'-N1	9.44	115.75	108.20
35	BA	311	C	N1-C2-O2	9.44	124.56	118.90
36	BB	34	U	C4-C5-C6	9.44	125.36	119.70
2	AB	231	A	N1-C2-N3	-9.44	124.58	129.30
2	AB	267	C	N1-C2-O2	9.44	124.56	118.90
2	AB	543	G	C8-N9-C4	-9.44	102.62	106.40
2	AB	2486	C	N3-C4-C5	-9.44	118.12	121.90
2	AB	2902	C	N1-C2-O2	9.44	124.56	118.90
35	BA	598	U	N3-C2-O2	-9.44	115.59	122.20
2	AB	1429	G	N9-C4-C5	-9.44	101.63	105.40
2	AB	1740	G	N3-C4-N9	9.44	131.66	126.00
2	AB	2706	A	C6-N1-C2	-9.44	112.94	118.60
35	BA	1336	C	N3-C2-O2	-9.44	115.30	121.90
35	BA	1512	U	N1-C2-N3	9.44	120.56	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1547	C	O4'-C1'-N1	9.43	115.75	108.20
2	AB	2671	G	C4-C5-N7	9.43	114.57	110.80
2	AB	1732	C	N3-C2-O2	-9.43	115.30	121.90
2	AB	98	G	C8-N9-C4	-9.43	102.63	106.40
2	AB	195	A	C5-N7-C8	-9.43	99.19	103.90
2	AB	1735	A	C4-C5-N7	-9.43	105.99	110.70
2	AB	2673	G	C4-C5-C6	-9.43	113.14	118.80
35	BA	225	C	N3-C4-C5	-9.43	118.13	121.90
35	BA	946	A	N1-C6-N6	-9.43	112.94	118.60
2	AB	546	U	C2-N3-C4	-9.43	121.34	127.00
2	AB	2160	C	N1-C2-O2	9.43	124.56	118.90
35	BA	505	G	O4'-C4'-C3'	9.43	113.64	106.10
2	AB	2204	G	C2-N3-C4	9.43	116.61	111.90
35	BA	1287	A	O4'-C1'-N9	9.43	115.74	108.20
2	AB	1824	G	P-O3'-C3'	9.42	131.01	119.70
35	BA	524	G	C5-N7-C8	-9.42	99.59	104.30
35	BA	991	U	C2-N3-C4	-9.42	121.34	127.00
2	AB	4	U	C5-C6-N1	-9.42	117.99	122.70
2	AB	48	G	C5'-C4'-O4'	9.42	120.41	109.10
35	BA	1505	G	N3-C2-N2	-9.42	113.31	119.90
2	AB	1228	G	C2-N3-C4	9.42	116.61	111.90
35	BA	506	G	N3-C2-N2	-9.42	113.31	119.90
35	BA	652	U	O4'-C1'-N1	9.42	115.74	108.20
2	AB	1581	G	N3-C4-C5	-9.42	123.89	128.60
2	AB	2063	C	C2-N3-C4	9.42	124.61	119.90
2	AB	2261	C	C5-C6-N1	9.42	125.71	121.00
45	BK	84	ARG	NE-CZ-NH1	9.42	125.01	120.30
37	BC	30	G	O4'-C1'-N9	9.42	115.73	108.20
52	BR	51	ARG	NE-CZ-NH1	9.42	125.01	120.30
2	AB	446	G	C5-C6-O6	-9.41	122.95	128.60
2	AB	2581	G	N9-C4-C5	9.41	109.17	105.40
35	BA	475	C	C2-N3-C4	9.41	124.61	119.90
2	AB	2	G	N1-C6-O6	-9.41	114.25	119.90
2	AB	864	G	C4-C5-C6	9.41	124.45	118.80
2	AB	1610	A	C5-C6-N1	9.41	122.41	117.70
2	AB	1783	A	N1-C6-N6	9.41	124.25	118.60
2	AB	2016	U	N3-C2-O2	-9.41	115.61	122.20
2	AB	2400	G	N3-C2-N2	-9.41	113.31	119.90
42	BH	110	ARG	NE-CZ-NH1	9.41	125.00	120.30
2	AB	46	G	C4-C5-N7	-9.41	107.04	110.80
35	BA	326	G	N9-C4-C5	9.41	109.16	105.40
2	AB	2834	G	C6-C5-N7	-9.40	124.76	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	608	A	C6-C5-N7	-9.40	125.72	132.30
2	AB	1154	G	C5-N7-C8	-9.40	99.60	104.30
2	AB	1404	C	C2-N3-C4	9.40	124.60	119.90
2	AB	2116	G	N1-C2-N3	-9.40	118.26	123.90
2	AB	2213	U	O4'-C1'-N1	9.40	115.72	108.20
2	AB	2527	C	N1-C2-O2	-9.40	113.26	118.90
35	BA	466	A	N1-C2-N3	-9.40	124.60	129.30
35	BA	899	C	N3-C4-C5	-9.40	118.14	121.90
35	BA	1152	A	O4'-C1'-N9	9.40	115.72	108.20
35	BA	1408	A	C5-N7-C8	9.40	108.60	103.90
2	AB	2123	G	C8-N9-C4	-9.40	102.64	106.40
2	AB	2644	G	C3'-C2'-C1'	-9.40	93.98	101.50
35	BA	824	G	C5-C6-N1	9.40	116.20	111.50
35	BA	1157	A	C2-N3-C4	9.40	115.30	110.60
2	AB	116	C	C6-N1-C2	9.39	124.06	120.30
2	AB	386	G	O4'-C1'-N9	9.39	115.71	108.20
2	AB	2462	C	O4'-C1'-N1	9.39	115.71	108.20
36	BB	25	U	C1'-O4'-C4'	-9.39	102.39	109.90
35	BA	111	G	C4-C5-N7	-9.39	107.04	110.80
35	BA	670	G	C5-C6-N1	9.39	116.20	111.50
2	AB	326	G	C5-N7-C8	-9.39	99.61	104.30
35	BA	439	U	C4-C5-C6	9.39	125.33	119.70
2	AB	2880	C	N3-C4-N4	9.39	124.57	118.00
35	BA	1058	G	N1-C6-O6	-9.39	114.27	119.90
2	AB	665	U	N1-C2-N3	9.38	120.53	114.90
2	AB	1482	G	O4'-C1'-N9	9.39	115.71	108.20
2	AB	1699	G	C4-C5-N7	9.38	114.55	110.80
2	AB	1890	A	N7-C8-N9	9.38	118.49	113.80
2	AB	1893	C	C6-N1-C2	-9.38	116.55	120.30
2	AB	2549	G	C6-N1-C2	-9.38	119.47	125.10
2	AB	2250	G	O4'-C1'-N9	9.38	115.71	108.20
2	AB	2396	G	N9-C4-C5	9.38	109.15	105.40
35	BA	1399	C	N3-C4-C5	-9.38	118.15	121.90
2	AB	2561	U	O4'-C1'-N1	9.38	115.70	108.20
2	AB	1789	A	C5'-C4'-C3'	-9.38	101.00	116.00
2	AB	2053	G	C2-N3-C4	9.38	116.59	111.90
2	AB	2100	G	C8-N9-C4	-9.38	102.65	106.40
2	AB	2684	U	C4-C5-C6	9.38	125.33	119.70
35	BA	951	G	C5-C6-O6	9.38	134.23	128.60
35	BA	1144	G	C4-C5-C6	9.38	124.43	118.80
35	BA	1232	U	O4'-C1'-N1	9.38	115.70	108.20
2	AB	846	U	N3-C4-C5	-9.38	108.97	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1846	G	C5-C6-N1	9.38	116.19	111.50
2	AB	2365	G	N3-C4-C5	-9.38	123.91	128.60
35	BA	391	G	C6-C5-N7	-9.38	124.78	130.40
35	BA	703	G	N9-C4-C5	9.38	109.15	105.40
2	AB	462	C	N1-C2-O2	9.37	124.52	118.90
2	AB	758	C	C5-C6-N1	-9.37	116.31	121.00
2	AB	2691	C	C2-N3-C4	9.37	124.59	119.90
35	BA	35	G	C8-N9-C4	-9.37	102.65	106.40
35	BA	1134	G	N3-C4-C5	-9.37	123.91	128.60
35	BA	1309	G	N7-C8-N9	9.37	117.79	113.10
2	AB	2724	U	N3-C4-O4	-9.37	112.84	119.40
45	BK	122	ARG	NE-CZ-NH1	9.37	124.98	120.30
1	AA	9	G	C4-C5-C6	9.37	124.42	118.80
2	AB	110	G	C3'-C2'-C1'	-9.36	94.01	101.50
2	AB	1357	C	N1-C2-O2	9.37	124.52	118.90
2	AB	2421	G	N9-C4-C5	9.37	109.15	105.40
2	AB	2683	C	O4'-C1'-N1	9.36	115.69	108.20
35	BA	766	A	C8-N9-C4	-9.36	102.05	105.80
35	BA	964	A	C5-N7-C8	9.36	108.58	103.90
35	BA	92	U	O4'-C1'-N1	9.36	115.69	108.20
35	BA	866	C	N3-C4-C5	-9.36	118.16	121.90
2	AB	72	U	O4'-C1'-N1	9.36	115.69	108.20
2	AB	1754	A	C2-N3-C4	-9.36	105.92	110.60
35	BA	520	A	C2-N3-C4	9.36	115.28	110.60
35	BA	1047	G	C8-N9-C4	-9.36	102.66	106.40
2	AB	472	A	C8-N9-C4	-9.36	102.06	105.80
2	AB	1961	C	N3-C4-N4	9.36	124.55	118.00
35	BA	1228	C	N3-C4-N4	9.36	124.55	118.00
2	AB	678	C	N3-C4-C5	-9.36	118.16	121.90
2	AB	1681	G	C8-N9-C4	-9.36	102.66	106.40
2	AB	1761	C	N1-C2-O2	9.36	124.52	118.90
2	AB	2757	A	N7-C8-N9	-9.36	109.12	113.80
35	BA	468	A	C5-N7-C8	-9.36	99.22	103.90
35	BA	1275	A	C8-N9-C4	-9.36	102.06	105.80
2	AB	597	G	N7-C8-N9	9.36	117.78	113.10
2	AB	653	U	C6-N1-C2	-9.36	115.39	121.00
2	AB	969	G	N7-C8-N9	9.36	117.78	113.10
35	BA	290	C	C5'-C4'-O4'	9.36	120.33	109.10
35	BA	1052	U	N3-C2-O2	-9.36	115.65	122.20
2	AB	2799	A	N7-C8-N9	9.36	118.48	113.80
35	BA	1099	G	C4-C5-N7	9.36	114.54	110.80
2	AB	166	U	C1'-O4'-C4'	-9.35	102.42	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	577	G	C5-C6-O6	-9.35	122.99	128.60
2	AB	2411	A	N1-C6-N6	9.35	124.21	118.60
2	AB	2578	G	C4-C5-N7	-9.35	107.06	110.80
2	AB	254	G	C5-C6-N1	-9.35	106.83	111.50
2	AB	446	G	N7-C8-N9	9.35	117.78	113.10
2	AB	1235	G	C5-C6-O6	-9.35	122.99	128.60
2	AB	1717	A	C2-N3-C4	9.35	115.28	110.60
2	AB	2706	A	N1-C2-N3	9.35	133.98	129.30
2	AB	2882	A	C8-N9-C4	9.35	109.54	105.80
35	BA	746	A	N1-C6-N6	9.35	124.21	118.60
35	BA	815	A	C5-N7-C8	9.35	108.58	103.90
2	AB	305	C	N3-C2-O2	-9.35	115.36	121.90
2	AB	732	C	C2-N3-C4	-9.35	115.22	119.90
2	AB	2434	A	C1'-O4'-C4'	-9.35	102.42	109.90
2	AB	1604	C	C6-N1-C2	9.35	124.04	120.30
7	AG	149	ARG	NE-CZ-NH1	9.35	124.97	120.30
35	BA	690	G	C4-C5-C6	9.35	124.41	118.80
35	BA	786	G	C5-C6-N1	9.35	116.17	111.50
35	BA	1496	C	N1-C2-O2	9.35	124.51	118.90
2	AB	1529	G	N9-C4-C5	9.34	109.14	105.40
2	AB	1717	A	N1-C2-N3	-9.34	124.63	129.30
2	AB	2088	A	C8-N9-C4	9.34	109.54	105.80
2	AB	2142	A	O4'-C1'-N9	9.34	115.67	108.20
2	AB	2403	C	O4'-C1'-N1	9.34	115.67	108.20
2	AB	301	G	N7-C8-N9	9.34	117.77	113.10
2	AB	2630	G	C2-N3-C4	9.34	116.57	111.90
35	BA	1214	C	C5-C6-N1	9.34	125.67	121.00
2	AB	289	G	N9-C1'-C2'	-9.34	101.73	112.00
2	AB	428	A	C1'-O4'-C4'	-9.34	102.43	109.90
2	AB	866	A	C5-C6-N6	-9.34	116.23	123.70
2	AB	2785	C	N3-C4-N4	9.34	124.54	118.00
35	BA	688	G	C2-N3-C4	9.34	116.57	111.90
35	BA	1445	U	N1-C2-O2	9.34	129.34	122.80
2	AB	724	U	C5-C4-O4	-9.34	120.30	125.90
2	AB	2381	A	C5-C6-N1	9.34	122.37	117.70
2	AB	2636	C	O4'-C1'-N1	9.34	115.67	108.20
36	BB	34	U	N3-C4-O4	9.34	125.94	119.40
2	AB	73	A	C8-N9-C4	9.33	109.53	105.80
2	AB	1730	C	N3-C2-O2	-9.33	115.37	121.90
35	BA	159	G	C4-C5-N7	9.33	114.53	110.80
47	BM	26	PHE	CB-CG-CD1	-9.33	114.27	120.80
35	BA	1068	G	C6-N1-C2	-9.33	119.50	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	17	G	C8-N9-C4	-9.33	102.67	106.40
2	AB	242	G	N3-C4-C5	-9.33	123.94	128.60
2	AB	544	C	O4'-C1'-N1	9.33	115.67	108.20
2	AB	1347	A	C5-C6-N1	9.33	122.37	117.70
2	AB	1676	A	O4'-C1'-N9	9.33	115.66	108.20
2	AB	12	U	C5-C4-O4	-9.33	120.30	125.90
2	AB	1087	G	C8-N9-C4	-9.33	102.67	106.40
2	AB	1850	G	C4-C5-N7	-9.33	107.07	110.80
35	BA	1257	A	C8-N9-C4	-9.33	102.07	105.80
2	AB	1482	G	N1-C6-O6	9.33	125.50	119.90
2	AB	2126	A	N1-C2-N3	9.33	133.96	129.30
2	AB	200	U	O4'-C1'-N1	9.32	115.66	108.20
2	AB	1383	A	C6-C5-N7	-9.32	125.77	132.30
2	AB	1102	C	N3-C4-C5	-9.32	118.17	121.90
2	AB	2617	U	N1-C2-N3	9.32	120.50	114.90
2	AB	2644	G	O4'-C4'-C3'	-9.32	94.67	104.00
35	BA	388	G	C5-C6-N1	9.32	116.16	111.50
35	BA	898	G	C4-C5-N7	9.32	114.53	110.80
40	BF	140	ASP	CB-CG-OD1	-9.32	109.91	118.30
35	BA	898	G	N9-C4-C5	-9.32	101.67	105.40
35	BA	1041	G	O4'-C1'-N9	9.32	115.66	108.20
2	AB	106	C	C1'-O4'-C4'	-9.32	102.44	109.90
2	AB	1152	C	O4'-C1'-N1	9.32	115.66	108.20
35	BA	743	A	N7-C8-N9	9.32	118.46	113.80
2	AB	1012	U	N3-C2-O2	-9.32	115.68	122.20
2	AB	2677	G	N3-C4-C5	-9.32	123.94	128.60
35	BA	410	G	N9-C4-C5	9.32	109.13	105.40
36	BB	21	U	P-O3'-C3'	9.32	130.88	119.70
2	AB	292	U	O4'-C1'-N1	9.32	115.65	108.20
2	AB	410	G	N3-C4-C5	-9.32	123.94	128.60
2	AB	912	C	N1-C2-O2	9.32	124.49	118.90
2	AB	968	C	N3-C4-C5	-9.32	118.17	121.90
2	AB	974	G	C4-C5-N7	-9.32	107.07	110.80
2	AB	1585	C	N1-C2-O2	9.32	124.49	118.90
35	BA	251	G	C1'-O4'-C4'	-9.32	102.45	109.90
35	BA	690	G	C4-C5-N7	-9.32	107.07	110.80
1	AA	1	U	C5-C4-O4	-9.31	120.31	125.90
35	BA	1517	G	C5-N7-C8	-9.31	99.64	104.30
2	AB	2230	G	C5-C6-N1	9.31	116.16	111.50
1	AA	44	G	N9-C4-C5	-9.31	101.67	105.40
2	AB	937	C	C4'-C3'-C2'	-9.31	93.29	102.60
2	AB	46	G	N9-C4-C5	9.31	109.12	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1115	G	N9-C4-C5	9.31	109.12	105.40
2	AB	2623	G	C4-C5-N7	-9.31	107.08	110.80
2	AB	1364	G	N3-C4-N9	-9.31	120.41	126.00
2	AB	2056	G	N3-C2-N2	-9.31	113.38	119.90
2	AB	2086	U	C4'-C3'-C2'	-9.31	93.29	102.60
35	BA	172	A	C8-N9-C4	-9.31	102.08	105.80
35	BA	1537	U	C5-C6-N1	-9.31	118.05	122.70
2	AB	802	A	N1-C6-N6	9.31	124.19	118.60
2	AB	1233	C	C5-C4-N4	-9.31	113.68	120.20
2	AB	1309	G	N3-C4-C5	-9.31	123.94	128.60
32	A5	12	ARG	NE-CZ-NH1	9.31	124.95	120.30
35	BA	1323	G	N1-C6-O6	-9.31	114.32	119.90
35	BA	1439	G	N3-C4-N9	9.31	131.58	126.00
2	AB	130	C	C5-C4-N4	-9.30	113.69	120.20
2	AB	389	G	P-O3'-C3'	9.31	130.87	119.70
2	AB	1151	A	N7-C8-N9	-9.30	109.15	113.80
2	AB	1415	U	O4'-C1'-N1	9.30	115.64	108.20
2	AB	1900	A	C8-N9-C4	9.30	109.52	105.80
35	BA	864	A	C8-N9-C4	-9.30	102.08	105.80
2	AB	1359	A	C6-N1-C2	9.30	124.18	118.60
14	AN	59	ARG	NE-CZ-NH1	9.30	124.95	120.30
1	AA	77	U	O4'-C1'-N1	9.30	115.64	108.20
2	AB	401	A	C5'-C4'-O4'	9.30	120.26	109.10
2	AB	1788	C	O4'-C1'-N1	9.30	115.64	108.20
2	AB	2774	C	C2-N3-C4	-9.30	115.25	119.90
35	BA	601	G	C5-C6-N1	9.30	116.15	111.50
35	BA	618	C	N1-C2-O2	9.30	124.48	118.90
35	BA	665	A	N9-C4-C5	9.30	109.52	105.80
35	BA	1061	G	C8-N9-C4	-9.30	102.68	106.40
35	BA	1218	C	C5-C6-N1	-9.30	116.35	121.00
2	AB	939	G	O4'-C1'-N9	9.30	115.64	108.20
2	AB	1104	C	C6-N1-C2	-9.30	116.58	120.30
2	AB	221	A	C4-C5-N7	9.29	115.35	110.70
2	AB	799	G	N3-C4-C5	-9.29	123.95	128.60
35	BA	521	G	N3-C4-C5	-9.29	123.95	128.60
35	BA	611	C	C4'-C3'-C2'	-9.29	93.31	102.60
35	BA	1117	A	O4'-C1'-N9	9.30	115.64	108.20
1	AA	7	G	O4'-C1'-N9	9.29	115.63	108.20
1	AA	105	G	N1-C6-O6	-9.29	114.33	119.90
2	AB	940	G	N9-C4-C5	9.29	109.12	105.40
2	AB	1345	C	C2-N3-C4	-9.29	115.25	119.90
2	AB	2849	U	C3'-C2'-C1'	-9.29	94.06	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2433	A	C6-N1-C2	-9.29	113.03	118.60
2	AB	2607	G	C5-C6-O6	-9.29	123.03	128.60
35	BA	463	U	C2-N3-C4	-9.29	121.42	127.00
35	BA	572	A	C5-N7-C8	-9.29	99.25	103.90
2	AB	413	C	N3-C4-C5	-9.29	118.18	121.90
2	AB	2255	G	C2-N3-C4	-9.29	107.25	111.90
23	AW	85	ARG	NE-CZ-NH1	9.29	124.94	120.30
35	BA	10	A	C4-C5-N7	-9.29	106.06	110.70
37	BC	22	A	C5-C6-N1	9.29	122.34	117.70
2	AB	66	C	N1-C2-O2	9.29	124.47	118.90
2	AB	1849	G	C2-N3-C4	9.29	116.54	111.90
2	AB	370	G	C8-N9-C4	-9.29	102.69	106.40
35	BA	904	U	O4'-C1'-N1	9.29	115.63	108.20
2	AB	183	C	C4-C5-C6	-9.28	112.76	117.40
35	BA	212	G	C5-C6-O6	-9.28	123.03	128.60
35	BA	360	G	C4-C5-N7	-9.29	107.09	110.80
35	BA	1147	C	N3-C2-O2	-9.29	115.40	121.90
35	BA	1486	G	C4-C5-N7	9.29	114.51	110.80
2	AB	1610	A	O4'-C1'-N9	9.28	115.63	108.20
35	BA	357	G	C6-N1-C2	-9.28	119.53	125.10
2	AB	1157	G	N7-C8-N9	9.28	117.74	113.10
2	AB	1235	G	P-O3'-C3'	9.28	130.84	119.70
2	AB	2205	A	C4'-C3'-C2'	-9.28	93.32	102.60
2	AB	2617	U	C5-C6-N1	-9.28	118.06	122.70
35	BA	178	C	C5-C6-N1	9.28	125.64	121.00
35	BA	665	A	P-O3'-C3'	9.28	130.84	119.70
2	AB	1172	C	O4'-C1'-N1	9.28	115.62	108.20
35	BA	1078	U	O4'-C1'-N1	9.27	115.62	108.20
35	BA	970	C	C1'-O4'-C4'	-9.27	102.48	109.90
35	BA	1067	A	O4'-C1'-N9	9.27	115.62	108.20
35	BA	1485	U	C5-C6-N1	-9.27	118.06	122.70
35	BA	976	G	N3-C4-N9	9.27	131.56	126.00
35	BA	1254	A	C5-C6-N6	-9.27	116.28	123.70
2	AB	728	G	N1-C6-O6	-9.27	114.34	119.90
2	AB	1045	C	C6-N1-C2	-9.27	116.59	120.30
35	BA	584	G	C5-C6-O6	-9.27	123.04	128.60
2	AB	404	A	C2-N3-C4	9.27	115.23	110.60
2	AB	2368	C	O4'-C1'-N1	9.27	115.61	108.20
2	AB	2186	G	C8-N9-C4	-9.27	102.69	106.40
2	AB	2410	G	C8-N9-C4	-9.27	102.69	106.40
2	AB	2877	G	C5-N7-C8	-9.27	99.67	104.30
35	BA	782	A	N1-C6-N6	9.27	124.16	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2867	G	N9-C4-C5	9.27	109.11	105.40
35	BA	509	A	N9-C4-C5	9.27	109.51	105.80
37	BC	47	A	C5-C6-N1	9.27	122.33	117.70
2	AB	84	A	C6-N1-C2	-9.26	113.04	118.60
2	AB	144	A	N1-C2-N3	-9.26	124.67	129.30
2	AB	424	G	C6-N1-C2	-9.26	119.54	125.10
2	AB	1601	G	C5-N7-C8	-9.26	99.67	104.30
35	BA	184	G	C8-N9-C4	-9.26	102.69	106.40
35	BA	936	C	N3-C4-C5	9.26	125.61	121.90
35	BA	1536	C	O4'-C4'-C3'	9.26	113.51	106.10
2	AB	1420	A	N3-C4-N9	9.26	134.81	127.40
2	AB	1439	A	N9-C4-C5	9.26	109.50	105.80
35	BA	209	U	C4-C5-C6	9.26	125.26	119.70
35	BA	1489	G	C4-C5-N7	-9.26	107.10	110.80
2	AB	721	A	C8-N9-C4	-9.26	102.10	105.80
35	BA	1334	G	C4-C5-C6	9.26	124.36	118.80
1	AA	119	A	C5-C6-N6	-9.26	116.30	123.70
2	AB	1127	A	N9-C4-C5	9.26	109.50	105.80
2	AB	1292	G	O4'-C4'-C3'	9.26	113.50	106.10
2	AB	1314	C	C6-N1-C2	-9.26	116.60	120.30
2	AB	2339	C	O4'-C1'-N1	9.26	115.61	108.20
35	BA	168	G	C5'-C4'-C3'	-9.26	101.19	116.00
35	BA	498	A	O5'-P-OP2	-9.26	97.37	105.70
35	BA	1026	G	C2-N3-C4	9.26	116.53	111.90
57	BW	46	ARG	NE-CZ-NH1	9.26	124.93	120.30
2	AB	269	C	C2-N3-C4	-9.25	115.27	119.90
2	AB	904	G	C2-N3-C4	9.25	116.53	111.90
2	AB	905	A	C5-C6-N6	-9.25	116.30	123.70
2	AB	1434	A	C8-N9-C4	-9.25	102.10	105.80
2	AB	1998	A	C3'-C2'-C1'	-9.25	94.10	101.50
2	AB	635	C	N3-C4-N4	-9.25	111.52	118.00
2	AB	759	G	C6-C5-N7	-9.25	124.85	130.40
35	BA	18	C	C5-C4-N4	-9.25	113.73	120.20
35	BA	491	G	C6-N1-C2	-9.25	119.55	125.10
2	AB	1380	G	C6-C5-N7	-9.25	124.85	130.40
2	AB	1740	G	C4-C5-N7	9.25	114.50	110.80
2	AB	1921	G	C5-C6-O6	-9.25	123.05	128.60
2	AB	2119	A	C4-C5-C6	-9.25	112.38	117.00
2	AB	2676	C	O4'-C1'-N1	9.24	115.60	108.20
2	AB	2842	G	C5'-C4'-O4'	9.24	120.19	109.10
2	AB	826	U	P-O3'-C3'	9.24	130.79	119.70
35	BA	187	G	P-O3'-C3'	9.24	130.79	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	692	U	N3-C2-O2	-9.24	115.73	122.20
2	AB	1659	G	C4-C5-N7	-9.24	107.10	110.80
2	AB	1054	A	N9-C1'-C2'	-9.24	101.83	112.00
2	AB	2481	G	C8-N9-C4	-9.24	102.70	106.40
35	BA	1451	U	C2-N3-C4	-9.24	121.45	127.00
2	AB	303	G	N7-C8-N9	9.24	117.72	113.10
2	AB	2582	G	N9-C4-C5	9.24	109.10	105.40
35	BA	1251	A	C8-N9-C4	-9.24	102.10	105.80
2	AB	618	G	C8-N9-C4	-9.24	102.70	106.40
2	AB	1337	G	N3-C2-N2	-9.24	113.43	119.90
2	AB	1188	U	N3-C2-O2	-9.24	115.73	122.20
2	AB	156	A	C5-N7-C8	9.23	108.52	103.90
2	AB	2060	A	P-O3'-C3'	9.23	130.78	119.70
2	AB	2421	G	C5-C6-N1	9.23	116.12	111.50
2	AB	1665	A	C4'-C3'-C2'	-9.23	93.37	102.60
2	AB	2063	C	O4'-C1'-N1	9.23	115.58	108.20
2	AB	2450	A	C8-N9-C4	-9.23	102.11	105.80
35	BA	399	G	N1-C2-N3	-9.23	118.36	123.90
35	BA	1105	A	O4'-C1'-N9	9.23	115.58	108.20
35	BA	1221	G	C2-N3-C4	9.23	116.52	111.90
37	BC	22	A	N1-C2-N3	-9.23	124.68	129.30
1	AA	46	A	C4-C5-N7	-9.23	106.09	110.70
2	AB	599	A	C2-N3-C4	9.23	115.21	110.60
2	AB	599	A	N1-C6-N6	-9.23	113.06	118.60
2	AB	907	G	C8-N9-C4	-9.23	102.71	106.40
2	AB	2276	G	C5-C6-N1	9.23	116.11	111.50
35	BA	895	G	C8-N9-C4	-9.23	102.71	106.40
2	AB	1082	U	C5-C6-N1	-9.23	118.09	122.70
2	AB	1346	G	C2-N3-C4	9.23	116.51	111.90
2	AB	2626	C	N1-C1'-C2'	-9.23	101.85	112.00
35	BA	156	C	O4'-C1'-N1	9.23	115.58	108.20
35	BA	1300	G	C6-C5-N7	-9.23	124.86	130.40
52	BR	5	ARG	NE-CZ-NH2	-9.23	115.69	120.30
2	AB	1099	G	C2-N3-C4	9.22	116.51	111.90
2	AB	1306	C	O4'-C1'-N1	9.22	115.58	108.20
2	AB	2297	A	C5'-C4'-O4'	9.22	120.17	109.10
2	AB	450	G	N9-C4-C5	9.22	109.09	105.40
2	AB	714	U	C5'-C4'-O4'	9.22	120.17	109.10
2	AB	2258	C	C5-C6-N1	9.22	125.61	121.00
2	AB	2415	G	C5-C6-N1	9.22	116.11	111.50
35	BA	287	U	C2-N3-C4	-9.22	121.47	127.00
2	AB	239	C	N3-C4-C5	-9.22	118.21	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	367	G	C5-N7-C8	9.22	108.91	104.30
2	AB	1263	U	C5-C4-O4	-9.22	120.37	125.90
35	BA	230	G	N9-C4-C5	9.22	109.09	105.40
47	BM	114	PRO	N-CA-CB	9.22	114.36	103.30
2	AB	843	G	N1-C6-O6	9.22	125.43	119.90
2	AB	1269	A	N1-C2-N3	-9.21	124.69	129.30
35	BA	7	A	C8-N9-C4	-9.22	102.11	105.80
35	BA	1186	G	C3'-C2'-C1'	-9.22	94.13	101.50
2	AB	1578	U	O4'-C1'-N1	9.21	115.57	108.20
2	AB	524	G	O4'-C1'-N9	9.21	115.57	108.20
2	AB	2567	G	N9-C4-C5	9.21	109.08	105.40
2	AB	2743	U	N1-C2-N3	9.21	120.43	114.90
37	BC	43	G	C6-N1-C2	-9.21	119.57	125.10
2	AB	432	A	O4'-C1'-N9	9.21	115.57	108.20
1	AA	51	G	C4-C5-N7	9.21	114.48	110.80
2	AB	485	C	O4'-C1'-N1	9.21	115.57	108.20
2	AB	914	G	N9-C1'-C2'	-9.21	101.87	112.00
2	AB	1397	U	C2-N3-C4	-9.21	121.47	127.00
2	AB	1966	A	C5-C6-N6	9.21	131.07	123.70
35	BA	609	A	C5-N7-C8	9.21	108.50	103.90
2	AB	2319	G	N3-C4-C5	-9.21	124.00	128.60
35	BA	98	A	C8-N9-C4	-9.21	102.12	105.80
2	AB	1381	G	C8-N9-C4	-9.21	102.72	106.40
2	AB	1883	U	C2-N3-C4	-9.21	121.48	127.00
49	BO	106	ARG	NE-CZ-NH1	9.21	124.90	120.30
2	AB	2466	C	C5-C4-N4	-9.20	113.76	120.20
2	AB	2471	A	C3'-C2'-C1'	-9.21	94.14	101.50
35	BA	359	G	C8-N9-C4	-9.20	102.72	106.40
35	BA	598	U	C4-C5-C6	9.21	125.22	119.70
35	BA	1231	G	C4-C5-N7	-9.20	107.12	110.80
2	AB	428	A	O4'-C1'-N9	9.20	115.56	108.20
2	AB	1410	G	C2-N3-C4	9.20	116.50	111.90
35	BA	637	C	P-O3'-C3'	9.20	130.74	119.70
35	BA	708	C	C4-C5-C6	-9.20	112.80	117.40
35	BA	770	C	C5-C6-N1	9.20	125.60	121.00
1	AA	67	G	N9-C4-C5	-9.20	101.72	105.40
35	BA	38	G	C3'-C2'-C1'	-9.20	94.14	101.50
35	BA	388	G	N1-C6-O6	-9.20	114.38	119.90
35	BA	398	U	C4-C5-C6	9.20	125.22	119.70
2	AB	1358	G	N9-C4-C5	9.20	109.08	105.40
35	BA	1444	U	N3-C4-C5	-9.20	109.08	114.60
1	AA	109	A	O4'-C1'-N9	-9.20	100.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	55	G	C8-N9-C4	-9.20	102.72	106.40
2	AB	629	G	C2-N3-C4	9.20	116.50	111.90
2	AB	673	C	C4-C5-C6	-9.19	112.80	117.40
2	AB	2098	U	C2-N3-C4	-9.20	121.48	127.00
2	AB	2428	G	N3-C4-C5	-9.19	124.00	128.60
35	BA	392	C	C6-N1-C2	-9.19	116.62	120.30
35	BA	663	A	C5-N7-C8	-9.20	99.30	103.90
35	BA	1265	C	C4-C5-C6	9.20	122.00	117.40
2	AB	157	C	C4-C5-C6	-9.19	112.80	117.40
2	AB	2268	A	C5'-C4'-O4'	9.19	120.13	109.10
37	BC	51	U	C4-C5-C6	9.19	125.22	119.70
2	AB	1829	A	C8-N9-C4	9.19	109.48	105.80
2	AB	2623	G	C4-C5-C6	9.19	124.31	118.80
35	BA	679	C	C5-C6-N1	-9.19	116.41	121.00
35	BA	1315	U	N3-C4-C5	9.19	120.11	114.60
37	BC	64	G	C6-N1-C2	-9.19	119.58	125.10
1	AA	57	A	N1-C6-N6	-9.19	113.09	118.60
2	AB	678	C	C4-C5-C6	9.19	122.00	117.40
2	AB	1665	A	C8-N9-C4	-9.19	102.12	105.80
2	AB	2164	C	O4'-C1'-N1	9.19	115.55	108.20
2	AB	549	G	N9-C4-C5	9.19	109.08	105.40
35	BA	894	G	C4-C5-N7	-9.19	107.12	110.80
2	AB	765	C	N1-C2-O2	9.19	124.41	118.90
2	AB	1452	G	N9-C4-C5	9.19	109.07	105.40
2	AB	2157	G	N3-C4-C5	-9.19	124.01	128.60
2	AB	820	A	C2-N3-C4	9.18	115.19	110.60
2	AB	1966	A	N1-C6-N6	-9.18	113.09	118.60
1	AA	2	G	N3-C4-N9	9.18	131.51	126.00
2	AB	988	A	N7-C8-N9	-9.18	109.21	113.80
2	AB	2567	G	C5-C6-N1	9.18	116.09	111.50
2	AB	1619	G	N9-C4-C5	9.18	109.07	105.40
2	AB	2387	U	C2-N3-C4	-9.18	121.49	127.00
2	AB	2866	U	N3-C2-O2	-9.18	115.78	122.20
35	BA	909	A	O4'-C1'-N9	9.18	115.54	108.20
35	BA	1539	C	N1-C2-O2	9.18	124.41	118.90
38	BD	62	ARG	NE-CZ-NH2	-9.18	115.71	120.30
2	AB	212	G	C6-N1-C2	9.18	130.60	125.10
2	AB	519	U	N1-C2-N3	9.18	120.41	114.90
35	BA	92	U	C5-C6-N1	-9.18	118.11	122.70
35	BA	1084	G	C5-C6-N1	9.18	116.09	111.50
2	AB	1735	A	N1-C2-N3	-9.18	124.71	129.30
2	AB	1759	A	O4'-C1'-N9	9.18	115.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2247	A	O4'-C1'-N9	9.18	115.54	108.20
35	BA	168	G	C5'-C4'-O4'	9.18	120.11	109.10
35	BA	824	G	C2-N3-C4	9.18	116.49	111.90
35	BA	866	C	O4'-C1'-N1	9.18	115.54	108.20
35	BA	1505	G	O4'-C1'-N9	-9.18	100.86	108.20
35	BA	1381	U	N1-C2-N3	9.18	120.41	114.90
2	AB	1737	G	N1-C2-N3	-9.17	118.39	123.90
2	AB	2686	G	C2-N3-C4	9.17	116.49	111.90
2	AB	2766	A	C4'-C3'-C2'	-9.17	93.43	102.60
2	AB	2834	G	C4-C5-C6	9.17	124.30	118.80
35	BA	907	A	O4'-C1'-N9	9.17	115.54	108.20
35	BA	672	U	C2-N3-C4	-9.17	121.50	127.00
35	BA	1159	U	C4'-C3'-C2'	-9.17	93.43	102.60
36	BB	59	A	C5-C6-N6	-9.17	116.36	123.70
35	BA	1450	U	C2-N3-C4	-9.17	121.50	127.00
2	AB	1892	C	O4'-C1'-N1	9.17	115.53	108.20
2	AB	2115	G	C8-N9-C4	-9.17	102.73	106.40
2	AB	2674	G	C5-C6-N1	9.17	116.08	111.50
35	BA	441	A	O4'-C1'-N9	9.17	115.54	108.20
2	AB	802	A	C5-N7-C8	9.17	108.48	103.90
2	AB	1515	A	C2-N3-C4	9.17	115.18	110.60
2	AB	134	G	C6-C5-N7	-9.16	124.90	130.40
2	AB	474	G	C2-N3-C4	9.16	116.48	111.90
2	AB	1024	G	N3-C4-N9	-9.16	120.50	126.00
13	AM	112	PHE	CB-CG-CD1	-9.16	114.39	120.80
35	BA	1186	G	N7-C8-N9	-9.16	108.52	113.10
2	AB	1127	A	C8-N9-C4	-9.16	102.14	105.80
35	BA	1435	G	N9-C4-C5	-9.16	101.73	105.40
2	AB	1813	G	C4-C5-N7	-9.16	107.14	110.80
1	AA	42	C	C5-C4-N4	9.16	126.61	120.20
2	AB	527	C	N1-C2-O2	9.16	124.40	118.90
2	AB	1186	G	N3-C4-N9	9.16	131.50	126.00
35	BA	1015	G	C8-N9-C1'	9.16	138.91	127.00
2	AB	1190	G	C1'-O4'-C4'	-9.16	102.57	109.90
2	AB	1968	G	C5-N7-C8	9.16	108.88	104.30
2	AB	2027	G	N7-C8-N9	9.16	117.68	113.10
2	AB	512	G	N7-C8-N9	9.16	117.68	113.10
2	AB	2664	G	C5-C6-N1	9.16	116.08	111.50
35	BA	1065	U	O4'-C4'-C3'	9.16	113.42	106.10
35	BA	1210	C	C6-N1-C2	-9.16	116.64	120.30
2	AB	668	A	C8-N9-C4	9.15	109.46	105.80
2	AB	1443	U	C2-N3-C4	-9.15	121.51	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1575	C	N1-C2-O2	9.15	124.39	118.90
2	AB	2463	C	C2-N3-C4	9.15	124.48	119.90
35	BA	731	G	C2-N3-C4	9.15	116.48	111.90
2	AB	1191	G	C3'-C2'-C1'	9.15	108.82	101.50
2	AB	1496	A	N1-C6-N6	9.15	124.09	118.60
35	BA	378	G	N3-C4-N9	9.15	131.49	126.00
2	AB	2040	G	C4-C5-C6	9.15	124.29	118.80
35	BA	97	G	N9-C4-C5	9.15	109.06	105.40
35	BA	565	U	C5-C4-O4	9.15	131.39	125.90
35	BA	650	G	C1'-O4'-C4'	-9.15	102.58	109.90
35	BA	929	G	N1-C2-N3	-9.15	118.41	123.90
35	BA	1215	G	N9-C4-C5	9.15	109.06	105.40
39	BE	51	VAL	CA-CB-CG1	9.15	124.62	110.90
1	AA	109	A	C5-N7-C8	9.15	108.47	103.90
2	AB	1251	C	C5-C4-N4	-9.15	113.80	120.20
2	AB	1342	A	N9-C4-C5	9.15	109.46	105.80
2	AB	2185	U	C5-C6-N1	-9.15	118.12	122.70
2	AB	1114	C	C4'-C3'-C2'	-9.15	93.45	102.60
2	AB	1147	A	C5-C6-N1	9.15	122.27	117.70
2	AB	2238	G	N3-C4-N9	9.15	131.49	126.00
35	BA	626	G	C2-N3-C4	9.15	116.47	111.90
35	BA	922	G	N1-C6-O6	9.15	125.39	119.90
36	BB	29	G	C4-C5-N7	-9.14	107.14	110.80
2	AB	39	G	C8-N9-C4	-9.14	102.74	106.40
2	AB	2389	G	N3-C4-C5	-9.14	124.03	128.60
2	AB	709	U	C1'-O4'-C4'	9.14	117.21	109.90
2	AB	43	G	N9-C4-C5	9.14	109.06	105.40
2	AB	429	A	N1-C2-N3	9.14	133.87	129.30
2	AB	627	A	N9-C4-C5	9.14	109.46	105.80
2	AB	1914	C	C4'-C3'-C2'	-9.14	93.46	102.60
35	BA	1134	G	C2-N3-C4	9.14	116.47	111.90
35	BA	1524	C	N3-C4-N4	9.14	124.40	118.00
2	AB	1483	G	N7-C8-N9	9.14	117.67	113.10
2	AB	1722	A	C6-C5-N7	-9.14	125.90	132.30
2	AB	2342	C	N1-C2-O2	9.14	124.38	118.90
2	AB	2460	U	O4'-C1'-N1	9.14	115.51	108.20
2	AB	436	C	O4'-C1'-N1	9.13	115.51	108.20
2	AB	997	G	C3'-C2'-C1'	-9.13	94.19	101.50
2	AB	2705	A	C8-N9-C4	-9.13	102.15	105.80
35	BA	328	C	N3-C4-C5	-9.13	118.25	121.90
35	BA	609	A	O4'-C1'-N9	9.13	115.51	108.20
35	BA	1272	G	C4'-C3'-C2'	-9.13	93.47	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1741	C	N3-C2-O2	-9.13	115.51	121.90
2	AB	2599	G	C6-N1-C2	-9.13	119.62	125.10
35	BA	956	U	C4-C5-C6	9.13	125.18	119.70
2	AB	1831	G	C5'-C4'-O4'	9.13	120.06	109.10
35	BA	93	U	N3-C2-O2	-9.13	115.81	122.20
35	BA	529	G	N3-C2-N2	9.13	126.29	119.90
2	AB	1020	A	N9-C4-C5	9.13	109.45	105.80
2	AB	1048	A	C4-C5-C6	9.13	121.56	117.00
2	AB	2688	G	C5-N7-C8	-9.13	99.74	104.30
2	AB	36	G	O4'-C1'-N9	9.13	115.50	108.20
35	BA	1146	A	C8-N9-C4	-9.13	102.15	105.80
2	AB	1817	G	C8-N9-C4	-9.12	102.75	106.40
35	BA	682	G	C5'-C4'-O4'	9.12	120.05	109.10
2	AB	18	U	O4'-C1'-N1	9.12	115.50	108.20
2	AB	623	C	O4'-C1'-N1	9.12	115.50	108.20
35	BA	971	G	C6-C5-N7	9.12	135.87	130.40
35	BA	1203	C	C6-N1-C2	-9.12	116.65	120.30
35	BA	824	G	N1-C6-O6	-9.12	114.43	119.90
2	AB	259	G	C8-N9-C4	-9.12	102.75	106.40
2	AB	1163	G	O4'-C1'-N9	9.12	115.50	108.20
35	BA	860	A	O4'-C1'-N9	9.12	115.50	108.20
2	AB	789	A	O4'-C1'-N9	9.12	115.49	108.20
2	AB	1206	G	C8-N9-C4	-9.12	102.75	106.40
2	AB	1465	G	N7-C8-N9	9.12	117.66	113.10
2	AB	2040	G	C4-C5-N7	-9.12	107.15	110.80
2	AB	2337	G	C5-C6-N1	9.12	116.06	111.50
35	BA	791	G	C5-N7-C8	-9.12	99.74	104.30
1	AA	7	G	C2-N3-C4	9.12	116.46	111.90
2	AB	91	A	C5-N7-C8	9.12	108.46	103.90
2	AB	1378	A	C2-N3-C4	9.11	115.16	110.60
2	AB	1383	A	N7-C8-N9	-9.12	109.24	113.80
2	AB	1762	A	P-O3'-C3'	9.12	130.64	119.70
2	AB	2668	G	N1-C6-O6	9.12	125.37	119.90
35	BA	376	G	N7-C8-N9	9.12	117.66	113.10
35	BA	1312	G	N3-C4-C5	-9.11	124.04	128.60
35	BA	56	U	N3-C2-O2	-9.11	115.82	122.20
2	AB	1130	U	N3-C2-O2	-9.11	115.82	122.20
2	AB	1639	C	C6-N1-C2	9.11	123.94	120.30
35	BA	684	U	N1-C2-O2	-9.11	116.42	122.80
35	BA	1521	C	C6-N1-C2	-9.11	116.66	120.30
2	AB	2465	C	O4'-C1'-N1	9.11	115.49	108.20
35	BA	569	C	C4-C5-C6	9.11	121.95	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1500	G	C2-N3-C4	9.11	116.45	111.90
2	AB	1537	G	C2-N3-C4	9.11	116.45	111.90
2	AB	2035	G	N9-C4-C5	9.11	109.04	105.40
35	BA	835	U	N1-C2-N3	9.11	120.36	114.90
37	BC	46	G	N9-C4-C5	9.11	109.04	105.40
2	AB	2025	C	N3-C4-C5	-9.11	118.26	121.90
2	AB	2413	G	C5'-C4'-O4'	9.11	120.03	109.10
2	AB	140	C	C6-N1-C2	-9.10	116.66	120.30
2	AB	698	C	N3-C4-C5	-9.10	118.26	121.90
2	AB	326	G	C5'-C4'-O4'	9.10	120.02	109.10
2	AB	495	G	N3-C2-N2	9.10	126.27	119.90
35	BA	1242	G	C6-C5-N7	-9.10	124.94	130.40
2	AB	689	A	C5'-C4'-O4'	9.10	120.02	109.10
2	AB	947	A	C2-N3-C4	9.10	115.15	110.60
2	AB	1099	G	N1-C6-O6	-9.10	114.44	119.90
2	AB	2590	A	C4-C5-C6	9.10	121.55	117.00
35	BA	25	C	C2-N3-C4	9.10	124.45	119.90
35	BA	261	U	C4-C5-C6	9.10	125.16	119.70
35	BA	993	G	C4-C5-N7	9.10	114.44	110.80
43	BI	2	ARG	NE-CZ-NH1	9.10	124.85	120.30
2	AB	1433	A	C4-C5-N7	-9.10	106.15	110.70
2	AB	1682	G	O4'-C1'-N9	9.10	115.48	108.20
35	BA	168	G	C5-N7-C8	-9.10	99.75	104.30
2	AB	2157	G	O4'-C4'-C3'	9.10	113.38	106.10
2	AB	2315	G	C2-N3-C4	9.10	116.45	111.90
35	BA	795	C	C6-N1-C2	-9.10	116.66	120.30
2	AB	312	G	C2-N3-C4	9.10	116.45	111.90
2	AB	2137	U	C5-C4-O4	-9.10	120.44	125.90
35	BA	521	G	N7-C8-N9	-9.10	108.55	113.10
2	AB	498	G	N1-C6-O6	-9.10	114.44	119.90
2	AB	2361	G	C8-N9-C4	-9.10	102.76	106.40
2	AB	2363	G	C5-C6-O6	-9.10	123.14	128.60
2	AB	2641	G	O4'-C1'-N9	9.10	115.48	108.20
20	AT	83	TYR	CB-CG-CD1	-9.10	115.54	121.00
35	BA	230	G	N3-C4-C5	-9.10	124.05	128.60
35	BA	376	G	C4-C5-N7	-9.10	107.16	110.80
35	BA	724	G	C4-C5-N7	9.10	114.44	110.80
2	AB	723	C	O4'-C1'-N1	9.09	115.47	108.20
11	AK	133	ARG	NE-CZ-NH2	-9.09	115.75	120.30
35	BA	91	U	N3-C4-C5	-9.09	109.14	114.60
35	BA	399	G	C6-C5-N7	-9.09	124.94	130.40
35	BA	973	G	C5-C6-N1	9.09	116.05	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1193	G	C5-C6-O6	-9.09	123.14	128.60
37	BC	57	C	C5-C6-N1	9.09	125.55	121.00
2	AB	420	C	N1-C2-O2	9.09	124.35	118.90
2	AB	582	A	N1-C2-N3	-9.09	124.75	129.30
35	BA	823	C	O4'-C1'-N1	9.09	115.47	108.20
1	AA	23	G	C5-C6-N1	-9.09	106.96	111.50
2	AB	280	U	N3-C2-O2	-9.09	115.84	122.20
2	AB	424	G	C4-C5-N7	-9.09	107.17	110.80
2	AB	1376	C	C5'-C4'-C3'	9.09	130.54	116.00
2	AB	1389	G	C4-C5-N7	-9.09	107.17	110.80
2	AB	1805	A	N1-C2-N3	-9.09	124.76	129.30
2	AB	1933	G	O4'-C1'-N9	9.09	115.47	108.20
35	BA	465	A	C1'-O4'-C4'	-9.09	102.63	109.90
38	BD	236	PHE	CB-CG-CD2	-9.09	114.44	120.80
2	AB	280	U	N1-C2-N3	9.08	120.35	114.90
2	AB	1754	A	N9-C4-C5	-9.08	102.17	105.80
2	AB	1992	G	N3-C2-N2	-9.08	113.54	119.90
35	BA	705	G	O4'-C1'-N9	9.08	115.47	108.20
2	AB	589	U	N3-C2-O2	-9.08	115.84	122.20
2	AB	631	A	N9-C4-C5	9.08	109.43	105.80
36	BB	26	U	O4'-C1'-N1	9.08	115.47	108.20
2	AB	968	C	N1-C2-O2	9.08	124.35	118.90
2	AB	2043	C	N1-C2-O2	9.08	124.35	118.90
35	BA	65	A	N7-C8-N9	9.08	118.34	113.80
2	AB	1237	A	N1-C6-N6	-9.08	113.15	118.60
2	AB	1815	A	N9-C4-C5	9.08	109.43	105.80
2	AB	1846	G	C6-N1-C2	-9.08	119.65	125.10
2	AB	1994	C	N1-C2-O2	9.08	124.35	118.90
2	AB	2373	G	C6-N1-C2	-9.08	119.65	125.10
2	AB	106	C	C4-C5-C6	-9.07	112.86	117.40
2	AB	199	A	C5'-C4'-O4'	9.07	119.99	109.10
2	AB	1975	G	C8-N9-C4	-9.07	102.77	106.40
2	AB	2171	A	O5'-P-OP2	-9.07	97.53	105.70
2	AB	1275	A	C5-N7-C8	-9.07	99.36	103.90
35	BA	780	A	N1-C6-N6	-9.07	113.16	118.60
2	AB	993	G	C8-N9-C4	-9.07	102.77	106.40
2	AB	2362	C	N1-C2-O2	9.07	124.34	118.90
36	BB	44	U	C5-C6-N1	-9.07	118.17	122.70
2	AB	1111	A	O4'-C1'-N9	9.07	115.45	108.20
2	AB	1186	G	N3-C4-C5	-9.07	124.07	128.60
2	AB	1220	G	C3'-C2'-C1'	-9.07	94.25	101.50
2	AB	2485	G	C8-N9-C4	-9.07	102.77	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	624	C	O4'-C1'-N1	9.07	115.45	108.20
2	AB	1374	G	N3-C4-C5	-9.06	124.07	128.60
2	AB	1393	A	C5-C6-N1	-9.06	113.17	117.70
2	AB	1091	G	N9-C4-C5	9.06	109.03	105.40
2	AB	1128	G	N9-C4-C5	9.06	109.03	105.40
2	AB	2304	G	O4'-C1'-N9	9.06	115.45	108.20
35	BA	986	U	O4'-C1'-N1	9.06	115.45	108.20
2	AB	873	C	C6-N1-C2	-9.06	116.68	120.30
2	AB	904	G	N3-C4-C5	-9.06	124.07	128.60
2	AB	1994	C	N3-C2-O2	-9.06	115.56	121.90
54	BT	60	ARG	NE-CZ-NH1	9.06	124.83	120.30
43	BI	4	ARG	NE-CZ-NH2	-9.06	115.77	120.30
2	AB	2056	G	N9-C4-C5	-9.06	101.78	105.40
35	BA	1397	C	N3-C4-N4	9.06	124.34	118.00
2	AB	91	A	C4-C5-N7	-9.06	106.17	110.70
2	AB	1293	C	O4'-C1'-N1	9.05	115.44	108.20
2	AB	2888	C	C6-N1-C2	-9.06	116.68	120.30
35	BA	223	A	N9-C4-C5	-9.06	102.18	105.80
35	BA	551	U	N3-C2-O2	-9.06	115.86	122.20
35	BA	681	A	C5'-C4'-O4'	9.05	119.97	109.10
2	AB	1606	C	N1-C2-N3	-9.05	112.86	119.20
35	BA	687	A	C4-C5-N7	-9.05	106.17	110.70
2	AB	701	G	C8-N9-C4	-9.05	102.78	106.40
2	AB	1694	C	N3-C4-C5	-9.05	118.28	121.90
2	AB	2093	G	C4-C5-C6	9.05	124.23	118.80
2	AB	2878	U	O4'-C1'-N1	9.05	115.44	108.20
35	BA	102	G	C4-C5-N7	-9.05	107.18	110.80
2	AB	1524	G	N7-C8-N9	-9.05	108.58	113.10
2	AB	2801	G	N1-C6-O6	-9.05	114.47	119.90
2	AB	1879	C	O4'-C1'-N1	9.05	115.44	108.20
2	AB	2319	G	C6-C5-N7	-9.05	124.97	130.40
35	BA	543	U	C5'-C4'-O4'	9.05	119.96	109.10
1	AA	5	U	O4'-C1'-N1	9.05	115.44	108.20
2	AB	467	G	C8-N9-C4	-9.05	102.78	106.40
2	AB	1050	A	C6-C5-N7	9.05	138.63	132.30
2	AB	514	A	O4'-C1'-N9	9.04	115.44	108.20
2	AB	971	G	C8-N9-C4	-9.04	102.78	106.40
2	AB	989	G	C5-N7-C8	-9.05	99.78	104.30
2	AB	2583	G	N3-C4-C5	-9.04	124.08	128.60
9	AI	27	ARG	NE-CZ-NH1	-9.04	115.78	120.30
35	BA	479	U	N1-C2-O2	-9.04	116.47	122.80
35	BA	1532	U	C4'-C3'-C2'	-9.04	93.56	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	262	A	O4'-C1'-N9	9.04	115.43	108.20
2	AB	1205	A	C2-N3-C4	-9.04	106.08	110.60
2	AB	2770	G	C6-N1-C2	-9.04	119.67	125.10
35	BA	1362	A	C5-C6-N1	-9.04	113.18	117.70
2	AB	1615	C	O4'-C1'-N1	9.04	115.43	108.20
35	BA	885	G	N7-C8-N9	9.04	117.62	113.10
2	AB	128	C	C6-N1-C2	-9.04	116.69	120.30
2	AB	591	U	N3-C4-C5	-9.04	109.18	114.60
2	AB	1784	A	C1'-O4'-C4'	-9.04	102.67	109.90
2	AB	2236	U	P-O3'-C3'	9.04	130.55	119.70
35	BA	1338	G	C5-N7-C8	-9.04	99.78	104.30
35	BA	1369	C	C6-N1-C2	-9.04	116.68	120.30
35	BA	393	A	C5-N7-C8	9.04	108.42	103.90
35	BA	1538	C	C6-N1-C2	9.04	123.92	120.30
2	AB	112	U	N1-C2-N3	9.04	120.32	114.90
2	AB	402	A	O4'-C1'-N9	9.04	115.43	108.20
2	AB	1545	A	C4-C5-N7	9.04	115.22	110.70
2	AB	1608	A	N1-C2-N3	9.04	133.82	129.30
2	AB	1703	G	C4-C5-N7	-9.04	107.19	110.80
2	AB	2729	G	N9-C4-C5	-9.04	101.79	105.40
35	BA	445	G	N9-C4-C5	9.04	109.01	105.40
2	AB	563	A	C4'-C3'-C2'	-9.03	93.57	102.60
2	AB	1869	G	N9-C4-C5	9.03	109.01	105.40
35	BA	626	G	C8-N9-C4	-9.03	102.79	106.40
35	BA	1328	C	N3-C4-C5	9.03	125.51	121.90
2	AB	68	G	C4'-C3'-C2'	-9.03	93.57	102.60
2	AB	336	C	O4'-C1'-N1	9.03	115.42	108.20
2	AB	1069	A	C3'-C2'-C1'	9.03	108.72	101.50
2	AB	1344	U	N1-C2-N3	9.03	120.32	114.90
2	AB	1867	G	N3-C4-C5	-9.03	124.08	128.60
2	AB	2269	G	C4-C5-N7	9.03	114.41	110.80
2	AB	2754	U	C2-N3-C4	-9.03	121.58	127.00
2	AB	2816	G	N7-C8-N9	9.03	117.61	113.10
2	AB	2875	C	O4'-C1'-N1	9.03	115.42	108.20
35	BA	300	A	C3'-C2'-C1'	9.03	108.72	101.50
35	BA	337	G	C4'-C3'-C2'	-9.03	93.57	102.60
35	BA	102	G	N9-C4-C5	9.03	109.01	105.40
35	BA	1252	A	N1-C2-N3	9.03	133.81	129.30
35	BA	1386	G	C1'-O4'-C4'	9.03	117.12	109.90
36	BB	23	C	C4-C5-C6	9.03	121.91	117.40
44	BJ	12	ARG	NE-CZ-NH1	-9.03	115.79	120.30
2	AB	363	G	O4'-C1'-N9	9.03	115.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	991	C	C2-N3-C4	9.03	124.41	119.90
2	AB	1904	G	C5-N7-C8	9.03	108.81	104.30
2	AB	1948	G	C2-N3-C4	-9.03	107.39	111.90
21	AU	95	ARG	NE-CZ-NH2	-9.03	115.79	120.30
35	BA	805	C	O4'-C1'-N1	9.03	115.42	108.20
38	BD	207	ARG	NE-CZ-NH2	9.03	124.81	120.30
35	BA	570	G	C5'-C4'-C3'	-9.03	101.56	116.00
2	AB	1098	A	C5'-C4'-O4'	9.02	119.93	109.10
2	AB	1866	A	N9-C4-C5	9.02	109.41	105.80
2	AB	2729	G	N3-C4-N9	9.02	131.41	126.00
35	BA	689	C	O4'-C1'-N1	9.02	115.42	108.20
35	BA	1388	C	N3-C4-C5	-9.02	118.29	121.90
35	BA	273	U	O4'-C1'-N1	9.02	115.42	108.20
2	AB	1608	A	N7-C8-N9	-9.02	109.29	113.80
35	BA	1159	U	O4'-C4'-C3'	9.02	113.31	106.10
2	AB	212	G	C2-N3-C4	9.02	116.41	111.90
2	AB	628	G	N1-C6-O6	-9.02	114.49	119.90
2	AB	2331	G	N3-C4-N9	9.02	131.41	126.00
2	AB	2851	A	N7-C8-N9	-9.02	109.29	113.80
35	BA	519	C	N1-C2-O2	9.02	124.31	118.90
35	BA	750	C	C5-C4-N4	-9.02	113.89	120.20
2	AB	1815	A	N1-C6-N6	-9.01	113.19	118.60
2	AB	2205	A	N1-C2-N3	9.01	133.81	129.30
35	BA	240	G	N9-C4-C5	9.01	109.00	105.40
35	BA	482	A	C5'-C4'-O4'	9.01	119.92	109.10
36	BB	48	C	C6-N1-C2	9.01	123.91	120.30
2	AB	1697	G	C2-N3-C4	9.01	116.41	111.90
2	AB	773	U	C3'-C2'-C1'	9.01	108.71	101.50
2	AB	1403	A	C2-N3-C4	-9.01	106.09	110.60
35	BA	1320	C	C6-N1-C2	-9.01	116.70	120.30
37	BC	41	C	N3-C4-N4	9.01	124.31	118.00
2	AB	54	G	N3-C4-C5	-9.01	124.10	128.60
2	AB	259	G	C5-C6-O6	-9.01	123.20	128.60
2	AB	1426	G	N3-C2-N2	-9.01	113.59	119.90
2	AB	1606	C	N1-C2-O2	9.01	124.30	118.90
2	AB	2308	G	N9-C4-C5	9.01	109.00	105.40
2	AB	2625	G	N3-C4-N9	-9.01	120.60	126.00
35	BA	1208	C	C2-N3-C4	9.01	124.40	119.90
2	AB	1099	G	C4-C5-C6	9.01	124.20	118.80
2	AB	1805	A	C5-N7-C8	9.01	108.40	103.90
18	AR	103	THR	CA-CB-CG2	9.01	125.01	112.40
35	BA	1240	U	C2-N3-C4	-9.01	121.60	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	38	A	C5-N7-C8	-9.00	99.40	103.90
2	AB	61	C	O4'-C1'-N1	9.00	115.40	108.20
35	BA	491	G	C5-C6-O6	-9.00	123.20	128.60
2	AB	2157	G	N9-C4-C5	9.00	109.00	105.40
2	AB	2308	G	N3-C4-C5	-9.00	124.10	128.60
2	AB	2481	G	N9-C4-C5	9.00	109.00	105.40
35	BA	998	C	N3-C4-C5	-9.00	118.30	121.90
35	BA	1541	U	C5-C4-O4	-9.00	120.50	125.90
1	AA	59	A	O4'-C1'-C2'	-9.00	96.80	105.80
2	AB	575	A	C8-N9-C4	-9.00	102.20	105.80
2	AB	1155	A	C5'-C4'-O4'	9.00	119.90	109.10
2	AB	904	G	C4'-C3'-C2'	-9.00	93.60	102.60
2	AB	1818	U	C5'-C4'-O4'	9.00	119.90	109.10
2	AB	2045	C	N3-C4-C5	9.00	125.50	121.90
2	AB	2464	G	N9-C1'-C2'	-9.00	102.10	112.00
2	AB	2038	G	N9-C4-C5	-9.00	101.80	105.40
2	AB	2087	G	C8-N9-C4	-9.00	102.80	106.40
35	BA	871	U	N3-C2-O2	-9.00	115.90	122.20
35	BA	990	C	N1-C2-O2	9.00	124.30	118.90
2	AB	1310	G	C8-N9-C4	-8.99	102.80	106.40
2	AB	1500	G	N3-C4-C5	-8.99	124.10	128.60
35	BA	1487	G	N3-C4-C5	-8.99	124.10	128.60
1	AA	55	U	C5-C6-N1	-8.99	118.20	122.70
2	AB	70	G	C6-C5-N7	8.99	135.80	130.40
2	AB	462	C	N3-C4-N4	8.99	124.30	118.00
2	AB	476	G	O4'-C1'-N9	8.99	115.39	108.20
2	AB	731	C	C4-C5-C6	8.99	121.90	117.40
2	AB	1878	G	O4'-C1'-N9	8.99	115.39	108.20
2	AB	2058	A	C5-N7-C8	-8.99	99.40	103.90
2	AB	2641	G	N9-C4-C5	8.99	109.00	105.40
2	AB	2867	G	C8-N9-C4	-8.99	102.80	106.40
35	BA	469	C	C6-N1-C2	-8.99	116.70	120.30
35	BA	1511	G	N3-C4-C5	-8.99	124.10	128.60
2	AB	1885	A	N9-C4-C5	-8.99	102.20	105.80
35	BA	1351	U	C4-C5-C6	8.99	125.09	119.70
2	AB	583	G	C8-N9-C4	-8.99	102.80	106.40
2	AB	755	U	N1-C2-O2	-8.99	116.51	122.80
2	AB	1077	A	N9-C4-C5	8.99	109.40	105.80
2	AB	1368	G	N7-C8-N9	8.99	117.59	113.10
35	BA	864	A	N7-C8-N9	8.99	118.30	113.80
2	AB	588	U	O4'-C1'-N1	8.99	115.39	108.20
2	AB	2112	G	N7-C8-N9	-8.99	108.61	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2195	U	C5-C6-N1	-8.99	118.20	122.70
2	AB	2725	A	N3-C4-C5	-8.99	120.51	126.80
35	BA	675	A	C5-N7-C8	-8.99	99.41	103.90
2	AB	1934	C	C5-C4-N4	-8.99	113.91	120.20
2	AB	2070	A	C3'-C2'-C1'	8.99	108.69	101.50
35	BA	602	A	N1-C2-N3	-8.99	124.81	129.30
39	BE	53	ARG	NE-CZ-NH2	-8.99	115.81	120.30
2	AB	578	G	N1-C6-O6	8.98	125.29	119.90
2	AB	2500	U	C3'-C2'-C1'	8.98	108.69	101.50
36	BB	59	A	N7-C8-N9	8.98	118.29	113.80
2	AB	981	A	O4'-C1'-N9	8.98	115.39	108.20
2	AB	1421	G	N1-C2-N3	-8.98	118.51	123.90
2	AB	2132	U	C5'-C4'-O4'	8.98	119.88	109.10
2	AB	2789	C	P-O3'-C3'	8.98	130.48	119.70
21	AU	110	ARG	NE-CZ-NH1	8.98	124.79	120.30
35	BA	342	C	N1-C2-O2	8.98	124.29	118.90
37	BC	28	U	O4'-C1'-N1	8.98	115.39	108.20
2	AB	840	C	C5-C4-N4	-8.98	113.91	120.20
35	BA	335	C	O4'-C1'-N1	8.98	115.39	108.20
35	BA	835	U	C4-C5-C6	8.98	125.09	119.70
1	AA	105	G	C6-N1-C2	-8.98	119.71	125.10
2	AB	137	U	C2-N3-C4	-8.98	121.61	127.00
2	AB	1287	A	O4'-C1'-N9	8.98	115.38	108.20
1	AA	93	C	C2-N3-C4	8.98	124.39	119.90
2	AB	851	C	C2-N3-C4	8.98	124.39	119.90
2	AB	1210	G	O4'-C1'-C2'	8.98	115.68	107.60
35	BA	460	A	C6-N1-C2	-8.98	113.21	118.60
2	AB	372	G	N7-C8-N9	8.97	117.59	113.10
2	AB	1659	G	N1-C6-O6	-8.97	114.52	119.90
1	AA	91	C	N1-C2-O2	8.97	124.28	118.90
2	AB	626	A	C3'-C2'-C1'	-8.97	94.32	101.50
2	AB	2025	C	C2-N3-C4	8.97	124.39	119.90
6	AF	88	ARG	NE-CZ-NH2	8.97	124.79	120.30
35	BA	629	A	O4'-C1'-N9	8.97	115.38	108.20
35	BA	668	G	C8-N9-C4	8.97	109.99	106.40
35	BA	1143	G	N3-C2-N2	-8.97	113.62	119.90
2	AB	1233	C	N3-C2-O2	-8.97	115.62	121.90
21	AU	11	ARG	NE-CZ-NH2	-8.97	115.81	120.30
35	BA	1120	C	O4'-C1'-N1	8.97	115.38	108.20
35	BA	232	G	C8-N9-C4	-8.97	102.81	106.40
35	BA	454	G	C3'-C2'-C1'	8.97	108.68	101.50
2	AB	3	U	C2-N3-C4	-8.97	121.62	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	716	A	O4'-C1'-N9	8.97	115.38	108.20
2	AB	1319	C	N3-C4-C5	-8.97	118.31	121.90
2	AB	2239	G	N3-C4-C5	-8.97	124.12	128.60
2	AB	2669	G	C4-C5-N7	8.97	114.39	110.80
35	BA	43	C	N1-C2-O2	8.97	124.28	118.90
35	BA	660	C	N1-C2-O2	8.97	124.28	118.90
35	BA	662	U	C4-C5-C6	8.97	125.08	119.70
35	BA	727	G	O4'-C1'-N9	8.97	115.37	108.20
35	BA	759	A	C2-N3-C4	8.97	115.08	110.60
45	BK	98	ARG	NE-CZ-NH1	8.97	124.78	120.30
2	AB	133	U	N1-C2-N3	8.96	120.28	114.90
2	AB	1403	A	N1-C2-N3	8.97	133.78	129.30
2	AB	1772	A	N1-C2-N3	-8.96	124.82	129.30
2	AB	2280	G	C4-C5-N7	-8.97	107.21	110.80
35	BA	258	G	N3-C4-N9	8.97	131.38	126.00
2	AB	2606	C	O4'-C1'-N1	8.96	115.37	108.20
35	BA	1358	U	P-O3'-C3'	8.96	130.46	119.70
1	AA	20	G	C5-C6-N1	8.96	115.98	111.50
2	AB	73	A	C2-N3-C4	-8.96	106.12	110.60
2	AB	1337	G	N3-C4-C5	-8.96	124.12	128.60
2	AB	1633	G	C2-N3-C4	8.96	116.38	111.90
2	AB	2228	G	C4-C5-N7	-8.96	107.22	110.80
2	AB	2865	U	N3-C4-O4	8.96	125.67	119.40
11	AK	64	ARG	NE-CZ-NH2	8.96	124.78	120.30
35	BA	1	A	C8-N9-C4	-8.96	102.22	105.80
35	BA	1048	G	C6-N1-C2	-8.96	119.72	125.10
2	AB	268	C	O4'-C1'-N1	8.96	115.37	108.20
2	AB	1728	C	O4'-C1'-N1	8.96	115.37	108.20
2	AB	531	C	N3-C4-N4	8.96	124.27	118.00
2	AB	1332	G	N7-C8-N9	8.96	117.58	113.10
35	BA	618	C	N3-C4-N4	8.96	124.27	118.00
35	BA	1490	U	C2-N3-C4	-8.96	121.62	127.00
2	AB	776	G	O4'-C1'-N9	8.96	115.36	108.20
2	AB	1154	G	C8-N9-C4	-8.96	102.82	106.40
2	AB	2190	G	C2-N3-C4	8.96	116.38	111.90
2	AB	2707	U	O4'-C1'-N1	8.96	115.37	108.20
35	BA	668	G	N9-C4-C5	-8.96	101.82	105.40
2	AB	71	A	C5'-C4'-O4'	-8.96	98.35	109.10
2	AB	270	A	N9-C1'-C2'	-8.96	102.15	112.00
2	AB	964	C	C6-N1-C2	-8.96	116.72	120.30
2	AB	2227	A	N1-C6-N6	8.95	123.97	118.60
2	AB	321	U	C3'-C2'-C1'	8.95	108.66	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	361	G	N3-C4-N9	8.95	131.37	126.00
2	AB	1858	A	C5-N7-C8	-8.95	99.42	103.90
2	AB	2508	G	N9-C4-C5	8.95	108.98	105.40
32	A5	35	ARG	NE-CZ-NH2	-8.95	115.82	120.30
35	BA	976	G	P-O3'-C3'	8.95	130.44	119.70
45	BK	98	ARG	NE-CZ-NH2	8.95	124.78	120.30
2	AB	259	G	N1-C6-O6	8.95	125.27	119.90
2	AB	757	G	C5-C6-O6	-8.95	123.23	128.60
2	AB	2315	G	C5-N7-C8	-8.95	99.83	104.30
2	AB	2369	A	C5-N7-C8	8.95	108.38	103.90
2	AB	2524	G	N1-C2-N2	-8.95	108.15	116.20
35	BA	947	G	C5-C6-O6	-8.95	123.23	128.60
35	BA	1081	A	C8-N9-C4	-8.95	102.22	105.80
35	BA	1365	G	C3'-C2'-C1'	8.95	108.66	101.50
2	AB	171	U	N3-C2-O2	-8.95	115.94	122.20
2	AB	486	C	O4'-C1'-N1	8.95	115.36	108.20
2	AB	1080	A	O4'-C1'-N9	8.95	115.36	108.20
2	AB	1175	A	C5-C6-N6	-8.95	116.54	123.70
2	AB	2464	G	O4'-C1'-N9	8.95	115.36	108.20
2	AB	2757	A	C5-C6-N1	8.95	122.17	117.70
35	BA	443	C	O4'-C1'-N1	8.95	115.36	108.20
35	BA	1439	G	N7-C8-N9	8.95	117.57	113.10
2	AB	1403	A	C4-C5-C6	-8.94	112.53	117.00
2	AB	2349	G	N7-C8-N9	8.94	117.57	113.10
35	BA	447	G	N1-C6-O6	-8.95	114.53	119.90
35	BA	654	G	O4'-C1'-N9	8.95	115.36	108.20
35	BA	1324	A	C4-C5-C6	8.95	121.47	117.00
35	BA	17	U	N3-C4-C5	-8.94	109.23	114.60
2	AB	2520	C	C2-N3-C4	8.94	124.37	119.90
2	AB	204	A	N1-C2-N3	-8.94	124.83	129.30
2	AB	1178	C	N3-C4-C5	-8.94	118.32	121.90
2	AB	233	A	C4'-C3'-C2'	-8.94	93.66	102.60
2	AB	372	G	C2-N3-C4	8.94	116.37	111.90
2	AB	2592	G	N9-C4-C5	8.94	108.98	105.40
35	BA	54	C	N1-C2-O2	8.94	124.26	118.90
35	BA	488	C	C2-N3-C4	8.94	124.37	119.90
35	BA	854	U	O4'-C1'-N1	8.94	115.35	108.20
2	AB	762	U	N3-C4-O4	8.94	125.66	119.40
35	BA	364	A	N1-C6-N6	-8.94	113.24	118.60
2	AB	89	A	N1-C6-N6	-8.94	113.24	118.60
2	AB	120	U	C5-C6-N1	-8.94	118.23	122.70
2	AB	432	A	C3'-C2'-C1'	8.94	108.65	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	531	C	C4'-C3'-C2'	-8.94	93.67	102.60
2	AB	1134	A	N7-C8-N9	8.94	118.27	113.80
2	AB	2717	C	C2-N3-C4	8.94	124.37	119.90
35	BA	43	C	C2-N3-C4	-8.94	115.43	119.90
35	BA	945	G	O4'-C1'-N9	8.94	115.35	108.20
2	AB	2041	U	C2-N3-C4	-8.93	121.64	127.00
2	AB	2068	U	C5'-C4'-O4'	8.93	119.82	109.10
2	AB	2488	G	C1'-O4'-C4'	-8.93	102.75	109.90
35	BA	437	U	C5-C4-O4	8.93	131.26	125.90
35	BA	620	C	N1-C1'-C2'	-8.93	102.17	112.00
35	BA	1063	C	C5-C6-N1	8.93	125.47	121.00
56	BV	28	ARG	NE-CZ-NH1	8.93	124.77	120.30
2	AB	597	G	C5-C6-N1	8.93	115.96	111.50
2	AB	763	G	C6-C5-N7	-8.93	125.04	130.40
2	AB	2319	G	N1-C2-N3	-8.93	118.54	123.90
2	AB	2664	G	C6-N1-C2	-8.93	119.74	125.10
35	BA	1309	G	C4-C5-C6	8.93	124.16	118.80
2	AB	1346	G	O4'-C1'-N9	8.93	115.34	108.20
16	AP	90	ARG	NE-CZ-NH1	8.93	124.76	120.30
35	BA	925	G	C2-N3-C4	8.93	116.36	111.90
35	BA	1096	C	N3-C4-C5	-8.93	118.33	121.90
2	AB	684	G	N9-C4-C5	8.93	108.97	105.40
2	AB	1271	G	C5-N7-C8	-8.93	99.84	104.30
2	AB	1484	U	O4'-C1'-N1	8.93	115.34	108.20
35	BA	49	U	C4-C5-C6	8.93	125.06	119.70
35	BA	772	U	O4'-C1'-N1	8.93	115.34	108.20
2	AB	1070	A	N9-C4-C5	8.92	109.37	105.80
2	AB	1530	G	C8-N9-C4	-8.92	102.83	106.40
35	BA	768	A	C8-N9-C4	-8.92	102.23	105.80
2	AB	2087	G	C4-C5-N7	8.92	114.37	110.80
2	AB	2123	G	N9-C4-C5	8.92	108.97	105.40
2	AB	2623	G	N9-C4-C5	8.92	108.97	105.40
35	BA	55	A	C6-N1-C2	8.92	123.95	118.60
2	AB	761	A	C8-N9-C4	-8.92	102.23	105.80
2	AB	1506	U	C5-C6-N1	-8.92	118.24	122.70
2	AB	2333	A	C4-C5-N7	-8.92	106.24	110.70
2	AB	168	G	C5-C6-O6	-8.92	123.25	128.60
2	AB	2501	C	O4'-C1'-N1	8.92	115.34	108.20
2	AB	2774	C	C6-N1-C2	-8.92	116.73	120.30
35	BA	651	C	C5-C6-N1	8.92	125.46	121.00
35	BA	481	G	C4-C5-N7	-8.92	107.23	110.80
2	AB	1803	A	N9-C4-C5	8.92	109.37	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	473	U	C5-C4-O4	-8.92	120.55	125.90
2	AB	885	C	N3-C4-C5	-8.92	118.33	121.90
2	AB	1824	G	C5-C6-O6	-8.92	123.25	128.60
2	AB	1946	U	O4'-C1'-N1	8.92	115.33	108.20
35	BA	559	A	N1-C2-N3	-8.92	124.84	129.30
43	BI	2	ARG	NE-CZ-NH2	-8.92	115.84	120.30
2	AB	1277	G	C5-C6-O6	8.91	133.95	128.60
35	BA	130	A	C5-C6-N1	-8.91	113.24	117.70
35	BA	451	A	O4'-C1'-N9	8.91	115.33	108.20
2	AB	803	U	O4'-C1'-N1	8.91	115.33	108.20
35	BA	256	U	N1-C2-N3	8.91	120.25	114.90
35	BA	441	A	N1-C6-N6	-8.91	113.25	118.60
35	BA	529	G	N1-C6-O6	-8.91	114.55	119.90
35	BA	755	G	C5-N7-C8	8.91	108.76	104.30
35	BA	820	U	C5-C6-N1	-8.91	118.24	122.70
2	AB	87	U	O4'-C1'-N1	8.91	115.33	108.20
2	AB	318	C	N3-C4-N4	8.91	124.24	118.00
2	AB	447	A	N9-C4-C5	-8.91	102.24	105.80
2	AB	789	A	C6-C5-N7	-8.91	126.06	132.30
2	AB	1456	G	O4'-C1'-N9	8.91	115.33	108.20
2	AB	1849	G	N3-C4-N9	8.91	131.35	126.00
2	AB	2584	U	O4'-C1'-N1	8.91	115.33	108.20
26	AZ	73	ARG	NE-CZ-NH2	8.91	124.75	120.30
35	BA	40	C	C4-C5-C6	8.91	121.86	117.40
35	BA	145	G	C5-N7-C8	-8.91	99.84	104.30
35	BA	300	A	N3-C4-C5	-8.91	120.56	126.80
37	BC	1	C	C5-C6-N1	-8.91	116.55	121.00
2	AB	1665	A	C3'-C2'-C1'	8.91	108.63	101.50
2	AB	2304	G	C2-N3-C4	8.91	116.35	111.90
2	AB	2317	A	C5'-C4'-O4'	8.91	119.79	109.10
2	AB	2545	G	O4'-C1'-N9	8.91	115.33	108.20
35	BA	935	A	C3'-C2'-C1'	8.91	108.62	101.50
35	BA	1118	U	O4'-C4'-C3'	8.91	113.22	106.10
35	BA	1195	C	C3'-C2'-C1'	8.91	108.63	101.50
1	AA	110	C	C5-C4-N4	-8.90	113.97	120.20
2	AB	2238	G	C6-N1-C2	-8.90	119.76	125.10
35	BA	33	A	C8-N9-C4	-8.90	102.24	105.80
37	BC	73	A	C2-N3-C4	8.90	115.05	110.60
2	AB	1767	G	N7-C8-N9	8.90	117.55	113.10
2	AB	1840	G	C8-N9-C4	-8.90	102.84	106.40
2	AB	2475	C	C3'-C2'-C1'	-8.90	94.38	101.50
35	BA	831	A	N9-C4-C5	8.90	109.36	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1638	C	N3-C4-N4	8.90	124.23	118.00
2	AB	2116	G	C1'-O4'-C4'	-8.90	102.78	109.90
2	AB	2502	G	N1-C6-O6	-8.90	114.56	119.90
2	AB	2569	G	N7-C8-N9	-8.90	108.65	113.10
2	AB	1157	G	C5-C6-O6	-8.90	123.26	128.60
35	BA	98	A	C6-C5-N7	8.90	138.53	132.30
35	BA	289	G	P-O3'-C3'	8.90	130.38	119.70
35	BA	310	G	N1-C2-N3	8.90	129.24	123.90
35	BA	352	C	C5-C4-N4	8.90	126.43	120.20
2	AB	934	U	N3-C2-O2	-8.90	115.97	122.20
2	AB	1182	G	C5-N7-C8	-8.90	99.85	104.30
35	BA	454	G	C5-C6-N1	8.90	115.95	111.50
35	BA	1007	U	C5'-C4'-O4'	8.90	119.78	109.10
43	BI	118	ARG	NE-CZ-NH2	-8.90	115.85	120.30
35	BA	365	U	C4-C5-C6	8.89	125.04	119.70
1	AA	119	A	N7-C8-N9	8.89	118.25	113.80
2	AB	568	U	O4'-C1'-N1	8.89	115.31	108.20
2	AB	1895	C	O4'-C1'-N1	8.89	115.31	108.20
2	AB	2052	A	C2-N3-C4	8.89	115.05	110.60
2	AB	224	U	O4'-C1'-N1	8.89	115.31	108.20
2	AB	897	C	O4'-C1'-N1	8.89	115.31	108.20
35	BA	389	A	N9-C4-C5	8.89	109.36	105.80
2	AB	1388	G	C6-N1-C2	-8.89	119.77	125.10
2	AB	2625	G	C5-C6-O6	8.89	133.93	128.60
35	BA	666	G	N1-C6-O6	-8.89	114.57	119.90
35	BA	1153	G	O4'-C1'-N9	8.89	115.31	108.20
1	AA	86	G	N3-C4-C5	-8.89	124.16	128.60
2	AB	156	A	C4-C5-C6	8.89	121.44	117.00
2	AB	2098	U	O4'-C1'-N1	8.89	115.31	108.20
35	BA	969	A	N3-C4-N9	-8.89	120.29	127.40
35	BA	993	G	C5-N7-C8	-8.89	99.86	104.30
2	AB	1502	A	C6-C5-N7	8.89	138.52	132.30
2	AB	356	G	C5-N7-C8	-8.88	99.86	104.30
2	AB	484	C	N1-C2-O2	8.88	124.23	118.90
2	AB	1047	G	N1-C6-O6	-8.88	114.57	119.90
2	AB	2300	C	C5'-C4'-O4'	8.88	119.76	109.10
35	BA	65	A	C5-C6-N1	8.88	122.14	117.70
35	BA	1094	G	C2-N3-C4	8.88	116.34	111.90
2	AB	929	U	C2-N3-C4	-8.88	121.67	127.00
2	AB	1581	G	C4-C5-N7	-8.88	107.25	110.80
17	AQ	69	ASP	CB-CG-OD1	-8.88	110.31	118.30
44	BJ	83	ARG	NE-CZ-NH1	8.88	124.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	119	A	C2-N3-C4	8.88	115.04	110.60
2	AB	447	A	N1-C6-N6	-8.88	113.27	118.60
2	AB	1395	A	C6-N1-C2	-8.88	113.27	118.60
2	AB	2685	G	N3-C2-N2	-8.88	113.69	119.90
2	AB	2870	C	C3'-C2'-C1'	-8.88	94.40	101.50
2	AB	760	G	N3-C4-N9	8.88	131.32	126.00
2	AB	994	C	N3-C4-N4	8.88	124.21	118.00
2	AB	1307	A	C5-N7-C8	-8.88	99.46	103.90
2	AB	1068	G	C2-N3-C4	8.87	116.34	111.90
35	BA	255	G	C4-C5-N7	-8.87	107.25	110.80
2	AB	1148	U	C6-N1-C2	8.87	126.32	121.00
2	AB	2327	A	C1'-O4'-C4'	8.87	117.00	109.90
35	BA	272	C	C4'-C3'-C2'	-8.87	93.73	102.60
37	BC	47	A	C3'-C2'-C1'	-8.87	94.40	101.50
2	AB	1526	C	C6-N1-C2	-8.87	116.75	120.30
2	AB	2062	A	C5-N7-C8	-8.87	99.47	103.90
2	AB	2588	G	C5'-C4'-C3'	8.87	130.19	116.00
35	BA	56	U	C4-C5-C6	8.87	125.02	119.70
35	BA	847	G	N7-C8-N9	8.87	117.53	113.10
35	BA	1365	G	C5-C6-O6	-8.87	123.28	128.60
2	AB	726	G	C5-N7-C8	-8.87	99.87	104.30
2	AB	1552	A	C5-N7-C8	8.87	108.33	103.90
2	AB	1694	C	N1-C2-O2	8.87	124.22	118.90
2	AB	173	A	N1-C2-N3	-8.86	124.87	129.30
2	AB	217	A	C2-N3-C4	8.86	115.03	110.60
2	AB	380	G	N3-C4-C5	-8.87	124.17	128.60
2	AB	553	G	N3-C2-N2	8.86	126.11	119.90
2	AB	1069	A	N9-C4-C5	8.87	109.35	105.80
2	AB	1292	G	C2-N3-C4	8.86	116.33	111.90
35	BA	883	C	O4'-C1'-N1	8.87	115.29	108.20
35	BA	1368	A	O4'-C1'-N9	8.86	115.29	108.20
35	BA	1426	G	C6-C5-N7	-8.87	125.08	130.40
2	AB	259	G	C5-N7-C8	-8.86	99.87	104.30
2	AB	528	A	O4'-C1'-N9	8.86	115.29	108.20
2	AB	2008	C	N1-C2-O2	8.86	124.22	118.90
35	BA	795	C	C5-C4-N4	8.86	126.40	120.20
2	AB	2892	G	N9-C4-C5	8.86	108.94	105.40
35	BA	260	G	N3-C4-C5	-8.86	124.17	128.60
36	BB	24	A	C8-N9-C4	-8.86	102.25	105.80
1	AA	29	A	C5-N7-C8	-8.86	99.47	103.90
2	AB	2323	G	C5-C6-O6	-8.86	123.28	128.60
2	AB	2323	G	O4'-C1'-N9	-8.86	101.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	768	A	O4'-C1'-N9	8.86	115.29	108.20
35	BA	925	G	N9-C4-C5	-8.86	101.86	105.40
35	BA	1151	A	N9-C4-C5	8.86	109.34	105.80
2	AB	2479	U	C4-C5-C6	8.86	125.01	119.70
2	AB	2813	A	N1-C2-N3	-8.86	124.87	129.30
2	AB	971	G	C4-C5-N7	-8.86	107.26	110.80
2	AB	2627	G	N3-C4-C5	-8.86	124.17	128.60
35	BA	190	A	C4-C5-N7	-8.86	106.27	110.70
35	BA	888	G	C3'-C2'-C1'	-8.86	94.42	101.50
35	BA	1322	C	C2-N3-C4	8.86	124.33	119.90
2	AB	1185	G	C6-N1-C2	-8.85	119.79	125.10
2	AB	2623	G	C5-C6-O6	8.85	133.91	128.60
35	BA	235	C	C4'-C3'-C2'	-8.85	93.75	102.60
2	AB	760	G	N3-C4-C5	-8.85	124.17	128.60
2	AB	1545	A	C6-C5-N7	-8.85	126.10	132.30
2	AB	1569	A	C6-C5-N7	8.85	138.50	132.30
35	BA	1538	C	N1-C2-N3	-8.85	113.00	119.20
2	AB	1753	G	C4-C5-N7	8.85	114.34	110.80
2	AB	1888	G	C8-N9-C4	-8.85	102.86	106.40
2	AB	2016	U	N1-C2-N3	8.85	120.21	114.90
35	BA	166	U	O4'-C1'-N1	8.85	115.28	108.20
35	BA	639	G	C8-N9-C4	-8.85	102.86	106.40
12	AL	16	TYR	CB-CG-CD2	-8.85	115.69	121.00
35	BA	1053	G	N3-C4-C5	-8.85	124.17	128.60
1	AA	50	A	C6-N1-C2	8.85	123.91	118.60
2	AB	2845	U	C5'-C4'-O4'	8.85	119.72	109.10
2	AB	322	A	C5-C6-N6	-8.85	116.62	123.70
2	AB	663	G	C2-N3-C4	8.85	116.32	111.90
2	AB	1400	U	C5-C4-O4	-8.85	120.59	125.90
2	AB	2821	A	C8-N9-C4	-8.85	102.26	105.80
2	AB	2890	G	C5-N7-C8	-8.85	99.88	104.30
2	AB	67	U	C6-N1-C2	-8.85	115.69	121.00
2	AB	923	G	C2-N3-C4	8.85	116.32	111.90
2	AB	1446	C	C6-N1-C2	-8.85	116.76	120.30
2	AB	2125	G	C2-N3-C4	8.85	116.32	111.90
2	AB	2261	C	N1-C2-O2	8.85	124.21	118.90
36	BB	15	G	C4-C5-N7	-8.85	107.26	110.80
1	AA	48	U	O4'-C1'-N1	8.84	115.28	108.20
1	AA	8	C	N3-C2-O2	-8.84	115.71	121.90
2	AB	2182	U	C5-C4-O4	8.84	131.21	125.90
2	AB	2638	G	C2-N3-C4	8.84	116.32	111.90
35	BA	1439	G	N3-C4-C5	-8.84	124.18	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	23	G	C2-N3-C4	8.84	116.32	111.90
37	BC	62	C	N3-C2-O2	-8.84	115.71	121.90
2	AB	68	G	C4-C5-N7	8.84	114.34	110.80
2	AB	253	C	C4-C5-C6	-8.84	112.98	117.40
2	AB	663	G	N9-C4-C5	8.84	108.94	105.40
2	AB	2713	U	N3-C2-O2	-8.84	116.01	122.20
35	BA	646	G	C5-N7-C8	8.84	108.72	104.30
2	AB	876	C	O4'-C1'-N1	8.84	115.27	108.20
2	AB	940	G	C5-C6-N1	8.84	115.92	111.50
2	AB	1367	A	C2-N3-C4	8.84	115.02	110.60
2	AB	2212	A	N3-C4-N9	8.84	134.47	127.40
35	BA	303	A	C8-N9-C4	-8.84	102.27	105.80
35	BA	1414	U	O4'-C1'-N1	8.84	115.27	108.20
35	BA	63	C	C2-N3-C4	8.84	124.32	119.90
35	BA	1468	A	C8-N9-C4	-8.84	102.27	105.80
37	BC	67	C	N3-C4-C5	-8.84	118.37	121.90
2	AB	2856	A	N1-C6-N6	8.83	123.90	118.60
35	BA	161	A	O4'-C1'-C2'	-8.83	96.97	105.80
35	BA	1525	G	C5-N7-C8	8.83	108.72	104.30
35	BA	223	A	C4-C5-N7	8.83	115.12	110.70
35	BA	1018	G	C5-C6-O6	-8.83	123.30	128.60
1	AA	105	G	C4-C5-N7	-8.83	107.27	110.80
19	AS	31	TYR	CB-CG-CD1	-8.83	115.70	121.00
2	AB	84	A	C5-C6-N1	8.83	122.11	117.70
2	AB	312	G	C5-C6-O6	-8.83	123.30	128.60
2	AB	419	U	O4'-C1'-N1	8.83	115.26	108.20
2	AB	1042	G	C6-C5-N7	-8.83	125.10	130.40
2	AB	1078	U	N1-C2-N3	8.83	120.20	114.90
2	AB	2687	U	C6-N1-C2	-8.83	115.70	121.00
2	AB	1340	U	C6-N1-C2	-8.83	115.70	121.00
35	BA	267	C	O4'-C1'-N1	8.83	115.26	108.20
35	BA	1309	G	C8-N9-C4	-8.83	102.87	106.40
2	AB	797	G	C4-C5-N7	-8.83	107.27	110.80
2	AB	1131	G	O4'-C1'-N9	8.83	115.26	108.20
2	AB	2176	A	C5-N7-C8	-8.83	99.49	103.90
2	AB	2487	G	N9-C4-C5	8.83	108.93	105.40
35	BA	567	G	C4'-C3'-C2'	-8.83	93.77	102.60
35	BA	623	C	N3-C4-C5	8.83	125.43	121.90
35	BA	1414	U	C4'-C3'-C2'	-8.83	93.77	102.60
37	BC	22	A	C3'-C2'-C1'	8.83	108.56	101.50
2	AB	606	U	N1-C2-O2	-8.82	116.62	122.80
2	AB	1304	A	C1'-O4'-C4'	-8.82	102.84	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1280	G	C4'-C3'-C2'	-8.82	93.78	102.60
2	AB	1467	U	N1-C2-N3	8.82	120.19	114.90
2	AB	2203	U	C5-C4-O4	-8.82	120.61	125.90
32	A5	39	ARG	NE-CZ-NH2	-8.82	115.89	120.30
2	AB	2527	C	C5'-C4'-O4'	8.82	119.69	109.10
2	AB	2741	A	C3'-C2'-C1'	8.82	108.56	101.50
35	BA	39	G	O4'-C1'-N9	8.82	115.26	108.20
2	AB	837	C	N3-C4-C5	-8.82	118.37	121.90
2	AB	932	U	C6-N1-C2	-8.82	115.71	121.00
2	AB	1881	C	C3'-C2'-C1'	8.82	108.56	101.50
2	AB	2479	U	O4'-C1'-N1	8.82	115.26	108.20
35	BA	614	C	N1-C2-O2	8.82	124.19	118.90
2	AB	178	G	N1-C6-O6	8.82	125.19	119.90
2	AB	940	G	N7-C8-N9	8.82	117.51	113.10
2	AB	2118	U	N1-C2-N3	8.82	120.19	114.90
48	BN	8	ARG	NE-CZ-NH2	-8.82	115.89	120.30
2	AB	35	G	O4'-C1'-N9	8.82	115.25	108.20
2	AB	1472	C	C6-N1-C2	8.82	123.83	120.30
2	AB	2733	A	C8-N9-C4	-8.82	102.27	105.80
2	AB	152	A	N1-C6-N6	8.82	123.89	118.60
2	AB	481	G	C8-N9-C4	-8.82	102.87	106.40
2	AB	844	A	N7-C8-N9	8.82	118.21	113.80
35	BA	112	G	C6-C5-N7	-8.82	125.11	130.40
35	BA	898	G	C5-N7-C8	-8.82	99.89	104.30
2	AB	100	U	N1-C2-N3	8.81	120.19	114.90
2	AB	908	C	C2-N3-C4	8.81	124.31	119.90
2	AB	1399	C	N3-C4-C5	-8.81	118.38	121.90
2	AB	1636	U	N1-C1'-C2'	-8.81	102.31	112.00
2	AB	1923	U	C5-C6-N1	-8.81	118.29	122.70
2	AB	1945	G	N7-C8-N9	8.81	117.51	113.10
2	AB	2046	G	C8-N9-C4	-8.81	102.88	106.40
2	AB	2276	G	N3-C4-N9	8.81	131.29	126.00
37	BC	46	G	O4'-C1'-N9	8.81	115.25	108.20
35	BA	22	G	C1'-O4'-C4'	8.81	116.95	109.90
35	BA	240	G	N3-C4-C5	-8.81	124.19	128.60
2	AB	622	G	C2-N3-C4	8.81	116.31	111.90
2	AB	873	C	N3-C4-N4	8.81	124.17	118.00
2	AB	2013	A	N9-C4-C5	8.81	109.32	105.80
2	AB	2455	G	C5-C6-O6	-8.81	123.31	128.60
2	AB	2768	U	N3-C2-O2	-8.81	116.03	122.20
35	BA	993	G	O4'-C1'-C2'	-8.81	96.99	105.80
35	BA	413	G	C4-C5-C6	-8.81	113.51	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1018	G	C4-C5-N7	8.81	114.32	110.80
2	AB	611	C	C6-N1-C2	-8.81	116.78	120.30
2	AB	1197	G	C4-C5-N7	-8.81	107.28	110.80
35	BA	1148	U	C1'-O4'-C4'	8.81	116.94	109.90
2	AB	718	A	N7-C8-N9	8.80	118.20	113.80
2	AB	2348	U	C6-N1-C2	-8.80	115.72	121.00
2	AB	15	G	N7-C8-N9	8.80	117.50	113.10
2	AB	1189	A	N1-C2-N3	8.80	133.70	129.30
2	AB	337	C	N3-C4-N4	8.80	124.16	118.00
2	AB	2892	G	N3-C4-C5	-8.80	124.20	128.60
35	BA	15	G	O4'-C1'-N9	8.80	115.24	108.20
35	BA	265	G	C5-C6-O6	-8.80	123.32	128.60
2	AB	1630	A	N9-C4-C5	8.80	109.32	105.80
2	AB	2249	U	C3'-C2'-C1'	8.80	108.54	101.50
2	AB	2289	G	C6-N1-C2	-8.80	119.82	125.10
2	AB	941	A	N9-C4-C5	8.80	109.32	105.80
35	BA	654	G	C5-C6-O6	8.80	133.88	128.60
35	BA	1365	G	N1-C6-O6	8.80	125.18	119.90
35	BA	1476	A	C5-C6-N1	8.80	122.10	117.70
2	AB	573	U	N3-C4-O4	8.79	125.56	119.40
2	AB	1625	C	N1-C2-N3	-8.79	113.04	119.20
2	AB	2310	C	C5-C4-N4	8.79	126.36	120.20
35	BA	890	G	C8-N9-C4	-8.79	102.88	106.40
35	BA	912	C	O4'-C1'-N1	8.79	115.23	108.20
2	AB	2062	A	N9-C4-C5	8.79	109.32	105.80
2	AB	2859	G	C5-C6-O6	8.79	133.88	128.60
2	AB	1286	A	O4'-C1'-N9	8.79	115.23	108.20
35	BA	553	A	C8-N9-C4	-8.79	102.28	105.80
35	BA	895	G	N9-C4-C5	8.79	108.92	105.40
35	BA	1072	G	N9-C4-C5	8.79	108.92	105.40
35	BA	1482	G	C4-C5-N7	-8.79	107.28	110.80
2	AB	236	C	C2-N3-C4	8.79	124.30	119.90
2	AB	577	G	C6-N1-C2	-8.79	119.83	125.10
2	AB	1213	A	C4'-C3'-C2'	-8.79	93.81	102.60
2	AB	53	A	N1-C6-N6	8.79	123.87	118.60
2	AB	273	G	N1-C6-O6	-8.79	114.63	119.90
2	AB	2330	G	N9-C4-C5	8.79	108.92	105.40
4	AD	270	ARG	NE-CZ-NH2	8.79	124.69	120.30
18	AR	112	ARG	NE-CZ-NH2	8.79	124.69	120.30
35	BA	258	G	N9-C4-C5	-8.79	101.88	105.40
2	AB	363	G	C4-C5-N7	-8.79	107.29	110.80
2	AB	2122	U	C6-N1-C2	-8.78	115.73	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2376	A	N7-C8-N9	8.79	118.19	113.80
35	BA	1312	G	O4'-C1'-N9	8.79	115.23	108.20
2	AB	844	A	C5-N7-C8	-8.78	99.51	103.90
2	AB	2045	C	N1-C2-O2	8.78	124.17	118.90
35	BA	1019	A	C4-C5-C6	-8.78	112.61	117.00
2	AB	1536	C	C5-C6-N1	-8.78	116.61	121.00
2	AB	2592	G	N1-C6-O6	-8.78	114.63	119.90
2	AB	242	G	C8-N9-C4	-8.78	102.89	106.40
35	BA	1110	A	C4-C5-C6	8.78	121.39	117.00
2	AB	35	G	N9-C4-C5	8.78	108.91	105.40
2	AB	117	G	C6-C5-N7	-8.78	125.13	130.40
2	AB	2854	G	O4'-C1'-N9	8.78	115.22	108.20
36	BB	39	U	C5-C4-O4	-8.78	120.63	125.90
2	AB	20	C	C1'-O4'-C4'	8.77	116.92	109.90
2	AB	35	G	C2-N3-C4	8.77	116.29	111.90
2	AB	134	G	N3-C2-N2	8.77	126.04	119.90
2	AB	407	G	C5-C6-N1	8.77	115.89	111.50
2	AB	1019	U	C6-N1-C2	-8.77	115.74	121.00
2	AB	1450	G	N9-C4-C5	8.77	108.91	105.40
2	AB	2374	C	C5'-C4'-O4'	8.77	119.63	109.10
2	AB	2675	A	N1-C2-N3	8.77	133.69	129.30
35	BA	702	A	C5-N7-C8	8.77	108.29	103.90
35	BA	1051	C	C3'-C2'-C1'	8.77	108.52	101.50
36	BB	55	A	C5-N7-C8	-8.77	99.51	103.90
1	AA	54	G	C8-N9-C4	-8.77	102.89	106.40
2	AB	1386	C	C5-C4-N4	-8.77	114.06	120.20
35	BA	375	U	C5-C4-O4	-8.77	120.64	125.90
35	BA	506	G	N1-C2-N2	8.77	124.09	116.20
35	BA	719	C	C5-C4-N4	8.77	126.34	120.20
35	BA	748	G	C2-N3-C4	8.77	116.28	111.90
35	BA	1166	G	N7-C8-N9	8.77	117.49	113.10
35	BA	1425	U	C5-C4-O4	-8.77	120.64	125.90
35	BA	1431	A	C5-N7-C8	-8.77	99.51	103.90
38	BD	107	ARG	NE-CZ-NH1	8.77	124.69	120.30
2	AB	96	C	C4'-C3'-C2'	-8.77	93.83	102.60
2	AB	212	G	N3-C2-N2	8.77	126.04	119.90
2	AB	1649	G	C5'-C4'-O4'	8.77	119.62	109.10
2	AB	2199	A	C5-C6-N6	-8.77	116.69	123.70
2	AB	2532	G	N7-C8-N9	8.77	117.48	113.10
30	A3	47	TYR	CB-CG-CD2	-8.77	115.74	121.00
35	BA	251	G	O4'-C1'-C2'	-8.77	97.03	105.80
35	BA	468	A	C4-C5-C6	-8.77	112.61	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	595	A	C2-N3-C4	8.77	114.98	110.60
35	BA	595	A	O4'-C1'-N9	8.77	115.22	108.20
35	BA	1309	G	N3-C4-N9	8.77	131.26	126.00
36	BB	20	G	C4-C5-N7	8.77	114.31	110.80
36	BB	49	U	O4'-C1'-N1	8.77	115.22	108.20
2	AB	120	U	C2-N3-C4	-8.77	121.74	127.00
2	AB	1529	G	N1-C2-N3	8.77	129.16	123.90
2	AB	1845	G	C6-N1-C2	-8.77	119.84	125.10
2	AB	2759	G	N7-C8-N9	8.77	117.48	113.10
35	BA	1173	U	N1-C2-N3	8.77	120.16	114.90
49	BO	108	ARG	NE-CZ-NH2	-8.77	115.92	120.30
2	AB	315	G	N3-C2-N2	-8.76	113.77	119.90
2	AB	598	U	C4-C5-C6	8.76	124.96	119.70
2	AB	855	G	N3-C4-C5	-8.76	124.22	128.60
2	AB	1301	A	O4'-C1'-C2'	-8.76	97.04	105.80
2	AB	2419	U	C5-C6-N1	-8.76	118.32	122.70
26	AZ	49	ARG	NE-CZ-NH2	-8.76	115.92	120.30
35	BA	42	G	N1-C6-O6	-8.76	114.64	119.90
35	BA	84	U	N1-C2-O2	8.76	128.93	122.80
35	BA	606	G	C1'-O4'-C4'	-8.76	102.89	109.90
35	BA	1385	G	O4'-C4'-C3'	-8.76	95.24	104.00
37	BC	20	G	C8-N9-C4	-8.76	102.89	106.40
2	AB	590	A	C5-N7-C8	8.76	108.28	103.90
2	AB	1667	G	N7-C8-N9	8.76	117.48	113.10
2	AB	2439	A	P-O3'-C3'	8.76	130.21	119.70
2	AB	2679	A	C2-N3-C4	8.76	114.98	110.60
2	AB	2798	U	N3-C4-O4	8.76	125.53	119.40
35	BA	149	A	C4'-C3'-C2'	-8.76	93.84	102.60
35	BA	525	C	N1-C2-O2	8.76	124.16	118.90
35	BA	1013	G	C5-C6-O6	8.76	133.85	128.60
2	AB	496	G	C6-C5-N7	-8.76	125.14	130.40
2	AB	542	C	N3-C2-O2	-8.76	115.77	121.90
2	AB	875	G	C4'-C3'-C2'	-8.76	93.84	102.60
2	AB	1042	G	N9-C1'-C2'	-8.76	102.37	112.00
2	AB	2720	U	N3-C4-C5	-8.76	109.35	114.60
35	BA	1368	A	C5-C6-N1	8.76	122.08	117.70
35	BA	227	G	N1-C2-N2	8.75	124.08	116.20
2	AB	636	G	N7-C8-N9	8.75	117.48	113.10
2	AB	1420	A	C4-C5-C6	8.75	121.38	117.00
2	AB	1467	U	C5-C6-N1	-8.75	118.32	122.70
2	AB	2120	G	C2-N3-C4	8.75	116.28	111.90
2	AB	2197	U	N3-C2-O2	-8.75	116.07	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	202	G	C5-C6-O6	-8.75	123.35	128.60
2	AB	225	C	O4'-C1'-N1	8.75	115.20	108.20
2	AB	2446	G	N3-C4-N9	-8.75	120.75	126.00
2	AB	2851	A	C5-C6-N1	-8.75	113.33	117.70
35	BA	1276	G	C4-C5-N7	-8.75	107.30	110.80
2	AB	771	G	N7-C8-N9	8.75	117.47	113.10
2	AB	2307	G	O4'-C1'-N9	8.75	115.20	108.20
5	AE	45	TYR	CB-CG-CD1	-8.75	115.75	121.00
35	BA	49	U	O4'-C1'-N1	8.75	115.20	108.20
35	BA	184	G	C4-C5-N7	-8.75	107.30	110.80
35	BA	988	G	N7-C8-N9	8.75	117.47	113.10
35	BA	917	G	C8-N9-C4	-8.75	102.90	106.40
2	AB	2182	U	C5-C6-N1	-8.74	118.33	122.70
35	BA	797	C	O4'-C1'-N1	8.74	115.20	108.20
35	BA	1062	U	C4'-C3'-C2'	-8.74	93.86	102.60
2	AB	1415	U	C5-C6-N1	-8.74	118.33	122.70
2	AB	1968	G	C6-C5-N7	8.74	135.65	130.40
2	AB	2595	G	C6-C5-N7	-8.74	125.15	130.40
2	AB	2654	A	N1-C2-N3	-8.74	124.93	129.30
35	BA	376	G	C5-C6-O6	-8.74	123.35	128.60
35	BA	557	G	N3-C4-N9	8.74	131.25	126.00
35	BA	700	G	C4-C5-N7	-8.74	107.30	110.80
35	BA	1395	C	N3-C4-C5	-8.74	118.40	121.90
35	BA	916	U	O4'-C1'-N1	8.74	115.19	108.20
35	BA	1267	C	O4'-C1'-N1	8.74	115.19	108.20
2	AB	833	A	N7-C8-N9	8.74	118.17	113.80
2	AB	2625	G	C1'-O4'-C4'	-8.74	102.91	109.90
2	AB	839	U	O4'-C1'-N1	8.74	115.19	108.20
2	AB	951	C	N3-C4-C5	8.74	125.40	121.90
2	AB	977	G	N7-C8-N9	8.74	117.47	113.10
35	BA	468	A	N7-C8-N9	8.74	118.17	113.80
2	AB	2250	G	C6-N1-C2	-8.74	119.86	125.10
2	AB	2879	A	N1-C6-N6	-8.74	113.36	118.60
2	AB	327	G	N9-C4-C5	8.74	108.89	105.40
2	AB	912	C	C3'-C2'-C1'	-8.74	94.51	101.50
2	AB	1507	C	O4'-C4'-C3'	8.74	113.09	106.10
2	AB	2316	G	C5-C6-N1	8.74	115.87	111.50
2	AB	2271	G	N7-C8-N9	8.74	117.47	113.10
2	AB	2621	G	C5-C6-O6	-8.74	123.36	128.60
35	BA	50	A	O4'-C1'-N9	8.74	115.19	108.20
35	BA	1381	U	C1'-O4'-C4'	8.74	116.89	109.90
38	BD	161	PHE	CB-CG-CD2	-8.74	114.68	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	979	C	O4'-C1'-C2'	-8.74	97.06	105.80
35	BA	1457	G	C5-C6-O6	-8.74	123.36	128.60
2	AB	947	A	N1-C2-N3	-8.73	124.93	129.30
2	AB	1368	G	C8-N9-C4	-8.73	102.91	106.40
2	AB	2240	U	C2-N3-C4	-8.73	121.76	127.00
35	BA	892	A	C1'-O4'-C4'	-8.73	102.91	109.90
35	BA	1020	G	C4-C5-N7	8.73	114.29	110.80
2	AB	1250	G	N1-C6-O6	-8.73	114.66	119.90
2	AB	1773	A	C4-C5-C6	8.73	121.37	117.00
2	AB	2772	C	C6-N1-C2	-8.73	116.81	120.30
2	AB	2784	U	N3-C4-C5	8.73	119.84	114.60
35	BA	1076	U	O4'-C1'-N1	8.73	115.19	108.20
35	BA	1120	C	C6-N1-C2	-8.73	116.81	120.30
43	BI	137	ARG	NE-CZ-NH2	8.73	124.67	120.30
35	BA	1239	A	C8-N9-C4	8.73	109.29	105.80
1	AA	94	A	C4-C5-N7	-8.73	106.34	110.70
2	AB	89	A	C6-N1-C2	-8.73	113.36	118.60
2	AB	1785	A	N1-C2-N3	-8.73	124.94	129.30
2	AB	690	G	N9-C4-C5	8.73	108.89	105.40
2	AB	1623	G	C5-C6-N1	8.73	115.86	111.50
2	AB	1997	C	N1-C2-O2	8.73	124.14	118.90
2	AB	2648	G	N9-C4-C5	8.73	108.89	105.40
35	BA	155	A	C5-N7-C8	8.73	108.27	103.90
35	BA	469	C	N3-C4-C5	-8.73	118.41	121.90
35	BA	1173	U	O4'-C1'-N1	8.73	115.18	108.20
2	AB	1340	U	N3-C2-O2	-8.73	116.09	122.20
2	AB	1524	G	C5'-C4'-O4'	8.73	119.57	109.10
2	AB	1795	C	C2-N3-C4	8.73	124.26	119.90
2	AB	1805	A	C6-N1-C2	8.73	123.84	118.60
2	AB	2289	G	C8-N9-C4	-8.73	102.91	106.40
2	AB	2853	C	C5-C4-N4	-8.73	114.09	120.20
33	A6	39	ARG	NE-CZ-NH2	8.73	124.66	120.30
35	BA	880	C	N1-C2-N3	-8.73	113.09	119.20
2	AB	167	A	C5-C6-N1	-8.72	113.34	117.70
2	AB	433	C	N3-C4-C5	8.72	125.39	121.90
2	AB	665	U	C2-N3-C4	-8.72	121.77	127.00
2	AB	1482	G	C2-N3-C4	8.72	116.26	111.90
2	AB	1502	A	O4'-C1'-N9	8.72	115.18	108.20
2	AB	2621	G	C5-C6-N1	8.72	115.86	111.50
35	BA	894	G	C8-N9-C4	-8.72	102.91	106.40
2	AB	486	C	C5'-C4'-O4'	8.72	119.57	109.10
2	AB	1009	A	C5-N7-C8	8.72	108.26	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1305	C	C6-N1-C2	-8.72	116.81	120.30
2	AB	1629	U	C5-C4-O4	-8.72	120.67	125.90
2	AB	2817	U	N3-C4-O4	8.72	125.50	119.40
2	AB	2157	G	C8-N9-C4	-8.72	102.91	106.40
7	AG	168	LEU	CB-CG-CD1	8.72	125.83	111.00
35	BA	1181	G	N3-C4-C5	-8.72	124.24	128.60
2	AB	1521	G	N7-C8-N9	-8.72	108.74	113.10
2	AB	2349	G	C4-C5-C6	8.72	124.03	118.80
2	AB	2441	U	N3-C2-O2	-8.72	116.10	122.20
2	AB	2495	G	N3-C4-C5	-8.72	124.24	128.60
29	A2	9	TYR	CB-CG-CD1	-8.72	115.77	121.00
35	BA	192	A	C1'-O4'-C4'	-8.72	102.93	109.90
35	BA	664	G	N9-C4-C5	8.72	108.89	105.40
35	BA	1024	G	C5'-C4'-O4'	8.72	119.56	109.10
35	BA	1375	A	C8-N9-C4	-8.72	102.31	105.80
1	AA	115	A	C8-N9-C4	8.71	109.29	105.80
2	AB	776	G	C5-C6-N1	8.72	115.86	111.50
2	AB	929	U	N3-C2-O2	-8.72	116.10	122.20
2	AB	484	C	N3-C4-C5	8.71	125.39	121.90
2	AB	520	G	N3-C4-C5	-8.71	124.24	128.60
2	AB	2284	A	N7-C8-N9	8.71	118.16	113.80
2	AB	2867	G	C3'-C2'-C1'	8.72	108.47	101.50
18	AR	88	ARG	NE-CZ-NH1	-8.71	115.94	120.30
35	BA	65	A	N1-C6-N6	-8.71	113.37	118.60
35	BA	89	U	C2-N3-C4	-8.71	121.77	127.00
35	BA	377	G	C5-C6-N1	8.71	115.86	111.50
36	BB	55	A	N9-C4-C5	8.71	109.29	105.80
2	AB	489	G	O4'-C1'-N9	8.71	115.17	108.20
18	AR	92	ARG	NE-CZ-NH1	8.71	124.66	120.30
35	BA	177	G	C5-N7-C8	8.71	108.66	104.30
35	BA	348	G	C4-C5-N7	-8.71	107.31	110.80
35	BA	760	G	N1-C6-O6	-8.71	114.67	119.90
2	AB	2399	G	C4-C5-C6	8.71	124.03	118.80
35	BA	255	G	C5-C6-O6	-8.71	123.37	128.60
35	BA	969	A	N3-C4-C5	8.71	132.90	126.80
35	BA	786	G	N1-C2-N3	-8.71	118.67	123.90
2	AB	992	C	C5-C6-N1	-8.71	116.65	121.00
2	AB	1824	G	N1-C6-O6	8.71	125.12	119.90
35	BA	796	C	N3-C4-C5	-8.71	118.42	121.90
35	BA	1226	C	O4'-C1'-N1	8.71	115.17	108.20
2	AB	1191	G	N3-C4-C5	-8.70	124.25	128.60
2	AB	1222	U	C2-N3-C4	-8.71	121.78	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1358	G	N1-C6-O6	-8.70	114.68	119.90
2	AB	1922	G	C2-N3-C4	8.70	116.25	111.90
2	AB	2100	G	N3-C4-C5	-8.71	124.25	128.60
2	AB	2362	C	O4'-C1'-N1	8.71	115.17	108.20
35	BA	317	U	C2-N3-C4	-8.70	121.78	127.00
2	AB	141	G	N3-C4-C5	-8.70	124.25	128.60
2	AB	534	U	N3-C2-O2	-8.70	116.11	122.20
2	AB	733	G	C6-C5-N7	-8.70	125.18	130.40
2	AB	192	C	C6-N1-C2	-8.70	116.82	120.30
2	AB	481	G	N3-C4-N9	8.70	131.22	126.00
2	AB	1081	U	C5-C4-O4	-8.70	120.68	125.90
2	AB	1853	A	C6-C5-N7	-8.70	126.21	132.30
2	AB	2159	G	C6-C5-N7	8.70	135.62	130.40
35	BA	1495	U	C5-C6-N1	8.70	127.05	122.70
2	AB	798	G	N9-C4-C5	8.70	108.88	105.40
2	AB	2110	G	C6-C5-N7	-8.70	125.18	130.40
37	BC	52	C	N1-C2-O2	8.70	124.12	118.90
2	AB	360	U	C5-C6-N1	-8.70	118.35	122.70
43	BI	78	ARG	NE-CZ-NH1	8.70	124.65	120.30
2	AB	13	A	N9-C4-C5	-8.70	102.32	105.80
2	AB	427	U	N1-C2-N3	8.70	120.12	114.90
2	AB	609	A	C3'-C2'-C1'	8.70	108.46	101.50
2	AB	1044	C	C6-N1-C2	-8.70	116.82	120.30
2	AB	2032	G	C2-N3-C4	8.70	116.25	111.90
2	AB	2382	G	C5-C6-N1	8.70	115.85	111.50
35	BA	519	C	N1-C2-N3	-8.70	113.11	119.20
35	BA	863	U	C4'-C3'-C2'	-8.70	93.90	102.60
2	AB	1494	A	N9-C1'-C2'	-8.69	102.44	112.00
2	AB	2050	C	N3-C4-N4	8.70	124.09	118.00
17	AQ	94	ARG	NE-CZ-NH1	8.69	124.65	120.30
35	BA	1036	A	N1-C2-N3	-8.69	124.95	129.30
35	BA	1168	U	C2-N3-C4	-8.69	121.78	127.00
35	BA	1469	C	N3-C4-N4	8.69	124.09	118.00
37	BC	6	G	C6-N1-C2	-8.70	119.88	125.10
37	BC	66	C	O4'-C1'-N1	8.69	115.15	108.20
42	BH	109	ARG	NE-CZ-NH1	8.69	124.65	120.30
54	BT	24	ASP	CB-CG-OD1	-8.69	110.48	118.30
2	AB	154	U	C5-C4-O4	-8.69	120.69	125.90
2	AB	194	G	N1-C6-O6	8.69	125.11	119.90
2	AB	1216	G	C2-N3-C4	8.69	116.25	111.90
2	AB	2276	G	C6-N1-C2	-8.69	119.89	125.10
35	BA	378	G	C2-N3-C4	8.69	116.24	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	753	A	C6-C5-N7	8.69	138.38	132.30
35	BA	1381	U	C2-N3-C4	-8.69	121.79	127.00
35	BA	1355	G	C5-C6-N1	8.69	115.84	111.50
35	BA	1401	G	C4-C5-C6	8.69	124.01	118.80
36	BB	29	G	C2-N3-C4	8.69	116.24	111.90
2	AB	251	A	C8-N9-C4	8.69	109.28	105.80
2	AB	2696	U	C5'-C4'-O4'	8.69	119.53	109.10
35	BA	374	A	C8-N9-C4	-8.69	102.33	105.80
37	BC	20	G	N1-C2-N3	-8.69	118.69	123.90
2	AB	96	C	C3'-C2'-C1'	8.68	108.45	101.50
2	AB	1290	C	N1-C2-O2	8.68	124.11	118.90
2	AB	2065	C	N3-C4-N4	8.68	124.08	118.00
2	AB	2413	G	C5-N7-C8	-8.68	99.96	104.30
2	AB	2862	G	C4-C5-N7	-8.68	107.33	110.80
35	BA	251	G	N3-C4-N9	8.68	131.21	126.00
35	BA	1493	A	O4'-C1'-N9	8.68	115.15	108.20
35	BA	561	U	P-O3'-C3'	8.68	130.12	119.70
1	AA	17	C	O4'-C1'-N1	8.68	115.14	108.20
2	AB	158	U	C6-N1-C2	-8.68	115.79	121.00
2	AB	881	G	C8-N9-C4	-8.68	102.93	106.40
2	AB	1605	C	C3'-C2'-C1'	8.68	108.44	101.50
2	AB	1969	A	C5-C6-N1	8.68	122.04	117.70
2	AB	2618	G	C5'-C4'-O4'	8.68	119.51	109.10
4	AD	237	ARG	NE-CZ-NH2	-8.68	115.96	120.30
37	BC	19	G	C5-N7-C8	-8.68	99.96	104.30
40	BF	106	PHE	CB-CG-CD2	-8.68	114.73	120.80
2	AB	1325	U	C4'-C3'-C2'	-8.68	93.92	102.60
2	AB	1824	G	C8-N9-C4	-8.68	102.93	106.40
40	BF	46	ARG	NE-CZ-NH1	8.68	124.64	120.30
2	AB	895	U	N3-C4-C5	-8.67	109.40	114.60
2	AB	1263	U	C2-N3-C4	-8.67	121.80	127.00
2	AB	1807	G	O4'-C1'-N9	8.67	115.14	108.20
35	BA	947	G	C2-N3-C4	8.67	116.24	111.90
35	BA	983	A	C4-C5-C6	-8.67	112.66	117.00
2	AB	134	G	O4'-C1'-C2'	8.67	115.41	107.60
35	BA	370	C	C6-N1-C2	-8.67	116.83	120.30
2	AB	1869	G	C4-C5-C6	8.67	124.00	118.80
2	AB	2065	C	N3-C4-C5	-8.67	118.43	121.90
2	AB	948	C	P-O3'-C3'	8.67	130.10	119.70
2	AB	2055	C	O4'-C1'-N1	8.67	115.14	108.20
35	BA	160	A	N9-C4-C5	8.67	109.27	105.80
35	BA	259	G	C8-N9-C4	-8.67	102.93	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2314	A	C2-N3-C4	-8.67	106.27	110.60
2	AB	644	A	C4'-C3'-C2'	-8.67	93.93	102.60
2	AB	945	A	C1'-O4'-C4'	-8.67	102.97	109.90
2	AB	2762	C	N1-C2-O2	8.67	124.10	118.90
37	BC	6	G	C4-C5-N7	8.67	114.27	110.80
2	AB	575	A	N7-C8-N9	8.66	118.13	113.80
2	AB	620	G	N3-C4-N9	8.66	131.20	126.00
2	AB	2091	C	N3-C4-C5	-8.66	118.43	121.90
2	AB	2294	G	C5-N7-C8	8.66	108.63	104.30
34	A7	24	ARG	NE-CZ-NH2	-8.66	115.97	120.30
2	AB	926	G	C6-N1-C2	-8.66	119.90	125.10
35	BA	673	A	N9-C4-C5	8.66	109.27	105.80
39	BE	53	ARG	NE-CZ-NH1	8.66	124.63	120.30
2	AB	1068	G	C4-C5-N7	-8.66	107.33	110.80
2	AB	1665	A	O4'-C1'-C2'	-8.66	97.14	105.80
2	AB	1910	G	O4'-C1'-N9	8.66	115.13	108.20
2	AB	2459	A	C2-N3-C4	-8.66	106.27	110.60
35	BA	792	A	N1-C2-N3	-8.66	124.97	129.30
35	BA	819	A	N9-C4-C5	8.66	109.27	105.80
36	BB	20	G	N3-C4-N9	8.66	131.20	126.00
2	AB	443	A	C8-N9-C4	-8.66	102.34	105.80
2	AB	2258	C	O4'-C1'-N1	8.66	115.13	108.20
2	AB	1467	U	C2-N3-C4	-8.66	121.80	127.00
35	BA	368	U	N3-C2-O2	-8.66	116.14	122.20
35	BA	500	G	N7-C8-N9	8.66	117.43	113.10
35	BA	1135	U	C2-N3-C4	-8.66	121.80	127.00
2	AB	498	G	C6-N1-C2	-8.66	119.91	125.10
2	AB	1723	G	C2-N3-C4	-8.66	107.57	111.90
2	AB	1980	G	C3'-C2'-C1'	8.66	108.43	101.50
2	AB	2804	U	O4'-C1'-N1	8.66	115.13	108.20
2	AB	2071	A	C5-N7-C8	8.66	108.23	103.90
35	BA	70	U	N1-C2-N3	8.66	120.09	114.90
35	BA	646	G	N3-C4-C5	-8.66	124.27	128.60
35	BA	847	G	N9-C4-C5	8.66	108.86	105.40
35	BA	895	G	N3-C4-C5	-8.66	124.27	128.60
35	BA	1310	G	N3-C4-N9	8.66	131.19	126.00
2	AB	325	G	C6-N1-C2	-8.65	119.91	125.10
2	AB	1906	G	C2-N3-C4	8.65	116.23	111.90
1	AA	98	G	C5-C6-O6	-8.65	123.41	128.60
2	AB	1878	G	C6-C5-N7	-8.65	125.21	130.40
2	AB	2316	G	N3-C2-N2	-8.65	113.84	119.90
35	BA	145	G	C8-N9-C4	-8.65	102.94	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	769	G	N1-C2-N2	-8.65	108.41	116.20
35	BA	1131	G	C2-N3-C4	8.65	116.23	111.90
35	BA	1361	G	N3-C4-C5	-8.65	124.27	128.60
2	AB	721	A	N9-C4-C5	-8.65	102.34	105.80
2	AB	1628	G	N3-C4-C5	-8.65	124.28	128.60
2	AB	2901	C	O4'-C1'-N1	8.65	115.12	108.20
35	BA	215	C	C5-C4-N4	8.65	126.26	120.20
2	AB	1010	A	N1-C2-N3	-8.65	124.98	129.30
2	AB	2195	U	N3-C4-C5	-8.65	109.41	114.60
2	AB	2675	A	N7-C8-N9	-8.65	109.48	113.80
2	AB	2758	A	C4'-C3'-C2'	-8.65	93.95	102.60
2	AB	2846	G	N1-C6-O6	8.65	125.09	119.90
35	BA	1158	C	C6-N1-C2	-8.65	116.84	120.30
2	AB	271	G	N3-C4-C5	-8.65	124.28	128.60
16	AP	17	ARG	NE-CZ-NH1	8.65	124.62	120.30
35	BA	551	U	N1-C2-N3	8.65	120.09	114.90
35	BA	1214	C	N3-C4-C5	-8.65	118.44	121.90
35	BA	1426	G	C2-N3-C4	-8.65	107.58	111.90
35	BA	1533	C	O4'-C1'-N1	8.65	115.12	108.20
1	AA	91	C	C2-N3-C4	8.64	124.22	119.90
2	AB	417	C	N3-C4-C5	-8.64	118.44	121.90
2	AB	2223	G	P-O3'-C3'	8.64	130.07	119.70
2	AB	2562	U	C5'-C4'-O4'	8.64	119.47	109.10
2	AB	2692	G	C6-C5-N7	-8.64	125.21	130.40
35	BA	888	G	C5-C6-O6	-8.64	123.41	128.60
35	BA	710	G	C4-C5-C6	-8.64	113.61	118.80
2	AB	252	G	N3-C4-C5	-8.64	124.28	128.60
2	AB	341	C	C5-C6-N1	8.64	125.32	121.00
2	AB	2626	C	C6-N1-C2	-8.64	116.84	120.30
35	BA	595	A	C5-C6-N1	8.64	122.02	117.70
2	AB	2717	C	C5-C6-N1	8.64	125.32	121.00
35	BA	948	C	C5-C4-N4	-8.64	114.15	120.20
35	BA	1062	U	C5-C6-N1	-8.64	118.38	122.70
35	BA	1204	A	N1-C2-N3	-8.64	124.98	129.30
2	AB	1368	G	C4-C5-N7	-8.64	107.34	110.80
2	AB	1773	A	C4-C5-N7	-8.64	106.38	110.70
35	BA	648	A	C2-N3-C4	-8.64	106.28	110.60
35	BA	693	G	C4-C5-N7	-8.64	107.34	110.80
55	BU	35	ARG	CD-NE-CZ	8.64	135.69	123.60
1	AA	35	C	C1'-O4'-C4'	-8.63	102.99	109.90
35	BA	1370	G	C4'-C3'-C2'	-8.64	93.96	102.60
40	BF	80	ARG	NE-CZ-NH2	-8.64	115.98	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	141	G	C8-N9-C4	-8.63	102.95	106.40
2	AB	1327	A	C6-C5-N7	8.63	138.34	132.30
2	AB	2185	U	C1'-O4'-C4'	-8.63	102.99	109.90
35	BA	247	G	N9-C4-C5	8.63	108.85	105.40
35	BA	725	G	N3-C2-N2	8.63	125.94	119.90
51	BQ	62	ARG	NE-CZ-NH1	8.63	124.62	120.30
2	AB	357	C	C6-N1-C2	-8.63	116.85	120.30
2	AB	1253	A	O4'-C1'-N9	8.63	115.11	108.20
2	AB	1558	C	C5-C4-N4	8.63	126.24	120.20
2	AB	2012	G	N3-C2-N2	8.63	125.94	119.90
2	AB	2542	A	C5-N7-C8	8.63	108.22	103.90
2	AB	2818	U	C2-N3-C4	-8.63	121.82	127.00
35	BA	656	G	C2-N3-C4	8.63	116.22	111.90
35	BA	942	G	C8-N9-C4	-8.63	102.95	106.40
2	AB	303	G	N9-C4-C5	8.63	108.85	105.40
35	BA	469	C	C2-N3-C4	8.63	124.22	119.90
35	BA	500	G	C6-C5-N7	-8.63	125.22	130.40
35	BA	1215	G	C4-C5-N7	-8.63	107.35	110.80
2	AB	570	G	C2-N3-C4	8.63	116.21	111.90
2	AB	886	A	C4-C5-N7	8.63	115.01	110.70
2	AB	1023	U	C6-N1-C2	8.63	126.18	121.00
2	AB	1465	G	C5-N7-C8	-8.63	99.99	104.30
35	BA	947	G	C4-C5-N7	8.63	114.25	110.80
36	BB	28	U	C5'-C4'-C3'	-8.63	102.19	116.00
2	AB	2391	G	C4-C5-N7	-8.63	107.35	110.80
2	AB	593	U	C2-N3-C4	-8.62	121.83	127.00
2	AB	1220	G	O4'-C1'-N9	8.62	115.10	108.20
2	AB	1320	C	N3-C2-O2	-8.62	115.86	121.90
2	AB	2617	U	C2-N3-C4	-8.62	121.83	127.00
35	BA	464	U	C2-N3-C4	-8.62	121.83	127.00
2	AB	190	A	C4-C5-C6	-8.62	112.69	117.00
2	AB	738	G	N1-C2-N3	8.62	129.07	123.90
2	AB	845	A	C8-N9-C4	-8.62	102.35	105.80
2	AB	900	A	O4'-C1'-N9	8.62	115.10	108.20
2	AB	2746	U	O4'-C1'-N1	8.62	115.10	108.20
35	BA	399	G	N9-C4-C5	-8.62	101.95	105.40
2	AB	278	A	N1-C6-N6	8.62	123.77	118.60
2	AB	1176	U	C5'-C4'-O4'	8.62	119.44	109.10
2	AB	2678	C	N3-C2-O2	-8.62	115.87	121.90
35	BA	1055	A	O4'-C1'-N9	8.62	115.10	108.20
35	BA	1235	U	N3-C4-O4	8.62	125.43	119.40
2	AB	1098	A	C5-N7-C8	8.62	108.21	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2064	C	C1'-O4'-C4'	-8.62	103.01	109.90
2	AB	2413	G	N3-C4-N9	-8.62	120.83	126.00
2	AB	2802	G	C4-C5-N7	-8.62	107.35	110.80
35	BA	128	G	C6-C5-N7	-8.62	125.23	130.40
35	BA	776	G	C6-C5-N7	8.62	135.57	130.40
35	BA	1025	U	C5-C6-N1	8.62	127.01	122.70
2	AB	134	G	C2-N3-C4	8.62	116.21	111.90
2	AB	2154	A	C4-C5-C6	-8.62	112.69	117.00
2	AB	1066	U	N1-C2-O2	8.61	128.83	122.80
2	AB	1475	G	C5-C6-N1	8.62	115.81	111.50
2	AB	1820	U	C3'-C2'-C1'	8.62	108.39	101.50
2	AB	1821	A	C5-C6-N1	8.62	122.01	117.70
2	AB	1622	G	N7-C8-N9	-8.61	108.79	113.10
2	AB	1632	A	N9-C4-C5	8.61	109.25	105.80
2	AB	2241	A	C8-N9-C4	-8.62	102.35	105.80
2	AB	2784	U	C5-C4-O4	-8.62	120.73	125.90
2	AB	2824	C	C5-C6-N1	-8.61	116.69	121.00
35	BA	378	G	C5-C6-N1	8.61	115.81	111.50
37	BC	5	G	C5-C6-O6	-8.61	123.43	128.60
37	BC	50	G	C4-C5-C6	8.61	123.97	118.80
2	AB	537	G	N3-C2-N2	8.61	125.93	119.90
2	AB	1787	A	C6-N1-C2	-8.61	113.43	118.60
19	AS	10	ARG	NH1-CZ-NH2	-8.61	109.93	119.40
35	BA	313	A	C8-N9-C4	8.61	109.24	105.80
35	BA	466	A	C6-N1-C2	8.61	123.77	118.60
2	AB	577	G	C5-C6-N1	8.61	115.80	111.50
2	AB	1604	C	C5-C6-N1	-8.61	116.70	121.00
2	AB	2194	U	C6-N1-C2	-8.61	115.83	121.00
35	BA	741	G	N3-C4-N9	-8.61	120.83	126.00
35	BA	930	C	N3-C4-N4	8.61	124.03	118.00
37	BC	27	G	C8-N9-C4	-8.61	102.96	106.40
1	AA	37	C	C2-N3-C4	8.61	124.20	119.90
2	AB	1266	G	N3-C4-C5	-8.61	124.30	128.60
2	AB	2525	G	C5-C6-O6	-8.61	123.44	128.60
35	BA	1447	A	C4-C5-C6	8.61	121.30	117.00
2	AB	800	A	C5'-C4'-O4'	8.61	119.43	109.10
2	AB	1008	A	C2-N3-C4	8.61	114.90	110.60
2	AB	1382	G	P-O3'-C3'	8.61	130.03	119.70
2	AB	1840	G	C4-C5-N7	-8.61	107.36	110.80
2	AB	1896	G	N9-C4-C5	-8.61	101.96	105.40
35	BA	252	U	N3-C4-O4	8.61	125.42	119.40
35	BA	975	A	C5-C6-N6	8.61	130.59	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1409	C	O4'-C1'-N1	8.61	115.09	108.20
35	BA	1015	G	N7-C8-N9	8.61	117.40	113.10
2	AB	516	C	N1-C1'-C2'	-8.60	102.54	112.00
2	AB	646	U	O4'-C1'-N1	8.60	115.08	108.20
2	AB	2206	C	N3-C4-C5	8.60	125.34	121.90
2	AB	2757	A	C5'-C4'-O4'	8.60	119.42	109.10
2	AB	2773	C	O4'-C1'-N1	8.60	115.08	108.20
35	BA	399	G	N1-C2-N2	8.60	123.94	116.20
35	BA	108	G	N3-C4-C5	-8.60	124.30	128.60
35	BA	1374	A	O4'-C1'-N9	8.60	115.08	108.20
2	AB	912	C	O4'-C1'-N1	8.60	115.08	108.20
2	AB	74	A	N7-C8-N9	-8.60	109.50	113.80
2	AB	1787	A	N1-C6-N6	-8.60	113.44	118.60
2	AB	2004	G	N3-C4-N9	8.60	131.16	126.00
2	AB	2838	G	C5-C6-O6	-8.60	123.44	128.60
2	AB	2902	C	C6-N1-C2	-8.60	116.86	120.30
9	AI	51	ARG	CD-NE-CZ	8.60	135.64	123.60
35	BA	445	G	N1-C6-O6	-8.60	114.74	119.90
35	BA	532	A	O4'-C1'-N9	8.60	115.08	108.20
35	BA	1106	G	C5-N7-C8	-8.60	100.00	104.30
35	BA	1388	C	O4'-C1'-N1	8.60	115.08	108.20
2	AB	752	A	N3-C4-C5	-8.60	120.78	126.80
35	BA	115	G	N7-C8-N9	8.60	117.40	113.10
2	AB	1609	A	N9-C4-C5	-8.60	102.36	105.80
2	AB	2046	G	N1-C2-N2	-8.60	108.46	116.20
35	BA	40	C	N3-C2-O2	-8.60	115.88	121.90
2	AB	618	G	C2-N3-C4	8.59	116.20	111.90
2	AB	966	G	N7-C8-N9	8.59	117.40	113.10
2	AB	2465	C	N1-C2-O2	8.59	124.06	118.90
35	BA	108	G	C6-N1-C2	-8.59	119.94	125.10
2	AB	20	C	C3'-C2'-C1'	8.59	108.37	101.50
2	AB	487	C	N1-C2-O2	8.59	124.05	118.90
2	AB	591	U	N3-C4-O4	8.59	125.41	119.40
2	AB	690	G	C2-N3-C4	8.59	116.20	111.90
2	AB	1751	U	N1-C2-O2	8.59	128.81	122.80
2	AB	1789	A	N1-C6-N6	-8.59	113.45	118.60
2	AB	1972	G	C5-C6-N1	8.59	115.80	111.50
2	AB	2062	A	C4-C5-C6	-8.59	112.70	117.00
35	BA	491	G	N3-C4-C5	-8.59	124.31	128.60
2	AB	2761	A	O4'-C1'-N9	8.59	115.07	108.20
35	BA	124	C	C5-C4-N4	-8.59	114.19	120.20
35	BA	317	U	C5-C4-O4	-8.59	120.75	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	739	C	C5-C4-N4	-8.59	114.19	120.20
37	BC	16	C	N3-C4-C5	8.59	125.34	121.90
35	BA	679	C	C5'-C4'-O4'	8.59	119.41	109.10
35	BA	885	G	N9-C4-C5	8.59	108.84	105.40
35	BA	1055	A	C6-N1-C2	8.59	123.75	118.60
2	AB	2415	G	C8-N9-C4	-8.59	102.97	106.40
2	AB	2446	G	N9-C4-C5	8.59	108.83	105.40
2	AB	2839	G	C2-N3-C4	8.59	116.19	111.90
2	AB	130	C	P-O3'-C3'	8.59	130.00	119.70
2	AB	608	A	C4-C5-N7	8.59	114.99	110.70
2	AB	649	G	C4'-C3'-C2'	-8.59	94.02	102.60
2	AB	837	C	C5-C6-N1	8.59	125.29	121.00
2	AB	1426	G	N3-C4-C5	8.59	132.89	128.60
2	AB	1465	G	O4'-C1'-N9	8.59	115.07	108.20
2	AB	1548	A	C8-N9-C4	-8.59	102.36	105.80
2	AB	1631	G	C8-N9-C4	8.59	109.83	106.40
2	AB	2512	C	N3-C4-C5	-8.59	118.47	121.90
2	AB	2898	U	C5-C4-O4	-8.59	120.75	125.90
35	BA	424	G	N7-C8-N9	8.59	117.39	113.10
36	BB	33	A	N3-C4-C5	-8.59	120.79	126.80
2	AB	602	A	C8-N9-C4	8.58	109.23	105.80
2	AB	659	G	N3-C2-N2	-8.58	113.89	119.90
2	AB	905	A	C2-N3-C4	8.58	114.89	110.60
2	AB	2882	A	C5-N7-C8	8.58	108.19	103.90
35	BA	588	G	N1-C6-O6	-8.58	114.75	119.90
2	AB	1533	C	N3-C4-N4	-8.58	111.99	118.00
2	AB	1664	A	C6-N1-C2	8.58	123.75	118.60
35	BA	144	G	O4'-C1'-N9	8.58	115.06	108.20
35	BA	287	U	C4'-C3'-C2'	-8.58	94.02	102.60
35	BA	1163	A	C6-N1-C2	8.58	123.75	118.60
1	AA	87	U	C4-C5-C6	8.58	124.85	119.70
2	AB	81	G	O4'-C1'-N9	8.58	115.06	108.20
2	AB	421	C	C4-C5-C6	8.58	121.69	117.40
2	AB	831	G	N9-C4-C5	8.58	108.83	105.40
2	AB	1157	G	N1-C6-O6	8.58	125.05	119.90
2	AB	2410	G	C4-C5-N7	-8.58	107.37	110.80
2	AB	2427	C	O4'-C1'-N1	8.58	115.06	108.20
2	AB	2686	G	C5-C6-N1	-8.58	107.21	111.50
2	AB	2821	A	C4-C5-N7	-8.58	106.41	110.70
35	BA	108	G	C8-N9-C4	-8.58	102.97	106.40
35	BA	232	G	C5-C6-O6	-8.58	123.45	128.60
35	BA	505	G	N3-C4-C5	-8.58	124.31	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1336	C	C4-C5-C6	8.58	121.69	117.40
2	AB	28	A	N9-C4-C5	8.57	109.23	105.80
2	AB	140	C	O4'-C1'-N1	8.57	115.06	108.20
2	AB	2680	U	O4'-C1'-N1	8.57	115.06	108.20
1	AA	74	U	C5-C6-N1	-8.57	118.41	122.70
2	AB	1196	C	C5'-C4'-O4'	8.57	119.39	109.10
2	AB	1513	U	C6-N1-C2	-8.57	115.86	121.00
2	AB	1830	C	O4'-C1'-N1	8.57	115.06	108.20
2	AB	1892	C	N1-C1'-C2'	-8.57	102.57	112.00
37	BC	41	C	C5-C4-N4	-8.57	114.20	120.20
2	AB	2333	A	C8-N9-C4	-8.57	102.37	105.80
2	AB	353	C	C6-N1-C2	8.57	123.73	120.30
2	AB	942	G	C8-N9-C4	-8.57	102.97	106.40
37	BC	12	G	C5-C6-O6	-8.57	123.46	128.60
2	AB	751	A	C3'-C2'-C1'	8.57	108.36	101.50
2	AB	1631	G	N3-C4-N9	8.57	131.14	126.00
2	AB	2084	C	C4'-C3'-C2'	-8.57	94.03	102.60
2	AB	2849	U	C2-N3-C4	-8.57	121.86	127.00
2	AB	1162	G	C1'-O4'-C4'	8.57	116.75	109.90
2	AB	1765	U	O4'-C1'-N1	8.57	115.06	108.20
2	AB	2437	G	N3-C4-C5	-8.57	124.32	128.60
35	BA	664	G	C8-N9-C4	-8.57	102.97	106.40
2	AB	1765	U	C5-C4-O4	-8.57	120.76	125.90
2	AB	2894	G	C6-C5-N7	8.57	135.54	130.40
35	BA	71	A	C4-C5-N7	8.57	114.98	110.70
35	BA	84	U	O4'-C1'-C2'	-8.57	97.23	105.80
35	BA	926	G	C5-N7-C8	-8.56	100.02	104.30
2	AB	1999	C	N3-C4-N4	8.56	123.99	118.00
2	AB	2711	A	N1-C2-N3	-8.56	125.02	129.30
35	BA	1042	A	N7-C8-N9	8.56	118.08	113.80
2	AB	674	G	N3-C4-C5	-8.56	124.32	128.60
35	BA	385	C	N1-C2-O2	8.56	124.04	118.90
35	BA	493	A	C1'-O4'-C4'	-8.56	103.05	109.90
2	AB	2467	C	N3-C4-N4	-8.56	112.01	118.00
2	AB	2658	C	N3-C4-C5	8.56	125.32	121.90
2	AB	2714	G	N3-C4-C5	-8.56	124.32	128.60
35	BA	236	A	N3-C4-C5	-8.56	120.81	126.80
35	BA	1080	A	N1-C6-N6	8.56	123.74	118.60
2	AB	176	A	N3-C4-C5	-8.56	120.81	126.80
2	AB	481	G	N7-C8-N9	8.56	117.38	113.10
2	AB	2490	G	N1-C2-N2	8.56	123.90	116.20
35	BA	814	A	N1-C2-N3	-8.56	125.02	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	918	A	N9-C4-C5	-8.56	102.38	105.80
35	BA	1016	A	C8-N9-C4	-8.56	102.38	105.80
36	BB	44	U	O4'-C1'-N1	8.56	115.05	108.20
36	BB	47	C	N1-C2-O2	8.56	124.03	118.90
2	AB	70	G	C2-N3-C4	8.56	116.18	111.90
2	AB	978	G	O4'-C1'-N9	8.55	115.04	108.20
2	AB	1904	G	N7-C8-N9	-8.56	108.82	113.10
2	AB	2455	G	N9-C1'-C2'	-8.56	102.59	112.00
2	AB	2573	C	C6-N1-C2	-8.56	116.88	120.30
2	AB	2686	G	N3-C4-C5	-8.55	124.32	128.60
35	BA	47	C	N1-C2-O2	8.56	124.03	118.90
35	BA	125	U	O4'-C1'-N1	8.56	115.05	108.20
2	AB	2006	C	C2-N3-C4	8.55	124.18	119.90
2	AB	2532	G	O4'-C1'-N9	8.55	115.04	108.20
35	BA	980	C	N3-C2-O2	-8.55	115.91	121.90
35	BA	991	U	N1-C2-N3	8.55	120.03	114.90
2	AB	707	G	O4'-C1'-N9	8.55	115.04	108.20
2	AB	1837	C	N3-C4-N4	8.55	123.99	118.00
2	AB	2199	A	C2-N3-C4	8.55	114.88	110.60
35	BA	1484	C	N3-C4-N4	8.55	123.99	118.00
2	AB	1037	G	C8-N9-C4	-8.55	102.98	106.40
2	AB	1232	G	C5-C6-N1	8.55	115.78	111.50
2	AB	2862	G	N3-C4-C5	-8.55	124.32	128.60
35	BA	83	C	C5-C4-N4	-8.55	114.21	120.20
35	BA	1501	C	C6-N1-C2	-8.55	116.88	120.30
2	AB	242	G	P-O3'-C3'	8.55	129.96	119.70
2	AB	450	G	C8-N9-C4	-8.55	102.98	106.40
2	AB	917	A	C8-N9-C4	8.55	109.22	105.80
2	AB	2459	A	N1-C2-N3	8.55	133.57	129.30
2	AB	2295	C	O4'-C1'-N1	8.55	115.04	108.20
2	AB	2716	C	N3-C2-O2	-8.55	115.92	121.90
2	AB	2456	C	N1-C2-O2	-8.55	113.77	118.90
2	AB	215	G	C8-N9-C4	-8.54	102.98	106.40
2	AB	724	U	N3-C4-O4	8.54	125.38	119.40
2	AB	1507	C	C4'-C3'-C2'	-8.54	94.06	102.60
21	AU	84	ARG	NE-CZ-NH2	8.54	124.57	120.30
2	AB	158	U	C5-C4-O4	8.54	131.03	125.90
2	AB	1934	C	N3-C4-C5	8.54	125.32	121.90
2	AB	2676	C	C5-C6-N1	-8.54	116.73	121.00
35	BA	183	C	C6-N1-C2	-8.54	116.88	120.30
35	BA	246	A	N1-C2-N3	-8.54	125.03	129.30
35	BA	499	A	C3'-C2'-C1'	-8.54	94.67	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	BR	5	ARG	NE-CZ-NH1	8.54	124.57	120.30
35	BA	586	C	N3-C2-O2	-8.54	115.92	121.90
35	BA	810	C	C5'-C4'-O4'	8.54	119.35	109.10
35	BA	1243	C	C1'-O4'-C4'	8.54	116.73	109.90
2	AB	1244	A	N9-C1'-C2'	-8.54	102.61	112.00
2	AB	1875	G	N9-C1'-C2'	-8.54	102.61	112.00
2	AB	1305	C	O4'-C1'-N1	8.54	115.03	108.20
2	AB	1874	C	C6-N1-C2	8.54	123.72	120.30
2	AB	2814	A	C1'-O4'-C4'	-8.54	103.07	109.90
35	BA	280	C	C3'-C2'-C1'	8.54	108.33	101.50
35	BA	328	C	N1-C2-O2	8.54	124.02	118.90
35	BA	391	G	C2-N3-C4	8.54	116.17	111.90
35	BA	840	C	N3-C2-O2	-8.54	115.92	121.90
35	BA	972	C	C6-N1-C2	8.54	123.72	120.30
2	AB	284	U	C5-C4-O4	8.54	131.02	125.90
2	AB	1099	G	C5-C6-O6	8.54	133.72	128.60
2	AB	1327	A	C4-C5-N7	-8.54	106.43	110.70
2	AB	48	G	N3-C4-C5	-8.53	124.33	128.60
2	AB	156	A	C4-C5-N7	-8.54	106.43	110.70
2	AB	358	U	C2-N3-C4	-8.54	121.88	127.00
2	AB	1175	A	C1'-O4'-C4'	-8.54	103.07	109.90
2	AB	1328	A	O4'-C1'-N9	8.54	115.03	108.20
2	AB	1928	A	C4'-C3'-C2'	-8.54	94.06	102.60
2	AB	1628	G	N3-C4-N9	8.53	131.12	126.00
2	AB	2294	G	N9-C1'-C2'	-8.54	102.61	112.00
35	BA	783	C	N1-C2-O2	8.54	124.02	118.90
2	AB	2614	A	C8-N9-C4	-8.53	102.39	105.80
1	AA	24	G	C6-C5-N7	8.53	135.52	130.40
35	BA	861	G	C3'-C2'-C1'	8.53	108.33	101.50
35	BA	1010	U	C5-C6-N1	8.53	126.97	122.70
2	AB	512	G	N3-C4-N9	8.53	131.12	126.00
2	AB	1159	U	C5-C6-N1	-8.53	118.43	122.70
2	AB	1228	G	C3'-C2'-C1'	8.53	108.33	101.50
2	AB	1385	A	O4'-C1'-N9	8.53	115.03	108.20
35	BA	1038	C	N3-C4-C5	-8.53	118.49	121.90
2	AB	2894	G	C5-C6-N1	8.53	115.77	111.50
2	AB	757	G	N3-C4-C5	-8.53	124.33	128.60
35	BA	505	G	C6-N1-C2	-8.53	119.98	125.10
2	AB	1040	A	N9-C4-C5	8.53	109.21	105.80
2	AB	2045	C	O4'-C1'-N1	8.53	115.02	108.20
2	AB	2255	G	N9-C4-C5	8.53	108.81	105.40
16	AP	86	ARG	NE-CZ-NH1	8.53	124.56	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	134	G	O4'-C1'-N9	8.53	115.02	108.20
35	BA	638	U	C4-C5-C6	-8.53	114.58	119.70
2	AB	482	A	C5-N7-C8	-8.53	99.64	103.90
2	AB	1470	A	C2-N3-C4	-8.53	106.34	110.60
2	AB	2370	G	O4'-C1'-N9	8.53	115.02	108.20
2	AB	2579	C	C4-C5-C6	-8.53	113.14	117.40
35	BA	887	G	C4-C5-N7	-8.52	107.39	110.80
1	AA	22	U	N1-C2-N3	8.52	120.01	114.90
2	AB	1684	G	C5-N7-C8	-8.52	100.04	104.30
2	AB	2004	G	C5-C6-O6	-8.52	123.49	128.60
35	BA	252	U	N1-C2-O2	8.52	128.76	122.80
35	BA	639	G	N3-C2-N2	-8.52	113.93	119.90
35	BA	461	A	N9-C4-C5	8.52	109.21	105.80
2	AB	325	G	N1-C2-N3	8.52	129.01	123.90
2	AB	753	A	N1-C2-N3	-8.52	125.04	129.30
2	AB	2696	U	O4'-C1'-N1	8.52	115.02	108.20
2	AB	2852	G	C6-N1-C2	-8.52	119.99	125.10
2	AB	1164	C	N3-C2-O2	-8.52	115.94	121.90
2	AB	2391	G	N1-C6-O6	-8.52	114.79	119.90
35	BA	805	C	C4-C5-C6	8.52	121.66	117.40
2	AB	398	C	N1-C2-O2	8.52	124.01	118.90
2	AB	1111	A	N9-C4-C5	8.52	109.21	105.80
2	AB	1366	A	N9-C4-C5	8.52	109.21	105.80
2	AB	1456	G	N9-C4-C5	8.52	108.81	105.40
19	AS	105	PHE	CB-CG-CD1	-8.52	114.84	120.80
45	BK	79	ARG	NE-CZ-NH2	-8.52	116.04	120.30
2	AB	701	G	O4'-C1'-N9	8.51	115.01	108.20
2	AB	1115	G	C4'-C3'-C2'	-8.51	94.09	102.60
3	AC	111	PHE	CB-CG-CD1	-8.51	114.84	120.80
35	BA	446	G	C6-N1-C2	-8.51	119.99	125.10
35	BA	900	A	N9-C4-C5	8.51	109.21	105.80
2	AB	849	A	N9-C4-C5	-8.51	102.40	105.80
2	AB	472	A	C4-C5-C6	8.51	121.25	117.00
2	AB	540	C	O4'-C4'-C3'	8.51	112.91	106.10
2	AB	1271	G	O4'-C1'-N9	8.51	115.01	108.20
2	AB	1361	G	N3-C4-N9	8.51	131.11	126.00
2	AB	1922	G	N1-C2-N2	8.51	123.86	116.20
2	AB	2806	C	N1-C2-O2	8.51	124.01	118.90
2	AB	2115	G	N7-C8-N9	8.51	117.36	113.10
2	AB	2704	C	O5'-P-OP2	-8.51	98.04	105.70
35	BA	389	A	C2-N3-C4	8.51	114.86	110.60
35	BA	912	C	N3-C4-C5	8.51	125.30	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1707	G	C8-N9-C4	-8.51	103.00	106.40
35	BA	1317	C	N1-C2-O2	8.51	124.00	118.90
35	BA	1533	C	N3-C2-O2	-8.51	115.94	121.90
2	AB	117	G	O4'-C1'-N9	8.51	115.00	108.20
2	AB	216	A	O4'-C1'-N9	8.51	115.00	108.20
2	AB	2027	G	C4-C5-N7	8.51	114.20	110.80
2	AB	2133	G	C5-C6-O6	-8.51	123.50	128.60
2	AB	2560	A	C8-N9-C4	-8.51	102.40	105.80
2	AB	2793	C	C3'-C2'-C1'	8.51	108.31	101.50
2	AB	2793	C	C6-N1-C2	-8.51	116.90	120.30
35	BA	588	G	C4-C5-N7	-8.51	107.40	110.80
1	AA	119	A	C5-C6-N1	8.50	121.95	117.70
2	AB	205	G	N3-C4-N9	8.50	131.10	126.00
2	AB	625	G	C5-C6-N1	8.50	115.75	111.50
2	AB	1106	G	O4'-C1'-N9	8.50	115.00	108.20
2	AB	386	G	C1'-O4'-C4'	8.50	116.70	109.90
2	AB	459	U	N3-C4-C5	-8.50	109.50	114.60
2	AB	1511	G	N1-C6-O6	-8.50	114.80	119.90
35	BA	90	C	N1-C2-O2	8.50	124.00	118.90
35	BA	766	A	N9-C4-C5	8.50	109.20	105.80
52	BR	20	VAL	CA-CB-CG2	8.50	123.65	110.90
2	AB	1238	G	C8-N9-C1'	8.50	138.05	127.00
35	BA	833	G	C3'-C2'-C1'	8.50	108.30	101.50
2	AB	1316	U	C3'-C2'-C1'	-8.50	94.70	101.50
2	AB	1401	G	O4'-C1'-N9	8.50	115.00	108.20
2	AB	1457	U	O4'-C1'-N1	8.50	115.00	108.20
2	AB	1593	A	O4'-C1'-N9	8.50	115.00	108.20
2	AB	1665	A	O4'-C4'-C3'	8.50	112.90	106.10
2	AB	1673	G	C2-N3-C4	-8.50	107.65	111.90
2	AB	1711	A	N1-C2-N3	-8.50	125.05	129.30
2	AB	2388	A	C5'-C4'-O4'	8.50	119.30	109.10
2	AB	1009	A	P-O3'-C3'	8.50	129.90	119.70
2	AB	2164	C	C5-C6-N1	-8.50	116.75	121.00
2	AB	2652	C	N3-C4-C5	-8.50	118.50	121.90
35	BA	404	G	C5-C6-N1	8.50	115.75	111.50
36	BB	39	U	N3-C4-O4	8.50	125.35	119.40
2	AB	7	G	C5-C6-N1	8.49	115.75	111.50
2	AB	1628	G	C2-N3-C4	8.49	116.15	111.90
35	BA	559	A	N1-C6-N6	8.49	123.70	118.60
35	BA	1161	C	O4'-C1'-N1	8.49	115.00	108.20
37	BC	64	G	C5-C6-N1	8.49	115.75	111.50
2	AB	949	G	O4'-C4'-C3'	8.49	112.89	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2555	U	C5-C6-N1	-8.49	118.45	122.70
14	AN	41	ARG	NE-CZ-NH2	-8.49	116.05	120.30
2	AB	67	U	C4-C5-C6	8.49	124.79	119.70
2	AB	337	C	C5-C4-N4	-8.49	114.26	120.20
2	AB	683	U	C5-C6-N1	-8.49	118.45	122.70
35	BA	108	G	C2-N3-C4	8.49	116.15	111.90
2	AB	1459	G	C8-N9-C4	-8.49	103.00	106.40
2	AB	2036	C	N3-C4-N4	8.49	123.94	118.00
12	AL	125	TYR	CB-CG-CD1	-8.49	115.91	121.00
36	BB	57	C	C4-C5-C6	-8.49	113.16	117.40
1	AA	17	C	N1-C2-O2	8.49	123.99	118.90
2	AB	2003	A	N9-C4-C5	-8.49	102.41	105.80
2	AB	622	G	N3-C4-C5	-8.49	124.36	128.60
2	AB	1190	G	C5'-C4'-C3'	-8.49	102.42	116.00
2	AB	1399	C	N3-C4-N4	8.49	123.94	118.00
2	AB	2389	G	C8-N9-C4	-8.49	103.01	106.40
2	AB	2888	C	C5-C6-N1	8.49	125.24	121.00
35	BA	101	A	C5-C6-N1	-8.49	113.46	117.70
35	BA	1233	G	C5-C6-O6	-8.49	123.51	128.60
2	AB	264	C	P-O3'-C3'	8.48	129.88	119.70
2	AB	1757	A	C3'-C2'-C1'	8.48	108.29	101.50
2	AB	2263	C	C5'-C4'-O4'	8.48	119.28	109.10
2	AB	2874	C	N3-C4-N4	8.48	123.94	118.00
35	BA	257	G	C4-C5-N7	-8.48	107.41	110.80
35	BA	757	U	N1-C2-N3	8.48	119.99	114.90
35	BA	1344	C	C2-N3-C4	8.48	124.14	119.90
2	AB	1239	G	P-O3'-C3'	8.48	129.88	119.70
2	AB	1523	U	O4'-C1'-C2'	-8.48	97.32	105.80
35	BA	168	G	C5-C6-N1	8.48	115.74	111.50
35	BA	334	C	C4'-C3'-C2'	-8.48	94.12	102.60
35	BA	482	A	C4-C5-C6	-8.48	112.76	117.00
2	AB	2787	C	O4'-C1'-N1	8.48	114.98	108.20
2	AB	77	G	C8-N9-C4	-8.48	103.01	106.40
2	AB	1066	U	C3'-C2'-C1'	8.48	108.28	101.50
2	AB	1345	C	C4-C5-C6	-8.48	113.16	117.40
2	AB	1880	U	O4'-C1'-N1	8.48	114.98	108.20
2	AB	2674	G	C5-C6-O6	-8.48	123.51	128.60
35	BA	728	A	C4'-C3'-C2'	-8.48	94.12	102.60
35	BA	1442	G	C5-C6-N1	8.48	115.74	111.50
37	BC	3	C	N3-C4-C5	8.48	125.29	121.90
35	BA	287	U	C3'-C2'-C1'	8.48	108.28	101.50
1	AA	45	A	C1'-O4'-C4'	8.47	116.68	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2316	G	C6-N1-C2	-8.47	120.02	125.10
1	AA	50	A	C5-C6-N1	-8.47	113.46	117.70
2	AB	105	C	N1-C1'-C2'	-8.47	102.68	112.00
2	AB	1190	G	N3-C4-C5	-8.47	124.36	128.60
2	AB	1834	U	O4'-C1'-N1	8.47	114.98	108.20
2	AB	2239	G	C6-C5-N7	-8.47	125.32	130.40
2	AB	2903	U	O4'-C1'-N1	8.47	114.98	108.20
35	BA	439	U	O4'-C1'-N1	8.47	114.98	108.20
35	BA	550	G	O4'-C1'-N9	8.47	114.98	108.20
35	BA	698	G	N1-C6-O6	-8.47	114.82	119.90
35	BA	1268	G	C6-N1-C2	-8.47	120.02	125.10
35	BA	1293	C	O4'-C1'-N1	8.47	114.98	108.20
35	BA	1343	G	O4'-C1'-N9	8.47	114.98	108.20
35	BA	1445	U	C5-C4-O4	-8.47	120.82	125.90
2	AB	446	G	C8-N9-C4	-8.47	103.01	106.40
2	AB	469	G	C6-N1-C2	-8.47	120.02	125.10
2	AB	711	G	N1-C2-N2	8.47	123.82	116.20
2	AB	1171	G	N1-C6-O6	-8.47	114.82	119.90
2	AB	2106	U	O4'-C1'-N1	8.47	114.98	108.20
2	AB	2550	G	C5'-C4'-O4'	8.47	119.27	109.10
35	BA	954	G	N7-C8-N9	8.47	117.34	113.10
35	BA	1030	U	C4-C5-C6	-8.47	114.62	119.70
2	AB	658	U	C4'-C3'-C2'	-8.47	94.13	102.60
2	AB	856	G	C6-N1-C2	-8.47	120.02	125.10
2	AB	2464	G	C8-N9-C4	8.47	109.79	106.40
35	BA	1028	C	N3-C4-C5	-8.47	118.51	121.90
35	BA	1093	A	N9-C4-C5	-8.47	102.41	105.80
2	AB	1088	A	O4'-C1'-N9	8.47	114.97	108.20
2	AB	1699	G	C6-C5-N7	-8.47	125.32	130.40
2	AB	1757	A	C4'-C3'-C2'	-8.46	94.14	102.60
2	AB	1961	C	C2-N3-C4	8.47	124.13	119.90
2	AB	2267	A	C2-N3-C4	8.47	114.83	110.60
2	AB	2592	G	C5-C6-N1	8.46	115.73	111.50
35	BA	79	G	C5-C6-N1	8.46	115.73	111.50
35	BA	428	G	C8-N9-C4	-8.47	103.01	106.40
2	AB	642	U	C5-C4-O4	-8.46	120.82	125.90
2	AB	2838	G	O4'-C1'-N9	8.46	114.97	108.20
35	BA	40	C	N3-C4-C5	-8.46	118.52	121.90
2	AB	689	A	C2-N3-C4	8.46	114.83	110.60
2	AB	1310	G	C1'-O4'-C4'	8.46	116.67	109.90
2	AB	2076	U	N3-C2-O2	-8.46	116.28	122.20
2	AB	2287	A	C4'-C3'-C2'	8.46	111.06	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2412	A	C1'-O4'-C4'	-8.46	103.13	109.90
2	AB	2604	U	C2-N3-C4	-8.46	121.92	127.00
17	AQ	16	ARG	NE-CZ-NH2	-8.46	116.07	120.30
22	AV	76	ARG	NE-CZ-NH1	8.46	124.53	120.30
35	BA	78	A	C6-C5-N7	-8.46	126.38	132.30
35	BA	644	U	C3'-C2'-C1'	8.46	108.27	101.50
35	BA	669	G	O4'-C1'-N9	8.46	114.97	108.20
35	BA	722	G	C5-C6-O6	-8.46	123.52	128.60
2	AB	241	A	P-O3'-C3'	8.46	129.85	119.70
2	AB	153	U	N1-C2-O2	8.46	128.72	122.80
2	AB	630	G	C8-N9-C4	-8.46	103.02	106.40
2	AB	1046	A	C5-N7-C8	-8.46	99.67	103.90
2	AB	2047	C	N3-C2-O2	-8.46	115.98	121.90
2	AB	2348	U	C2-N3-C4	-8.46	121.92	127.00
35	BA	812	G	O4'-C1'-C2'	-8.46	97.34	105.80
26	AZ	36	ARG	NE-CZ-NH2	8.46	124.53	120.30
2	AB	1001	A	C5-C6-N6	-8.45	116.94	123.70
2	AB	1467	U	C4-C5-C6	8.46	124.77	119.70
2	AB	1946	U	N1-C1'-C2'	-8.46	102.70	112.00
2	AB	1573	G	N3-C2-N2	8.45	125.82	119.90
2	AB	1740	G	C6-C5-N7	-8.45	125.33	130.40
2	AB	2064	C	O4'-C1'-N1	8.46	114.96	108.20
2	AB	2325	G	N3-C4-C5	-8.46	124.37	128.60
2	AB	2425	A	N1-C2-N3	-8.46	125.07	129.30
2	AB	195	A	C2-N3-C4	-8.45	106.37	110.60
2	AB	1475	G	N3-C4-C5	-8.45	124.37	128.60
2	AB	2763	G	N1-C2-N2	-8.45	108.59	116.20
35	BA	267	C	C3'-C2'-C1'	8.45	108.26	101.50
35	BA	809	G	O4'-C1'-N9	8.45	114.96	108.20
35	BA	904	U	O4'-C4'-C3'	8.45	112.86	106.10
35	BA	1511	G	C6-N1-C2	-8.45	120.03	125.10
2	AB	1794	A	C8-N9-C4	-8.45	102.42	105.80
2	AB	455	C	O4'-C1'-N1	8.45	114.96	108.20
2	AB	2059	A	C1'-O4'-C4'	-8.45	103.14	109.90
2	AB	2106	U	P-O3'-C3'	8.45	129.84	119.70
2	AB	2391	G	C5-C6-N1	8.45	115.72	111.50
35	BA	226	G	N7-C8-N9	8.45	117.33	113.10
35	BA	829	G	N3-C4-C5	-8.45	124.38	128.60
35	BA	1212	U	N3-C2-O2	-8.45	116.29	122.20
36	BB	32	U	N1-C2-N3	8.45	119.97	114.90
2	AB	1329	U	N1-C2-N3	8.45	119.97	114.90
2	AB	1491	G	N1-C2-N2	8.45	123.80	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1958	C	C5-C4-N4	8.45	126.11	120.20
1	AA	86	G	C6-N1-C2	-8.45	120.03	125.10
35	BA	177	G	C3'-C2'-C1'	8.45	108.26	101.50
35	BA	346	G	C5-N7-C8	-8.45	100.08	104.30
35	BA	406	G	C3'-C2'-C1'	-8.45	94.74	101.50
35	BA	1024	G	C4-C5-N7	8.44	114.18	110.80
35	BA	1427	C	N3-C4-C5	-8.44	118.52	121.90
2	AB	111	A	N1-C2-N3	-8.44	125.08	129.30
2	AB	511	U	C6-N1-C2	-8.44	115.94	121.00
2	AB	1164	C	P-O3'-C3'	8.44	129.83	119.70
2	AB	2199	A	N1-C2-N3	-8.44	125.08	129.30
12	AL	120	ARG	NE-CZ-NH1	-8.44	116.08	120.30
2	AB	1863	G	C6-N1-C2	-8.44	120.04	125.10
2	AB	1244	A	C8-N9-C4	-8.44	102.42	105.80
2	AB	2161	C	N3-C2-O2	-8.44	115.99	121.90
2	AB	2426	A	O4'-C1'-N9	8.44	114.95	108.20
2	AB	2625	G	N9-C4-C5	8.44	108.78	105.40
2	AB	2633	G	N9-C4-C5	-8.44	102.03	105.40
1	AA	9	G	C6-C5-N7	-8.44	125.34	130.40
1	AA	73	A	N9-C1'-C2'	-8.44	102.72	112.00
2	AB	585	G	N3-C4-C5	-8.44	124.38	128.60
2	AB	834	G	C6-C5-N7	-8.44	125.34	130.40
2	AB	924	G	C5-C6-N1	8.44	115.72	111.50
2	AB	1644	C	N1-C2-O2	8.44	123.96	118.90
2	AB	765	C	N3-C4-C5	-8.44	118.53	121.90
2	AB	1710	G	O4'-C1'-N9	8.44	114.95	108.20
35	BA	453	G	C8-N9-C4	8.44	109.78	106.40
2	AB	1783	A	N7-C8-N9	8.44	118.02	113.80
2	AB	1946	U	N3-C4-O4	8.44	125.31	119.40
2	AB	2087	G	N7-C8-N9	8.44	117.32	113.10
35	BA	776	G	C6-N1-C2	-8.44	120.04	125.10
2	AB	295	G	C5'-C4'-O4'	8.43	119.22	109.10
2	AB	622	G	O4'-C1'-N9	8.43	114.95	108.20
2	AB	1093	G	C5-C6-O6	-8.43	123.54	128.60
2	AB	2769	U	N3-C4-O4	8.43	125.30	119.40
2	AB	637	A	O4'-C1'-N9	8.43	114.94	108.20
2	AB	756	A	C4'-C3'-C2'	-8.43	94.17	102.60
2	AB	944	C	C4-C5-C6	-8.43	113.18	117.40
2	AB	1767	G	C4-C5-C6	8.43	123.86	118.80
2	AB	2328	A	C8-N9-C4	-8.43	102.43	105.80
35	BA	211	G	C5'-C4'-O4'	8.43	119.22	109.10
35	BA	678	U	C5'-C4'-O4'	8.43	119.22	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	741	G	C8-N9-C4	-8.43	103.03	106.40
35	BA	924	C	N3-C4-C5	8.43	125.27	121.90
35	BA	1005	A	O4'-C4'-C3'	8.43	112.84	106.10
2	AB	1931	U	O4'-C1'-N1	8.43	114.94	108.20
2	AB	2497	A	N1-C2-N3	-8.43	125.09	129.30
35	BA	391	G	N9-C4-C5	-8.43	102.03	105.40
35	BA	561	U	N3-C2-O2	-8.43	116.30	122.20
35	BA	1158	C	N3-C2-O2	-8.43	116.00	121.90
2	AB	416	U	C4-C5-C6	8.43	124.76	119.70
2	AB	653	U	N3-C2-O2	-8.43	116.30	122.20
2	AB	685	A	N9-C4-C5	8.43	109.17	105.80
35	BA	528	C	C6-N1-C2	-8.43	116.93	120.30
2	AB	520	G	C2-N3-C4	8.43	116.11	111.90
2	AB	611	C	C4-C5-C6	8.43	121.61	117.40
2	AB	1034	G	N3-C4-N9	8.43	131.06	126.00
2	AB	2166	U	O4'-C1'-N1	8.43	114.94	108.20
2	AB	2566	A	C8-N9-C4	-8.43	102.43	105.80
35	BA	951	G	N3-C2-N2	-8.43	114.00	119.90
35	BA	1058	G	C5-N7-C8	8.43	108.51	104.30
35	BA	1257	A	N1-C2-N3	-8.43	125.09	129.30
57	BW	70	TYR	CG-CD1-CE1	-8.43	114.56	121.30
1	AA	44	G	C5-N7-C8	-8.42	100.09	104.30
35	BA	1028	C	C4'-C3'-C2'	-8.42	94.18	102.60
2	AB	197	A	N1-C2-N3	-8.42	125.09	129.30
2	AB	385	C	C4-C5-C6	-8.42	113.19	117.40
2	AB	1007	C	O4'-C1'-N1	8.42	114.94	108.20
35	BA	124	C	C4-C5-C6	-8.42	113.19	117.40
35	BA	348	G	O4'-C1'-N9	8.42	114.94	108.20
4	AD	269	ARG	NE-CZ-NH1	-8.42	116.09	120.30
35	BA	1405	G	C5-C6-O6	-8.42	123.55	128.60
35	BA	1417	G	N1-C6-O6	-8.42	114.85	119.90
2	AB	1930	G	C4-C5-N7	-8.42	107.43	110.80
2	AB	2875	C	N3-C2-O2	-8.42	116.01	121.90
35	BA	929	G	O4'-C1'-N9	8.42	114.94	108.20
11	AK	122	GLU	OE1-CD-OE2	8.42	133.40	123.30
35	BA	1092	A	C6-N1-C2	8.42	123.65	118.60
35	BA	1261	A	N9-C4-C5	8.42	109.17	105.80
47	BM	6	ARG	NE-CZ-NH2	8.42	124.51	120.30
1	AA	67	G	N7-C8-N9	8.42	117.31	113.10
2	AB	1448	G	C8-N9-C4	-8.42	103.03	106.40
2	AB	1467	U	C5-C4-O4	8.42	130.95	125.90
2	AB	1661	G	C4-C5-N7	-8.42	107.43	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	296	U	C5-C6-N1	-8.42	118.49	122.70
35	BA	486	U	N1-C2-N3	8.42	119.95	114.90
35	BA	547	A	O4'-C1'-N9	8.42	114.93	108.20
35	BA	1370	G	N1-C6-O6	-8.42	114.85	119.90
40	BF	12	ARG	NE-CZ-NH1	8.42	124.51	120.30
1	AA	90	C	O4'-C1'-N1	8.41	114.93	108.20
2	AB	2090	A	N9-C4-C5	8.41	109.17	105.80
35	BA	273	U	C5-C4-O4	8.41	130.95	125.90
2	AB	1262	A	N9-C4-C5	8.41	109.17	105.80
2	AB	1327	A	C3'-C2'-C1'	8.41	108.23	101.50
35	BA	262	A	N9-C4-C5	8.41	109.17	105.80
35	BA	881	G	C8-N9-C4	-8.41	103.03	106.40
2	AB	1846	G	O4'-C1'-N9	8.41	114.93	108.20
2	AB	2664	G	N3-C4-C5	-8.41	124.39	128.60
2	AB	2699	C	O4'-C1'-N1	8.41	114.93	108.20
6	AF	69	ARG	NE-CZ-NH1	8.41	124.51	120.30
35	BA	236	A	C4-C5-C6	8.41	121.21	117.00
35	BA	670	G	N3-C2-N2	-8.41	114.01	119.90
2	AB	982	C	O4'-C1'-N1	8.41	114.93	108.20
2	AB	1916	A	C5-C6-N1	8.41	121.91	117.70
2	AB	2666	C	C3'-C2'-C1'	8.41	108.23	101.50
35	BA	1019	A	C5-C6-N1	8.41	121.91	117.70
35	BA	1075	U	N3-C4-O4	8.41	125.29	119.40
2	AB	407	G	C6-N1-C2	-8.41	120.06	125.10
2	AB	1111	A	N3-C4-C5	-8.41	120.92	126.80
35	BA	218	U	N3-C4-C5	-8.41	109.56	114.60
35	BA	1129	C	C2-N3-C4	8.41	124.10	119.90
2	AB	407	G	N9-C4-C5	8.40	108.76	105.40
2	AB	1075	C	O4'-C1'-N1	8.40	114.92	108.20
2	AB	1100	C	O4'-C1'-N1	8.40	114.92	108.20
2	AB	1190	G	C6-N1-C2	-8.40	120.06	125.10
2	AB	1210	G	O4'-C4'-C3'	8.40	112.82	106.10
2	AB	2289	G	C5-C6-O6	-8.40	123.56	128.60
2	AB	2530	A	C8-N9-C4	-8.40	102.44	105.80
2	AB	2540	C	C5'-C4'-O4'	8.40	119.19	109.10
35	BA	1526	G	N1-C2-N3	8.40	128.94	123.90
2	AB	2576	G	C4-C5-N7	-8.40	107.44	110.80
35	BA	17	U	C4-C5-C6	8.40	124.74	119.70
35	BA	69	G	N3-C4-C5	-8.40	124.40	128.60
35	BA	752	G	N3-C4-C5	-8.40	124.40	128.60
35	BA	824	G	C4'-C3'-C2'	-8.40	94.20	102.60
35	BA	1088	G	C2-N3-C4	8.40	116.10	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	BU	2	ARG	NE-CZ-NH2	8.40	124.50	120.30
2	AB	965	C	O4'-C1'-N1	8.40	114.92	108.20
2	AB	1349	C	C4-C5-C6	8.40	121.60	117.40
2	AB	1896	G	N3-C4-N9	8.40	131.04	126.00
2	AB	1914	C	N1-C2-O2	8.40	123.94	118.90
2	AB	2446	G	C3'-C2'-C1'	-8.40	94.78	101.50
2	AB	2645	G	C5-C6-N1	8.40	115.70	111.50
35	BA	61	G	N1-C6-O6	-8.40	114.86	119.90
35	BA	1338	G	N7-C8-N9	8.40	117.30	113.10
1	AA	41	G	O4'-C4'-C3'	8.40	112.82	106.10
2	AB	1365	A	C5-N7-C8	8.40	108.10	103.90
2	AB	1401	G	N9-C4-C5	8.40	108.76	105.40
1	AA	18	G	C8-N9-C4	-8.40	103.04	106.40
2	AB	315	G	C6-N1-C2	-8.40	120.06	125.10
2	AB	363	G	C4-C5-C6	8.40	123.84	118.80
2	AB	1210	G	C1'-O4'-C4'	-8.40	103.18	109.90
2	AB	2370	G	C5-N7-C8	-8.40	100.10	104.30
2	AB	2619	C	C2-N3-C4	8.40	124.10	119.90
35	BA	2	A	N7-C8-N9	8.40	118.00	113.80
35	BA	444	G	N1-C6-O6	8.40	124.94	119.90
35	BA	994	A	O4'-C1'-N9	8.40	114.92	108.20
2	AB	187	G	N7-C8-N9	8.39	117.30	113.10
2	AB	785	G	C4-C5-C6	-8.39	113.76	118.80
2	AB	2409	G	C5-C6-N1	8.39	115.70	111.50
2	AB	247	G	O4'-C1'-N9	8.39	114.92	108.20
2	AB	404	A	N9-C4-C5	8.39	109.16	105.80
2	AB	750	A	C4-C5-C6	-8.39	112.80	117.00
2	AB	1055	G	N9-C4-C5	8.39	108.76	105.40
2	AB	2391	G	C6-N1-C2	-8.39	120.06	125.10
35	BA	264	C	O4'-C4'-C3'	-8.39	95.61	104.00
35	BA	345	C	C6-N1-C2	-8.39	116.94	120.30
35	BA	705	G	C4-C5-N7	-8.39	107.44	110.80
37	BC	67	C	O4'-C1'-N1	8.39	114.92	108.20
2	AB	123	G	C5-C6-N1	8.39	115.69	111.50
2	AB	2517	C	O4'-C1'-N1	8.39	114.91	108.20
2	AB	2429	G	C6-C5-N7	8.39	135.43	130.40
35	BA	78	A	C4-C5-C6	8.39	121.19	117.00
35	BA	729	A	C5'-C4'-O4'	8.39	119.17	109.10
35	BA	747	A	C5-N7-C8	-8.39	99.70	103.90
35	BA	1112	C	N3-C4-C5	-8.39	118.54	121.90
2	AB	183	C	C2-N3-C4	8.39	124.09	119.90
35	BA	446	G	N9-C1'-C2'	-8.39	102.77	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1498	C	C6-N1-C2	8.39	123.66	120.30
2	AB	2015	A	N1-C2-N3	-8.39	125.11	129.30
2	AB	2892	G	N1-C6-O6	-8.39	114.87	119.90
35	BA	775	G	N9-C4-C5	8.39	108.75	105.40
35	BA	1332	A	C4-C5-C6	8.39	121.19	117.00
1	AA	56	G	N1-C2-N2	8.39	123.75	116.20
2	AB	29	U	O4'-C1'-N1	8.38	114.91	108.20
2	AB	474	G	N7-C8-N9	8.39	117.29	113.10
2	AB	1744	A	C4'-C3'-C2'	-8.39	94.21	102.60
35	BA	1232	U	C5'-C4'-O4'	8.39	119.16	109.10
2	AB	421	C	C5-C6-N1	-8.38	116.81	121.00
35	BA	423	G	C5-C6-O6	-8.38	123.57	128.60
35	BA	1184	G	C1'-O4'-C4'	8.39	116.61	109.90
2	AB	1760	C	N1-C2-O2	8.38	123.93	118.90
35	BA	213	G	C4-C5-C6	8.38	123.83	118.80
2	AB	852	U	C5'-C4'-O4'	8.38	119.16	109.10
2	AB	1066	U	O4'-C1'-N1	8.38	114.91	108.20
2	AB	1941	C	O4'-C1'-N1	8.38	114.91	108.20
35	BA	214	C	N1-C2-N3	-8.38	113.33	119.20
35	BA	1038	C	N1-C2-O2	8.38	123.93	118.90
35	BA	1336	C	N3-C4-C5	-8.38	118.55	121.90
1	AA	112	G	O4'-C1'-N9	8.38	114.90	108.20
2	AB	1386	C	N1-C2-O2	8.38	123.93	118.90
35	BA	1282	C	C5-C6-N1	8.38	125.19	121.00
2	AB	69	C	C5-C6-N1	8.38	125.19	121.00
2	AB	848	C	N3-C4-C5	-8.38	118.55	121.90
2	AB	2205	A	C1'-O4'-C4'	-8.38	103.20	109.90
2	AB	934	U	N1-C2-N3	8.38	119.93	114.90
35	BA	130	A	C6-N1-C2	8.38	123.63	118.60
35	BA	598	U	N1-C2-O2	8.38	128.66	122.80
35	BA	1509	C	N1-C2-O2	8.38	123.93	118.90
2	AB	784	G	C5-C6-N1	8.38	115.69	111.50
2	AB	1810	A	C6-C5-N7	8.38	138.16	132.30
35	BA	1001	C	C6-N1-C2	8.38	123.65	120.30
1	AA	57	A	O4'-C1'-N9	8.37	114.90	108.20
2	AB	156	A	N7-C8-N9	-8.38	109.61	113.80
2	AB	1108	U	C4'-C3'-C2'	-8.37	94.23	102.60
2	AB	1802	A	O4'-C1'-N9	8.38	114.90	108.20
35	BA	68	G	N7-C8-N9	8.38	117.29	113.10
35	BA	351	G	C5-C6-O6	-8.38	123.58	128.60
2	AB	27	G	C1'-O4'-C4'	8.37	116.60	109.90
2	AB	1945	G	C6-N1-C2	-8.37	120.08	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	138	U	N3-C4-O4	8.37	125.26	119.40
2	AB	1322	A	C1'-O4'-C4'	8.37	116.60	109.90
2	AB	1755	A	N9-C1'-C2'	-8.37	102.79	112.00
35	BA	182	A	C4-C5-C6	8.37	121.19	117.00
35	BA	1255	G	N1-C2-N2	8.37	123.74	116.20
35	BA	147	G	O4'-C1'-N9	8.37	114.90	108.20
35	BA	868	C	N3-C2-O2	-8.37	116.04	121.90
2	AB	147	C	C6-N1-C2	-8.37	116.95	120.30
2	AB	2881	U	O4'-C1'-N1	8.37	114.90	108.20
37	BC	9	G	C3'-C2'-C1'	8.37	108.19	101.50
2	AB	1094	U	O4'-C1'-N1	8.37	114.89	108.20
2	AB	2421	G	C4-C5-N7	-8.37	107.45	110.80
2	AB	2856	A	C5-C6-N6	-8.37	117.01	123.70
35	BA	255	G	N9-C4-C5	8.37	108.75	105.40
35	BA	923	A	N9-C4-C5	-8.37	102.45	105.80
35	BA	989	U	N1-C2-O2	-8.37	116.94	122.80
2	AB	553	G	N7-C8-N9	-8.37	108.92	113.10
2	AB	1797	G	N3-C4-C5	-8.37	124.42	128.60
2	AB	1800	C	C5-C6-N1	8.37	125.18	121.00
2	AB	2051	A	N1-C2-N3	-8.37	125.12	129.30
3	AC	134	ARG	NE-CZ-NH1	8.37	124.48	120.30
35	BA	673	A	N1-C2-N3	-8.37	125.12	129.30
35	BA	1017	U	N3-C4-O4	-8.36	113.55	119.40
35	BA	1052	U	C5-C4-O4	-8.36	120.88	125.90
35	BA	1371	G	N7-C8-N9	-8.36	108.92	113.10
2	AB	1027	A	C5-C6-N6	-8.36	117.01	123.70
2	AB	1617	C	C2-N3-C4	-8.36	115.72	119.90
2	AB	1751	U	C5-C4-O4	-8.36	120.88	125.90
2	AB	2755	C	O4'-C1'-N1	8.36	114.89	108.20
35	BA	863	U	C3'-C2'-C1'	8.36	108.19	101.50
2	AB	2226	C	N3-C4-N4	8.36	123.85	118.00
2	AB	2265	U	C6-N1-C2	-8.36	115.98	121.00
2	AB	2324	U	O4'-C1'-N1	8.36	114.89	108.20
2	AB	2803	G	N3-C2-N2	8.36	125.75	119.90
35	BA	222	C	C5-C4-N4	-8.36	114.35	120.20
35	BA	651	C	N3-C4-N4	8.36	123.85	118.00
35	BA	1034	G	N9-C4-C5	8.36	108.75	105.40
35	BA	1219	A	N3-C4-C5	-8.36	120.95	126.80
37	BC	37	U	N3-C2-O2	-8.36	116.35	122.20
2	AB	947	A	O4'-C1'-N9	8.36	114.89	108.20
2	AB	1255	U	C5-C6-N1	8.36	126.88	122.70
35	BA	39	G	C2-N3-C4	8.36	116.08	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
53	BS	39	ARG	NE-CZ-NH2	-8.36	116.12	120.30
2	AB	149	A	C2-N3-C4	-8.36	106.42	110.60
2	AB	726	G	C5-C6-O6	-8.36	123.58	128.60
2	AB	1895	C	C5'-C4'-O4'	-8.36	99.07	109.10
35	BA	833	G	C5-C6-N1	8.36	115.68	111.50
35	BA	1355	G	C6-N1-C2	-8.36	120.08	125.10
1	AA	57	A	P-O3'-C3'	8.36	129.73	119.70
2	AB	405	U	C4'-C3'-C2'	-8.36	94.24	102.60
2	AB	114	U	N3-C2-O2	-8.36	116.35	122.20
2	AB	1085	A	C6-C5-N7	8.36	138.15	132.30
2	AB	2597	G	N7-C8-N9	8.36	117.28	113.10
2	AB	2814	A	C4'-C3'-C2'	-8.36	94.24	102.60
35	BA	614	C	N3-C2-O2	-8.36	116.05	121.90
35	BA	737	C	N1-C2-O2	8.36	123.91	118.90
35	BA	730	G	O4'-C1'-N9	8.35	114.88	108.20
35	BA	761	G	N9-C4-C5	8.35	108.74	105.40
35	BA	1523	G	N7-C8-N9	8.35	117.28	113.10
1	AA	47	C	N3-C2-O2	-8.35	116.05	121.90
2	AB	286	U	N3-C4-O4	8.35	125.25	119.40
2	AB	581	C	C6-N1-C2	-8.35	116.96	120.30
2	AB	891	G	C5'-C4'-O4'	8.35	119.12	109.10
35	BA	305	G	C4-C5-N7	8.35	114.14	110.80
35	BA	541	G	P-O3'-C3'	8.35	129.72	119.70
35	BA	830	G	C4-C5-N7	-8.35	107.46	110.80
35	BA	1197	A	C8-N9-C4	-8.35	102.46	105.80
2	AB	316	C	C6-N1-C2	8.35	123.64	120.30
2	AB	883	G	O4'-C1'-N9	8.35	114.88	108.20
2	AB	2045	C	C5-C4-N4	-8.35	114.36	120.20
2	AB	469	G	N3-C4-N9	8.35	131.01	126.00
2	AB	1401	G	C6-N1-C2	-8.35	120.09	125.10
2	AB	2674	G	N3-C2-N2	-8.35	114.06	119.90
35	BA	1215	G	C1'-O4'-C4'	-8.35	103.22	109.90
2	AB	883	G	C2-N3-C4	8.35	116.07	111.90
2	AB	2087	G	C5-N7-C8	-8.35	100.13	104.30
35	BA	1100	C	C6-N1-C2	-8.35	116.96	120.30
35	BA	1385	G	C4-C5-C6	-8.35	113.79	118.80
2	AB	2280	G	C8-N9-C4	-8.35	103.06	106.40
2	AB	2319	G	C4-C5-C6	8.35	123.81	118.80
35	BA	1504	G	C4-C5-N7	-8.35	107.46	110.80
35	BA	696	A	C1'-O4'-C4'	-8.34	103.22	109.90
2	AB	4	U	O4'-C1'-N1	8.34	114.87	108.20
2	AB	228	C	N3-C2-O2	-8.34	116.06	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2049	G	C4-C5-N7	-8.34	107.46	110.80
2	AB	2725	A	N9-C4-C5	8.34	109.14	105.80
2	AB	433	C	O4'-C1'-N1	8.34	114.87	108.20
2	AB	1391	U	C2-N3-C4	-8.34	122.00	127.00
2	AB	1922	G	C4-C5-N7	8.34	114.14	110.80
2	AB	2127	G	N9-C4-C5	8.34	108.74	105.40
35	BA	1121	U	C5'-C4'-C3'	-8.34	102.65	116.00
35	BA	1316	G	N9-C4-C5	8.34	108.74	105.40
2	AB	1535	A	O4'-C1'-N9	8.34	114.87	108.20
35	BA	551	U	C6-N1-C2	-8.34	116.00	121.00
2	AB	542	C	N1-C2-O2	8.34	123.90	118.90
2	AB	2223	G	C5-C6-O6	-8.34	123.60	128.60
2	AB	2428	G	N7-C8-N9	8.34	117.27	113.10
35	BA	326	G	C2-N3-C4	8.34	116.07	111.90
35	BA	1257	A	C6-N1-C2	8.34	123.60	118.60
35	BA	1352	C	C2-N3-C4	-8.34	115.73	119.90
2	AB	896	A	O4'-C4'-C3'	8.34	112.77	106.10
2	AB	924	G	C6-N1-C2	-8.34	120.10	125.10
2	AB	2349	G	C5-N7-C8	-8.34	100.13	104.30
18	AR	100	ARG	NE-CZ-NH2	8.34	124.47	120.30
35	BA	9	G	N7-C8-N9	8.34	117.27	113.10
35	BA	610	U	C3'-C2'-C1'	-8.34	94.83	101.50
35	BA	774	G	O4'-C1'-N9	8.34	114.87	108.20
2	AB	1194	A	N9-C1'-C2'	-8.34	102.83	112.00
2	AB	1843	C	P-O3'-C3'	8.34	129.70	119.70
35	BA	1254	A	N9-C4-C5	8.34	109.14	105.80
35	BA	1390	U	O4'-C1'-N1	8.34	114.87	108.20
2	AB	2024	G	C5-C6-O6	-8.34	123.60	128.60
2	AB	2745	C	N1-C2-O2	8.34	123.90	118.90
35	BA	156	C	C3'-C2'-C1'	8.34	108.17	101.50
42	BH	128	ASP	CB-CG-OD2	-8.34	110.80	118.30
2	AB	285	G	C5-N7-C8	8.33	108.47	104.30
2	AB	381	G	C4-C5-N7	-8.33	107.47	110.80
2	AB	946	C	C6-N1-C2	8.33	123.63	120.30
2	AB	1952	A	C3'-C2'-C1'	8.33	108.17	101.50
2	AB	948	C	O4'-C1'-N1	8.33	114.86	108.20
2	AB	1728	C	O4'-C1'-C2'	-8.33	97.47	105.80
2	AB	1823	G	N3-C4-N9	8.33	131.00	126.00
2	AB	2133	G	C8-N9-C4	-8.33	103.07	106.40
2	AB	2352	A	C2-N3-C4	8.33	114.77	110.60
2	AB	2707	U	C5-C4-O4	8.33	130.90	125.90
2	AB	2745	C	O4'-C1'-N1	8.33	114.87	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	3	A	C8-N9-C4	-8.33	102.47	105.80
35	BA	565	U	C4-C5-C6	8.33	124.70	119.70
35	BA	232	G	C5-C6-N1	-8.33	107.33	111.50
2	AB	240	C	C4-C5-C6	8.33	121.57	117.40
2	AB	447	A	C4-C5-C6	-8.33	112.83	117.00
2	AB	1126	A	N1-C2-N3	-8.33	125.14	129.30
2	AB	2087	G	C5-C6-N1	8.33	115.66	111.50
2	AB	2160	C	C5-C6-N1	8.33	125.17	121.00
35	BA	1205	U	O4'-C1'-N1	8.33	114.86	108.20
2	AB	608	A	O4'-C1'-N9	8.33	114.86	108.20
2	AB	644	A	P-O3'-C3'	8.33	129.69	119.70
2	AB	890	C	N3-C4-C5	-8.33	118.57	121.90
2	AB	2141	G	N3-C4-C5	-8.33	124.44	128.60
2	AB	1441	G	N1-C2-N3	-8.33	118.90	123.90
35	BA	578	C	N3-C4-C5	-8.33	118.57	121.90
35	BA	1031	C	N1-C2-O2	8.33	123.90	118.90
1	AA	101	A	C5-C6-N1	-8.32	113.54	117.70
2	AB	493	G	N3-C4-C5	-8.32	124.44	128.60
2	AB	660	C	C5-C4-N4	8.32	126.03	120.20
2	AB	1469	A	C2-N3-C4	-8.32	106.44	110.60
35	BA	1180	A	C5-C6-N1	8.32	121.86	117.70
2	AB	717	C	O4'-C1'-N1	8.32	114.86	108.20
2	AB	2334	U	N3-C2-O2	-8.32	116.37	122.20
8	AH	169	ARG	NE-CZ-NH1	-8.32	116.14	120.30
35	BA	311	C	C6-N1-C2	-8.32	116.97	120.30
35	BA	951	G	N9-C4-C5	-8.32	102.07	105.40
35	BA	143	A	N7-C8-N9	8.32	117.96	113.80
35	BA	665	A	O4'-C1'-N9	8.32	114.86	108.20
35	BA	1455	G	C6-N1-C2	-8.32	120.11	125.10
35	BA	1510	C	C5-C4-N4	8.32	126.03	120.20
2	AB	80	G	C1'-O4'-C4'	-8.32	103.24	109.90
35	BA	1171	A	C3'-C2'-C1'	8.32	108.16	101.50
2	AB	132	G	N1-C6-O6	8.32	124.89	119.90
2	AB	209	C	C2-N3-C4	8.32	124.06	119.90
2	AB	954	G	N1-C2-N3	-8.32	118.91	123.90
2	AB	1424	G	O4'-C1'-N9	8.32	114.86	108.20
2	AB	1557	C	N3-C2-O2	-8.32	116.08	121.90
35	BA	633	G	N9-C4-C5	8.32	108.73	105.40
2	AB	31	C	O4'-C1'-N1	8.32	114.85	108.20
2	AB	1441	G	C2-N3-C4	8.32	116.06	111.90
2	AB	25	U	O4'-C1'-N1	8.32	114.85	108.20
2	AB	404	A	O4'-C1'-N9	8.32	114.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1380	G	C2-N3-C4	8.32	116.06	111.90
2	AB	1434	A	C5-C6-N1	8.32	121.86	117.70
2	AB	1651	G	P-O3'-C3'	8.32	129.68	119.70
2	AB	1607	C	N3-C4-C5	-8.32	118.57	121.90
2	AB	2061	G	N1-C6-O6	-8.32	114.91	119.90
2	AB	2194	U	N1-C2-N3	8.32	119.89	114.90
2	AB	2490	G	C6-N1-C2	8.32	130.09	125.10
2	AB	2748	A	C5'-C4'-C3'	-8.32	102.69	116.00
35	BA	60	A	N9-C4-C5	8.32	109.13	105.80
35	BA	161	A	C8-N9-C4	-8.32	102.47	105.80
35	BA	321	A	C5-N7-C8	-8.32	99.74	103.90
35	BA	600	A	N1-C6-N6	-8.32	113.61	118.60
35	BA	816	A	C3'-C2'-C1'	8.32	108.15	101.50
35	BA	973	G	N3-C4-C5	-8.32	124.44	128.60
35	BA	1212	U	N1-C2-O2	8.32	128.62	122.80
40	BF	72	ARG	NE-CZ-NH2	-8.32	116.14	120.30
44	BJ	14	ARG	NE-CZ-NH2	8.32	124.46	120.30
2	AB	175	G	C4-C5-N7	8.31	114.12	110.80
2	AB	504	A	C2-N3-C4	-8.31	106.44	110.60
2	AB	1086	A	C5-N7-C8	-8.31	99.74	103.90
2	AB	555	G	N1-C6-O6	-8.31	114.91	119.90
2	AB	1455	G	C6-C5-N7	8.31	135.39	130.40
2	AB	1863	G	C8-N9-C4	-8.31	103.08	106.40
2	AB	2695	U	C4'-C3'-C2'	-8.31	94.29	102.60
3	AC	71	ARG	NE-CZ-NH1	8.31	124.46	120.30
35	BA	1067	A	C5-C6-N6	-8.31	117.05	123.70
2	AB	275	C	C5'-C4'-O4'	8.31	119.07	109.10
2	AB	851	C	O4'-C1'-N1	8.31	114.85	108.20
2	AB	2087	G	N1-C2-N3	-8.31	118.91	123.90
2	AB	2888	C	C4'-C3'-C2'	-8.31	94.29	102.60
35	BA	669	G	N3-C4-N9	8.31	130.99	126.00
35	BA	821	G	O4'-C1'-N9	8.31	114.85	108.20
4	AD	42	ARG	NE-CZ-NH2	-8.31	116.14	120.30
15	AO	50	ARG	NE-CZ-NH2	8.31	124.45	120.30
35	BA	313	A	N7-C8-N9	-8.31	109.64	113.80
35	BA	1132	C	N3-C2-O2	-8.31	116.08	121.90
2	AB	977	G	N3-C4-C5	-8.31	124.45	128.60
2	AB	1281	G	C8-N9-C4	-8.31	103.08	106.40
2	AB	1194	A	C4-C5-N7	-8.31	106.55	110.70
2	AB	1210	G	C4-C5-N7	-8.31	107.48	110.80
2	AB	1223	G	C4-C5-N7	-8.31	107.48	110.80
2	AB	1684	G	C4-C5-N7	8.31	114.12	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1340	A	C8-N9-C4	8.31	109.12	105.80
2	AB	2315	G	C1'-O4'-C4'	-8.31	103.25	109.90
2	AB	2712	C	C1'-O4'-C4'	8.31	116.55	109.90
35	BA	674	G	N3-C4-C5	-8.31	124.45	128.60
35	BA	1077	G	N7-C8-N9	8.31	117.25	113.10
35	BA	1282	C	C6-N1-C2	-8.31	116.98	120.30
35	BA	1492	A	C5-N7-C8	-8.31	99.75	103.90
2	AB	608	A	C5-N7-C8	-8.31	99.75	103.90
35	BA	129	A	C2-N3-C4	8.31	114.75	110.60
2	AB	198	C	N1-C2-O2	-8.30	113.92	118.90
2	AB	629	G	N3-C2-N2	8.30	125.71	119.90
2	AB	2318	G	O4'-C4'-C3'	8.30	112.74	106.10
2	AB	2758	A	C4-C5-N7	-8.30	106.55	110.70
35	BA	650	G	O4'-C1'-N9	-8.30	101.56	108.20
35	BA	1206	G	C6-C5-N7	-8.31	125.42	130.40
35	BA	12	U	O4'-C1'-N1	8.30	114.84	108.20
35	BA	581	G	C6-N1-C2	-8.30	120.12	125.10
35	BA	874	G	C4-C5-N7	-8.30	107.48	110.80
1	AA	61	G	N7-C8-N9	8.30	117.25	113.10
2	AB	941	A	C6-N1-C2	-8.30	113.62	118.60
2	AB	2016	U	N3-C4-C5	-8.30	109.62	114.60
2	AB	1278	C	O4'-C1'-N1	8.30	114.84	108.20
2	AB	1538	G	C8-N9-C4	-8.30	103.08	106.40
2	AB	1606	C	C5-C6-N1	8.30	125.15	121.00
35	BA	61	G	C8-N9-C4	-8.30	103.08	106.40
35	BA	696	A	N9-C4-C5	8.30	109.12	105.80
2	AB	223	A	O4'-C1'-N9	8.30	114.84	108.20
2	AB	963	U	O4'-C1'-N1	8.30	114.84	108.20
35	BA	236	A	N1-C6-N6	8.30	123.58	118.60
2	AB	97	C	N1-C2-N3	-8.30	113.39	119.20
2	AB	2668	G	N3-C2-N2	-8.30	114.09	119.90
35	BA	1053	G	C5-C6-O6	-8.30	123.62	128.60
2	AB	550	C	O4'-C1'-N1	8.30	114.84	108.20
2	AB	1789	A	C4-C5-C6	8.30	121.15	117.00
2	AB	1811	G	N3-C2-N2	-8.30	114.09	119.90
35	BA	42	G	P-O3'-C3'	8.29	129.65	119.70
35	BA	558	G	N1-C6-O6	-8.29	114.92	119.90
35	BA	1334	G	N1-C6-O6	8.29	124.88	119.90
35	BA	1489	G	O4'-C4'-C3'	8.29	112.73	106.10
2	AB	464	U	N1-C2-N3	8.29	119.88	114.90
2	AB	1027	A	C5-N7-C8	-8.29	99.75	103.90
2	AB	2001	C	N3-C4-C5	-8.29	118.58	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	785	G	C5-C6-N1	8.29	115.65	111.50
2	AB	1400	U	N1-C2-O2	-8.29	117.00	122.80
2	AB	1560	G	N7-C8-N9	8.29	117.25	113.10
2	AB	2731	G	N3-C4-C5	-8.29	124.45	128.60
2	AB	2851	A	C5-C6-N6	8.29	130.33	123.70
2	AB	312	G	C5-C6-N1	8.29	115.64	111.50
2	AB	2253	G	C8-N9-C4	-8.29	103.08	106.40
2	AB	2528	U	C5-C6-N1	-8.29	118.56	122.70
2	AB	2611	C	N3-C4-N4	8.29	123.80	118.00
2	AB	2868	A	C5-C6-N6	8.29	130.33	123.70
35	BA	378	G	N7-C8-N9	8.29	117.25	113.10
35	BA	1491	G	N7-C8-N9	8.29	117.25	113.10
35	BA	725	G	N3-C4-C5	-8.29	124.46	128.60
2	AB	756	A	N3-C4-C5	8.29	132.60	126.80
35	BA	1465	A	C4'-C3'-C2'	-8.29	94.31	102.60
2	AB	2800	A	C5-N7-C8	8.28	108.04	103.90
35	BA	199	A	C5-C6-N6	-8.28	117.07	123.70
35	BA	1500	A	C5-C6-N6	-8.28	117.07	123.70
2	AB	264	C	C3'-C2'-C1'	8.28	108.13	101.50
2	AB	1655	A	C4-C5-N7	8.28	114.84	110.70
2	AB	2476	A	C8-N9-C4	-8.28	102.49	105.80
2	AB	2812	G	N3-C2-N2	-8.28	114.10	119.90
35	BA	1496	C	O4'-C4'-C3'	-8.28	95.72	104.00
2	AB	1001	A	C5-N7-C8	8.28	108.04	103.90
2	AB	1356	G	N7-C8-N9	8.28	117.24	113.10
2	AB	1423	G	C5-C6-O6	-8.28	123.63	128.60
2	AB	1467	U	O4'-C1'-N1	8.28	114.83	108.20
2	AB	1672	A	N1-C2-N3	8.28	133.44	129.30
2	AB	2769	U	C5-C6-N1	-8.28	118.56	122.70
35	BA	134	G	N3-C2-N2	-8.28	114.10	119.90
35	BA	459	A	C4-C5-C6	-8.28	112.86	117.00
35	BA	1063	C	C2-N3-C4	8.28	124.04	119.90
35	BA	1488	G	C6-C5-N7	-8.28	125.43	130.40
2	AB	437	U	C5-C6-N1	-8.28	118.56	122.70
2	AB	1637	A	C5-N7-C8	8.28	108.04	103.90
2	AB	667	U	C1'-O4'-C4'	8.28	116.52	109.90
2	AB	2274	A	N1-C2-N3	-8.28	125.16	129.30
2	AB	2737	G	N3-C2-N2	8.28	125.69	119.90
28	A1	56	VAL	CA-CB-CG1	-8.28	98.48	110.90
35	BA	359	G	N3-C4-C5	-8.28	124.46	128.60
35	BA	844	G	O4'-C1'-N9	8.28	114.82	108.20
35	BA	399	G	C5-C6-N1	8.28	115.64	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	431	A	C1'-O4'-C4'	-8.28	103.28	109.90
35	BA	753	A	C4-C5-N7	-8.28	106.56	110.70
2	AB	1049	C	N3-C4-C5	-8.28	118.59	121.90
35	BA	556	C	O4'-C1'-N1	8.28	114.82	108.20
36	BB	48	C	N3-C4-N4	8.28	123.79	118.00
35	BA	1210	C	C5-C6-N1	8.28	125.14	121.00
37	BC	4	G	N7-C8-N9	8.28	117.24	113.10
2	AB	1127	A	C1'-O4'-C4'	-8.27	103.28	109.90
2	AB	1210	G	C6-N1-C2	-8.27	120.14	125.10
2	AB	1250	G	O4'-C1'-N9	8.27	114.82	108.20
2	AB	1509	A	N3-C4-C5	-8.27	121.01	126.80
2	AB	1834	U	N3-C4-O4	8.27	125.19	119.40
2	AB	2009	A	N9-C4-C5	8.27	109.11	105.80
2	AB	2294	G	C5'-C4'-O4'	8.27	119.03	109.10
35	BA	275	G	C8-N9-C4	-8.27	103.09	106.40
2	AB	2253	G	N1-C6-O6	8.27	124.86	119.90
2	AB	2302	U	O4'-C1'-N1	8.27	114.82	108.20
35	BA	137	U	O4'-C1'-N1	8.27	114.82	108.20
35	BA	243	A	C2-N3-C4	8.27	114.74	110.60
35	BA	907	A	C5'-C4'-O4'	8.27	119.03	109.10
36	BB	16	A	C8-N9-C4	-8.27	102.49	105.80
37	BC	54	G	C6-C5-N7	8.27	135.36	130.40
2	AB	443	A	N9-C4-C5	8.27	109.11	105.80
2	AB	707	G	N3-C4-C5	-8.27	124.47	128.60
2	AB	1025	G	C3'-C2'-C1'	-8.27	94.88	101.50
2	AB	1056	G	N1-C2-N3	-8.27	118.94	123.90
2	AB	1480	C	O4'-C1'-N1	8.27	114.82	108.20
2	AB	1439	A	C8-N9-C4	-8.27	102.49	105.80
2	AB	1947	C	C4'-C3'-C2'	-8.27	94.33	102.60
2	AB	2516	A	N1-C2-N3	8.27	133.43	129.30
35	BA	330	C	C6-N1-C2	8.27	123.61	120.30
35	BA	789	U	P-O3'-C3'	8.27	129.62	119.70
35	BA	1529	G	C8-N9-C4	-8.27	103.09	106.40
35	BA	1068	G	C8-N9-C4	-8.27	103.09	106.40
2	AB	446	G	N1-C2-N3	-8.27	118.94	123.90
2	AB	464	U	N3-C4-O4	8.27	125.19	119.40
2	AB	1552	A	N9-C4-C5	-8.27	102.49	105.80
30	A3	51	ARG	NE-CZ-NH2	8.27	124.43	120.30
2	AB	291	G	C4-C5-N7	-8.26	107.50	110.80
2	AB	763	G	C6-N1-C2	-8.26	120.14	125.10
2	AB	973	A	C5-C6-N1	8.26	121.83	117.70
2	AB	2714	G	N7-C8-N9	8.26	117.23	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2	G	O4'-C1'-N9	8.26	114.81	108.20
2	AB	177	G	C8-N9-C4	-8.26	103.10	106.40
2	AB	258	G	N1-C6-O6	-8.26	114.94	119.90
2	AB	640	C	O4'-C1'-N1	8.26	114.81	108.20
2	AB	974	G	N3-C4-C5	-8.26	124.47	128.60
2	AB	1001	A	N9-C4-C5	8.26	109.10	105.80
2	AB	1662	U	O4'-C1'-N1	8.26	114.81	108.20
2	AB	1879	C	C3'-C2'-C1'	8.26	108.11	101.50
2	AB	2283	C	C5-C4-N4	-8.26	114.42	120.20
2	AB	2389	G	C5-C6-O6	-8.26	123.64	128.60
35	BA	72	A	C5'-C4'-O4'	8.26	119.01	109.10
35	BA	252	U	N3-C2-O2	-8.26	116.42	122.20
35	BA	1002	G	C8-N9-C4	-8.26	103.09	106.40
35	BA	76	G	C2-N3-C4	8.26	116.03	111.90
35	BA	1175	G	C2-N3-C4	8.26	116.03	111.90
1	AA	41	G	C5-C6-O6	8.26	133.55	128.60
2	AB	2731	G	N1-C6-O6	8.26	124.85	119.90
35	BA	350	G	C8-N9-C4	-8.26	103.10	106.40
1	AA	111	U	N1-C1'-C2'	-8.26	102.92	112.00
2	AB	78	U	N3-C2-O2	-8.26	116.42	122.20
2	AB	789	A	C5-N7-C8	-8.26	99.77	103.90
2	AB	1433	A	N3-C4-C5	-8.26	121.02	126.80
2	AB	2890	G	N9-C4-C5	8.26	108.70	105.40
35	BA	1227	A	C4'-C3'-C2'	-8.26	94.34	102.60
2	AB	1017	G	N3-C4-C5	-8.25	124.47	128.60
35	BA	77	A	C5-N7-C8	8.25	108.03	103.90
35	BA	231	U	C5-C6-N1	-8.25	118.57	122.70
35	BA	502	A	O4'-C1'-N9	8.25	114.80	108.20
2	AB	188	G	N9-C4-C5	8.25	108.70	105.40
2	AB	1149	G	C5-C6-N1	8.25	115.63	111.50
2	AB	1279	G	N9-C4-C5	-8.25	102.10	105.40
2	AB	1465	G	C6-C5-N7	-8.25	125.45	130.40
2	AB	1763	G	N3-C4-C5	-8.25	124.47	128.60
35	BA	299	G	N3-C2-N2	-8.25	114.12	119.90
2	AB	994	C	C6-N1-C2	8.25	123.60	120.30
35	BA	1315	U	C6-N1-C2	8.25	125.95	121.00
45	BK	84	ARG	NE-CZ-NH2	-8.25	116.18	120.30
53	BS	61	ARG	NE-CZ-NH2	-8.25	116.17	120.30
56	BV	73	ARG	NE-CZ-NH1	8.25	124.42	120.30
2	AB	101	A	N9-C4-C5	8.25	109.10	105.80
2	AB	718	A	C8-N9-C4	-8.25	102.50	105.80
2	AB	1657	U	N1-C2-N3	8.25	119.85	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1671	U	C5-C6-N1	8.25	126.82	122.70
2	AB	2741	A	O4'-C1'-C2'	-8.25	97.55	105.80
35	BA	223	A	N1-C2-N3	8.25	133.42	129.30
35	BA	1354	U	O4'-C1'-N1	8.25	114.80	108.20
36	BB	47	C	N3-C2-O2	-8.25	116.13	121.90
2	AB	314	C	C2-N3-C4	8.24	124.02	119.90
2	AB	845	A	C5-C6-N1	-8.24	113.58	117.70
2	AB	2133	G	N3-C4-C5	-8.24	124.48	128.60
1	AA	73	A	C4-C5-C6	8.24	121.12	117.00
2	AB	2358	A	O4'-C1'-N9	8.24	114.80	108.20
2	AB	2618	G	N7-C8-N9	8.24	117.22	113.10
3	AC	74	ARG	NE-CZ-NH1	8.24	124.42	120.30
35	BA	810	C	N1-C2-O2	8.24	123.85	118.90
43	BI	137	ARG	CD-NE-CZ	8.24	135.14	123.60
2	AB	811	U	C5-C6-N1	-8.24	118.58	122.70
2	AB	841	G	C8-N9-C4	-8.24	103.10	106.40
2	AB	1864	U	N3-C2-O2	-8.24	116.43	122.20
2	AB	2216	G	C6-N1-C2	-8.24	120.15	125.10
35	BA	36	C	N3-C4-C5	-8.24	118.60	121.90
35	BA	339	C	N3-C4-C5	-8.24	118.60	121.90
1	AA	58	A	C8-N9-C4	-8.24	102.50	105.80
2	AB	653	U	N1-C2-N3	8.24	119.84	114.90
2	AB	1531	C	N3-C2-O2	-8.24	116.13	121.90
2	AB	1847	A	C5-C6-N1	-8.24	113.58	117.70
35	BA	115	G	N1-C2-N3	8.24	128.84	123.90
35	BA	1433	A	C8-N9-C4	-8.24	102.50	105.80
2	AB	1022	G	C5-C6-N1	8.24	115.62	111.50
35	BA	27	G	C5-C6-O6	-8.24	123.66	128.60
35	BA	332	G	C8-N9-C4	-8.24	103.11	106.40
2	AB	1659	G	N3-C4-C5	-8.24	124.48	128.60
2	AB	2485	G	P-O3'-C3'	8.24	129.58	119.70
35	BA	505	G	C4-C5-C6	8.24	123.74	118.80
35	BA	761	G	N3-C2-N2	-8.24	114.14	119.90
36	BB	27	A	N9-C4-C5	8.24	109.09	105.80
2	AB	136	G	C5-N7-C8	8.23	108.42	104.30
2	AB	146	A	N1-C2-N3	-8.23	125.18	129.30
2	AB	637	A	C5-C6-N6	8.23	130.29	123.70
2	AB	2167	U	C3'-C2'-C1'	8.23	108.09	101.50
2	AB	2253	G	C5-C6-O6	-8.23	123.66	128.60
35	BA	193	C	N1-C2-O2	8.23	123.84	118.90
35	BA	213	G	N3-C2-N2	8.23	125.66	119.90
35	BA	1048	G	C4-C5-N7	-8.23	107.51	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	419	U	N1-C2-N3	8.23	119.84	114.90
2	AB	486	C	N3-C4-C5	8.23	125.19	121.90
2	AB	2319	G	N3-C4-N9	8.23	130.94	126.00
2	AB	2400	G	C8-N9-C4	-8.23	103.11	106.40
15	AO	40	ARG	NE-CZ-NH2	8.23	124.42	120.30
40	BF	69	ARG	NE-CZ-NH2	-8.23	116.19	120.30
2	AB	1789	A	C6-N1-C2	-8.23	113.66	118.60
2	AB	2198	A	C6-C5-N7	8.23	138.06	132.30
2	AB	2367	G	C2-N3-C4	8.23	116.01	111.90
35	BA	83	C	O4'-C1'-N1	8.23	114.78	108.20
35	BA	891	U	C5-C6-N1	-8.23	118.59	122.70
36	BB	46	C	N3-C4-C5	-8.23	118.61	121.90
55	BU	36	ARG	NE-CZ-NH1	8.23	124.41	120.30
1	AA	13	G	N3-C4-N9	-8.23	121.06	126.00
2	AB	1424	G	C4-C5-N7	-8.23	107.51	110.80
35	BA	1121	U	C5'-C4'-O4'	8.23	118.97	109.10
2	AB	328	U	P-O3'-C3'	8.22	129.57	119.70
2	AB	2638	G	C5-N7-C8	-8.22	100.19	104.30
35	BA	1304	G	C8-N9-C4	-8.22	103.11	106.40
2	AB	388	G	C5-C6-N1	8.22	115.61	111.50
35	BA	1416	G	C6-N1-C2	-8.22	120.17	125.10
35	BA	1431	A	C5'-C4'-O4'	8.22	118.97	109.10
2	AB	849	A	N7-C8-N9	-8.22	109.69	113.80
2	AB	967	U	N3-C2-O2	8.22	127.95	122.20
2	AB	1444	G	C4'-C3'-C2'	-8.22	94.38	102.60
2	AB	2323	G	N3-C2-N2	-8.22	114.15	119.90
35	BA	579	A	O4'-C1'-N9	8.22	114.78	108.20
35	BA	741	G	N9-C4-C5	8.22	108.69	105.40
2	AB	740	C	C1'-O4'-C4'	8.22	116.47	109.90
2	AB	2800	A	N1-C2-N3	8.22	133.41	129.30
35	BA	876	C	N3-C2-O2	8.22	127.65	121.90
2	AB	1574	C	O4'-C1'-C2'	-8.22	97.58	105.80
2	AB	1904	G	C6-C5-N7	8.22	135.33	130.40
2	AB	2428	G	C6-N1-C2	-8.22	120.17	125.10
35	BA	41	G	O4'-C1'-N9	8.22	114.77	108.20
35	BA	566	G	O4'-C4'-C3'	8.22	112.67	106.10
35	BA	838	G	C4-C5-N7	8.22	114.09	110.80
35	BA	923	A	C8-N9-C4	8.22	109.09	105.80
1	AA	68	C	N1-C2-O2	8.22	123.83	118.90
2	AB	247	G	N1-C6-O6	-8.21	114.97	119.90
2	AB	1179	G	N7-C8-N9	8.21	117.21	113.10
2	AB	1704	C	O4'-C4'-C3'	8.22	112.67	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1434	A	N9-C4-C5	8.21	109.09	105.80
2	AB	1632	A	N1-C6-N6	-8.21	113.67	118.60
2	AB	1684	G	C5-C6-O6	-8.21	123.67	128.60
2	AB	2360	G	C5-C6-O6	-8.21	123.67	128.60
2	AB	2452	C	N1-C2-O2	8.21	123.83	118.90
35	BA	919	A	O4'-C1'-N9	8.21	114.77	108.20
35	BA	947	G	N7-C8-N9	8.21	117.21	113.10
35	BA	1239	A	C6-N1-C2	8.21	123.53	118.60
35	BA	1249	C	C1'-O4'-C4'	-8.21	103.33	109.90
2	AB	1922	G	N3-C4-C5	-8.21	124.49	128.60
2	AB	58	G	C8-N9-C4	-8.21	103.12	106.40
35	BA	289	G	N3-C4-C5	-8.21	124.49	128.60
35	BA	557	G	C4-C5-C6	8.21	123.73	118.80
35	BA	406	G	N9-C4-C5	8.21	108.68	105.40
35	BA	441	A	N9-C4-C5	8.21	109.08	105.80
35	BA	1018	G	N3-C2-N2	-8.21	114.15	119.90
35	BA	1497	G	O4'-C4'-C3'	8.21	112.67	106.10
37	BC	43	G	N9-C4-C5	8.21	108.69	105.40
37	BC	47	A	C4-C5-C6	-8.21	112.89	117.00
1	AA	105	G	N7-C8-N9	-8.21	109.00	113.10
2	AB	125	A	C3'-C2'-C1'	8.21	108.07	101.50
2	AB	1677	A	N9-C4-C5	8.21	109.08	105.80
35	BA	311	C	O4'-C1'-N1	8.21	114.77	108.20
35	BA	351	G	C5-C6-N1	8.21	115.61	111.50
35	BA	1343	G	N3-C2-N2	-8.21	114.15	119.90
2	AB	132	G	N7-C8-N9	8.21	117.20	113.10
2	AB	2751	G	C3'-C2'-C1'	-8.21	94.94	101.50
35	BA	502	A	C5-N7-C8	8.21	108.00	103.90
2	AB	1361	G	C3'-C2'-C1'	8.21	108.06	101.50
2	AB	1848	A	N9-C4-C5	8.21	109.08	105.80
11	AK	7	TYR	CB-CG-CD1	-8.21	116.08	121.00
35	BA	907	A	C5-N7-C8	8.21	108.00	103.90
2	AB	1721	G	C8-N9-C4	-8.20	103.12	106.40
35	BA	263	A	C8-N9-C4	-8.21	102.52	105.80
35	BA	897	C	P-O3'-C3'	8.20	129.54	119.70
35	BA	941	G	C5-C6-N1	8.20	115.60	111.50
35	BA	1359	C	C1'-O4'-C4'	-8.21	103.34	109.90
2	AB	130	C	N3-C4-N4	8.20	123.74	118.00
2	AB	303	G	C8-N9-C4	-8.20	103.12	106.40
2	AB	978	G	N9-C4-C5	8.20	108.68	105.40
2	AB	2049	G	C4'-C3'-C2'	-8.20	94.40	102.60
2	AB	2118	U	C2-N3-C4	-8.20	122.08	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2238	G	N3-C2-N2	-8.20	114.16	119.90
4	AD	188	ARG	NE-CZ-NH1	-8.20	116.20	120.30
35	BA	63	C	C5-C6-N1	-8.20	116.90	121.00
35	BA	162	A	O4'-C1'-N9	8.20	114.76	108.20
35	BA	631	C	C2-N3-C4	8.20	124.00	119.90
35	BA	1076	U	N3-C2-O2	-8.20	116.46	122.20
35	BA	1447	A	C5-C6-N1	-8.20	113.60	117.70
1	AA	5	U	C5'-C4'-O4'	8.20	118.94	109.10
2	AB	334	C	C4-C5-C6	-8.20	113.30	117.40
2	AB	1651	G	N9-C4-C5	8.20	108.68	105.40
35	BA	817	C	N1-C2-N3	-8.20	113.46	119.20
2	AB	211	C	C5-C6-N1	8.20	125.10	121.00
2	AB	673	C	C5-C6-N1	8.20	125.10	121.00
2	AB	1256	G	C4'-C3'-C2'	-8.20	94.40	102.60
2	AB	1701	A	C5-C6-N6	-8.20	117.14	123.70
35	BA	264	C	C5-C6-N1	8.20	125.10	121.00
35	BA	952	U	N1-C2-O2	8.20	128.54	122.80
36	BB	53	G	N3-C4-C5	-8.20	124.50	128.60
37	BC	10	G	N9-C4-C5	8.20	108.68	105.40
2	AB	431	U	N3-C2-O2	-8.20	116.46	122.20
2	AB	2062	A	C6-N1-C2	-8.20	113.68	118.60
2	AB	1023	U	C3'-C2'-C1'	-8.20	94.94	101.50
2	AB	2691	C	N3-C4-N4	-8.20	112.26	118.00
35	BA	144	G	C6-C5-N7	-8.20	125.48	130.40
2	AB	2114	A	C6-N1-C2	-8.19	113.68	118.60
2	AB	2170	A	C8-N9-C4	-8.20	102.52	105.80
35	BA	262	A	C8-N9-C4	-8.20	102.52	105.80
35	BA	43	C	N3-C4-N4	8.19	123.74	118.00
35	BA	565	U	C5-C6-N1	-8.20	118.60	122.70
2	AB	349	U	O4'-C1'-N1	8.19	114.75	108.20
2	AB	644	A	O4'-C1'-N9	8.19	114.75	108.20
2	AB	654	A	C5-N7-C8	8.19	108.00	103.90
2	AB	2101	A	N9-C4-C5	-8.19	102.52	105.80
35	BA	654	G	N3-C2-N2	-8.19	114.17	119.90
35	BA	707	U	C4'-C3'-C2'	-8.19	94.41	102.60
37	BC	19	G	C5-C6-O6	8.19	133.52	128.60
2	AB	1063	G	C5'-C4'-O4'	8.19	118.93	109.10
2	AB	1428	C	C5-C4-N4	-8.19	114.47	120.20
2	AB	727	A	C1'-O4'-C4'	8.19	116.45	109.90
2	AB	730	A	N1-C2-N3	-8.19	125.20	129.30
2	AB	1223	G	O4'-C1'-N9	8.19	114.75	108.20
2	AB	1428	C	O4'-C1'-N1	8.19	114.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1822	C	C5-C6-N1	8.19	125.09	121.00
35	BA	325	A	C6-C5-N7	8.19	138.03	132.30
35	BA	432	A	O4'-C1'-N9	8.19	114.75	108.20
35	BA	874	G	N7-C8-N9	-8.19	109.00	113.10
35	BA	1306	A	N7-C8-N9	8.19	117.89	113.80
35	BA	192	A	O4'-C1'-N9	8.19	114.75	108.20
40	BF	75	TYR	CG-CD2-CE2	-8.19	114.75	121.30
2	AB	197	A	C8-N9-C4	-8.19	102.53	105.80
2	AB	1358	G	C5-N7-C8	8.19	108.39	104.30
2	AB	2573	C	C4'-C3'-C2'	8.19	110.79	102.60
35	BA	52	C	C5-C4-N4	8.19	125.93	120.20
2	AB	2266	A	C5-N7-C8	-8.19	99.81	103.90
35	BA	219	U	N1-C1'-C2'	-8.19	103.00	112.00
35	BA	1233	G	C8-N9-C4	-8.19	103.13	106.40
1	AA	10	G	C6-N1-C2	-8.18	120.19	125.10
2	AB	783	A	O4'-C1'-N9	8.18	114.75	108.20
2	AB	1047	G	N3-C4-N9	8.18	130.91	126.00
35	BA	33	A	N7-C8-N9	8.18	117.89	113.80
36	BB	54	U	C5-C4-O4	-8.18	120.99	125.90
2	AB	1610	A	N1-C6-N6	-8.18	113.69	118.60
2	AB	1632	A	C5-N7-C8	8.18	107.99	103.90
2	AB	1858	A	N7-C8-N9	8.18	117.89	113.80
2	AB	2529	G	N3-C4-C5	-8.18	124.51	128.60
35	BA	85	U	N3-C4-O4	8.18	125.13	119.40
2	AB	2647	U	N1-C2-O2	8.18	128.53	122.80
35	BA	488	C	N3-C4-C5	-8.18	118.63	121.90
2	AB	1323	C	C5'-C4'-C3'	-8.18	102.91	116.00
2	AB	1876	A	C3'-C2'-C1'	8.18	108.05	101.50
35	BA	81	A	O4'-C1'-N9	8.18	114.75	108.20
35	BA	1336	C	O4'-C1'-N1	8.18	114.75	108.20
2	AB	1380	G	N7-C8-N9	8.18	117.19	113.10
2	AB	2823	A	C8-N9-C4	-8.18	102.53	105.80
2	AB	2859	G	C6-C5-N7	-8.18	125.49	130.40
31	A4	5	ARG	NE-CZ-NH1	8.18	124.39	120.30
35	BA	1171	A	C4-C5-N7	8.18	114.79	110.70
35	BA	1242	G	O4'-C1'-N9	8.18	114.74	108.20
2	AB	85	G	C5-C6-O6	-8.18	123.69	128.60
2	AB	300	A	N1-C2-N3	-8.18	125.21	129.30
1	AA	83	G	C4-C5-N7	-8.18	107.53	110.80
2	AB	878	A	C5-C6-N6	-8.18	117.16	123.70
35	BA	932	C	O4'-C1'-N1	8.18	114.74	108.20
36	BB	28	U	N3-C4-O4	8.18	125.12	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	672	C	C4-C5-C6	-8.17	113.31	117.40
2	AB	1678	A	O4'-C4'-C3'	-8.17	95.83	104.00
2	AB	2038	G	N3-C4-N9	8.17	130.91	126.00
35	BA	685	G	N1-C2-N3	-8.17	119.00	123.90
2	AB	529	A	O4'-C1'-N9	8.17	114.74	108.20
2	AB	2267	A	C5-C6-N1	8.17	121.79	117.70
2	AB	2800	A	O4'-C1'-N9	8.17	114.74	108.20
6	AF	114	ARG	NE-CZ-NH2	8.17	124.39	120.30
35	BA	127	G	C2-N3-C4	8.17	115.99	111.90
35	BA	256	U	C6-N1-C2	-8.17	116.10	121.00
35	BA	389	A	N3-C4-C5	-8.17	121.08	126.80
45	BK	98	ARG	NH1-CZ-NH2	-8.17	110.41	119.40
1	AA	1	U	N3-C4-O4	8.17	125.12	119.40
1	AA	10	G	C5-C6-O6	-8.17	123.70	128.60
2	AB	69	C	O4'-C1'-N1	8.17	114.73	108.20
2	AB	420	C	C4-C5-C6	-8.17	113.31	117.40
2	AB	1057	A	C3'-C2'-C1'	-8.17	94.96	101.50
2	AB	2295	C	C2-N3-C4	8.17	123.98	119.90
2	AB	2708	G	N1-C2-N2	8.17	123.55	116.20
35	BA	936	C	C5-C6-N1	8.17	125.08	121.00
2	AB	2578	G	C5'-C4'-O4'	8.17	118.90	109.10
35	BA	302	G	N7-C8-N9	8.17	117.18	113.10
35	BA	968	A	C8-N9-C4	-8.17	102.53	105.80
35	BA	1026	G	N1-C2-N3	-8.17	119.00	123.90
35	BA	972	C	C4'-C3'-C2'	-8.17	94.43	102.60
2	AB	868	U	C5-C6-N1	-8.17	118.62	122.70
2	AB	1394	U	O4'-C1'-N1	8.17	114.73	108.20
2	AB	1943	U	N3-C2-O2	-8.17	116.48	122.20
35	BA	327	A	N1-C2-N3	-8.17	125.22	129.30
2	AB	755	U	N1-C2-N3	8.16	119.80	114.90
2	AB	1031	G	N3-C2-N2	-8.16	114.18	119.90
2	AB	1078	U	N3-C2-O2	-8.16	116.48	122.20
2	AB	2390	U	N1-C1'-C2'	-8.16	103.02	112.00
2	AB	1003	G	C2-N3-C4	8.16	115.98	111.90
2	AB	1313	U	P-O3'-C3'	8.16	129.50	119.70
2	AB	2475	C	C5-C6-N1	8.16	125.08	121.00
35	BA	618	C	P-O3'-C3'	8.16	129.50	119.70
35	BA	675	A	C4-C5-C6	8.16	121.08	117.00
35	BA	1193	G	N3-C4-C5	-8.16	124.52	128.60
2	AB	1879	C	C6-N1-C2	-8.16	117.03	120.30
2	AB	1821	A	O4'-C1'-N9	8.16	114.73	108.20
2	AB	2353	G	N9-C4-C5	8.16	108.66	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2619	C	N1-C2-N3	-8.16	113.49	119.20
2	AB	2740	A	C6-C5-N7	8.16	138.01	132.30
35	BA	319	G	C5-N7-C8	8.16	108.38	104.30
36	BB	33	A	N1-C2-N3	-8.16	125.22	129.30
1	AA	60	C	O4'-C1'-N1	8.16	114.73	108.20
2	AB	405	U	C2-N3-C4	-8.16	122.11	127.00
35	BA	4	U	P-O3'-C3'	8.16	129.49	119.70
2	AB	630	G	N3-C4-N9	-8.16	121.11	126.00
2	AB	1460	U	C4-C5-C6	8.16	124.59	119.70
2	AB	2218	G	C5-N7-C8	-8.16	100.22	104.30
35	BA	339	C	C2-N3-C4	8.16	123.98	119.90
35	BA	190	A	C5'-C4'-O4'	8.15	118.89	109.10
35	BA	237	G	C4-C5-N7	8.15	114.06	110.80
35	BA	862	C	C4'-C3'-C2'	-8.15	94.44	102.60
35	BA	1093	A	O4'-C1'-N9	8.15	114.72	108.20
2	AB	2652	C	N1-C2-N3	-8.15	113.49	119.20
2	AB	2752	C	C5-C4-N4	-8.15	114.49	120.20
35	BA	86	G	C5-N7-C8	-8.15	100.22	104.30
1	AA	88	C	N3-C4-C5	8.15	125.16	121.90
2	AB	149	A	C4'-C3'-C2'	-8.15	94.45	102.60
2	AB	418	C	N3-C4-C5	-8.15	118.64	121.90
2	AB	1279	G	N3-C4-C5	-8.15	124.53	128.60
3	AC	51	ASP	CB-CG-OD1	-8.15	110.96	118.30
30	A3	30	ASP	CB-CG-OD1	-8.15	110.96	118.30
35	BA	204	G	C6-N1-C2	-8.15	120.21	125.10
35	BA	926	G	C4-C5-N7	8.15	114.06	110.80
35	BA	1257	A	C5-C6-N1	-8.15	113.62	117.70
35	BA	1513	A	C5-N7-C8	-8.15	99.82	103.90
35	BA	211	G	C6-C5-N7	-8.15	125.51	130.40
35	BA	494	G	C2-N3-C4	8.15	115.97	111.90
35	BA	889	A	C3'-C2'-C1'	8.15	108.02	101.50
35	BA	1005	A	N1-C2-N3	-8.15	125.22	129.30
35	BA	1422	G	O4'-C1'-N9	8.15	114.72	108.20
40	BF	13	ARG	NE-CZ-NH2	8.15	124.38	120.30
2	AB	884	U	C2-N3-C4	-8.15	122.11	127.00
2	AB	1020	A	O4'-C1'-N9	8.15	114.72	108.20
2	AB	1687	G	N3-C4-N9	8.15	130.89	126.00
2	AB	1841	U	N1-C2-O2	8.15	128.50	122.80
2	AB	2478	A	N1-C2-N3	-8.15	125.23	129.30
2	AB	2699	C	C4'-C3'-C2'	-8.15	94.45	102.60
2	AB	2814	A	O4'-C4'-C3'	8.15	112.62	106.10
2	AB	333	G	N3-C4-C5	-8.15	124.53	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	533	G	C6-N1-C2	-8.15	120.21	125.10
35	BA	653	U	C1'-O4'-C4'	-8.15	103.38	109.90
2	AB	775	G	C2-N3-C4	8.15	115.97	111.90
35	BA	546	A	C5-C6-N1	8.15	121.77	117.70
2	AB	186	G	N1-C6-O6	-8.14	115.01	119.90
35	BA	771	G	O4'-C1'-N9	8.14	114.72	108.20
2	AB	939	G	N1-C2-N3	-8.14	119.01	123.90
2	AB	1102	C	N3-C2-O2	-8.14	116.20	121.90
2	AB	1444	G	N3-C4-C5	8.14	132.67	128.60
2	AB	1816	C	N3-C4-N4	8.14	123.70	118.00
2	AB	2725	A	C4-C5-N7	-8.14	106.63	110.70
35	BA	260	G	C2-N3-C4	8.14	115.97	111.90
35	BA	1016	A	N1-C6-N6	-8.14	113.71	118.60
1	AA	1	U	C4-C5-C6	8.14	124.58	119.70
2	AB	945	A	O4'-C1'-C2'	-8.14	97.66	105.80
2	AB	1242	U	C4-C5-C6	8.14	124.58	119.70
2	AB	1872	A	N9-C1'-C2'	-8.14	103.04	112.00
1	AA	20	G	N7-C8-N9	8.14	117.17	113.10
2	AB	248	G	N3-C4-C5	-8.14	124.53	128.60
2	AB	1224	U	C4-C5-C6	8.14	124.58	119.70
35	BA	288	A	C8-N9-C4	-8.14	102.54	105.80
35	BA	1025	U	C6-N1-C2	-8.14	116.11	121.00
1	AA	41	G	C2-N3-C4	8.14	115.97	111.90
2	AB	1292	G	C8-N9-C4	-8.14	103.14	106.40
2	AB	2756	U	P-O3'-C3'	8.14	129.47	119.70
2	AB	1304	A	N1-C6-N6	-8.14	113.72	118.60
2	AB	1864	U	N1-C2-O2	8.14	128.50	122.80
35	BA	162	A	N1-C2-N3	-8.14	125.23	129.30
35	BA	605	U	C4'-C3'-C2'	-8.14	94.46	102.60
35	BA	1384	C	C5'-C4'-O4'	8.14	118.87	109.10
35	BA	826	C	N1-C2-O2	8.14	123.78	118.90
35	BA	889	A	O4'-C1'-N9	8.14	114.71	108.20
2	AB	565	C	N3-C2-O2	-8.13	116.21	121.90
2	AB	1238	G	C2-N3-C4	8.13	115.97	111.90
35	BA	469	C	N3-C2-O2	-8.14	116.20	121.90
46	BL	96	VAL	CA-CB-CG1	8.14	123.10	110.90
2	AB	2048	G	C2-N3-C4	8.13	115.97	111.90
2	AB	2475	C	N3-C4-C5	-8.13	118.65	121.90
2	AB	2903	U	C5-C4-O4	-8.13	121.02	125.90
30	A3	9	ARG	NE-CZ-NH2	8.13	124.37	120.30
35	BA	664	G	C5-C6-O6	-8.13	123.72	128.60
35	BA	1283	U	C3'-C2'-C1'	8.13	108.01	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	48	U	C4'-C3'-C2'	-8.13	94.47	102.60
2	AB	44	A	C6-C5-N7	8.13	137.99	132.30
2	AB	192	C	C5-C6-N1	8.13	125.07	121.00
2	AB	297	G	N3-C4-C5	-8.13	124.53	128.60
2	AB	2583	G	N7-C8-N9	8.13	117.17	113.10
37	BC	22	A	C4-C5-C6	-8.13	112.93	117.00
2	AB	673	C	O4'-C1'-N1	8.13	114.70	108.20
37	BC	22	A	N1-C6-N6	-8.13	113.72	118.60
2	AB	2689	U	O4'-C1'-N1	8.13	114.70	108.20
2	AB	2750	A	C1'-O4'-C4'	-8.13	103.40	109.90
35	BA	107	G	C5-N7-C8	-8.13	100.23	104.30
37	BC	32	G	C5-C6-N1	8.13	115.57	111.50
46	BL	63	ASP	CB-CG-OD1	-8.13	110.98	118.30
27	A0	7	ARG	NE-CZ-NH2	8.13	124.36	120.30
35	BA	295	C	C6-N1-C2	8.13	123.55	120.30
35	BA	396	C	O4'-C1'-N1	8.13	114.70	108.20
37	BC	30	G	C4-C5-N7	-8.13	107.55	110.80
1	AA	39	A	C8-N9-C4	-8.13	102.55	105.80
2	AB	245	G	C6-C5-N7	-8.13	125.52	130.40
2	AB	599	A	C3'-C2'-C1'	8.13	108.00	101.50
2	AB	759	G	C5'-C4'-O4'	8.13	118.86	109.10
2	AB	1209	U	C4-C5-C6	8.13	124.58	119.70
35	BA	132	C	C2-N3-C4	8.13	123.96	119.90
35	BA	730	G	N9-C4-C5	8.13	108.65	105.40
35	BA	795	C	N1-C1'-C2'	-8.13	103.06	112.00
35	BA	858	G	C3'-C2'-C1'	8.13	108.00	101.50
35	BA	1331	G	C3'-C2'-C1'	-8.13	95.00	101.50
1	AA	96	G	O4'-C1'-N9	8.13	114.70	108.20
2	AB	1236	G	N3-C2-N2	8.12	125.59	119.90
35	BA	558	G	O4'-C1'-N9	8.13	114.70	108.20
2	AB	1574	C	C6-N1-C2	-8.12	117.05	120.30
2	AB	1821	A	C4-C5-N7	-8.12	106.64	110.70
2	AB	2209	G	C8-N9-C4	-8.12	103.15	106.40
2	AB	2824	C	C1'-O4'-C4'	-8.12	103.40	109.90
25	AY	78	PHE	CB-CG-CD2	-8.12	115.11	120.80
35	BA	5	U	O4'-C1'-N1	8.12	114.70	108.20
35	BA	221	C	C4'-C3'-C2'	-8.12	94.47	102.60
35	BA	1017	U	O4'-C1'-N1	8.13	114.70	108.20
35	BA	747	A	N7-C8-N9	8.12	117.86	113.80
2	AB	1733	G	C6-N1-C2	-8.12	120.23	125.10
2	AB	533	G	C5-C6-N1	8.12	115.56	111.50
2	AB	1511	G	C4-C5-N7	-8.12	107.55	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1817	G	N1-C2-N3	-8.12	119.03	123.90
2	AB	2091	C	O4'-C4'-C3'	8.12	112.60	106.10
2	AB	2346	A	C6-C5-N7	8.12	137.99	132.30
2	AB	2411	A	C5-C6-N6	-8.12	117.20	123.70
2	AB	2805	C	N3-C4-C5	-8.12	118.65	121.90
35	BA	969	A	O4'-C1'-N9	8.12	114.70	108.20
2	AB	1617	C	C5-C6-N1	-8.12	116.94	121.00
2	AB	1666	G	C2-N3-C4	-8.12	107.84	111.90
2	AB	1704	C	C3'-C2'-C1'	8.12	108.00	101.50
2	AB	1732	C	O4'-C1'-N1	8.12	114.70	108.20
2	AB	2319	G	C1'-O4'-C4'	-8.12	103.40	109.90
35	BA	204	G	N3-C2-N2	-8.12	114.22	119.90
2	AB	1992	G	C8-N9-C4	-8.12	103.15	106.40
2	AB	2447	G	C5-C6-N1	8.12	115.56	111.50
35	BA	1144	G	C4-C5-N7	-8.12	107.55	110.80
35	BA	156	C	N3-C4-C5	-8.12	118.65	121.90
35	BA	210	C	C1'-O4'-C4'	8.12	116.39	109.90
35	BA	721	G	C5-C6-N1	-8.12	107.44	111.50
35	BA	767	A	C5-C6-N6	-8.12	117.21	123.70
35	BA	915	A	N9-C4-C5	-8.12	102.55	105.80
35	BA	1087	G	N3-C4-C5	-8.12	124.54	128.60
36	BB	32	U	C3'-C2'-C1'	8.11	107.99	101.50
2	AB	82	U	C3'-C2'-C1'	-8.11	95.01	101.50
2	AB	268	C	N3-C4-N4	8.11	123.68	118.00
2	AB	1758	U	C3'-C2'-C1'	8.11	107.99	101.50
2	AB	1846	G	C5'-C4'-O4'	8.11	118.84	109.10
2	AB	2792	A	C2-N3-C4	8.11	114.66	110.60
35	BA	211	G	C4'-C3'-C2'	-8.11	94.49	102.60
2	AB	377	G	C2-N3-C4	8.11	115.96	111.90
35	BA	1403	C	N3-C4-C5	8.11	125.14	121.90
2	AB	592	A	N1-C2-N3	-8.11	125.25	129.30
2	AB	834	G	C2-N3-C4	8.11	115.95	111.90
2	AB	1001	A	C5-C6-N1	8.11	121.75	117.70
2	AB	1177	G	C4-C5-N7	-8.11	107.56	110.80
35	BA	813	U	C5-C4-O4	8.11	130.77	125.90
37	BC	51	U	C5-C6-N1	-8.11	118.65	122.70
2	AB	163	C	O4'-C1'-N1	8.11	114.68	108.20
2	AB	1168	G	N3-C4-N9	-8.11	121.14	126.00
2	AB	2643	G	C1'-O4'-C4'	8.11	116.39	109.90
2	AB	2779	U	C3'-C2'-C1'	-8.11	95.01	101.50
35	BA	433	G	C5-C6-N1	8.11	115.55	111.50
35	BA	1037	C	C6-N1-C2	-8.11	117.06	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	794	A	N1-C6-N6	8.11	123.46	118.60
35	BA	418	C	C6-N1-C2	-8.11	117.06	120.30
35	BA	740	U	C5-C6-N1	-8.11	118.65	122.70
35	BA	890	G	C2-N3-C4	8.11	115.95	111.90
35	BA	1183	U	C4'-C3'-C2'	-8.11	94.50	102.60
2	AB	2212	A	C5-C6-N1	8.10	121.75	117.70
2	AB	2266	A	C4-C5-N7	8.10	114.75	110.70
2	AB	2329	U	O4'-C1'-N1	8.10	114.68	108.20
1	AA	112	G	C3'-C2'-C1'	-8.10	95.02	101.50
2	AB	1254	A	C5-C6-N6	-8.10	117.22	123.70
2	AB	1922	G	C5-N7-C8	-8.10	100.25	104.30
2	AB	2464	G	C6-C5-N7	8.10	135.26	130.40
5	AE	151	THR	CA-CB-CG2	8.10	123.74	112.40
19	AS	52	ARG	NE-CZ-NH1	8.10	124.35	120.30
35	BA	1332	A	N1-C6-N6	8.10	123.46	118.60
35	BA	1462	C	C1'-O4'-C4'	-8.10	103.42	109.90
2	AB	277	G	C5'-C4'-O4'	8.10	118.82	109.10
2	AB	1271	G	N3-C4-C5	8.10	132.65	128.60
1	AA	32	U	N3-C4-O4	8.10	125.07	119.40
2	AB	811	U	C4'-C3'-C2'	-8.10	94.50	102.60
2	AB	2286	G	C8-N9-C4	-8.10	103.16	106.40
2	AB	2762	C	O4'-C1'-N1	8.10	114.68	108.20
2	AB	2792	A	N1-C2-N3	-8.10	125.25	129.30
2	AB	2883	A	C8-N9-C4	-8.10	102.56	105.80
35	BA	859	G	C3'-C2'-C1'	8.10	107.98	101.50
57	BW	54	ARG	NE-CZ-NH2	8.10	124.35	120.30
2	AB	823	C	C5'-C4'-O4'	8.10	118.82	109.10
2	AB	888	C	N3-C4-N4	8.10	123.67	118.00
2	AB	1853	A	C2-N3-C4	8.10	114.65	110.60
35	BA	714	G	C2-N3-C4	8.10	115.95	111.90
2	AB	81	G	C8-N9-C4	-8.10	103.16	106.40
2	AB	1570	A	C5-C6-N1	8.10	121.75	117.70
2	AB	2791	G	C2-N3-C4	8.10	115.95	111.90
35	BA	1316	G	C8-N9-C4	-8.10	103.16	106.40
43	BI	91	ARG	NH1-CZ-NH2	-8.10	110.49	119.40
2	AB	81	G	N1-C6-O6	8.09	124.76	119.90
2	AB	223	A	C6-N1-C2	-8.09	113.74	118.60
2	AB	1157	G	N3-C4-C5	-8.09	124.55	128.60
2	AB	2413	G	O4'-C1'-N9	8.09	114.67	108.20
35	BA	106	C	O4'-C1'-N1	8.09	114.67	108.20
35	BA	1286	U	O4'-C1'-N1	8.09	114.67	108.20
37	BC	25	U	C5-C4-O4	8.09	130.75	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	40	C	C6-N1-C2	-8.09	117.06	120.30
1	AA	94	A	N9-C4-C5	8.09	109.04	105.80
1	AA	97	C	N3-C2-O2	-8.09	116.24	121.90
2	AB	375	G	N3-C2-N2	-8.09	114.24	119.90
2	AB	1299	G	N7-C8-N9	8.09	117.14	113.10
2	AB	1378	A	N1-C2-N3	-8.09	125.26	129.30
2	AB	1776	G	O4'-C1'-N9	8.09	114.67	108.20
2	AB	2293	G	C6-C5-N7	-8.09	125.55	130.40
35	BA	252	U	C5-C4-O4	-8.09	121.05	125.90
35	BA	1302	C	N1-C2-O2	8.09	123.75	118.90
35	BA	1527	U	O4'-C1'-N1	8.09	114.67	108.20
1	AA	47	C	N3-C4-N4	8.09	123.66	118.00
2	AB	754	U	C2-N3-C4	-8.09	122.15	127.00
2	AB	181	A	C5'-C4'-O4'	8.09	118.80	109.10
2	AB	217	A	C4-C5-C6	8.09	121.04	117.00
2	AB	405	U	C4-C5-C6	8.09	124.55	119.70
2	AB	1158	C	C6-N1-C2	-8.09	117.06	120.30
2	AB	1451	C	C2-N3-C4	8.09	123.94	119.90
35	BA	971	G	N7-C8-N9	-8.09	109.06	113.10
2	AB	816	C	N3-C4-C5	-8.09	118.67	121.90
2	AB	886	A	O4'-C1'-N9	8.09	114.67	108.20
2	AB	1216	G	N1-C2-N3	-8.09	119.05	123.90
2	AB	2655	G	N3-C4-C5	-8.09	124.56	128.60
35	BA	980	C	N1-C2-O2	8.08	123.75	118.90
1	AA	69	G	C4-C5-N7	8.08	114.03	110.80
2	AB	307	G	N1-C2-N3	-8.08	119.05	123.90
2	AB	351	C	O4'-C1'-N1	8.08	114.67	108.20
2	AB	685	A	C2-N3-C4	8.08	114.64	110.60
2	AB	1524	G	C5-N7-C8	8.08	108.34	104.30
2	AB	1775	U	O4'-C1'-N1	8.08	114.67	108.20
2	AB	1813	G	N3-C2-N2	-8.08	114.24	119.90
2	AB	2240	U	N1-C2-N3	8.08	119.75	114.90
35	BA	155	A	N9-C4-C5	8.08	109.03	105.80
2	AB	2253	G	N1-C2-N3	-8.08	119.05	123.90
2	AB	377	G	N1-C2-N3	-8.08	119.05	123.90
2	AB	1246	A	N1-C2-N3	-8.08	125.26	129.30
35	BA	162	A	C8-N9-C4	-8.08	102.57	105.80
35	BA	1531	A	C4-C5-N7	-8.08	106.66	110.70
2	AB	1355	G	O4'-C1'-N9	8.08	114.66	108.20
2	AB	2190	G	N3-C4-C5	-8.08	124.56	128.60
2	AB	2632	A	C5-C6-N1	8.08	121.74	117.70
2	AB	2895	G	N3-C4-N9	8.08	130.85	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	189	A	C8-N9-C4	-8.08	102.57	105.80
35	BA	399	G	C5-N7-C8	-8.08	100.26	104.30
35	BA	406	G	C5-N7-C8	-8.08	100.26	104.30
35	BA	460	A	C5-N7-C8	-8.08	99.86	103.90
35	BA	669	G	N3-C4-C5	-8.08	124.56	128.60
2	AB	398	C	C6-N1-C2	8.08	123.53	120.30
2	AB	572	A	C8-N9-C4	-8.08	102.57	105.80
2	AB	716	A	C2-N3-C4	8.08	114.64	110.60
35	BA	1471	U	C2-N3-C4	-8.08	122.15	127.00
2	AB	1001	A	C4-C5-N7	-8.08	106.66	110.70
2	AB	1948	G	N3-C2-N2	-8.08	114.25	119.90
2	AB	2454	G	C6-N1-C2	-8.08	120.25	125.10
2	AB	2674	G	C6-N1-C2	-8.08	120.25	125.10
35	BA	46	G	C6-N1-C2	-8.08	120.25	125.10
35	BA	752	G	N9-C4-C5	8.08	108.63	105.40
56	BV	59	ARG	NE-CZ-NH2	8.08	124.34	120.30
35	BA	980	C	O4'-C1'-N1	8.08	114.66	108.20
2	AB	29	U	P-O3'-C3'	8.07	129.39	119.70
2	AB	507	A	O4'-C1'-N9	8.07	114.66	108.20
2	AB	2438	U	C2-N3-C4	-8.07	122.16	127.00
2	AB	2523	G	C4-C5-N7	8.07	114.03	110.80
35	BA	47	C	C5-C6-N1	8.07	125.04	121.00
2	AB	706	A	N7-C8-N9	8.07	117.84	113.80
2	AB	2707	U	N1-C2-N3	8.07	119.74	114.90
35	BA	1036	A	N9-C4-C5	-8.07	102.57	105.80
35	BA	1094	G	N1-C6-O6	-8.07	115.06	119.90
35	BA	1201	A	P-O3'-C3'	8.07	129.39	119.70
35	BA	1182	G	N1-C6-O6	-8.07	115.06	119.90
35	BA	1260	G	N7-C8-N9	8.07	117.14	113.10
35	BA	1459	G	C2-N3-C4	8.07	115.94	111.90
2	AB	957	C	N3-C4-N4	8.07	123.65	118.00
2	AB	2199	A	N7-C8-N9	8.07	117.84	113.80
2	AB	2584	U	C2-N3-C4	-8.07	122.16	127.00
2	AB	701	G	N7-C8-N9	8.07	117.14	113.10
2	AB	903	C	N3-C2-O2	-8.07	116.25	121.90
2	AB	1585	C	N3-C4-N4	8.07	123.65	118.00
2	AB	1642	G	C6-N1-C2	-8.07	120.26	125.10
2	AB	2813	A	C8-N9-C4	-8.07	102.57	105.80
2	AB	1424	G	C8-N9-C4	-8.07	103.17	106.40
2	AB	1741	C	N1-C1'-C2'	-8.07	103.12	112.00
2	AB	1927	A	O4'-C1'-N9	8.07	114.66	108.20
2	AB	2843	G	C6-C5-N7	-8.07	125.56	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	AG	94	ARG	NE-CZ-NH1	-8.07	116.27	120.30
35	BA	856	C	O4'-C1'-N1	8.07	114.66	108.20
35	BA	865	A	C3'-C2'-C1'	8.07	107.96	101.50
2	AB	512	G	C5-C6-N1	8.07	115.53	111.50
2	AB	818	G	N7-C8-N9	8.07	117.13	113.10
35	BA	895	G	O4'-C1'-N9	8.07	114.66	108.20
35	BA	906	A	P-O3'-C3'	8.07	129.38	119.70
2	AB	1980	G	O4'-C1'-N9	8.07	114.65	108.20
2	AB	2475	C	C6-N1-C2	-8.07	117.07	120.30
35	BA	898	G	C6-N1-C2	-8.07	120.26	125.10
35	BA	1472	U	N3-C2-O2	-8.07	116.55	122.20
38	BD	211	LEU	CB-CG-CD2	8.07	124.71	111.00
47	BM	68	ARG	NE-CZ-NH1	8.07	124.33	120.30
2	AB	829	A	C4-C5-C6	-8.06	112.97	117.00
2	AB	1300	G	C5'-C4'-O4'	8.06	118.78	109.10
2	AB	2124	G	N3-C4-C5	-8.06	124.57	128.60
2	AB	975	A	O4'-C1'-N9	8.06	114.65	108.20
2	AB	271	G	P-O3'-C3'	8.06	129.37	119.70
2	AB	1830	C	C2-N3-C4	8.06	123.93	119.90
2	AB	2399	G	N3-C2-N2	-8.06	114.26	119.90
2	AB	2539	C	N1-C2-O2	-8.06	114.06	118.90
2	AB	2630	G	N3-C4-N9	8.06	130.84	126.00
35	BA	1103	C	C5'-C4'-O4'	8.06	118.77	109.10
2	AB	1071	G	O4'-C1'-N9	8.06	114.65	108.20
2	AB	2321	U	N3-C4-O4	-8.06	113.76	119.40
1	AA	40	U	O4'-C1'-N1	8.06	114.65	108.20
2	AB	1675	C	N3-C2-O2	-8.06	116.26	121.90
35	BA	12	U	C4-C5-C6	8.06	124.53	119.70
35	BA	45	G	N1-C2-N3	8.06	128.74	123.90
35	BA	183	C	N1-C2-O2	-8.06	114.06	118.90
35	BA	259	G	N3-C4-C5	-8.06	124.57	128.60
35	BA	262	A	C2-N3-C4	8.06	114.63	110.60
35	BA	280	C	C5-C6-N1	8.06	125.03	121.00
35	BA	508	U	N3-C2-O2	-8.06	116.56	122.20
35	BA	1538	C	C4-C5-C6	-8.06	113.37	117.40
2	AB	378	C	O4'-C1'-N1	8.06	114.64	108.20
2	AB	2418	A	C4-C5-C6	-8.06	112.97	117.00
1	AA	29	A	N1-C2-N3	-8.05	125.27	129.30
2	AB	758	C	C1'-O4'-C4'	8.05	116.34	109.90
2	AB	901	C	C6-N1-C2	-8.05	117.08	120.30
2	AB	2603	G	C5-C6-N1	8.06	115.53	111.50
2	AB	2867	G	C5-N7-C8	8.05	108.33	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	918	A	N7-C8-N9	-8.06	109.77	113.80
35	BA	1079	G	N3-C4-C5	-8.06	124.57	128.60
35	BA	1208	C	O4'-C1'-N1	8.05	114.64	108.20
35	BA	1488	G	N1-C6-O6	8.05	124.73	119.90
45	BK	90	ASP	CB-CG-OD2	-8.06	111.05	118.30
2	AB	1137	G	N3-C4-C5	-8.05	124.57	128.60
2	AB	1746	A	C5-C6-N6	8.05	130.14	123.70
2	AB	2832	U	O4'-C1'-N1	8.05	114.64	108.20
35	BA	27	G	N3-C2-N2	-8.05	114.26	119.90
35	BA	914	A	N7-C8-N9	8.05	117.83	113.80
35	BA	1271	A	C2-N3-C4	8.05	114.63	110.60
2	AB	973	A	C4-C5-C6	-8.05	112.97	117.00
2	AB	1188	U	C4'-C3'-C2'	-8.05	94.55	102.60
2	AB	1315	C	C4-C5-C6	8.05	121.43	117.40
2	AB	1400	U	N3-C4-O4	8.05	125.04	119.40
2	AB	1809	A	N1-C2-N3	-8.05	125.27	129.30
2	AB	1882	U	C6-N1-C2	8.05	125.83	121.00
35	BA	1245	C	C2-N3-C4	8.05	123.93	119.90
2	AB	1964	G	N3-C4-C5	-8.05	124.58	128.60
35	BA	585	G	C5-N7-C8	-8.05	100.28	104.30
35	BA	765	G	O4'-C1'-C2'	-8.05	97.75	105.80
35	BA	1156	G	C5'-C4'-O4'	8.05	118.76	109.10
35	BA	1436	U	C2-N3-C4	-8.05	122.17	127.00
2	AB	407	G	N9-C1'-C2'	-8.05	103.15	112.00
2	AB	881	G	C5-N7-C8	-8.05	100.28	104.30
2	AB	1878	G	N1-C2-N3	8.05	128.73	123.90
2	AB	1974	C	N3-C4-N4	8.05	123.63	118.00
2	AB	2386	A	N1-C2-N3	-8.05	125.28	129.30
35	BA	911	U	C5-C6-N1	-8.05	118.67	122.70
2	AB	1042	G	N3-C4-C5	-8.04	124.58	128.60
2	AB	1337	G	N1-C2-N3	8.04	128.73	123.90
2	AB	1702	G	C8-N9-C4	-8.05	103.18	106.40
2	AB	1806	C	C5-C6-N1	8.04	125.02	121.00
2	AB	1929	G	C2-N3-C4	8.04	115.92	111.90
2	AB	2053	G	C4-C5-N7	-8.04	107.58	110.80
2	AB	2269	G	N3-C4-N9	8.04	130.83	126.00
1	AA	45	A	C8-N9-C4	-8.04	102.58	105.80
2	AB	298	G	N3-C4-C5	-8.04	124.58	128.60
2	AB	949	G	C1'-O4'-C4'	-8.04	103.47	109.90
2	AB	2459	A	O4'-C1'-N9	8.04	114.63	108.20
2	AB	2564	A	N1-C2-N3	-8.04	125.28	129.30
35	BA	867	G	N9-C4-C5	-8.04	102.18	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	241	G	N3-C4-C5	-8.04	124.58	128.60
35	BA	970	C	N3-C2-O2	-8.04	116.27	121.90
2	AB	350	G	C4-C5-C6	8.04	123.62	118.80
2	AB	744	U	C2-N3-C4	-8.04	122.18	127.00
2	AB	1804	C	C5'-C4'-O4'	8.04	118.75	109.10
2	AB	2193	G	N3-C4-C5	-8.04	124.58	128.60
2	AB	2901	C	N3-C4-N4	8.04	123.63	118.00
11	AK	61	TYR	CG-CD1-CE1	-8.04	114.87	121.30
35	BA	865	A	N9-C4-C5	8.04	109.02	105.80
2	AB	940	G	C4'-C3'-C2'	-8.04	94.56	102.60
2	AB	1270	C	O4'-C1'-N1	-8.04	101.77	108.20
35	BA	110	C	C4'-C3'-C2'	-8.04	94.56	102.60
2	AB	1607	C	C4-C5-C6	8.04	121.42	117.40
2	AB	1653	G	N3-C4-N9	-8.04	121.18	126.00
35	BA	82	G	C5-C6-O6	-8.04	123.78	128.60
35	BA	341	C	O4'-C1'-N1	8.04	114.63	108.20
35	BA	889	A	N9-C4-C5	8.04	109.02	105.80
35	BA	1184	G	O4'-C1'-N9	8.04	114.63	108.20
35	BA	1190	G	C1'-O4'-C4'	-8.04	103.47	109.90
35	BA	1370	G	O4'-C1'-N9	8.04	114.63	108.20
2	AB	1446	C	O4'-C4'-C3'	-8.04	95.96	104.00
2	AB	87	U	C5-C6-N1	-8.03	118.68	122.70
2	AB	871	U	O4'-C1'-N1	8.04	114.63	108.20
2	AB	1492	G	C5-C6-O6	-8.04	123.78	128.60
35	BA	404	G	C8-N9-C4	-8.04	103.19	106.40
35	BA	997	U	N3-C4-O4	8.04	125.03	119.40
35	BA	1272	G	N1-C6-O6	-8.04	115.08	119.90
1	AA	9	G	N3-C4-C5	-8.03	124.58	128.60
2	AB	1435	G	N3-C4-N9	8.03	130.82	126.00
2	AB	1470	A	C3'-C2'-C1'	8.03	107.93	101.50
2	AB	1555	G	N3-C2-N2	-8.03	114.28	119.90
2	AB	1582	C	N3-C2-O2	-8.03	116.28	121.90
2	AB	1884	G	C4-C5-N7	8.03	114.01	110.80
2	AB	2058	A	C1'-O4'-C4'	-8.03	103.47	109.90
2	AB	2417	C	N3-C2-O2	-8.03	116.28	121.90
35	BA	258	G	O4'-C4'-C3'	8.03	112.53	106.10
35	BA	308	C	C5-C6-N1	-8.03	116.98	121.00
35	BA	548	G	N1-C2-N3	-8.03	119.08	123.90
35	BA	933	G	C6-N1-C2	-8.03	120.28	125.10
35	BA	1322	C	N3-C4-C5	-8.03	118.69	121.90
35	BA	1528	U	C5-C4-O4	-8.03	121.08	125.90
37	BC	46	G	C8-N9-C4	-8.03	103.19	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	100	U	C5-C6-N1	-8.03	118.69	122.70
2	AB	605	G	N9-C1'-C2'	-8.03	103.17	112.00
2	AB	2204	G	C4-C5-N7	8.03	114.01	110.80
2	AB	1568	G	C5-N7-C8	8.03	108.31	104.30
2	AB	1883	U	N1-C1'-C2'	-8.03	103.17	112.00
2	AB	2250	G	C6-C5-N7	-8.03	125.58	130.40
35	BA	20	U	O4'-C1'-N1	8.03	114.62	108.20
35	BA	55	A	N1-C2-N3	-8.03	125.28	129.30
35	BA	1125	U	N1-C2-O2	-8.03	117.18	122.80
1	AA	24	G	N1-C6-O6	-8.03	115.08	119.90
2	AB	469	G	C2-N3-C4	8.03	115.91	111.90
2	AB	1040	A	C1'-O4'-C4'	-8.03	103.48	109.90
2	AB	1230	A	N1-C2-N3	-8.03	125.29	129.30
2	AB	2880	C	C5-C6-N1	8.03	125.01	121.00
35	BA	368	U	C5-C6-N1	-8.03	118.69	122.70
2	AB	2841	C	O4'-C1'-N1	8.03	114.62	108.20
35	BA	1152	A	C1'-O4'-C4'	-8.03	103.48	109.90
35	BA	1360	A	C5'-C4'-O4'	8.03	118.73	109.10
2	AB	166	U	C3'-C2'-C1'	-8.02	95.08	101.50
2	AB	710	U	N3-C2-O2	-8.02	116.58	122.20
2	AB	1767	G	N3-C4-C5	-8.02	124.59	128.60
2	AB	1872	A	C3'-C2'-C1'	8.02	107.92	101.50
2	AB	2115	G	C6-N1-C2	-8.02	120.29	125.10
2	AB	2237	G	N1-C6-O6	8.02	124.71	119.90
2	AB	2694	G	N3-C4-N9	8.02	130.81	126.00
35	BA	262	A	C4-C5-N7	-8.02	106.69	110.70
35	BA	659	U	C5-C4-O4	-8.02	121.09	125.90
35	BA	1045	C	O4'-C1'-N1	8.02	114.62	108.20
2	AB	2777	G	O4'-C4'-C3'	8.02	112.52	106.10
2	AB	2883	A	N3-C4-C5	-8.02	121.19	126.80
35	BA	456	A	N9-C4-C5	-8.02	102.59	105.80
2	AB	81	G	C5'-C4'-O4'	8.02	118.72	109.10
2	AB	1128	G	C5-C6-N1	-8.02	107.49	111.50
2	AB	1343	G	C2-N3-C4	8.02	115.91	111.90
2	AB	1784	A	N9-C4-C5	8.02	109.01	105.80
2	AB	2195	U	N3-C2-O2	-8.02	116.59	122.20
2	AB	2832	U	N1-C2-O2	8.02	128.41	122.80
4	AD	42	ARG	NE-CZ-NH1	8.02	124.31	120.30
35	BA	325	A	C4-C5-N7	-8.02	106.69	110.70
35	BA	1142	G	N1-C2-N2	-8.02	108.98	116.20
2	AB	311	A	C3'-C2'-C1'	8.02	107.91	101.50
43	BI	77	ARG	NE-CZ-NH1	8.02	124.31	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	118	A	C2-N3-C4	-8.02	106.59	110.60
2	AB	467	G	O4'-C1'-N9	8.02	114.61	108.20
2	AB	483	A	N1-C2-N3	-8.02	125.29	129.30
2	AB	2350	C	C5-C4-N4	-8.02	114.59	120.20
35	BA	857	C	C3'-C2'-C1'	8.02	107.91	101.50
35	BA	1106	G	C2-N3-C4	8.02	115.91	111.90
2	AB	670	A	C5-C6-N6	-8.01	117.29	123.70
2	AB	367	G	C4-C5-N7	-8.01	107.59	110.80
2	AB	515	A	C6-C5-N7	8.01	137.91	132.30
2	AB	827	U	O4'-C1'-N1	8.01	114.61	108.20
2	AB	1292	G	C6-C5-N7	8.01	135.21	130.40
2	AB	1453	A	C5-C6-N6	-8.01	117.29	123.70
2	AB	1351	C	N1-C1'-C2'	-8.01	103.19	112.00
2	AB	2010	G	N1-C6-O6	-8.01	115.09	119.90
2	AB	2048	G	C5-C6-O6	-8.01	123.79	128.60
2	AB	2886	A	C4-C5-C6	-8.01	112.99	117.00
35	BA	1423	G	C5-C6-O6	-8.01	123.79	128.60
2	AB	32	C	C4'-C3'-C2'	-8.01	94.59	102.60
2	AB	381	G	P-O3'-C3'	8.01	129.31	119.70
2	AB	977	G	C2-N3-C4	8.01	115.90	111.90
2	AB	997	G	N7-C8-N9	8.01	117.11	113.10
2	AB	2268	A	C6-N1-C2	-8.01	113.79	118.60
2	AB	2793	C	C4-C5-C6	-8.01	113.39	117.40
35	BA	262	A	C6-C5-N7	8.01	137.91	132.30
2	AB	563	A	N7-C8-N9	8.01	117.80	113.80
2	AB	1042	G	C8-N9-C4	-8.01	103.20	106.40
2	AB	1316	U	N3-C2-O2	-8.01	116.59	122.20
2	AB	1376	C	O4'-C1'-N1	8.01	114.61	108.20
2	AB	1497	U	O4'-C4'-C3'	8.01	112.51	106.10
2	AB	111	A	C5-N7-C8	-8.01	99.90	103.90
2	AB	1768	C	O4'-C1'-N1	8.01	114.61	108.20
29	A2	56	ARG	NE-CZ-NH2	8.01	124.30	120.30
2	AB	2382	G	C5-C6-O6	-8.01	123.80	128.60
2	AB	2627	G	N3-C4-N9	8.01	130.80	126.00
2	AB	2643	G	C4-C5-N7	-8.01	107.60	110.80
35	BA	619	U	N1-C2-O2	-8.01	117.20	122.80
35	BA	1330	U	C4'-C3'-C2'	-8.01	94.59	102.60
2	AB	120	U	C4-C5-C6	8.00	124.50	119.70
2	AB	1206	G	C6-N1-C2	-8.00	120.30	125.10
2	AB	1341	G	C4-C5-N7	8.00	114.00	110.80
2	AB	2119	A	C4-C5-N7	8.00	114.70	110.70
2	AB	2009	A	N1-C2-N3	8.00	133.30	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	899	C	O4'-C4'-C3'	8.00	112.50	106.10
2	AB	395	U	O4'-C1'-N1	8.00	114.60	108.20
2	AB	561	G	P-O3'-C3'	8.00	129.30	119.70
2	AB	1356	G	C8-N9-C4	-8.00	103.20	106.40
2	AB	1843	C	C5'-C4'-O4'	8.00	118.70	109.10
2	AB	1863	G	N3-C4-C5	-8.00	124.60	128.60
2	AB	2685	G	N1-C2-N2	8.00	123.40	116.20
35	BA	82	G	N1-C6-O6	8.00	124.70	119.90
35	BA	187	G	N1-C2-N3	-8.00	119.10	123.90
35	BA	687	A	N9-C4-C5	8.00	109.00	105.80
35	BA	1121	U	O4'-C1'-N1	8.00	114.60	108.20
35	BA	1252	A	C1'-O4'-C4'	-8.00	103.50	109.90
35	BA	1484	C	N3-C2-O2	-8.00	116.30	121.90
37	BC	76	C	O4'-C4'-C3'	-8.00	96.00	104.00
2	AB	327	G	O4'-C1'-N9	8.00	114.60	108.20
2	AB	513	A	C4-C5-C6	8.00	121.00	117.00
2	AB	792	A	N9-C4-C5	8.00	109.00	105.80
2	AB	1249	U	O4'-C1'-N1	8.00	114.60	108.20
2	AB	1255	U	O4'-C1'-N1	8.00	114.60	108.20
2	AB	1354	A	C8-N9-C4	8.00	109.00	105.80
2	AB	1437	C	C5-C4-N4	-8.00	114.60	120.20
2	AB	1442	U	O4'-C1'-N1	8.00	114.60	108.20
2	AB	2776	A	N9-C4-C5	-8.00	102.60	105.80
35	BA	1008	U	O4'-C1'-N1	8.00	114.60	108.20
2	AB	495	G	C5-C6-N1	8.00	115.50	111.50
2	AB	1540	G	N3-C4-C5	-8.00	124.60	128.60
2	AB	2170	A	O4'-C1'-N9	8.00	114.60	108.20
35	BA	2	A	C3'-C2'-C1'	8.00	107.90	101.50
35	BA	106	C	O4'-C4'-C3'	-8.00	96.00	104.00
35	BA	268	U	C5-C6-N1	8.00	126.70	122.70
35	BA	534	U	C3'-C2'-C1'	-8.00	95.10	101.50
2	AB	879	G	O4'-C1'-N9	8.00	114.60	108.20
2	AB	2779	U	C4-C5-C6	8.00	124.50	119.70
3	AC	7	ARG	NE-CZ-NH2	-8.00	116.30	120.30
35	BA	1360	A	C8-N9-C4	-8.00	102.60	105.80
36	BB	24	A	C3'-C2'-C1'	8.00	107.90	101.50
1	AA	66	A	N9-C4-C5	7.99	109.00	105.80
1	AA	84	G	C2-N3-C4	7.99	115.90	111.90
2	AB	2141	G	N7-C8-N9	7.99	117.10	113.10
2	AB	2163	A	C6-N1-C2	-7.99	113.80	118.60
2	AB	2302	U	C2-N3-C4	-7.99	122.20	127.00
2	AB	2343	U	O4'-C1'-N1	7.99	114.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2851	A	O4'-C1'-N9	7.99	114.59	108.20
35	BA	36	C	N3-C4-N4	7.99	123.60	118.00
35	BA	707	U	C1'-O4'-C4'	-7.99	103.51	109.90
35	BA	1105	A	C4'-C3'-C2'	-7.99	94.61	102.60
35	BA	1354	U	C4-C5-C6	7.99	124.50	119.70
35	BA	1394	A	N9-C4-C5	-7.99	102.60	105.80
2	AB	160	A	O4'-C1'-N9	7.99	114.59	108.20
2	AB	239	C	C4-C5-C6	7.99	121.40	117.40
2	AB	676	A	C5-N7-C8	7.99	107.90	103.90
2	AB	1301	A	N1-C2-N3	-7.99	125.30	129.30
2	AB	2035	G	N3-C2-N2	-7.99	114.31	119.90
2	AB	231	A	C3'-C2'-C1'	-7.99	95.11	101.50
2	AB	2834	G	N1-C6-O6	7.99	124.69	119.90
26	AZ	71	ARG	NE-CZ-NH1	-7.99	116.31	120.30
36	BB	13	A	N9-C4-C5	7.99	109.00	105.80
2	AB	937	C	C6-N1-C2	-7.99	117.10	120.30
2	AB	1576	U	N3-C4-O4	7.99	124.99	119.40
2	AB	2665	A	C5-N7-C8	-7.99	99.91	103.90
35	BA	307	C	N1-C2-O2	7.99	123.69	118.90
35	BA	542	G	C4'-C3'-C2'	-7.99	94.61	102.60
35	BA	1275	A	C5-N7-C8	-7.99	99.91	103.90
2	AB	1645	G	N7-C8-N9	7.99	117.09	113.10
18	AR	88	ARG	NE-CZ-NH2	7.99	124.29	120.30
35	BA	1165	U	O4'-C1'-N1	7.99	114.59	108.20
2	AB	941	A	C5-N7-C8	7.99	107.89	103.90
2	AB	1723	G	N3-C2-N2	-7.99	114.31	119.90
2	AB	2282	G	N9-C4-C5	7.99	108.59	105.40
2	AB	2328	A	N1-C6-N6	-7.99	113.81	118.60
2	AB	2524	G	C3'-C2'-C1'	7.99	107.89	101.50
35	BA	6	G	C6-C5-N7	-7.99	125.61	130.40
35	BA	944	G	C8-N9-C4	-7.99	103.21	106.40
35	BA	1253	G	N7-C8-N9	7.99	117.09	113.10
2	AB	40	U	N1-C2-N3	7.98	119.69	114.90
2	AB	768	G	N7-C8-N9	7.98	117.09	113.10
2	AB	849	A	C6-N1-C2	7.98	123.39	118.60
35	BA	67	C	C2-N3-C4	-7.98	115.91	119.90
35	BA	862	C	N3-C4-C5	7.98	125.09	121.90
2	AB	2	G	C2-N3-C4	7.98	115.89	111.90
2	AB	2261	C	N3-C4-C5	7.98	125.09	121.90
2	AB	2450	A	N7-C8-N9	7.98	117.79	113.80
2	AB	2774	C	O4'-C1'-N1	7.98	114.58	108.20
35	BA	196	A	C6-N1-C2	7.98	123.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	489	C	C5-C4-N4	-7.98	114.61	120.20
35	BA	599	C	C4-C5-C6	-7.98	113.41	117.40
35	BA	999	C	N3-C2-O2	-7.98	116.31	121.90
2	AB	772	C	O4'-C1'-N1	7.98	114.58	108.20
2	AB	831	G	C4-C5-N7	-7.98	107.61	110.80
2	AB	1742	U	C5-C6-N1	-7.98	118.71	122.70
2	AB	254	G	C4-C5-C6	7.98	123.59	118.80
2	AB	1454	C	O4'-C1'-N1	7.98	114.58	108.20
2	AB	1852	U	C1'-O4'-C4'	-7.98	103.52	109.90
2	AB	741	U	N3-C4-C5	7.98	119.39	114.60
2	AB	1067	A	C6-N1-C2	7.98	123.39	118.60
35	BA	1014	A	P-O3'-C3'	7.98	129.27	119.70
35	BA	1400	C	N1-C2-O2	7.98	123.69	118.90
2	AB	1028	A	C4-C5-N7	7.97	114.69	110.70
2	AB	1142	A	C8-N9-C4	7.97	108.99	105.80
2	AB	1816	C	C5-C4-N4	-7.97	114.62	120.20
2	AB	1964	G	N3-C4-N9	7.97	130.78	126.00
2	AB	2100	G	N3-C4-N9	7.97	130.78	126.00
2	AB	2634	A	O4'-C1'-N9	7.97	114.58	108.20
35	BA	261	U	C5-C6-N1	-7.97	118.71	122.70
35	BA	1123	U	C5-C4-O4	-7.97	121.11	125.90
57	BW	66	ARG	NE-CZ-NH2	7.97	124.29	120.30
2	AB	5	A	N7-C8-N9	-7.97	109.81	113.80
2	AB	886	A	N1-C6-N6	-7.97	113.82	118.60
2	AB	1006	C	N3-C4-C5	7.97	125.09	121.90
2	AB	1518	C	N1-C2-N3	-7.97	113.62	119.20
2	AB	2254	C	N3-C2-O2	-7.97	116.32	121.90
2	AB	2534	A	C8-N9-C4	-7.97	102.61	105.80
2	AB	2681	C	N3-C4-C5	-7.97	118.71	121.90
2	AB	2827	C	N3-C2-O2	-7.97	116.32	121.90
35	BA	885	G	C5-N7-C8	-7.97	100.31	104.30
35	BA	1346	A	N9-C4-C5	7.97	108.99	105.80
2	AB	2432	A	N7-C8-N9	7.97	117.79	113.80
35	BA	322	C	C1'-O4'-C4'	-7.97	103.52	109.90
35	BA	937	A	N1-C6-N6	-7.97	113.82	118.60
35	BA	962	C	C6-N1-C2	-7.97	117.11	120.30
2	AB	254	G	C2-N3-C4	7.97	115.89	111.90
2	AB	634	C	N3-C4-C5	-7.97	118.71	121.90
2	AB	1188	U	O4'-C1'-N1	7.97	114.58	108.20
2	AB	1319	C	N1-C2-O2	7.97	123.68	118.90
2	AB	1705	A	N1-C2-N3	-7.97	125.31	129.30
2	AB	2026	U	C5-C4-O4	-7.97	121.12	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	916	U	C4-C5-C6	7.97	124.48	119.70
35	BA	975	A	N7-C8-N9	7.97	117.78	113.80
35	BA	1131	G	N3-C4-C5	-7.97	124.61	128.60
2	AB	1087	G	O4'-C1'-N9	7.97	114.57	108.20
2	AB	2065	C	O4'-C1'-N1	7.97	114.58	108.20
2	AB	2316	G	N3-C4-N9	7.97	130.78	126.00
2	AB	267	C	C5'-C4'-C3'	-7.97	103.25	116.00
2	AB	1356	G	C1'-O4'-C4'	7.97	116.27	109.90
2	AB	1493	C	N3-C2-O2	-7.97	116.32	121.90
2	AB	1781	U	O4'-C1'-N1	7.97	114.57	108.20
2	AB	2335	A	C4-C5-N7	-7.97	106.72	110.70
35	BA	333	U	N3-C2-O2	-7.97	116.62	122.20
35	BA	1044	A	C8-N9-C4	-7.97	102.61	105.80
35	BA	1160	G	C5'-C4'-O4'	7.97	118.66	109.10
35	BA	1405	G	N3-C4-C5	-7.97	124.62	128.60
36	BB	32	U	C5'-C4'-C3'	-7.97	103.25	116.00
2	AB	711	G	N3-C4-C5	-7.96	124.62	128.60
2	AB	853	C	O4'-C1'-N1	7.96	114.57	108.20
2	AB	949	G	C4'-C3'-C2'	-7.96	94.64	102.60
2	AB	969	G	O4'-C1'-N9	7.96	114.57	108.20
2	AB	1803	A	O4'-C1'-N9	7.96	114.57	108.20
2	AB	1977	A	C4-C5-C6	-7.96	113.02	117.00
2	AB	2223	G	N9-C1'-C2'	-7.96	103.24	112.00
2	AB	2334	U	N1-C2-N3	7.96	119.68	114.90
35	BA	769	G	C6-C5-N7	-7.96	125.62	130.40
2	AB	1508	A	C5-N7-C8	-7.96	99.92	103.90
2	AB	2102	G	O4'-C4'-C3'	7.96	112.47	106.10
2	AB	2815	C	C3'-C2'-C1'	7.96	107.87	101.50
35	BA	904	U	C1'-O4'-C4'	-7.96	103.53	109.90
1	AA	47	C	N1-C2-O2	7.96	123.68	118.90
2	AB	48	G	N3-C4-N9	7.96	130.78	126.00
2	AB	794	A	C5-C6-N6	-7.96	117.33	123.70
2	AB	1425	G	O4'-C1'-N9	7.96	114.57	108.20
2	AB	1462	C	O4'-C1'-N1	7.96	114.57	108.20
2	AB	2895	G	C5-C6-N1	7.96	115.48	111.50
35	BA	344	A	C3'-C2'-C1'	7.96	107.87	101.50
35	BA	684	U	C4-C5-C6	7.96	124.48	119.70
35	BA	1340	A	O4'-C1'-N9	7.96	114.57	108.20
35	BA	1359	C	N3-C4-C5	-7.96	118.72	121.90
2	AB	877	A	N9-C4-C5	-7.96	102.62	105.80
2	AB	1638	C	N3-C4-C5	-7.96	118.72	121.90
2	AB	2741	A	C8-N9-C4	-7.96	102.62	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	52	A	C4-C5-N7	7.96	114.68	110.70
2	AB	220	G	C5-C6-N1	7.96	115.48	111.50
2	AB	1357	C	C4-C5-C6	-7.96	113.42	117.40
2	AB	1869	G	C5-C6-N1	-7.96	107.52	111.50
2	AB	2846	G	N9-C4-C5	7.96	108.58	105.40
2	AB	2895	G	N3-C4-C5	-7.96	124.62	128.60
35	BA	453	G	N7-C8-N9	-7.96	109.12	113.10
35	BA	802	A	C5-N7-C8	7.96	107.88	103.90
35	BA	1439	G	O4'-C1'-N9	7.96	114.57	108.20
35	BA	1506	U	O4'-C1'-N1	7.96	114.57	108.20
2	AB	785	G	C8-N9-C4	-7.96	103.22	106.40
2	AB	1505	A	C4'-C3'-C2'	-7.96	94.64	102.60
2	AB	1965	C	C2-N3-C4	7.96	123.88	119.90
35	BA	1162	C	N3-C4-N4	7.96	123.57	118.00
36	BB	58	C	N3-C2-O2	-7.96	116.33	121.90
1	AA	83	G	N9-C4-C5	7.96	108.58	105.40
2	AB	805	G	C4-C5-N7	-7.96	107.62	110.80
2	AB	2194	U	C4-C5-C6	7.96	124.47	119.70
2	AB	2258	C	O4'-C4'-C3'	7.96	112.46	106.10
2	AB	2316	G	C5-C6-O6	7.96	133.37	128.60
35	BA	155	A	C6-C5-N7	7.96	137.87	132.30
2	AB	1177	G	C6-N1-C2	-7.95	120.33	125.10
2	AB	2599	G	N9-C4-C5	7.95	108.58	105.40
35	BA	1033	G	N7-C8-N9	7.95	117.08	113.10
35	BA	1486	G	C5'-C4'-O4'	7.95	118.64	109.10
2	AB	161	A	C5'-C4'-O4'	7.95	118.64	109.10
2	AB	2435	A	C8-N9-C4	-7.95	102.62	105.80
2	AB	2820	A	C5-C6-N1	7.95	121.68	117.70
35	BA	718	A	C8-N9-C4	-7.95	102.62	105.80
35	BA	1069	C	N3-C4-N4	7.95	123.57	118.00
2	AB	279	A	C4'-C3'-C2'	-7.95	94.65	102.60
2	AB	308	G	N1-C2-N3	-7.95	119.13	123.90
2	AB	1193	G	N3-C4-N9	-7.95	121.23	126.00
2	AB	2562	U	N1-C1'-C2'	-7.95	103.25	112.00
2	AB	2695	U	N3-C4-O4	-7.95	113.83	119.40
2	AB	2753	A	N9-C4-C5	7.95	108.98	105.80
35	BA	95	C	C4-C5-C6	-7.95	113.42	117.40
35	BA	1424	U	N3-C2-O2	-7.95	116.63	122.20
2	AB	892	A	N3-C4-N9	-7.95	121.04	127.40
2	AB	2037	A	C5-C6-N1	7.95	121.67	117.70
2	AB	2076	U	P-O3'-C3'	7.95	129.24	119.70
2	AB	2483	C	N3-C4-N4	7.95	123.56	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	952	U	O4'-C1'-N1	7.95	114.56	108.20
35	BA	1089	G	C8-N9-C4	-7.95	103.22	106.40
35	BA	1532	U	C2-N3-C4	-7.95	122.23	127.00
37	BC	32	G	C4'-C3'-C2'	-7.95	94.65	102.60
2	AB	2844	G	C4-C5-C6	7.95	123.57	118.80
35	BA	788	U	N1-C2-N3	7.95	119.67	114.90
2	AB	186	G	N9-C1'-C2'	-7.95	103.26	112.00
2	AB	630	G	N9-C4-C5	7.95	108.58	105.40
2	AB	2243	U	C2-N3-C4	-7.95	122.23	127.00
2	AB	2310	C	N1-C2-O2	7.95	123.67	118.90
2	AB	2631	G	C5'-C4'-O4'	7.95	118.63	109.10
2	AB	2825	G	O4'-C1'-N9	7.95	114.56	108.20
2	AB	2847	U	C5-C6-N1	-7.95	118.73	122.70
35	BA	716	A	O4'-C4'-C3'	7.95	112.46	106.10
35	BA	731	G	C8-N9-C4	-7.95	103.22	106.40
35	BA	1044	A	N9-C4-C5	7.95	108.98	105.80
36	BB	20	G	N3-C4-C5	-7.95	124.63	128.60
37	BC	10	G	C8-N9-C4	-7.95	103.22	106.40
1	AA	97	C	C4-C5-C6	7.94	121.37	117.40
2	AB	182	A	C4'-C3'-C2'	-7.94	94.66	102.60
2	AB	310	A	C3'-C2'-C1'	-7.94	95.14	101.50
2	AB	2201	G	N1-C6-O6	-7.94	115.13	119.90
2	AB	2256	G	O4'-C1'-N9	7.94	114.56	108.20
2	AB	2731	G	C8-N9-C4	-7.94	103.22	106.40
2	AB	433	C	C2-N3-C4	-7.94	115.93	119.90
2	AB	1297	C	O4'-C1'-N1	7.94	114.55	108.20
2	AB	1546	G	C5-C6-N1	7.94	115.47	111.50
2	AB	1996	C	N1-C2-O2	7.94	123.67	118.90
35	BA	1010	U	N1-C2-N3	7.94	119.67	114.90
2	AB	1623	G	O4'-C1'-N9	7.94	114.55	108.20
2	AB	2402	U	O4'-C1'-C2'	-7.94	97.86	105.80
2	AB	2654	A	C2-N3-C4	7.94	114.57	110.60
35	BA	391	G	N3-C2-N2	7.94	125.46	119.90
35	BA	843	U	C5-C6-N1	-7.94	118.73	122.70
2	AB	1007	C	N1-C2-O2	7.94	123.66	118.90
35	BA	55	A	O4'-C1'-N9	7.94	114.55	108.20
35	BA	362	G	C5'-C4'-O4'	7.94	118.63	109.10
37	BC	30	G	N3-C4-C5	-7.94	124.63	128.60
2	AB	273	G	O4'-C1'-N9	7.94	114.55	108.20
2	AB	1877	A	N7-C8-N9	7.94	117.77	113.80
35	BA	1089	G	C5-C6-O6	7.94	133.36	128.60
35	BA	1154	G	C5-N7-C8	-7.94	100.33	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1501	C	O4'-C1'-N1	7.94	114.55	108.20
35	BA	833	G	N7-C8-N9	7.94	117.07	113.10
1	AA	116	G	C6-N1-C2	-7.93	120.34	125.10
2	AB	1463	C	N3-C4-C5	-7.93	118.73	121.90
2	AB	1711	A	C2-N3-C4	7.93	114.57	110.60
2	AB	1933	G	C2-N3-C4	7.93	115.87	111.90
2	AB	2754	U	C5-C4-O4	-7.93	121.14	125.90
35	BA	433	G	N1-C2-N3	7.93	128.66	123.90
35	BA	778	G	C5-C6-N1	7.93	115.47	111.50
35	BA	779	C	C2-N3-C4	-7.93	115.93	119.90
35	BA	1135	U	C5-C6-N1	-7.93	118.73	122.70
35	BA	1346	A	C8-N9-C4	-7.93	102.63	105.80
2	AB	80	G	C4'-C3'-C2'	-7.93	94.67	102.60
2	AB	1718	G	N7-C8-N9	7.93	117.07	113.10
35	BA	345	C	C2-N3-C4	7.93	123.87	119.90
35	BA	506	G	C2-N3-C4	7.93	115.87	111.90
1	AA	34	A	N3-C4-N9	7.93	133.75	127.40
2	AB	923	G	N1-C2-N3	-7.93	119.14	123.90
35	BA	1259	C	N1-C2-O2	7.93	123.66	118.90
2	AB	701	G	C6-N1-C2	-7.93	120.34	125.10
2	AB	909	A	N1-C2-N3	-7.93	125.33	129.30
2	AB	1122	G	O4'-C1'-N9	7.93	114.54	108.20
2	AB	1292	G	C1'-O4'-C4'	-7.93	103.56	109.90
2	AB	1806	C	O4'-C1'-N1	7.93	114.54	108.20
2	AB	2782	G	C5'-C4'-O4'	7.93	118.61	109.10
35	BA	186	C	C2-N3-C4	7.93	123.86	119.90
35	BA	249	U	C5-C6-N1	7.93	126.67	122.70
35	BA	632	U	C5'-C4'-O4'	7.93	118.61	109.10
35	BA	763	G	C5-N7-C8	7.93	108.27	104.30
35	BA	969	A	C2-N3-C4	-7.93	106.64	110.60
2	AB	2536	G	C5'-C4'-O4'	7.93	118.61	109.10
2	AB	101	A	C5-C6-N1	7.93	121.66	117.70
2	AB	1050	A	C4-C5-C6	-7.93	113.04	117.00
2	AB	1537	G	C4-C5-C6	7.93	123.56	118.80
2	AB	2674	G	O4'-C1'-N9	7.93	114.54	108.20
35	BA	744	C	N3-C2-O2	-7.93	116.35	121.90
35	BA	985	C	C5-C6-N1	-7.93	117.04	121.00
2	AB	486	C	C5-C4-N4	-7.92	114.65	120.20
2	AB	974	G	C5-N7-C8	7.92	108.26	104.30
2	AB	1843	C	C3'-C2'-C1'	7.92	107.84	101.50
2	AB	2280	G	N9-C4-C5	7.92	108.57	105.40
2	AB	2314	A	C4-C5-C6	-7.92	113.04	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	35	C	O4'-C1'-N1	7.92	114.54	108.20
2	AB	887	U	C5-C6-N1	-7.92	118.74	122.70
2	AB	1485	U	C4-C5-C6	7.92	124.45	119.70
35	BA	1287	A	C2-N3-C4	7.92	114.56	110.60
1	AA	118	C	N3-C2-O2	-7.92	116.36	121.90
2	AB	301	G	N9-C4-C5	7.92	108.57	105.40
2	AB	1211	C	N1-C2-O2	7.92	123.65	118.90
2	AB	2004	G	C6-N1-C2	-7.92	120.35	125.10
2	AB	2051	A	C8-N9-C4	-7.92	102.63	105.80
2	AB	2291	U	C4-C5-C6	-7.92	114.95	119.70
35	BA	1348	U	N3-C2-O2	-7.92	116.66	122.20
35	BA	1225	A	N9-C4-C5	7.92	108.97	105.80
2	AB	114	U	N1-C2-N3	7.92	119.65	114.90
2	AB	155	A	C5'-C4'-O4'	7.92	118.60	109.10
2	AB	1208	C	N1-C2-O2	7.92	123.65	118.90
2	AB	1401	G	C8-N9-C4	-7.92	103.23	106.40
2	AB	1504	A	N1-C6-N6	-7.92	113.85	118.60
35	BA	299	G	C4-C5-N7	-7.92	107.63	110.80
35	BA	1440	U	O4'-C1'-N1	7.92	114.53	108.20
2	AB	157	C	O4'-C1'-N1	7.92	114.53	108.20
2	AB	1390	U	N3-C2-O2	-7.92	116.66	122.20
35	BA	422	C	C4-C5-C6	-7.92	113.44	117.40
35	BA	1502	A	C5-N7-C8	7.92	107.86	103.90
2	AB	1386	C	N3-C4-C5	7.92	125.07	121.90
2	AB	2083	G	N3-C4-C5	-7.92	124.64	128.60
2	AB	2521	C	N3-C2-O2	7.92	127.44	121.90
2	AB	2630	G	C5-C6-O6	-7.92	123.85	128.60
36	BB	23	C	O4'-C1'-N1	7.92	114.53	108.20
2	AB	532	A	C5-C6-N1	7.91	121.66	117.70
2	AB	739	A	C4-C5-C6	7.91	120.96	117.00
2	AB	1272	A	C2-N3-C4	-7.91	106.64	110.60
2	AB	2053	G	N3-C4-N9	7.91	130.75	126.00
35	BA	1133	G	C5-C6-O6	-7.91	123.85	128.60
35	BA	1372	U	O4'-C1'-N1	7.91	114.53	108.20
2	AB	2486	C	O4'-C1'-N1	7.91	114.53	108.20
35	BA	1109	C	N3-C2-O2	-7.91	116.36	121.90
35	BA	1270	G	N9-C4-C5	7.91	108.56	105.40
2	AB	327	G	C5-N7-C8	-7.91	100.34	104.30
2	AB	362	A	C8-N9-C4	7.91	108.96	105.80
2	AB	1059	G	C5-C6-N1	7.91	115.46	111.50
2	AB	1234	U	C3'-C2'-C1'	7.91	107.83	101.50
2	AB	2117	A	O4'-C1'-N9	7.91	114.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2766	A	C5'-C4'-C3'	-7.91	103.34	116.00
2	AB	2871	U	N1-C2-O2	7.91	128.34	122.80
35	BA	601	G	N3-C2-N2	-7.91	114.36	119.90
35	BA	909	A	C2-N3-C4	7.91	114.56	110.60
35	BA	1334	G	N3-C4-C5	-7.91	124.64	128.60
2	AB	214	G	C6-N1-C2	-7.91	120.36	125.10
2	AB	409	G	C4-C5-N7	-7.91	107.64	110.80
2	AB	2143	C	C5'-C4'-O4'	7.91	118.59	109.10
2	AB	2299	U	C2-N3-C4	-7.91	122.25	127.00
2	AB	2629	U	C1'-O4'-C4'	7.91	116.23	109.90
35	BA	237	G	C6-N1-C2	-7.91	120.36	125.10
35	BA	1220	G	C3'-C2'-C1'	7.91	107.83	101.50
35	BA	1509	C	C6-N1-C2	7.91	123.46	120.30
37	BC	13	C	C4-C5-C6	7.91	121.36	117.40
2	AB	1236	G	N1-C2-N3	-7.91	119.16	123.90
2	AB	2791	G	C6-N1-C2	-7.91	120.36	125.10
2	AB	446	G	C2-N3-C4	7.91	115.85	111.90
2	AB	751	A	O4'-C1'-C2'	-7.91	97.89	105.80
2	AB	1701	A	O4'-C1'-N9	7.91	114.53	108.20
2	AB	987	C	C1'-O4'-C4'	-7.90	103.58	109.90
2	AB	70	G	O4'-C1'-C2'	-7.90	97.90	105.80
2	AB	700	G	C6-N1-C2	-7.90	120.36	125.10
2	AB	1016	G	C4-C5-N7	-7.90	107.64	110.80
2	AB	1275	A	C5-C6-N1	7.90	121.65	117.70
2	AB	2613	U	C2-N3-C4	-7.90	122.26	127.00
22	AV	69	ARG	NH1-CZ-NH2	-7.90	110.71	119.40
35	BA	809	G	O4'-C4'-C3'	7.90	112.42	106.10
35	BA	971	G	N9-C4-C5	7.90	108.56	105.40
1	AA	48	U	C1'-O4'-C4'	-7.90	103.58	109.90
2	AB	942	G	C6-C5-N7	7.90	135.14	130.40
2	AB	1772	A	C5-C6-N6	-7.90	117.38	123.70
2	AB	2014	A	C5-C6-N1	7.90	121.65	117.70
2	AB	2349	G	C6-C5-N7	-7.90	125.66	130.40
2	AB	2743	U	C2-N3-C4	-7.90	122.26	127.00
35	BA	93	U	N1-C2-O2	7.90	128.33	122.80
9	AI	68	ARG	NE-CZ-NH2	-7.90	116.35	120.30
15	AO	16	ARG	NE-CZ-NH1	7.90	124.25	120.30
35	BA	532	A	C2-N3-C4	7.90	114.55	110.60
2	AB	237	C	C2-N3-C4	-7.90	115.95	119.90
2	AB	2413	G	N9-C4-C5	7.90	108.56	105.40
35	BA	1229	A	C5-N7-C8	-7.90	99.95	103.90
36	BB	18	A	P-O3'-C3'	7.90	129.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1509	A	C1'-O4'-C4'	7.90	116.22	109.90
2	AB	2180	U	O4'-C1'-N1	7.90	114.52	108.20
2	AB	2750	A	N1-C2-N3	-7.90	125.35	129.30
35	BA	116	A	N7-C8-N9	-7.90	109.85	113.80
2	AB	193	U	C4'-C3'-C2'	-7.89	94.70	102.60
2	AB	1753	G	N3-C4-N9	7.89	130.74	126.00
2	AB	2536	G	C6-N1-C2	-7.89	120.36	125.10
35	BA	482	A	C6-C5-N7	7.89	137.83	132.30
35	BA	746	A	N1-C2-N3	7.89	133.25	129.30
37	BC	43	G	N3-C4-C5	-7.89	124.65	128.60
2	AB	1542	U	O5'-P-OP2	-7.89	98.60	105.70
35	BA	1193	G	C2-N3-C4	7.89	115.85	111.90
2	AB	520	G	N1-C6-O6	-7.89	115.17	119.90
2	AB	1732	C	C6-N1-C2	-7.89	117.14	120.30
2	AB	2080	A	C2-N3-C4	7.89	114.55	110.60
2	AB	2434	A	C4-C5-N7	-7.89	106.75	110.70
1	AA	42	C	N3-C4-C5	-7.89	118.74	121.90
2	AB	493	G	N9-C4-C5	7.89	108.56	105.40
2	AB	769	U	N3-C4-O4	7.89	124.92	119.40
2	AB	1992	G	N9-C4-C5	7.89	108.56	105.40
2	AB	2366	A	C2-N3-C4	7.89	114.55	110.60
35	BA	217	C	C2-N3-C4	-7.89	115.96	119.90
35	BA	402	G	N1-C6-O6	-7.89	115.17	119.90
2	AB	137	U	C5-C4-O4	-7.89	121.17	125.90
2	AB	19	A	C6-N1-C2	-7.89	113.87	118.60
2	AB	23	G	C5'-C4'-O4'	7.89	118.56	109.10
2	AB	175	G	N9-C4-C5	-7.89	102.25	105.40
2	AB	233	A	C3'-C2'-C1'	7.89	107.81	101.50
35	BA	1304	G	C6-C5-N7	-7.89	125.67	130.40
2	AB	178	G	C5-C6-O6	-7.88	123.87	128.60
2	AB	434	U	C5-C6-N1	-7.88	118.76	122.70
2	AB	880	G	C2-N3-C4	7.88	115.84	111.90
2	AB	1585	C	C2-N3-C4	7.88	123.84	119.90
2	AB	2263	C	N1-C2-N3	7.88	124.72	119.20
35	BA	188	C	O4'-C1'-N1	7.88	114.51	108.20
35	BA	350	G	C5-N7-C8	-7.88	100.36	104.30
36	BB	40	G	N3-C2-N2	-7.88	114.38	119.90
2	AB	2698	U	N3-C4-O4	7.88	124.92	119.40
35	BA	345	C	O4'-C1'-N1	7.88	114.51	108.20
35	BA	434	U	C2-N3-C4	-7.88	122.27	127.00
35	BA	1536	C	C1'-O4'-C4'	-7.88	103.59	109.90
2	AB	504	A	O4'-C1'-N9	7.88	114.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2171	A	C4-C5-C6	7.88	120.94	117.00
2	AB	2270	A	N3-C4-C5	-7.88	121.28	126.80
35	BA	124	C	N1-C1'-C2'	-7.88	103.33	112.00
35	BA	1146	A	C2-N3-C4	7.88	114.54	110.60
36	BB	13	A	N9-C1'-C2'	-7.88	103.33	112.00
2	AB	1483	G	C4-C5-N7	-7.88	107.65	110.80
2	AB	1574	C	N3-C4-N4	7.88	123.52	118.00
2	AB	1867	G	N7-C8-N9	7.88	117.04	113.10
2	AB	2381	A	N7-C8-N9	-7.88	109.86	113.80
2	AB	2387	U	N3-C2-O2	-7.88	116.68	122.20
2	AB	2621	G	N3-C4-C5	-7.88	124.66	128.60
35	BA	919	A	C5-C6-N1	7.88	121.64	117.70
2	AB	241	A	C4-C5-C6	-7.88	113.06	117.00
2	AB	405	U	N1-C2-N3	7.88	119.63	114.90
2	AB	879	G	N3-C2-N2	-7.88	114.39	119.90
2	AB	1093	G	N7-C8-N9	7.88	117.04	113.10
2	AB	1672	A	O4'-C1'-N9	7.88	114.50	108.20
2	AB	1752	C	C1'-O4'-C4'	-7.88	103.60	109.90
2	AB	2254	C	C5-C4-N4	7.88	125.72	120.20
2	AB	2324	U	C4'-C3'-C2'	7.88	110.48	102.60
2	AB	2582	G	N3-C4-C5	-7.88	124.66	128.60
2	AB	2752	C	C6-N1-C2	7.88	123.45	120.30
28	A1	10	ARG	NE-CZ-NH2	7.88	124.24	120.30
35	BA	752	G	C5-C6-O6	-7.88	123.87	128.60
2	AB	957	C	O4'-C1'-N1	7.88	114.50	108.20
2	AB	1006	C	C4-C5-C6	-7.88	113.46	117.40
2	AB	1347	A	N1-C6-N6	-7.88	113.88	118.60
2	AB	1484	U	C2-N3-C4	-7.88	122.27	127.00
2	AB	1544	A	N1-C6-N6	7.88	123.33	118.60
2	AB	1854	A	C8-N9-C4	7.88	108.95	105.80
2	AB	2148	G	N3-C2-N2	7.88	125.41	119.90
17	AQ	102	ARG	NE-CZ-NH2	7.88	124.24	120.30
35	BA	349	A	N1-C2-N3	7.88	133.24	129.30
35	BA	541	G	N3-C2-N2	-7.88	114.39	119.90
35	BA	1293	C	C6-N1-C2	7.88	123.45	120.30
2	AB	227	A	C5-N7-C8	-7.88	99.96	103.90
2	AB	262	A	N7-C8-N9	7.88	117.74	113.80
2	AB	489	G	C5-N7-C8	-7.88	100.36	104.30
2	AB	1085	A	C5-C6-N1	7.88	121.64	117.70
2	AB	1127	A	N3-C4-C5	-7.88	121.29	126.80
2	AB	1260	A	C6-C5-N7	7.88	137.81	132.30
2	AB	1870	C	O4'-C1'-N1	7.88	114.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	97	G	C2-N3-C4	7.88	115.84	111.90
35	BA	1004	A	C5'-C4'-O4'	7.88	118.55	109.10
35	BA	1289	A	N1-C6-N6	-7.88	113.88	118.60
1	AA	20	G	C5'-C4'-O4'	7.87	118.55	109.10
2	AB	174	U	O4'-C1'-N1	7.87	114.50	108.20
2	AB	1042	G	N1-C6-O6	7.87	124.62	119.90
2	AB	1052	C	C2-N3-C4	-7.87	115.96	119.90
2	AB	1223	G	C2-N3-C4	7.87	115.84	111.90
2	AB	2451	A	C5'-C4'-C3'	-7.87	103.40	116.00
2	AB	2708	G	N7-C8-N9	-7.87	109.16	113.10
35	BA	31	G	N1-C2-N2	-7.87	109.11	116.20
35	BA	110	C	C6-N1-C2	-7.87	117.15	120.30
35	BA	522	C	N1-C2-O2	7.87	123.62	118.90
35	BA	833	G	C4'-C3'-C2'	-7.87	94.73	102.60
35	BA	913	A	C2-N3-C4	7.87	114.54	110.60
35	BA	1442	G	C2-N3-C4	7.87	115.84	111.90
2	AB	19	A	C4-C5-C6	7.87	120.94	117.00
2	AB	1929	G	N1-C2-N3	-7.87	119.18	123.90
2	AB	2164	C	N3-C4-N4	7.87	123.51	118.00
2	AB	2203	U	C5'-C4'-O4'	7.87	118.55	109.10
2	AB	2241	A	C5-C6-N6	7.87	130.00	123.70
2	AB	2777	G	N3-C4-N9	7.87	130.72	126.00
35	BA	1187	G	O4'-C1'-N9	7.87	114.50	108.20
36	BB	22	G	C2'-C3'-O3'	7.87	126.82	109.50
2	AB	1048	A	N7-C8-N9	7.87	117.73	113.80
2	AB	1889	A	C8-N9-C4	-7.87	102.65	105.80
35	BA	1185	G	C8-N9-C4	-7.87	103.25	106.40
2	AB	369	U	C5'-C4'-O4'	7.87	118.54	109.10
2	AB	2716	C	N1-C1'-C2'	-7.87	103.34	112.00
2	AB	2758	A	N9-C4-C5	7.87	108.95	105.80
2	AB	2857	G	O4'-C1'-N9	7.87	114.50	108.20
2	AB	2861	U	C5'-C4'-O4'	7.87	118.54	109.10
35	BA	585	G	N3-C4-N9	7.87	130.72	126.00
35	BA	1275	A	N1-C6-N6	7.87	123.32	118.60
2	AB	2254	C	C4-C5-C6	7.87	121.33	117.40
35	BA	601	G	N3-C4-C5	-7.87	124.67	128.60
1	AA	99	A	N9-C4-C5	7.87	108.95	105.80
2	AB	886	A	N7-C8-N9	7.87	117.73	113.80
2	AB	1738	G	O4'-C1'-N9	7.87	114.49	108.20
2	AB	2363	G	C2-N3-C4	7.87	115.83	111.90
2	AB	2409	G	N1-C2-N2	7.87	123.28	116.20
2	AB	2502	G	C5-C6-N1	7.87	115.43	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2768	U	C6-N1-C2	-7.87	116.28	121.00
2	AB	2876	G	N3-C4-C5	-7.87	124.67	128.60
35	BA	152	A	N7-C8-N9	-7.87	109.87	113.80
2	AB	86	G	C5-C6-O6	7.86	133.32	128.60
2	AB	635	C	C5'-C4'-O4'	7.86	118.53	109.10
35	BA	224	U	C3'-C2'-C1'	7.86	107.79	101.50
35	BA	467	U	O4'-C1'-N1	7.86	114.49	108.20
35	BA	1233	G	N1-C2-N3	-7.86	119.18	123.90
38	BD	94	ARG	NE-CZ-NH2	7.86	124.23	120.30
2	AB	244	A	N1-C6-N6	-7.86	113.88	118.60
35	BA	9	G	O4'-C4'-C3'	7.86	112.39	106.10
36	BB	35	G	N9-C1'-C2'	-7.86	103.35	112.00
2	AB	335	C	N3-C4-N4	7.86	123.50	118.00
2	AB	630	G	C5-N7-C8	-7.86	100.37	104.30
2	AB	967	U	N1-C2-O2	-7.86	117.30	122.80
2	AB	1056	G	N7-C8-N9	7.86	117.03	113.10
2	AB	2314	A	N3-C4-C5	7.86	132.30	126.80
2	AB	2388	A	C6-N1-C2	7.86	123.32	118.60
2	AB	2538	C	C3'-C2'-C1'	-7.86	95.21	101.50
2	AB	2699	C	C2-N3-C4	7.86	123.83	119.90
2	AB	2705	A	C2-N3-C4	7.86	114.53	110.60
2	AB	2848	G	C4-C5-C6	7.86	123.52	118.80
2	AB	2883	A	C4-C5-C6	7.86	120.93	117.00
35	BA	553	A	C1'-O4'-C4'	7.86	116.19	109.90
35	BA	723	U	N3-C4-C5	-7.86	109.88	114.60
35	BA	1382	C	C4-C5-C6	7.86	121.33	117.40
36	BB	35	G	C8-N9-C4	-7.86	103.26	106.40
36	BB	38	G	C4-C5-N7	-7.86	107.66	110.80
2	AB	108	G	C6-N1-C2	-7.86	120.38	125.10
2	AB	595	C	N1-C2-O2	7.86	123.62	118.90
2	AB	943	A	N1-C2-N3	-7.86	125.37	129.30
2	AB	2704	C	N3-C4-N4	7.86	123.50	118.00
35	BA	1278	G	N3-C4-C5	7.86	132.53	128.60
37	BC	28	U	N3-C2-O2	-7.86	116.70	122.20
1	AA	112	G	N1-C2-N3	-7.86	119.19	123.90
2	AB	1623	G	N7-C8-N9	7.86	117.03	113.10
2	AB	1736	U	O4'-C1'-N1	7.86	114.49	108.20
2	AB	2577	A	C5-N7-C8	7.86	107.83	103.90
35	BA	989	U	N3-C2-O2	7.86	127.70	122.20
35	BA	1137	C	N3-C2-O2	-7.86	116.40	121.90
35	BA	1502	A	N1-C6-N6	7.86	123.31	118.60
2	AB	359	G	O4'-C1'-N9	7.86	114.48	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1439	A	N1-C6-N6	-7.86	113.89	118.60
2	AB	2859	G	C5-N7-C8	-7.86	100.37	104.30
35	BA	38	G	O4'-C1'-N9	7.86	114.48	108.20
35	BA	1215	G	O4'-C1'-C2'	7.86	114.67	107.60
35	BA	1362	A	C8-N9-C4	-7.86	102.66	105.80
2	AB	2326	C	N3-C4-C5	7.85	125.04	121.90
35	BA	742	G	O4'-C1'-N9	7.85	114.48	108.20
2	AB	860	U	C2-N3-C4	-7.85	122.29	127.00
2	AB	1949	G	N9-C4-C5	-7.85	102.26	105.40
2	AB	2020	A	P-O3'-C3'	7.85	129.12	119.70
2	AB	2817	U	O4'-C1'-N1	7.85	114.48	108.20
35	BA	500	G	C5-N7-C8	-7.85	100.37	104.30
35	BA	535	A	C4-C5-N7	-7.85	106.77	110.70
36	BB	20	G	C2-N3-C4	7.85	115.83	111.90
35	BA	439	U	C5-C6-N1	-7.85	118.77	122.70
35	BA	773	G	N3-C4-N9	7.85	130.71	126.00
35	BA	987	G	C8-N9-C4	-7.85	103.26	106.40
2	AB	709	U	C6-N1-C2	-7.85	116.29	121.00
2	AB	1190	G	C5'-C4'-O4'	7.85	118.52	109.10
2	AB	1935	G	N9-C4-C5	7.85	108.54	105.40
2	AB	2148	G	C8-N9-C4	-7.85	103.26	106.40
35	BA	256	U	C4-C5-C6	7.85	124.41	119.70
35	BA	401	C	C6-N1-C2	7.85	123.44	120.30
35	BA	560	A	O4'-C1'-N9	7.85	114.48	108.20
35	BA	1033	G	N3-C4-C5	-7.85	124.67	128.60
35	BA	1493	A	C8-N9-C4	-7.85	102.66	105.80
2	AB	971	G	C8-N9-C1'	7.85	137.20	127.00
2	AB	1235	G	N1-C6-O6	7.85	124.61	119.90
2	AB	1301	A	C2-N3-C4	7.85	114.52	110.60
2	AB	1505	A	N1-C2-N3	-7.85	125.38	129.30
2	AB	1635	A	O4'-C1'-N9	7.85	114.48	108.20
2	AB	2210	U	C5-C4-O4	7.85	130.61	125.90
35	BA	9	G	C4'-C3'-C2'	-7.85	94.75	102.60
35	BA	478	A	O4'-C1'-N9	7.85	114.48	108.20
35	BA	666	G	C4-C5-N7	7.85	113.94	110.80
2	AB	97	C	C3'-C2'-C1'	-7.85	95.22	101.50
2	AB	504	A	N1-C2-N3	7.85	133.22	129.30
2	AB	520	G	N3-C4-N9	7.85	130.71	126.00
2	AB	2400	G	C6-N1-C2	-7.85	120.39	125.10
35	BA	284	C	N3-C4-C5	7.85	125.04	121.90
35	BA	1511	G	N1-C6-O6	-7.85	115.19	119.90
2	AB	252	G	N1-C6-O6	7.84	124.61	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1192	G	N1-C2-N2	7.84	123.26	116.20
2	AB	2607	G	P-O3'-C3'	7.84	129.11	119.70
2	AB	2630	G	N3-C4-C5	-7.84	124.68	128.60
35	BA	75	G	C5-N7-C8	-7.84	100.38	104.30
2	AB	207	A	N9-C4-C5	7.84	108.94	105.80
2	AB	430	A	C5-C6-N1	7.84	121.62	117.70
2	AB	436	C	N3-C4-N4	7.84	123.49	118.00
2	AB	1913	A	C1'-O4'-C4'	-7.84	103.63	109.90
2	AB	2650	U	C5-C4-O4	-7.84	121.19	125.90
2	AB	2819	G	O4'-C1'-N9	7.84	114.47	108.20
2	AB	20	C	C6-N1-C2	-7.84	117.16	120.30
2	AB	609	A	C4-C5-C6	7.84	120.92	117.00
2	AB	1452	G	C4-C5-N7	-7.84	107.66	110.80
2	AB	1803	A	C8-N9-C4	-7.84	102.66	105.80
2	AB	2173	A	N1-C2-N3	-7.84	125.38	129.30
2	AB	2493	U	C5-C6-N1	-7.84	118.78	122.70
2	AB	2578	G	N9-C4-C5	7.84	108.54	105.40
35	BA	145	G	N9-C4-C5	7.84	108.54	105.40
35	BA	539	A	N9-C4-C5	-7.84	102.66	105.80
2	AB	105	C	C5-C4-N4	7.84	125.69	120.20
2	AB	371	A	C1'-O4'-C4'	7.84	116.17	109.90
2	AB	978	G	C6-N1-C2	-7.84	120.40	125.10
2	AB	2218	G	C4-C5-N7	7.84	113.94	110.80
35	BA	233	C	C5'-C4'-O4'	7.84	118.51	109.10
35	BA	1043	G	C2-N3-C4	7.84	115.82	111.90
36	BB	28	U	O4'-C1'-N1	7.84	114.47	108.20
57	BW	65	ARG	NE-CZ-NH1	7.84	124.22	120.30
2	AB	615	U	N3-C2-O2	-7.84	116.71	122.20
2	AB	1211	C	C2-N3-C4	7.84	123.82	119.90
2	AB	2182	U	N3-C4-C5	-7.84	109.90	114.60
2	AB	2590	A	C8-N9-C4	-7.84	102.67	105.80
2	AB	2862	G	C2-N3-C4	7.84	115.82	111.90
35	BA	844	G	N9-C4-C5	7.84	108.53	105.40
2	AB	976	G	N3-C2-N2	7.84	125.39	119.90
2	AB	1252	G	N7-C8-N9	-7.84	109.18	113.10
2	AB	2255	G	C5-C6-O6	7.84	133.30	128.60
35	BA	254	G	C5-C6-O6	-7.84	123.90	128.60
35	BA	429	U	C4-C5-C6	7.84	124.40	119.70
35	BA	941	G	C2-N3-C4	7.84	115.82	111.90
35	BA	1321	U	N3-C4-C5	-7.84	109.90	114.60
2	AB	151	C	P-O3'-C3'	7.83	129.10	119.70
2	AB	1235	G	O4'-C4'-C3'	7.83	112.37	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	971	G	C1'-O4'-C4'	-7.83	103.63	109.90
57	BW	1	PRO	CA-N-CD	-7.83	100.53	111.50
2	AB	1718	G	O4'-C1'-N9	-7.83	101.93	108.20
2	AB	1910	G	C5-C6-O6	-7.83	123.90	128.60
2	AB	2024	G	C8-N9-C4	-7.83	103.27	106.40
2	AB	2722	G	O4'-C1'-N9	7.83	114.47	108.20
2	AB	2861	U	C6-N1-C2	-7.83	116.30	121.00
2	AB	2874	C	C5-C4-N4	-7.83	114.72	120.20
35	BA	1340	A	N7-C8-N9	-7.83	109.88	113.80
42	BH	24	ARG	NE-CZ-NH1	7.83	124.22	120.30
2	AB	513	A	C4-C5-N7	-7.83	106.78	110.70
2	AB	906	U	O4'-C1'-N1	7.83	114.47	108.20
2	AB	1090	A	N9-C4-C5	7.83	108.93	105.80
2	AB	1826	G	N3-C2-N2	7.83	125.38	119.90
2	AB	2247	A	C4'-C3'-C2'	-7.83	94.77	102.60
2	AB	2527	C	C5-C4-N4	7.83	125.68	120.20
2	AB	2699	C	N3-C4-C5	-7.83	118.77	121.90
35	BA	1145	A	N1-C2-N3	-7.83	125.38	129.30
2	AB	1002	G	N7-C8-N9	-7.83	109.19	113.10
2	AB	1621	U	C4'-C3'-C2'	-7.83	94.77	102.60
7	AG	30	VAL	CA-CB-CG1	7.83	122.65	110.90
35	BA	301	G	N1-C2-N3	7.83	128.60	123.90
35	BA	325	A	C8-N9-C4	-7.83	102.67	105.80
2	AB	408	G	C5-N7-C8	-7.83	100.39	104.30
2	AB	618	G	C4-C5-N7	-7.83	107.67	110.80
2	AB	1079	C	C2-N3-C4	7.83	123.81	119.90
2	AB	1196	C	C6-N1-C2	7.83	123.43	120.30
2	AB	1361	G	N9-C4-C5	-7.83	102.27	105.40
2	AB	1383	A	C4-C5-C6	7.83	120.91	117.00
2	AB	1396	U	P-O3'-C3'	7.83	129.09	119.70
2	AB	1815	A	O4'-C1'-N9	7.83	114.46	108.20
2	AB	2266	A	N9-C4-C5	-7.83	102.67	105.80
2	AB	2487	G	N1-C2-N3	-7.83	119.20	123.90
35	BA	301	G	C6-N1-C2	-7.83	120.40	125.10
35	BA	698	G	C5-C6-O6	7.83	133.30	128.60
2	AB	570	G	N9-C4-C5	-7.83	102.27	105.40
1	AA	105	G	C4-C5-C6	7.83	123.50	118.80
2	AB	1074	G	C6-C5-N7	7.83	135.09	130.40
2	AB	1435	G	C5-C6-O6	-7.83	123.91	128.60
2	AB	1726	C	N1-C2-N3	-7.83	113.72	119.20
2	AB	2360	G	C6-N1-C2	-7.83	120.40	125.10
35	BA	1018	G	C4-C5-C6	-7.83	114.11	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1262	C	N3-C4-C5	-7.83	118.77	121.90
37	BC	57	C	C6-N1-C2	-7.83	117.17	120.30
46	BL	9	ARG	NE-CZ-NH2	7.83	124.21	120.30
48	BN	94	TYR	CB-CG-CD1	-7.83	116.31	121.00
2	AB	36	G	N3-C4-N9	7.82	130.69	126.00
2	AB	822	G	C5-C6-N1	7.82	115.41	111.50
2	AB	2152	G	C5'-C4'-C3'	-7.82	103.48	116.00
35	BA	208	U	O4'-C4'-C3'	7.82	112.36	106.10
35	BA	399	G	N3-C4-C5	-7.82	124.69	128.60
35	BA	1169	A	C8-N9-C4	7.82	108.93	105.80
37	BC	20	G	C5-C6-O6	7.82	133.29	128.60
57	BW	32	ARG	NE-CZ-NH2	7.82	124.21	120.30
2	AB	1645	G	N3-C4-C5	-7.82	124.69	128.60
2	AB	1723	G	C8-N9-C4	-7.82	103.27	106.40
2	AB	479	A	N1-C2-N3	7.82	133.21	129.30
2	AB	1173	U	C4-C5-C6	7.82	124.39	119.70
2	AB	1746	A	C6-C5-N7	-7.82	126.83	132.30
2	AB	2245	U	N3-C2-O2	-7.82	116.72	122.20
35	BA	427	U	C3'-C2'-C1'	-7.82	95.24	101.50
35	BA	593	U	O4'-C1'-N1	7.82	114.46	108.20
35	BA	1190	G	C2-N3-C4	7.82	115.81	111.90
35	BA	1204	A	N3-C4-C5	-7.82	121.33	126.80
2	AB	1631	G	N9-C4-C5	-7.82	102.27	105.40
2	AB	1711	A	C5'-C4'-O4'	7.82	118.48	109.10
2	AB	1992	G	C2-N3-C4	7.82	115.81	111.90
35	BA	295	C	C2-N1-C1'	-7.82	110.20	118.80
35	BA	1280	A	C5-N7-C8	-7.82	99.99	103.90
35	BA	1286	U	C6-N1-C2	-7.82	116.31	121.00
35	BA	1293	C	C4-C5-C6	-7.82	113.49	117.40
51	BQ	83	ARG	NE-CZ-NH2	7.82	124.21	120.30
2	AB	50	U	O4'-C1'-N1	7.82	114.45	108.20
2	AB	1016	G	C5-C6-O6	-7.82	123.91	128.60
2	AB	1360	G	N1-C2-N3	-7.82	119.21	123.90
2	AB	1950	G	C5'-C4'-C3'	-7.82	103.49	116.00
2	AB	2066	C	C2-N3-C4	7.82	123.81	119.90
2	AB	2319	G	C3'-C2'-C1'	-7.82	95.25	101.50
2	AB	2846	G	C5-C6-O6	-7.82	123.91	128.60
2	AB	2862	G	N9-C4-C5	7.82	108.53	105.40
35	BA	113	G	C5-C6-N1	7.82	115.41	111.50
35	BA	506	G	N7-C8-N9	7.82	117.01	113.10
2	AB	98	G	N3-C4-C5	-7.82	124.69	128.60
2	AB	734	A	C2-N3-C4	-7.82	106.69	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	834	G	C1'-O4'-C4'	7.82	116.15	109.90
2	AB	894	U	N1-C1'-C2'	-7.82	103.40	112.00
2	AB	1294	U	C4-C5-C6	7.82	124.39	119.70
2	AB	1821	A	C6-C5-N7	7.82	137.77	132.30
2	AB	2112	G	C6-C5-N7	7.82	135.09	130.40
6	AF	60	TRP	NE1-CE2-CD2	-7.82	99.48	107.30
35	BA	507	C	C6-N1-C2	-7.82	117.17	120.30
35	BA	972	C	C2-N1-C1'	-7.82	110.20	118.80
2	AB	335	C	C2-N3-C4	7.81	123.81	119.90
35	BA	502	A	C4-C5-N7	-7.81	106.79	110.70
2	AB	627	A	N9-C1'-C2'	-7.81	103.41	112.00
2	AB	758	C	N3-C4-C5	-7.81	118.78	121.90
2	AB	875	G	C5-C6-N1	-7.81	107.59	111.50
2	AB	1394	U	N1-C2-O2	7.81	128.27	122.80
2	AB	1559	U	C5-C4-O4	-7.81	121.21	125.90
2	AB	1728	C	C5-C4-N4	7.81	125.67	120.20
2	AB	1772	A	C5-C6-N1	7.81	121.61	117.70
2	AB	2623	G	C5'-C4'-O4'	7.81	118.47	109.10
35	BA	160	A	N7-C8-N9	7.81	117.71	113.80
35	BA	627	G	O4'-C1'-N9	7.81	114.45	108.20
35	BA	1351	U	N1-C1'-C2'	-7.81	103.41	112.00
2	AB	1809	A	C5-N7-C8	-7.81	100.00	103.90
2	AB	2890	G	N3-C4-C5	-7.81	124.69	128.60
2	AB	431	U	N1-C2-N3	7.81	119.59	114.90
2	AB	963	U	C4'-C3'-C2'	-7.81	94.79	102.60
2	AB	2744	G	O4'-C1'-N9	7.81	114.45	108.20
35	BA	572	A	N9-C4-C5	-7.81	102.68	105.80
2	AB	31	C	N1-C2-O2	7.81	123.58	118.90
2	AB	577	G	C2-N3-C4	7.81	115.80	111.90
2	AB	921	C	N3-C4-N4	7.81	123.47	118.00
2	AB	1319	C	C2-N3-C4	7.81	123.80	119.90
2	AB	2277	G	N3-C2-N2	-7.81	114.43	119.90
2	AB	2523	G	C6-C5-N7	-7.81	125.72	130.40
35	BA	903	G	C8-N9-C4	-7.81	103.28	106.40
37	BC	45	A	C5-N7-C8	7.81	107.80	103.90
35	BA	223	A	C5-N7-C8	-7.81	100.00	103.90
35	BA	529	G	N7-C8-N9	7.81	117.00	113.10
35	BA	1119	C	C5-C4-N4	7.81	125.66	120.20
2	AB	84	A	N1-C6-N6	-7.80	113.92	118.60
2	AB	504	A	N7-C8-N9	-7.80	109.90	113.80
2	AB	1747	U	N1-C2-O2	7.80	128.26	122.80
2	AB	1924	C	C3'-C2'-C1'	7.80	107.74	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2015	A	C5'-C4'-O4'	-7.80	99.73	109.10
2	AB	2757	A	C8-N9-C4	7.80	108.92	105.80
35	BA	102	G	O4'-C1'-N9	7.80	114.44	108.20
2	AB	2254	C	O4'-C1'-N1	7.80	114.44	108.20
2	AB	700	G	C5-C6-N1	7.80	115.40	111.50
2	AB	1863	G	O4'-C1'-N9	7.80	114.44	108.20
2	AB	1877	A	C4'-C3'-C2'	-7.80	94.80	102.60
2	AB	2182	U	O4'-C1'-N1	7.80	114.44	108.20
2	AB	2394	C	N1-C2-O2	7.80	123.58	118.90
2	AB	2831	G	C6-C5-N7	-7.80	125.72	130.40
35	BA	921	U	N1-C2-O2	7.80	128.26	122.80
35	BA	1337	G	C4-C5-C6	7.80	123.48	118.80
35	BA	1529	G	O4'-C1'-N9	7.80	114.44	108.20
46	BL	48	ARG	NE-CZ-NH2	-7.80	116.40	120.30
2	AB	148	U	C4'-C3'-C2'	-7.80	94.80	102.60
2	AB	468	G	C4-C5-N7	-7.80	107.68	110.80
2	AB	1117	C	C5'-C4'-O4'	7.80	118.46	109.10
2	AB	1481	U	C3'-C2'-C1'	-7.80	95.26	101.50
2	AB	1519	G	N3-C4-C5	-7.80	124.70	128.60
2	AB	1678	A	C8-N9-C4	-7.80	102.68	105.80
2	AB	2211	A	N9-C4-C5	7.80	108.92	105.80
35	BA	342	C	C4-C5-C6	-7.80	113.50	117.40
35	BA	761	G	C5-C6-O6	-7.80	123.92	128.60
35	BA	1244	G	C5-C6-N1	7.80	115.40	111.50
35	BA	1405	G	C4-C5-N7	-7.80	107.68	110.80
2	AB	608	A	C5-C6-N6	7.80	129.94	123.70
2	AB	2723	C	N1-C2-O2	7.80	123.58	118.90
35	BA	1415	G	N3-C2-N2	-7.80	114.44	119.90
35	BA	1533	C	C5-C6-N1	7.80	124.90	121.00
2	AB	1290	C	C4-C5-C6	7.80	121.30	117.40
2	AB	2068	U	C2-N3-C4	-7.80	122.32	127.00
35	BA	616	G	C6-N1-C2	-7.80	120.42	125.10
35	BA	1499	A	N1-C2-N3	7.80	133.20	129.30
2	AB	1315	C	C3'-C2'-C1'	7.79	107.74	101.50
2	AB	2017	U	C5-C4-O4	-7.79	121.22	125.90
2	AB	233	A	N9-C4-C5	7.79	108.92	105.80
2	AB	1087	G	N3-C4-N9	-7.79	121.32	126.00
2	AB	1702	G	O4'-C1'-N9	7.79	114.44	108.20
2	AB	2577	A	N1-C6-N6	-7.79	113.92	118.60
35	BA	1	A	C5-N7-C8	-7.79	100.00	103.90
35	BA	357	G	N9-C4-C5	7.79	108.52	105.40
1	AA	24	G	O4'-C4'-C3'	7.79	112.33	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	82	U	N3-C2-O2	-7.79	116.75	122.20
2	AB	386	G	N1-C2-N2	7.79	123.21	116.20
2	AB	1421	G	C2-N3-C4	7.79	115.80	111.90
2	AB	2136	G	P-O5'-C5'	7.79	133.37	120.90
2	AB	2336	A	C8-N9-C4	-7.79	102.68	105.80
2	AB	2383	G	N3-C4-C5	-7.79	124.70	128.60
35	BA	346	G	C5-C6-N1	-7.79	107.61	111.50
35	BA	444	G	C5-N7-C8	-7.79	100.40	104.30
35	BA	1048	G	C5-C6-N1	7.79	115.39	111.50
2	AB	1023	U	N3-C4-O4	-7.79	113.95	119.40
2	AB	1532	A	C8-N9-C4	-7.79	102.68	105.80
2	AB	1768	C	N3-C2-O2	-7.79	116.45	121.90
2	AB	2435	A	C6-N1-C2	7.79	123.27	118.60
2	AB	2645	G	O4'-C4'-C3'	7.79	112.33	106.10
35	BA	1373	G	C4'-C3'-C2'	-7.79	94.81	102.60
2	AB	2410	G	O4'-C1'-N9	7.79	114.43	108.20
35	BA	1449	C	C5-C6-N1	7.79	124.89	121.00
35	BA	1527	U	C5-C4-O4	-7.79	121.23	125.90
2	AB	17	G	P-O3'-C3'	7.79	129.04	119.70
10	AJ	61	ARG	NE-CZ-NH1	7.79	124.19	120.30
2	AB	80	G	C8-N9-C4	-7.79	103.28	106.40
2	AB	2112	G	N3-C4-C5	-7.79	124.71	128.60
2	AB	2582	G	C5-C6-N1	7.79	115.39	111.50
35	BA	530	G	C4-C5-N7	-7.79	107.69	110.80
35	BA	572	A	C6-C5-N7	-7.79	126.85	132.30
35	BA	691	G	N3-C4-C5	-7.79	124.71	128.60
35	BA	1068	G	N9-C4-C5	7.79	108.51	105.40
2	AB	1199	U	O4'-C1'-N1	7.78	114.43	108.20
2	AB	2250	G	C4-C5-N7	7.78	113.91	110.80
2	AB	2455	G	N3-C2-N2	-7.78	114.45	119.90
2	AB	2529	G	C8-N9-C4	-7.78	103.29	106.40
2	AB	2838	G	N9-C4-C5	7.78	108.51	105.40
35	BA	67	C	C4-C5-C6	7.78	121.29	117.40
2	AB	90	U	O4'-C1'-N1	7.78	114.43	108.20
35	BA	237	G	N3-C4-N9	7.78	130.67	126.00
2	AB	412	A	N3-C4-N9	7.78	133.62	127.40
2	AB	1558	C	C5-C6-N1	-7.78	117.11	121.00
2	AB	2430	A	C5-N7-C8	7.78	107.79	103.90
2	AB	2737	G	O4'-C1'-N9	7.78	114.42	108.20
35	BA	173	U	P-O3'-C3'	7.78	129.04	119.70
35	BA	218	U	N3-C4-O4	7.78	124.85	119.40
35	BA	959	A	C3'-C2'-C1'	7.78	107.72	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1084	A	C5'-C4'-O4'	7.78	118.44	109.10
35	BA	947	G	O4'-C1'-N9	7.78	114.42	108.20
2	AB	453	A	P-O3'-C3'	7.78	129.03	119.70
2	AB	627	A	C3'-C2'-C1'	-7.78	95.28	101.50
2	AB	1268	A	N1-C6-N6	-7.78	113.93	118.60
2	AB	2106	U	C2-N3-C4	-7.78	122.33	127.00
35	BA	1401	G	N7-C8-N9	7.78	116.99	113.10
2	AB	247	G	C5-C6-N1	7.78	115.39	111.50
2	AB	366	C	O4'-C1'-N1	7.78	114.42	108.20
2	AB	978	G	C4-C5-C6	7.78	123.47	118.80
2	AB	1280	G	O4'-C4'-C3'	7.78	112.32	106.10
2	AB	2022	U	C5-C4-O4	-7.78	121.23	125.90
2	AB	2031	A	N1-C6-N6	7.78	123.27	118.60
35	BA	452	A	C5-N7-C8	-7.78	100.01	103.90
35	BA	577	G	N3-C4-C5	-7.78	124.71	128.60
35	BA	913	A	N1-C2-N3	-7.78	125.41	129.30
2	AB	2863	C	N1-C2-O2	7.77	123.56	118.90
2	AB	441	U	C4-C5-C6	7.77	124.36	119.70
2	AB	618	G	N9-C4-C5	7.77	108.51	105.40
2	AB	660	C	N3-C4-N4	-7.77	112.56	118.00
2	AB	1218	G	C8-N9-C4	-7.77	103.29	106.40
2	AB	2060	A	O4'-C1'-N9	7.77	114.42	108.20
2	AB	2341	G	O4'-C1'-N9	7.77	114.42	108.20
35	BA	631	C	O4'-C1'-N1	7.77	114.42	108.20
2	AB	874	G	C5-C6-O6	-7.77	123.94	128.60
2	AB	447	A	C4-C5-N7	7.77	114.58	110.70
2	AB	2546	U	O4'-C1'-N1	7.77	114.42	108.20
23	AW	28	LEU	CB-CG-CD1	-7.77	97.79	111.00
35	BA	469	C	C5-C6-N1	7.77	124.89	121.00
35	BA	582	C	C5-C4-N4	7.77	125.64	120.20
35	BA	730	G	C8-N9-C4	-7.77	103.29	106.40
35	BA	956	U	C5-C6-N1	-7.77	118.82	122.70
35	BA	970	C	C4-C5-C6	7.77	121.28	117.40
2	AB	332	A	C4-C5-C6	-7.77	113.12	117.00
2	AB	444	C	C4'-C3'-C2'	-7.77	94.83	102.60
2	AB	501	A	C5-C6-N6	-7.77	117.49	123.70
2	AB	1737	G	N3-C4-C5	-7.77	124.72	128.60
2	AB	1995	U	O4'-C1'-N1	7.77	114.41	108.20
2	AB	2542	A	C5-C6-N6	-7.77	117.49	123.70
2	AB	2600	A	N1-C6-N6	-7.77	113.94	118.60
35	BA	749	A	O4'-C1'-N9	7.77	114.41	108.20
35	BA	789	U	O4'-C1'-N1	7.77	114.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	861	G	C5-N7-C8	-7.77	100.42	104.30
35	BA	1491	G	C4-C5-N7	-7.77	107.69	110.80
36	BB	20	G	N1-C2-N3	-7.77	119.24	123.90
2	AB	534	U	C1'-O4'-C4'	7.77	116.11	109.90
35	BA	145	G	N3-C4-C5	-7.77	124.72	128.60
2	AB	153	U	C4'-C3'-C2'	-7.76	94.83	102.60
2	AB	1663	G	N1-C2-N2	7.76	123.19	116.20
2	AB	2002	G	N3-C2-N2	-7.76	114.46	119.90
2	AB	607	U	C3'-C2'-C1'	-7.76	95.29	101.50
2	AB	1527	G	N1-C2-N2	7.76	123.19	116.20
2	AB	2812	G	C4-C5-N7	-7.76	107.69	110.80
2	AB	473	G	C4-C5-N7	-7.76	107.69	110.80
2	AB	700	G	C5-C6-O6	-7.76	123.94	128.60
2	AB	2024	G	N9-C4-C5	7.76	108.50	105.40
37	BC	75	C	O4'-C1'-N1	7.76	114.41	108.20
2	AB	58	G	N3-C2-N2	-7.76	114.47	119.90
2	AB	146	A	C2-N3-C4	7.76	114.48	110.60
2	AB	217	A	O4'-C4'-C3'	-7.76	96.24	104.00
2	AB	337	C	O4'-C1'-N1	7.76	114.41	108.20
2	AB	1057	A	C2-N3-C4	7.76	114.48	110.60
2	AB	2517	C	N3-C4-C5	7.76	125.00	121.90
2	AB	2627	G	C2-N3-C4	7.76	115.78	111.90
35	BA	226	G	C5-N7-C8	-7.76	100.42	104.30
35	BA	421	U	N3-C4-C5	-7.76	109.94	114.60
35	BA	936	C	O4'-C1'-N1	7.76	114.41	108.20
2	AB	1478	G	O4'-C1'-N9	7.76	114.41	108.20
2	AB	2008	C	C3'-C2'-C1'	7.76	107.71	101.50
26	AZ	77	TYR	CB-CG-CD2	7.76	125.66	121.00
35	BA	1325	C	C4'-C3'-C2'	-7.76	94.84	102.60
35	BA	1512	U	C6-N1-C2	-7.76	116.34	121.00
2	AB	433	C	N3-C2-O2	-7.76	116.47	121.90
35	BA	1385	G	C4-C5-N7	7.76	113.90	110.80
2	AB	621	A	O4'-C1'-N9	7.75	114.40	108.20
2	AB	2693	G	C8-N9-C4	7.75	109.50	106.40
37	BC	41	C	C1'-O4'-C4'	7.75	116.10	109.90
2	AB	85	G	C5-N7-C8	7.75	108.18	104.30
2	AB	1137	G	N1-C6-O6	7.75	124.55	119.90
2	AB	1207	C	N3-C2-O2	-7.75	116.47	121.90
2	AB	1539	U	C6-N1-C2	-7.75	116.35	121.00
2	AB	1920	C	N1-C2-O2	7.75	123.55	118.90
35	BA	25	C	N3-C4-C5	-7.75	118.80	121.90
35	BA	558	G	C2-N3-C4	7.75	115.78	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	745	G	C4-C5-C6	7.75	123.45	118.80
35	BA	1315	U	N3-C2-O2	-7.75	116.77	122.20
2	AB	4	U	C5-C4-O4	7.75	130.55	125.90
2	AB	590	A	N7-C8-N9	-7.75	109.92	113.80
2	AB	1031	G	C1'-O4'-C4'	-7.75	103.70	109.90
35	BA	1434	A	C6-N1-C2	7.75	123.25	118.60
2	AB	1510	G	N1-C2-N3	-7.75	119.25	123.90
2	AB	1654	A	C6-C5-N7	7.75	137.72	132.30
2	AB	1731	G	C2-N3-C4	7.75	115.78	111.90
2	AB	248	G	C5-C6-O6	7.75	133.25	128.60
2	AB	908	C	O4'-C1'-N1	7.75	114.40	108.20
2	AB	1140	C	C5-C4-N4	-7.75	114.78	120.20
2	AB	1913	A	O4'-C1'-N9	7.75	114.40	108.20
2	AB	2163	A	C2-N3-C4	7.75	114.47	110.60
2	AB	2744	G	C5'-C4'-O4'	7.75	118.40	109.10
35	BA	938	A	N1-C2-N3	-7.75	125.42	129.30
35	BA	1084	G	C4-C5-N7	-7.75	107.70	110.80
2	AB	366	C	N3-C4-C5	7.75	125.00	121.90
2	AB	2159	G	N1-C2-N2	7.75	123.17	116.20
35	BA	927	G	C6-N1-C2	-7.75	120.45	125.10
35	BA	1167	A	C5-C6-N1	-7.75	113.83	117.70
44	BJ	12	ARG	NE-CZ-NH2	7.75	124.17	120.30
2	AB	348	A	N3-C4-C5	7.75	132.22	126.80
2	AB	549	G	C3'-C2'-C1'	7.75	107.70	101.50
2	AB	1119	U	N3-C4-C5	-7.75	109.95	114.60
2	AB	1377	G	C6-C5-N7	-7.75	125.75	130.40
2	AB	2697	G	N3-C4-N9	7.75	130.65	126.00
2	AB	2814	A	O4'-C1'-N9	7.75	114.40	108.20
7	AG	70	ARG	NE-CZ-NH2	7.75	124.17	120.30
19	AS	2	ARG	NE-CZ-NH1	-7.75	116.43	120.30
2	AB	908	C	C6-N1-C2	-7.74	117.20	120.30
2	AB	1510	G	C3'-C2'-C1'	-7.74	95.31	101.50
35	BA	612	C	C5-C6-N1	-7.74	117.13	121.00
2	AB	152	A	C4-C5-C6	7.74	120.87	117.00
2	AB	857	G	N1-C2-N3	7.74	128.54	123.90
2	AB	1496	A	C5-N7-C8	7.74	107.77	103.90
2	AB	1715	G	O4'-C1'-N9	7.74	114.39	108.20
35	BA	802	A	C4-C5-N7	-7.74	106.83	110.70
2	AB	1846	G	C5-N7-C8	7.74	108.17	104.30
2	AB	1995	U	C5-C4-O4	7.74	130.54	125.90
2	AB	2778	A	N1-C2-N3	-7.74	125.43	129.30
35	BA	649	A	C4-C5-N7	-7.74	106.83	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	690	G	N9-C4-C5	7.74	108.50	105.40
35	BA	899	C	C6-N1-C2	-7.74	117.20	120.30
35	BA	1262	C	N1-C2-O2	7.74	123.54	118.90
2	AB	1007	C	C6-N1-C2	7.74	123.40	120.30
2	AB	1045	C	N3-C4-N4	-7.74	112.58	118.00
2	AB	1350	C	C6-N1-C2	-7.74	117.20	120.30
2	AB	1401	G	C5-C6-O6	-7.74	123.96	128.60
2	AB	1580	A	C4-C5-N7	7.74	114.57	110.70
2	AB	1609	A	C6-N1-C2	7.74	123.24	118.60
35	BA	181	A	C1'-O4'-C4'	-7.74	103.71	109.90
2	AB	102	U	C2-N3-C4	-7.74	122.36	127.00
2	AB	380	G	N7-C8-N9	-7.74	109.23	113.10
2	AB	930	G	C4'-C3'-C2'	-7.74	94.86	102.60
2	AB	1315	C	C1'-O4'-C4'	7.74	116.09	109.90
2	AB	2411	A	C4-C5-C6	-7.74	113.13	117.00
2	AB	741	U	N1-C2-N3	7.74	119.54	114.90
2	AB	2633	G	O4'-C1'-N9	7.74	114.39	108.20
35	BA	643	C	C4'-C3'-C2'	-7.74	94.86	102.60
35	BA	1412	C	N3-C4-N4	7.74	123.42	118.00
36	BB	57	C	C2-N3-C4	7.74	123.77	119.90
35	BA	1157	A	O4'-C1'-N9	7.73	114.39	108.20
2	AB	183	C	O4'-C1'-N1	7.73	114.39	108.20
2	AB	533	G	C2-N3-C4	7.73	115.77	111.90
2	AB	1497	U	C1'-O4'-C4'	-7.73	103.71	109.90
2	AB	1516	G	C1'-O4'-C4'	7.73	116.09	109.90
2	AB	1560	G	C5-N7-C8	-7.73	100.43	104.30
2	AB	1633	G	N3-C4-C5	-7.73	124.73	128.60
2	AB	2340	A	N1-C6-N6	7.73	123.24	118.60
35	BA	926	G	C3'-C2'-C1'	7.73	107.69	101.50
35	BA	1058	G	C5'-C4'-O4'	7.73	118.38	109.10
2	AB	46	G	C2-N3-C4	7.73	115.77	111.90
2	AB	1037	G	N3-C4-C5	-7.73	124.73	128.60
2	AB	1821	A	C5-N7-C8	7.73	107.77	103.90
2	AB	2182	U	N1-C2-O2	-7.73	117.39	122.80
2	AB	2601	C	C5-C4-N4	-7.73	114.79	120.20
9	AI	134	VAL	CA-CB-CG2	7.73	122.50	110.90
35	BA	775	G	C4-C5-N7	-7.73	107.71	110.80
35	BA	910	C	N3-C4-N4	7.73	123.41	118.00
35	BA	954	G	C5-N7-C8	-7.73	100.44	104.30
35	BA	1309	G	C2-N3-C4	7.73	115.77	111.90
48	BN	65	TYR	CG-CD1-CE1	-7.73	115.12	121.30
48	BN	113	ARG	NE-CZ-NH1	-7.73	116.44	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1262	A	C4-C5-N7	-7.73	106.83	110.70
2	AB	2071	A	C5'-C4'-O4'	7.73	118.38	109.10
2	AB	2255	G	C4-C5-N7	-7.73	107.71	110.80
35	BA	46	G	N1-C6-O6	-7.73	115.26	119.90
1	AA	87	U	O4'-C1'-N1	7.73	114.38	108.20
2	AB	778	G	O4'-C1'-N9	7.73	114.38	108.20
2	AB	1887	C	C5'-C4'-O4'	7.73	118.37	109.10
2	AB	2252	G	O4'-C1'-N9	7.73	114.38	108.20
2	AB	2763	G	C4'-C3'-C2'	-7.73	94.87	102.60
35	BA	510	A	C8-N9-C4	-7.73	102.71	105.80
35	BA	958	A	N1-C2-N3	-7.73	125.44	129.30
35	BA	1089	G	C5-N7-C8	7.73	108.16	104.30
35	BA	1179	A	C5'-C4'-O4'	7.73	118.37	109.10
36	BB	22	G	N3-C2-N2	-7.73	114.49	119.90
37	BC	12	G	C5-C6-N1	7.73	115.36	111.50
2	AB	541	A	O4'-C1'-N9	7.73	114.38	108.20
35	BA	1350	A	C5'-C4'-O4'	7.73	118.37	109.10
35	BA	1512	U	N3-C4-C5	-7.73	109.96	114.60
2	AB	210	C	N3-C4-N4	7.72	123.41	118.00
2	AB	378	C	N1-C1'-C2'	-7.72	103.50	112.00
2	AB	426	C	N3-C4-N4	7.72	123.41	118.00
2	AB	984	A	O4'-C1'-N9	-7.72	102.02	108.20
2	AB	1028	A	C6-N1-C2	7.72	123.23	118.60
2	AB	1725	U	N3-C4-C5	-7.72	109.97	114.60
2	AB	1884	G	N3-C2-N2	7.72	125.31	119.90
2	AB	2606	C	C6-N1-C2	7.72	123.39	120.30
35	BA	183	C	C1'-O4'-C4'	-7.72	103.72	109.90
35	BA	845	A	P-O3'-C3'	7.72	128.97	119.70
2	AB	192	C	C4-C5-C6	-7.72	113.54	117.40
2	AB	372	G	N9-C4-C5	7.72	108.49	105.40
2	AB	968	C	C5-C6-N1	-7.72	117.14	121.00
2	AB	1574	C	N3-C4-C5	-7.72	118.81	121.90
2	AB	2618	G	N1-C6-O6	7.72	124.53	119.90
35	BA	1150	A	O5'-P-OP2	-7.72	98.75	105.70
37	BC	4	G	O4'-C1'-C2'	-7.72	98.08	105.80
2	AB	174	U	N1-C2-N3	7.72	119.53	114.90
2	AB	1907	G	C6-C5-N7	-7.72	125.77	130.40
2	AB	2290	G	C4-C5-C6	7.72	123.43	118.80
37	BC	31	G	C5'-C4'-O4'	7.72	118.37	109.10
2	AB	2049	G	N9-C4-C5	7.72	108.49	105.40
2	AB	2478	A	C2-N3-C4	7.72	114.46	110.60
35	BA	958	A	C5-C6-N1	-7.72	113.84	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	762	U	C1'-O4'-C4'	7.72	116.07	109.90
35	BA	134	G	C5-N7-C8	7.72	108.16	104.30
35	BA	1121	U	N1-C1'-C2'	-7.72	103.51	112.00
35	BA	1374	A	C4'-C3'-C2'	-7.72	94.88	102.60
2	AB	1565	C	O4'-C4'-C3'	7.72	112.27	106.10
2	AB	1760	C	O4'-C1'-N1	7.72	114.37	108.20
2	AB	1990	C	N1-C2-O2	7.72	123.53	118.90
2	AB	2655	G	N1-C2-N3	-7.72	119.27	123.90
19	AS	60	TRP	NE1-CE2-CD2	-7.72	99.58	107.30
35	BA	318	G	C3'-C2'-C1'	7.72	107.67	101.50
35	BA	742	G	C5-C6-O6	7.72	133.23	128.60
2	AB	464	U	O4'-C1'-N1	7.71	114.37	108.20
2	AB	875	G	C5-C6-O6	7.71	133.23	128.60
2	AB	1324	G	C8-N9-C4	7.71	109.49	106.40
2	AB	2253	G	C2-N3-C4	7.71	115.76	111.90
2	AB	2424	C	N3-C4-N4	7.71	123.40	118.00
2	AB	2892	G	C2-N3-C4	7.71	115.76	111.90
35	BA	237	G	C5-C6-N1	7.71	115.36	111.50
35	BA	1268	G	C5-C6-N1	7.71	115.36	111.50
35	BA	1290	G	N3-C2-N2	-7.71	114.50	119.90
42	BH	74	LEU	CB-CG-CD1	7.71	124.12	111.00
43	BI	125	ASP	CB-CG-OD1	-7.71	111.36	118.30
2	AB	2159	G	C5-C6-O6	-7.71	123.97	128.60
2	AB	2895	G	N9-C1'-C2'	-7.71	103.52	112.00
35	BA	514	C	O4'-C1'-N1	7.71	114.37	108.20
49	BO	108	ARG	NE-CZ-NH1	7.71	124.16	120.30
2	AB	46	G	N7-C8-N9	-7.71	109.24	113.10
2	AB	647	G	C4-C5-N7	7.71	113.88	110.80
2	AB	2013	A	C8-N9-C4	-7.71	102.72	105.80
2	AB	2118	U	P-O3'-C3'	7.71	128.95	119.70
2	AB	2561	U	C3'-C2'-C1'	7.71	107.67	101.50
2	AB	2572	A	O4'-C1'-N9	7.71	114.37	108.20
35	BA	218	U	N3-C2-O2	-7.71	116.80	122.20
35	BA	830	G	C2-N3-C4	7.71	115.76	111.90
2	AB	2209	G	C4'-C3'-C2'	7.71	110.31	102.60
2	AB	2340	A	N9-C4-C5	7.71	108.88	105.80
35	BA	1094	G	C8-N9-C4	-7.71	103.32	106.40
2	AB	187	G	C4-C5-N7	7.71	113.88	110.80
2	AB	347	A	C5'-C4'-O4'	7.71	118.35	109.10
2	AB	378	C	C6-N1-C2	-7.71	117.22	120.30
2	AB	2364	C	N1-C2-O2	7.71	123.53	118.90
2	AB	2534	A	C4'-C3'-C2'	-7.71	94.89	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2553	G	C5-C6-N1	7.71	115.36	111.50
35	BA	18	C	N3-C4-C5	7.71	124.98	121.90
35	BA	186	C	N1-C2-O2	7.71	123.53	118.90
35	BA	286	C	O4'-C1'-N1	7.71	114.37	108.20
35	BA	332	G	C5'-C4'-O4'	7.71	118.35	109.10
2	AB	349	U	C1'-O4'-C4'	-7.71	103.73	109.90
2	AB	960	A	O4'-C1'-N9	7.71	114.37	108.20
2	AB	2084	C	C1'-O4'-C4'	-7.71	103.73	109.90
2	AB	2697	G	C5'-C4'-O4'	7.71	118.35	109.10
2	AB	2749	A	C5'-C4'-O4'	7.71	118.35	109.10
35	BA	422	C	N1-C2-O2	7.71	123.52	118.90
35	BA	1225	A	C8-N9-C4	-7.71	102.72	105.80
2	AB	592	A	P-O3'-C3'	7.71	128.95	119.70
2	AB	2138	G	C2-N3-C4	7.71	115.75	111.90
2	AB	2318	G	C1'-O4'-C4'	-7.71	103.74	109.90
35	BA	163	C	N3-C4-N4	7.71	123.39	118.00
35	BA	731	G	O4'-C1'-N9	7.71	114.36	108.20
2	AB	214	G	C5-C6-O6	-7.70	123.98	128.60
2	AB	400	G	P-O3'-C3'	7.70	128.94	119.70
2	AB	446	G	C3'-C2'-C1'	7.70	107.66	101.50
2	AB	2500	U	C5-C6-N1	-7.70	118.85	122.70
2	AB	2799	A	C4-C5-N7	7.70	114.55	110.70
35	BA	187	G	N7-C8-N9	7.70	116.95	113.10
35	BA	846	G	O4'-C1'-N9	7.70	114.36	108.20
35	BA	975	A	O4'-C4'-C3'	7.70	112.26	106.10
35	BA	771	G	C2-N3-C4	7.70	115.75	111.90
1	AA	9	G	N3-C2-N2	-7.70	114.51	119.90
2	AB	4	U	N3-C4-O4	-7.70	114.01	119.40
2	AB	2212	A	O4'-C1'-N9	7.70	114.36	108.20
2	AB	2453	A	O4'-C1'-C2'	7.70	114.53	107.60
35	BA	117	G	N3-C2-N2	7.70	125.29	119.90
35	BA	922	G	O4'-C1'-N9	7.70	114.36	108.20
2	AB	883	G	C8-N9-C4	-7.70	103.32	106.40
2	AB	1312	U	C4'-C3'-C2'	-7.70	94.90	102.60
2	AB	1794	A	C2-N3-C4	-7.70	106.75	110.60
2	AB	1896	G	P-O3'-C3'	7.70	128.94	119.70
35	BA	115	G	C6-C5-N7	-7.70	125.78	130.40
35	BA	422	C	C5'-C4'-O4'	7.70	118.34	109.10
35	BA	573	A	N9-C4-C5	-7.70	102.72	105.80
35	BA	724	G	N9-C4-C5	-7.70	102.32	105.40
36	BB	32	U	C6-N1-C2	-7.70	116.38	121.00
2	AB	778	G	O4'-C4'-C3'	7.70	112.26	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	912	C	C5-C6-N1	-7.70	117.15	121.00
2	AB	1430	G	C5-C6-N1	-7.70	107.65	111.50
2	AB	1794	A	N7-C8-N9	7.70	117.65	113.80
2	AB	2512	C	C3'-C2'-C1'	-7.70	95.34	101.50
35	BA	404	G	C5-N7-C8	-7.70	100.45	104.30
35	BA	881	G	C5-N7-C8	-7.70	100.45	104.30
35	BA	1163	A	O4'-C1'-N9	7.70	114.36	108.20
2	AB	693	A	C8-N9-C4	-7.69	102.72	105.80
2	AB	2250	G	N3-C2-N2	-7.69	114.51	119.90
2	AB	2719	G	C2-N3-C4	7.69	115.75	111.90
7	AG	79	ARG	NE-CZ-NH2	7.69	124.15	120.30
35	BA	538	G	O4'-C1'-N9	7.69	114.36	108.20
35	BA	1195	C	C5-C6-N1	7.69	124.85	121.00
2	AB	483	A	C2-N3-C4	7.69	114.45	110.60
2	AB	1056	G	N3-C4-C5	-7.69	124.75	128.60
2	AB	1191	G	N3-C2-N2	-7.69	114.52	119.90
2	AB	2778	A	C5-N7-C8	-7.69	100.05	103.90
35	BA	10	A	N3-C4-C5	-7.69	121.42	126.80
35	BA	448	A	C5'-C4'-C3'	-7.69	103.69	116.00
35	BA	596	A	N9-C4-C5	-7.69	102.72	105.80
35	BA	1356	G	O4'-C1'-N9	7.69	114.35	108.20
52	BR	25	ARG	NE-CZ-NH2	-7.69	116.45	120.30
2	AB	398	C	C5-C4-N4	-7.69	114.82	120.20
2	AB	404	A	N1-C2-N3	-7.69	125.45	129.30
2	AB	882	G	C2-N3-C4	7.69	115.75	111.90
2	AB	986	C	N3-C4-C5	-7.69	118.82	121.90
2	AB	1622	G	O4'-C1'-N9	7.69	114.35	108.20
2	AB	2277	G	C8-N9-C4	-7.69	103.32	106.40
2	AB	2767	C	C4-C5-C6	-7.69	113.55	117.40
35	BA	767	A	P-O3'-C3'	7.69	128.93	119.70
35	BA	1019	A	N1-C2-N3	-7.69	125.45	129.30
35	BA	1387	G	N7-C8-N9	7.69	116.95	113.10
2	AB	881	G	C5-C6-O6	-7.69	123.99	128.60
2	AB	2341	G	N3-C2-N2	-7.69	114.52	119.90
35	BA	1043	G	N3-C4-C5	-7.69	124.75	128.60
2	AB	963	U	C2-N3-C4	-7.69	122.39	127.00
2	AB	996	A	N7-C8-N9	-7.69	109.96	113.80
2	AB	1119	U	O4'-C1'-N1	7.69	114.35	108.20
2	AB	1390	U	P-O3'-C3'	7.69	128.93	119.70
2	AB	2260	C	C2-N3-C4	7.69	123.74	119.90
2	AB	2350	C	N3-C4-N4	7.69	123.38	118.00
35	BA	55	A	N9-C4-C5	-7.69	102.72	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	743	A	O4'-C1'-N9	7.69	114.35	108.20
35	BA	1085	U	C3'-C2'-C1'	-7.69	95.35	101.50
35	BA	1324	A	C3'-C2'-C1'	7.69	107.65	101.50
2	AB	2	G	C5-C6-N1	7.68	115.34	111.50
2	AB	2162	G	N1-C6-O6	-7.68	115.29	119.90
2	AB	2804	U	C5-C4-O4	-7.68	121.29	125.90
2	AB	2854	G	C6-N1-C2	-7.68	120.49	125.10
35	BA	567	G	C5-N7-C8	-7.68	100.46	104.30
35	BA	1358	U	O4'-C1'-N1	7.68	114.35	108.20
2	AB	119	A	O4'-C4'-C3'	7.68	112.25	106.10
2	AB	554	U	C4-C5-C6	7.68	124.31	119.70
2	AB	1826	G	N3-C4-C5	-7.68	124.76	128.60
35	BA	481	G	C2-N3-C4	7.68	115.74	111.90
35	BA	1331	G	N1-C2-N3	-7.68	119.29	123.90
35	BA	1286	U	N3-C4-O4	7.68	124.78	119.40
2	AB	39	G	N9-C4-C5	7.68	108.47	105.40
2	AB	368	A	C5'-C4'-O4'	7.68	118.31	109.10
2	AB	1121	C	C5-C6-N1	-7.68	117.16	121.00
2	AB	1401	G	P-O3'-C3'	7.68	128.91	119.70
2	AB	2114	A	O4'-C1'-N9	7.68	114.34	108.20
2	AB	2602	A	C4-C5-N7	-7.68	106.86	110.70
35	BA	8	A	C8-N9-C4	-7.68	102.73	105.80
35	BA	97	G	C4'-C3'-C2'	-7.68	94.92	102.60
35	BA	642	A	C5-C6-N1	7.68	121.54	117.70
35	BA	1139	G	C3'-C2'-C1'	-7.68	95.36	101.50
35	BA	1317	C	C5'-C4'-O4'	-7.68	99.89	109.10
55	BU	77	ARG	NE-CZ-NH2	-7.68	116.46	120.30
2	AB	14	A	N9-C4-C5	7.68	108.87	105.80
2	AB	1047	G	O4'-C4'-C3'	7.68	112.24	106.10
2	AB	1659	G	C8-N9-C4	-7.68	103.33	106.40
2	AB	2507	C	N1-C2-O2	7.68	123.51	118.90
35	BA	1415	G	N3-C4-C5	-7.68	124.76	128.60
35	BA	1496	C	C5-C4-N4	-7.68	114.83	120.20
2	AB	221	A	C8-N9-C4	7.68	108.87	105.80
2	AB	791	C	C3'-C2'-C1'	-7.68	95.36	101.50
2	AB	1257	C	O4'-C1'-N1	7.68	114.34	108.20
2	AB	2242	G	N3-C2-N2	-7.68	114.53	119.90
2	AB	2728	U	N3-C4-C5	7.68	119.21	114.60
10	AJ	97	GLU	OE1-CD-OE2	7.68	132.51	123.30
17	AQ	25	ARG	NE-CZ-NH2	-7.68	116.46	120.30
35	BA	299	G	N1-C6-O6	-7.68	115.29	119.90
35	BA	305	G	N9-C4-C5	-7.68	102.33	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	391	G	N3-C4-N9	7.68	130.61	126.00
35	BA	1252	A	O4'-C4'-C3'	7.68	112.24	106.10
35	BA	1441	A	N9-C4-C5	7.68	108.87	105.80
2	AB	1256	G	O4'-C4'-C3'	7.67	112.24	106.10
2	AB	1703	G	C4-C5-C6	7.67	123.41	118.80
2	AB	1799	G	N7-C8-N9	7.67	116.94	113.10
2	AB	1969	A	C6-C5-N7	7.67	137.67	132.30
2	AB	2268	A	N1-C6-N6	7.67	123.20	118.60
35	BA	642	A	C1'-O4'-C4'	-7.67	103.76	109.90
35	BA	1022	A	N9-C4-C5	7.67	108.87	105.80
35	BA	1542	A	C1'-O4'-C4'	-7.67	103.76	109.90
2	AB	1183	U	C4'-C3'-C2'	-7.67	94.93	102.60
36	BB	48	C	C4'-C3'-C2'	-7.67	94.93	102.60
2	AB	269	C	N3-C2-O2	-7.67	116.53	121.90
2	AB	570	G	N3-C4-C5	-7.67	124.77	128.60
2	AB	721	A	C1'-O4'-C4'	7.67	116.04	109.90
2	AB	893	C	C1'-O4'-C4'	7.67	116.04	109.90
2	AB	930	G	N3-C4-C5	-7.67	124.76	128.60
2	AB	958	U	O4'-C1'-N1	7.67	114.34	108.20
2	AB	1175	A	C3'-C2'-C1'	-7.67	95.36	101.50
2	AB	1219	U	C5'-C4'-O4'	7.67	118.31	109.10
2	AB	1417	C	O4'-C1'-N1	7.67	114.34	108.20
35	BA	1509	C	O4'-C1'-N1	7.67	114.34	108.20
2	AB	818	G	C4-C5-N7	7.67	113.87	110.80
2	AB	1629	U	N3-C4-O4	7.67	124.77	119.40
2	AB	1659	G	C5-C6-N1	7.67	115.33	111.50
2	AB	1723	G	N1-C2-N3	7.67	128.50	123.90
2	AB	2224	G	C5-C6-O6	-7.67	124.00	128.60
2	AB	2470	G	C5'-C4'-O4'	7.67	118.30	109.10
35	BA	68	G	C5-C6-O6	-7.67	124.00	128.60
35	BA	758	C	N3-C4-C5	-7.67	118.83	121.90
35	BA	1120	C	C5-C4-N4	-7.67	114.83	120.20
37	BC	68	C	O4'-C1'-N1	7.67	114.33	108.20
40	BF	96	ARG	NE-CZ-NH2	7.67	124.13	120.30
2	AB	2631	G	O4'-C1'-N9	7.67	114.33	108.20
35	BA	496	A	C5'-C4'-O4'	7.67	118.30	109.10
35	BA	690	G	N1-C2-N2	-7.67	109.30	116.20
35	BA	1373	G	C3'-C2'-C1'	7.67	107.63	101.50
2	AB	338	G	C5-N7-C8	-7.67	100.47	104.30
2	AB	466	A	C5-N7-C8	7.67	107.73	103.90
2	AB	836	G	N9-C4-C5	7.67	108.47	105.40
2	AB	1733	G	N9-C4-C5	7.67	108.47	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2048	G	N1-C2-N3	-7.67	119.30	123.90
2	AB	447	A	C5-C6-N1	7.66	121.53	117.70
2	AB	785	G	C6-C5-N7	7.66	135.00	130.40
2	AB	1339	G	O4'-C1'-N9	7.66	114.33	108.20
2	AB	2156	G	C3'-C2'-C1'	-7.66	95.37	101.50
2	AB	879	G	N9-C1'-C2'	-7.66	103.57	112.00
2	AB	2059	A	O4'-C4'-C3'	7.66	112.23	106.10
35	BA	1342	C	C4-C5-C6	7.66	121.23	117.40
1	AA	10	G	N1-C2-N3	7.66	128.50	123.90
2	AB	104	A	C2-N3-C4	-7.66	106.77	110.60
2	AB	957	C	C2-N3-C4	7.66	123.73	119.90
2	AB	978	G	N3-C4-N9	7.66	130.60	126.00
2	AB	1938	A	O4'-C1'-N9	7.66	114.33	108.20
2	AB	2055	C	N3-C4-C5	-7.66	118.84	121.90
2	AB	2500	U	N3-C2-O2	-7.66	116.84	122.20
35	BA	406	G	C6-N1-C2	-7.66	120.50	125.10
35	BA	455	G	O4'-C4'-C3'	7.66	112.23	106.10
2	AB	717	C	C6-N1-C2	-7.66	117.24	120.30
2	AB	1088	A	C3'-C2'-C1'	7.66	107.63	101.50
2	AB	1235	G	O4'-C1'-N9	7.66	114.33	108.20
2	AB	1441	G	C8-N9-C4	-7.66	103.34	106.40
2	AB	2342	C	N3-C2-O2	-7.66	116.54	121.90
2	AB	2507	C	N3-C4-N4	-7.66	112.64	118.00
2	AB	2583	G	O5'-P-OP1	-7.66	98.81	105.70
35	BA	473	U	N3-C4-O4	7.66	124.76	119.40
35	BA	1218	C	C4-C5-C6	7.66	121.23	117.40
2	AB	1164	C	N1-C2-O2	7.66	123.49	118.90
2	AB	1408	G	N3-C2-N2	-7.66	114.54	119.90
2	AB	2248	C	N1-C2-O2	7.66	123.49	118.90
2	AB	2635	A	C2-N3-C4	7.66	114.43	110.60
2	AB	2871	U	N3-C2-O2	-7.66	116.84	122.20
2	AB	2887	A	C5'-C4'-O4'	7.66	118.29	109.10
35	BA	555	U	N3-C2-O2	-7.66	116.84	122.20
2	AB	455	C	P-O3'-C3'	7.66	128.89	119.70
2	AB	466	A	C4'-C3'-C2'	-7.66	94.94	102.60
2	AB	655	A	P-O3'-C3'	7.66	128.89	119.70
2	AB	1190	G	C4'-C3'-C2'	-7.66	94.94	102.60
2	AB	1274	A	C8-N9-C4	7.66	108.86	105.80
35	BA	510	A	C4-C5-N7	-7.66	106.87	110.70
35	BA	933	G	O4'-C1'-N9	7.66	114.32	108.20
35	BA	1285	A	C5-N7-C8	-7.66	100.07	103.90
2	AB	1426	G	N3-C4-N9	-7.65	121.41	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2448	A	C5-C6-N1	7.65	121.53	117.70
21	AU	88	ARG	NE-CZ-NH1	-7.65	116.47	120.30
35	BA	642	A	C6-N1-C2	-7.65	114.01	118.60
1	AA	80	U	C2-N3-C4	-7.65	122.41	127.00
2	AB	1540	G	N7-C8-N9	7.65	116.93	113.10
2	AB	1679	A	C2-N3-C4	7.65	114.43	110.60
2	AB	2088	A	C2-N3-C4	-7.65	106.77	110.60
2	AB	2452	C	N3-C2-O2	-7.65	116.54	121.90
35	BA	305	G	N3-C2-N2	7.65	125.26	119.90
35	BA	788	U	N3-C4-C5	-7.65	110.01	114.60
2	AB	592	A	C8-N9-C4	-7.65	102.74	105.80
2	AB	612	G	N7-C8-N9	7.65	116.92	113.10
2	AB	993	G	N9-C1'-C2'	-7.65	103.58	112.00
2	AB	2193	G	C6-N1-C2	-7.65	120.51	125.10
2	AB	2324	U	N3-C2-O2	-7.65	116.84	122.20
2	AB	2397	G	N1-C6-O6	-7.65	115.31	119.90
35	BA	468	A	C4-C5-N7	7.65	114.53	110.70
35	BA	506	G	C5-N7-C8	-7.65	100.47	104.30
35	BA	508	U	C5-C6-N1	-7.65	118.88	122.70
2	AB	138	U	O4'-C1'-N1	7.65	114.32	108.20
2	AB	1088	A	N1-C6-N6	7.65	123.19	118.60
2	AB	2183	A	O4'-C1'-N9	7.65	114.32	108.20
35	BA	765	G	C4-C5-N7	7.65	113.86	110.80
35	BA	190	A	O4'-C1'-N9	7.65	114.32	108.20
35	BA	717	U	P-O3'-C3'	7.65	128.88	119.70
35	BA	792	A	P-O3'-C3'	7.65	128.88	119.70
35	BA	1394	A	C1'-O4'-C4'	7.65	116.02	109.90
2	AB	2127	G	N1-C6-O6	-7.65	115.31	119.90
2	AB	2866	U	C5-C4-O4	-7.65	121.31	125.90
2	AB	770	G	N7-C8-N9	7.64	116.92	113.10
2	AB	1280	G	N3-C4-N9	7.64	130.59	126.00
2	AB	1378	A	N9-C4-C5	7.64	108.86	105.80
2	AB	1542	U	C3'-C2'-C1'	7.64	107.61	101.50
2	AB	2127	G	C5'-C4'-O4'	7.64	118.27	109.10
2	AB	2425	A	P-O3'-C3'	7.64	128.87	119.70
35	BA	171	A	C5'-C4'-O4'	7.64	118.27	109.10
35	BA	494	G	C6-N1-C2	-7.64	120.51	125.10
35	BA	584	G	O4'-C1'-N9	7.64	114.32	108.20
55	BU	60	PHE	CB-CG-CD1	-7.64	115.45	120.80
2	AB	184	C	O4'-C1'-N1	7.64	114.31	108.20
2	AB	1854	A	N9-C4-C5	-7.64	102.74	105.80
2	AB	2115	G	C5-N7-C8	-7.64	100.48	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2744	G	N3-C4-C5	-7.64	124.78	128.60
35	BA	849	G	N3-C4-C5	-7.64	124.78	128.60
35	BA	1473	G	N1-C6-O6	-7.64	115.31	119.90
6	AF	168	ASP	CB-CG-OD2	-7.64	111.42	118.30
35	BA	1228	C	N3-C4-C5	-7.64	118.84	121.90
35	BA	1289	A	N9-C4-C5	7.64	108.86	105.80
2	AB	207	A	N1-C2-N3	-7.64	125.48	129.30
2	AB	296	U	O4'-C1'-N1	7.64	114.31	108.20
2	AB	643	A	N1-C2-N3	-7.64	125.48	129.30
2	AB	1017	G	N9-C4-C5	7.64	108.46	105.40
2	AB	1948	G	C1'-O4'-C4'	7.64	116.01	109.90
35	BA	149	A	C3'-C2'-C1'	7.64	107.61	101.50
35	BA	641	U	O4'-C1'-N1	7.64	114.31	108.20
35	BA	1006	G	N3-C4-C5	-7.64	124.78	128.60
35	BA	1113	C	C6-N1-C2	-7.64	117.24	120.30
35	BA	1212	U	C2-N3-C4	-7.64	122.42	127.00
2	AB	507	A	C8-N9-C4	-7.64	102.75	105.80
2	AB	602	A	C5-C6-N1	7.64	121.52	117.70
2	AB	661	A	N7-C8-N9	7.64	117.62	113.80
2	AB	843	G	C2-N3-C4	7.64	115.72	111.90
2	AB	1509	A	N1-C2-N3	-7.64	125.48	129.30
2	AB	2476	A	C4-C5-C6	-7.64	113.18	117.00
2	AB	2555	U	C5-C4-O4	-7.64	121.32	125.90
35	BA	67	C	P-O3'-C3'	7.64	128.87	119.70
35	BA	654	G	C3'-C2'-C1'	-7.64	95.39	101.50
35	BA	1405	G	C8-N9-C4	-7.64	103.34	106.40
1	AA	70	C	C6-N1-C2	-7.64	117.25	120.30
2	AB	231	A	O4'-C4'-C3'	-7.64	96.36	104.00
2	AB	372	G	C5-N7-C8	-7.64	100.48	104.30
2	AB	2406	A	N1-C2-N3	7.64	133.12	129.30
2	AB	2490	G	P-O3'-C3'	7.64	128.86	119.70
35	BA	835	U	O4'-C1'-N1	7.64	114.31	108.20
35	BA	1129	C	C6-N1-C2	-7.64	117.25	120.30
2	AB	292	U	N3-C4-C5	-7.63	110.02	114.60
2	AB	1213	A	N1-C6-N6	-7.63	114.02	118.60
2	AB	1453	A	C2-N3-C4	7.63	114.42	110.60
2	AB	2204	G	P-O3'-C3'	7.63	128.86	119.70
35	BA	528	C	N3-C4-C5	-7.63	118.85	121.90
35	BA	721	G	C4-C5-C6	7.63	123.38	118.80
35	BA	890	G	C5-C6-N1	7.63	115.32	111.50
35	BA	912	C	C3'-C2'-C1'	7.63	107.61	101.50
35	BA	1432	G	N9-C4-C5	7.63	108.45	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	616	A	C5-N7-C8	7.63	107.72	103.90
2	AB	971	G	C4-C5-C6	7.63	123.38	118.80
2	AB	2663	G	N9-C4-C5	-7.63	102.35	105.40
35	BA	1048	G	C5-C6-O6	-7.63	124.02	128.60
35	BA	1522	U	O4'-C1'-N1	7.63	114.31	108.20
37	BC	71	G	C4-C5-N7	7.63	113.85	110.80
2	AB	99	U	N3-C4-O4	-7.63	114.06	119.40
2	AB	1435	G	C4'-C3'-C2'	-7.63	94.97	102.60
2	AB	1495	A	N9-C4-C5	-7.63	102.75	105.80
2	AB	1530	G	C6-N1-C2	-7.63	120.52	125.10
2	AB	2660	A	C4'-C3'-C2'	-7.63	94.97	102.60
35	BA	432	A	C3'-C2'-C1'	-7.63	95.39	101.50
35	BA	602	A	C6-N1-C2	7.63	123.18	118.60
35	BA	1312	G	N9-C4-C5	7.63	108.45	105.40
2	AB	1296	G	N9-C4-C5	7.63	108.45	105.40
2	AB	109	C	C5'-C4'-O4'	7.63	118.25	109.10
2	AB	481	G	N3-C2-N2	-7.63	114.56	119.90
2	AB	488	G	N1-C2-N2	7.63	123.07	116.20
2	AB	741	U	N3-C2-O2	-7.63	116.86	122.20
2	AB	1648	U	N1-C2-N3	-7.63	110.32	114.90
2	AB	2460	U	C2-N3-C4	-7.63	122.42	127.00
2	AB	2867	G	N1-C6-O6	-7.63	115.32	119.90
35	BA	621	A	C2-N3-C4	7.63	114.41	110.60
35	BA	729	A	C2-N3-C4	7.63	114.42	110.60
2	AB	34	U	C1'-O4'-C4'	7.63	116.00	109.90
2	AB	1118	C	C4-C5-C6	7.63	121.21	117.40
2	AB	1471	G	N3-C2-N2	-7.63	114.56	119.90
2	AB	1648	U	N1-C2-O2	7.63	128.14	122.80
2	AB	1888	G	N7-C8-N9	7.63	116.91	113.10
2	AB	2102	G	C8-N9-C4	-7.63	103.35	106.40
2	AB	2122	U	C5'-C4'-O4'	7.63	118.25	109.10
2	AB	2282	G	C8-N9-C1'	7.63	136.91	127.00
2	AB	2735	G	C2-N3-C4	7.63	115.71	111.90
35	BA	725	G	N1-C6-O6	7.63	124.48	119.90
35	BA	780	A	N1-C2-N3	-7.63	125.49	129.30
1	AA	88	C	C5'-C4'-C3'	-7.62	103.80	116.00
2	AB	252	G	P-O3'-C3'	7.62	128.85	119.70
2	AB	898	C	N3-C4-C5	-7.62	118.85	121.90
2	AB	1022	G	N3-C2-N2	-7.62	114.56	119.90
2	AB	1132	U	N3-C2-O2	-7.62	116.86	122.20
2	AB	733	G	C5'-C4'-O4'	7.62	118.25	109.10
2	AB	1068	G	N1-C2-N3	-7.62	119.33	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1096	A	N7-C8-N9	7.62	117.61	113.80
2	AB	1255	U	C3'-C2'-C1'	7.62	107.60	101.50
2	AB	2872	A	C6-N1-C2	7.62	123.17	118.60
35	BA	269	C	C3'-C2'-C1'	7.62	107.60	101.50
2	AB	122	G	C1'-O4'-C4'	-7.62	103.80	109.90
2	AB	302	C	N3-C2-O2	-7.62	116.56	121.90
2	AB	1028	A	C5-N7-C8	-7.62	100.09	103.90
2	AB	1403	A	C5-C6-N1	7.62	121.51	117.70
2	AB	1807	G	N3-C4-C5	7.62	132.41	128.60
35	BA	84	U	C2-N3-C4	-7.62	122.43	127.00
35	BA	168	G	O4'-C1'-N9	7.62	114.30	108.20
35	BA	356	A	C4'-C3'-C2'	-7.62	94.98	102.60
35	BA	873	A	N9-C4-C5	7.62	108.85	105.80
35	BA	1091	U	C5-C4-O4	7.62	130.47	125.90
35	BA	1107	C	N3-C4-C5	-7.62	118.85	121.90
2	AB	1405	U	C4'-C3'-C2'	-7.62	94.98	102.60
2	AB	2287	A	N3-C4-C5	-7.62	121.47	126.80
35	BA	359	G	C3'-C2'-C1'	7.62	107.60	101.50
35	BA	714	G	C5-C6-N1	7.62	115.31	111.50
2	AB	360	U	C4-C5-C6	7.62	124.27	119.70
2	AB	1713	A	N1-C2-N3	-7.62	125.49	129.30
2	AB	2341	G	N3-C4-C5	-7.62	124.79	128.60
2	AB	2515	C	C4'-C3'-C2'	-7.62	94.98	102.60
35	BA	867	G	C3'-C2'-C1'	7.62	107.59	101.50
35	BA	1051	C	C5-C4-N4	-7.62	114.87	120.20
35	BA	1373	G	N1-C6-O6	7.62	124.47	119.90
2	AB	1250	G	N3-C4-N9	7.62	130.57	126.00
2	AB	2174	C	N1-C2-O2	7.62	123.47	118.90
2	AB	2418	A	C5-C6-N1	7.62	121.51	117.70
35	BA	255	G	C6-C5-N7	7.62	134.97	130.40
2	AB	71	A	C8-N9-C4	7.62	108.85	105.80
2	AB	629	G	N7-C8-N9	7.62	116.91	113.10
2	AB	1225	G	N7-C8-N9	7.62	116.91	113.10
2	AB	1283	G	C6-N1-C2	-7.62	120.53	125.10
2	AB	2557	G	N3-C4-C5	-7.62	124.79	128.60
1	AA	113	C	N3-C4-N4	-7.61	112.67	118.00
2	AB	53	A	O4'-C1'-N9	7.61	114.29	108.20
2	AB	1189	A	C6-N1-C2	-7.61	114.03	118.60
9	AI	123	ARG	NE-CZ-NH2	-7.61	116.49	120.30
35	BA	114	U	C5'-C4'-C3'	-7.61	103.82	116.00
35	BA	474	G	C6-C5-N7	-7.61	125.83	130.40
35	BA	1192	C	N1-C2-O2	7.61	123.47	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	BK	17	ARG	NE-CZ-NH1	7.61	124.11	120.30
2	AB	981	A	C5-N7-C8	-7.61	100.09	103.90
2	AB	1234	U	N1-C2-N3	-7.61	110.33	114.90
2	AB	1252	G	C5-N7-C8	7.61	108.11	104.30
2	AB	1919	A	N7-C8-N9	-7.61	110.00	113.80
2	AB	2397	G	C6-N1-C2	-7.61	120.53	125.10
2	AB	2631	G	C8-N9-C4	-7.61	103.36	106.40
35	BA	622	A	N1-C6-N6	-7.61	114.03	118.60
35	BA	743	A	C4'-C3'-C2'	-7.61	94.99	102.60
2	AB	1902	C	N1-C1'-C2'	-7.61	103.63	112.00
2	AB	2506	U	N1-C2-O2	7.61	128.13	122.80
2	AB	132	G	O4'-C1'-N9	7.61	114.29	108.20
2	AB	730	A	C8-N9-C4	-7.61	102.76	105.80
2	AB	1463	C	O4'-C1'-N1	7.61	114.29	108.20
35	BA	205	A	N1-C6-N6	-7.61	114.03	118.60
35	BA	215	C	C2-N3-C4	7.61	123.70	119.90
35	BA	1027	C	C5-C6-N1	7.61	124.80	121.00
35	BA	1223	C	C5-C4-N4	7.61	125.53	120.20
2	AB	225	C	N1-C2-O2	7.61	123.46	118.90
2	AB	917	A	C2-N3-C4	7.61	114.40	110.60
2	AB	1263	U	N3-C2-O2	-7.61	116.88	122.20
35	BA	684	U	N1-C2-N3	7.61	119.46	114.90
35	BA	1036	A	C5-N7-C8	-7.61	100.10	103.90
35	BA	1063	C	P-O3'-C3'	7.61	128.83	119.70
2	AB	129	C	C2-N3-C4	-7.60	116.10	119.90
2	AB	132	G	C4-C5-C6	7.60	123.36	118.80
1	AA	33	G	C5-N7-C8	-7.60	100.50	104.30
2	AB	42	A	C4'-C3'-C2'	-7.60	95.00	102.60
2	AB	351	C	C5'-C4'-O4'	7.60	118.22	109.10
2	AB	696	G	O4'-C1'-N9	7.60	114.28	108.20
2	AB	2151	U	C4-C5-C6	7.60	124.26	119.70
2	AB	2246	G	N3-C4-C5	-7.60	124.80	128.60
35	BA	365	U	O4'-C1'-N1	7.60	114.28	108.20
35	BA	464	U	N3-C4-C5	7.60	119.16	114.60
35	BA	584	G	N1-C2-N3	-7.60	119.34	123.90
35	BA	622	A	C5-N7-C8	7.60	107.70	103.90
35	BA	1399	C	C4-C5-C6	7.60	121.20	117.40
57	BW	60	ALA	N-CA-CB	-7.60	99.46	110.10
35	BA	611	C	C3'-C2'-C1'	7.60	107.58	101.50
2	AB	175	G	N1-C6-O6	-7.60	115.34	119.90
2	AB	463	G	P-O3'-C3'	7.60	128.82	119.70
2	AB	1031	G	N1-C2-N2	7.60	123.04	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1430	G	N1-C6-O6	7.60	124.46	119.90
35	BA	840	C	C5'-C4'-O4'	7.60	118.22	109.10
35	BA	940	C	N3-C4-C5	-7.60	118.86	121.90
35	BA	1013	G	C6-C5-N7	7.60	134.96	130.40
35	BA	1222	G	N3-C4-C5	-7.60	124.80	128.60
37	BC	1	C	N1-C2-O2	7.60	123.46	118.90
2	AB	2297	A	C5-C6-N6	7.60	129.78	123.70
35	BA	96	U	C5-C4-O4	7.60	130.46	125.90
35	BA	363	A	O4'-C4'-C3'	7.60	112.18	106.10
2	AB	1692	U	C4'-C3'-C2'	-7.60	95.00	102.60
2	AB	638	G	C2-N3-C4	7.59	115.70	111.90
2	AB	2216	G	N1-C2-N2	-7.59	109.37	116.20
2	AB	2245	U	N1-C1'-C2'	-7.59	103.64	112.00
2	AB	2281	A	O4'-C4'-C3'	-7.59	96.41	104.00
2	AB	2340	A	C4-C5-C6	7.59	120.80	117.00
19	AS	44	TYR	CB-CG-CD1	-7.59	116.44	121.00
35	BA	318	G	O4'-C1'-N9	7.59	114.28	108.20
35	BA	772	U	C5-C4-O4	7.59	130.46	125.90
35	BA	1302	C	N3-C2-O2	-7.59	116.58	121.90
35	BA	1353	G	C2-N3-C4	7.59	115.70	111.90
2	AB	912	C	C4-C5-C6	7.59	121.20	117.40
2	AB	1343	G	C8-N9-C4	-7.59	103.36	106.40
2	AB	1980	G	C5-N7-C8	-7.59	100.50	104.30
35	BA	1534	A	C4-C5-C6	-7.59	113.20	117.00
1	AA	41	G	C3'-C2'-C1'	7.59	107.57	101.50
2	AB	818	G	C6-C5-N7	-7.59	125.84	130.40
2	AB	989	G	C1'-O4'-C4'	7.59	115.97	109.90
2	AB	1723	G	N1-C6-O6	-7.59	115.34	119.90
2	AB	1773	A	C5-N7-C8	7.59	107.69	103.90
2	AB	2331	G	N9-C1'-C2'	-7.59	103.65	112.00
2	AB	2360	G	N3-C4-C5	-7.59	124.81	128.60
35	BA	395	C	N1-C2-O2	-7.59	114.34	118.90
35	BA	457	G	N3-C4-C5	-7.59	124.80	128.60
2	AB	1431	A	N9-C1'-C2'	-7.59	103.65	112.00
2	AB	1687	G	C5-C6-O6	7.59	133.15	128.60
2	AB	1951	U	C3'-C2'-C1'	7.59	107.57	101.50
2	AB	2412	A	C4-C5-N7	-7.59	106.91	110.70
2	AB	2474	U	N1-C2-O2	7.59	128.11	122.80
2	AB	2842	G	N1-C2-N2	-7.59	109.37	116.20
26	AZ	65	THR	CA-CB-CG2	-7.59	101.78	112.40
35	BA	754	C	C5-C4-N4	7.59	125.51	120.20
35	BA	1145	A	C2-N3-C4	7.59	114.39	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	951	C	C5-C4-N4	-7.59	114.89	120.20
2	AB	2288	A	C5-C6-N1	7.59	121.49	117.70
2	AB	218	A	C3'-C2'-C1'	7.59	107.57	101.50
2	AB	1571	A	N7-C8-N9	7.59	117.59	113.80
2	AB	1718	G	N3-C2-N2	7.59	125.21	119.90
2	AB	2067	G	N7-C8-N9	7.59	116.89	113.10
35	BA	70	U	C5'-C4'-C3'	-7.59	103.86	116.00
35	BA	444	G	N3-C2-N2	7.59	125.21	119.90
37	BC	7	G	O4'-C1'-N9	7.59	114.27	108.20
2	AB	692	C	N1-C2-O2	7.58	123.45	118.90
2	AB	1460	U	O4'-C1'-N1	7.58	114.27	108.20
2	AB	1532	A	N1-C6-N6	7.58	123.15	118.60
2	AB	1819	A	C5-C6-N1	7.58	121.49	117.70
2	AB	2525	G	C6-N1-C2	-7.58	120.55	125.10
35	BA	83	C	C6-N1-C2	-7.58	117.27	120.30
35	BA	146	G	C1'-O4'-C4'	-7.58	103.83	109.90
1	AA	32	U	N1-C2-N3	7.58	119.45	114.90
1	AA	35	C	N1-C2-O2	7.58	123.45	118.90
35	BA	1361	G	N9-C4-C5	7.58	108.43	105.40
1	AA	88	C	C4-C5-C6	-7.58	113.61	117.40
2	AB	1199	U	C5-C4-O4	-7.58	121.35	125.90
2	AB	2512	C	C6-N1-C2	-7.58	117.27	120.30
2	AB	2845	U	C4'-C3'-C2'	-7.58	95.02	102.60
35	BA	536	C	C4-C5-C6	-7.58	113.61	117.40
35	BA	985	C	O4'-C1'-N1	7.58	114.26	108.20
2	AB	2546	U	C4-C5-C6	7.58	124.25	119.70
2	AB	2577	A	C4-C5-N7	-7.58	106.91	110.70
2	AB	2522	U	C2-N1-C1'	7.58	126.79	117.70
35	BA	67	C	C5-C6-N1	-7.58	117.21	121.00
35	BA	1032	G	C4'-C3'-C2'	-7.58	95.02	102.60
1	AA	32	U	N3-C4-C5	-7.58	110.05	114.60
2	AB	1838	C	C2-N3-C4	-7.58	116.11	119.90
2	AB	2402	U	O4'-C4'-C3'	-7.58	96.42	104.00
35	BA	1239	A	C2-N3-C4	7.58	114.39	110.60
35	BA	1458	G	N9-C1'-C2'	-7.58	103.67	112.00
35	BA	1541	U	C4'-C3'-C2'	7.58	110.18	102.60
2	AB	83	A	C4-C5-N7	-7.57	106.91	110.70
2	AB	1008	A	C4-C5-N7	7.57	114.49	110.70
2	AB	1679	A	N9-C4-C5	7.57	108.83	105.80
2	AB	1991	U	O4'-C1'-N1	7.57	114.26	108.20
2	AB	2340	A	C5-N7-C8	7.57	107.69	103.90
35	BA	301	G	C4'-C3'-C2'	-7.57	95.03	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	882	C	N3-C2-O2	-7.57	116.60	121.90
35	BA	931	C	C5'-C4'-O4'	7.57	118.19	109.10
35	BA	1013	G	C4-C5-N7	-7.57	107.77	110.80
35	BA	1089	G	C3'-C2'-C1'	7.57	107.56	101.50
41	BG	23	THR	CA-CB-CG2	7.57	123.00	112.40
2	AB	1740	G	C2-N3-C4	7.57	115.69	111.90
9	AI	51	ARG	NE-CZ-NH1	-7.57	116.51	120.30
35	BA	303	A	C5'-C4'-O4'	7.57	118.19	109.10
35	BA	1094	G	C3'-C2'-C1'	7.57	107.56	101.50
36	BB	54	U	C4-C5-C6	-7.57	115.16	119.70
2	AB	122	G	N9-C4-C5	7.57	108.43	105.40
2	AB	175	G	C6-N1-C2	-7.57	120.56	125.10
2	AB	1091	G	N3-C4-C5	-7.57	124.81	128.60
2	AB	1111	A	N1-C6-N6	7.57	123.14	118.60
2	AB	2802	G	N1-C2-N3	-7.57	119.36	123.90
2	AB	2823	A	O4'-C1'-N9	7.57	114.26	108.20
35	BA	459	A	C5-C6-N1	7.57	121.48	117.70
35	BA	507	C	C2-N3-C4	-7.57	116.11	119.90
35	BA	1489	G	C4'-C3'-C2'	-7.57	95.03	102.60
2	AB	1477	A	C6-N1-C2	-7.57	114.06	118.60
2	AB	910	A	N1-C2-N3	7.57	133.08	129.30
2	AB	1954	G	O4'-C4'-C3'	7.57	112.16	106.10
2	AB	2427	C	N3-C4-N4	7.57	123.30	118.00
2	AB	2852	G	C5'-C4'-C3'	-7.57	103.89	116.00
35	BA	425	G	N3-C2-N2	-7.57	114.60	119.90
35	BA	1083	U	N3-C2-O2	-7.57	116.90	122.20
36	BB	53	G	O4'-C1'-C2'	-7.57	98.23	105.80
2	AB	2323	G	C8-N9-C4	-7.57	103.37	106.40
35	BA	102	G	C2-N3-C4	7.57	115.68	111.90
35	BA	1252	A	C5-C6-N6	-7.57	117.65	123.70
2	AB	67	U	N3-C2-O2	-7.56	116.91	122.20
2	AB	561	G	N9-C4-C5	-7.56	102.38	105.40
2	AB	748	G	O4'-C1'-C2'	-7.56	98.24	105.80
2	AB	781	A	O4'-C1'-N9	7.56	114.25	108.20
2	AB	2081	U	N3-C2-O2	-7.56	116.91	122.20
2	AB	2407	A	O4'-C1'-N9	-7.56	102.15	108.20
35	BA	692	U	N1-C2-O2	7.56	128.09	122.80
35	BA	924	C	C5-C4-N4	-7.56	114.91	120.20
35	BA	1405	G	N7-C8-N9	7.56	116.88	113.10
52	BR	56	ARG	NE-CZ-NH2	7.56	124.08	120.30
2	AB	1407	G	N3-C2-N2	7.56	125.19	119.90
35	BA	545	C	C6-N1-C2	-7.56	117.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1293	C	N1-C2-O2	7.56	123.44	118.90
2	AB	1236	G	C8-N9-C4	-7.56	103.38	106.40
2	AB	2629	U	C3'-C2'-C1'	7.56	107.55	101.50
35	BA	502	A	C6-C5-N7	7.56	137.59	132.30
35	BA	615	G	N1-C2-N2	7.56	123.00	116.20
35	BA	1360	A	N1-C2-N3	-7.56	125.52	129.30
35	BA	1464	U	C5-C4-O4	-7.56	121.36	125.90
1	AA	55	U	C1'-O4'-C4'	-7.56	103.85	109.90
2	AB	108	G	N7-C8-N9	7.56	116.88	113.10
2	AB	140	C	N3-C2-O2	-7.56	116.61	121.90
2	AB	580	U	C5'-C4'-O4'	7.56	118.17	109.10
2	AB	2716	C	N1-C2-O2	7.56	123.44	118.90
35	BA	335	C	N3-C4-C5	-7.56	118.88	121.90
35	BA	440	C	C5-C4-N4	-7.56	114.91	120.20
35	BA	1113	C	C1'-O4'-C4'	-7.56	103.86	109.90
2	AB	77	G	C6-N1-C2	-7.56	120.57	125.10
2	AB	208	C	C5-C4-N4	-7.56	114.91	120.20
2	AB	690	G	N3-C4-C5	-7.56	124.82	128.60
2	AB	907	G	N7-C8-N9	7.56	116.88	113.10
2	AB	911	A	O5'-P-OP2	-7.56	98.90	105.70
2	AB	1294	U	N1-C1'-C2'	-7.56	103.69	112.00
2	AB	2628	C	O4'-C1'-N1	7.56	114.25	108.20
35	BA	984	C	C5'-C4'-O4'	7.56	118.17	109.10
35	BA	1174	G	C4'-C3'-C2'	-7.56	95.04	102.60
2	AB	148	U	C5'-C4'-C3'	-7.55	103.91	116.00
2	AB	181	A	C8-N9-C4	-7.55	102.78	105.80
2	AB	380	G	N3-C4-N9	7.55	130.53	126.00
2	AB	1425	G	C1'-O4'-C4'	7.55	115.94	109.90
2	AB	1476	U	C4'-C3'-C2'	-7.55	95.05	102.60
2	AB	2053	G	N1-C6-O6	7.55	124.43	119.90
2	AB	2169	A	C8-N9-C4	-7.55	102.78	105.80
2	AB	2237	G	C4-C5-N7	7.55	113.82	110.80
2	AB	2344	U	C2-N3-C4	-7.55	122.47	127.00
2	AB	2806	C	C5'-C4'-O4'	7.55	118.17	109.10
35	BA	113	G	C6-N1-C2	-7.55	120.57	125.10
37	BC	73	A	C5-N7-C8	7.55	107.68	103.90
2	AB	320	A	N1-C2-N3	-7.55	125.52	129.30
35	BA	1224	U	N1-C2-O2	7.55	128.09	122.80
2	AB	452	G	C4-C5-N7	-7.55	107.78	110.80
2	AB	704	G	P-O3'-C3'	7.55	128.76	119.70
2	AB	1020	A	P-O3'-C3'	7.55	128.76	119.70
2	AB	1206	G	C5-C6-N1	7.55	115.28	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2204	G	N3-C4-N9	7.55	130.53	126.00
35	BA	326	G	N3-C4-C5	-7.55	124.83	128.60
2	AB	497	A	C6-C5-N7	7.55	137.59	132.30
2	AB	1298	C	O4'-C1'-N1	7.55	114.24	108.20
2	AB	1766	G	C4-C5-N7	-7.55	107.78	110.80
2	AB	1874	C	N1-C2-N3	-7.55	113.92	119.20
2	AB	2768	U	N1-C2-N3	7.55	119.43	114.90
35	BA	39	G	N3-C4-C5	-7.55	124.83	128.60
2	AB	136	G	N9-C4-C5	7.55	108.42	105.40
2	AB	1592	C	N1-C1'-C2'	-7.55	103.70	112.00
2	AB	2257	U	C5-C6-N1	7.55	126.47	122.70
35	BA	1204	A	N7-C8-N9	7.55	117.57	113.80
2	AB	174	U	C5-C6-N1	-7.55	118.93	122.70
2	AB	879	G	C5-C6-O6	7.55	133.13	128.60
2	AB	1091	G	C5-C6-N1	7.55	115.27	111.50
2	AB	1468	U	C5'-C4'-O4'	7.55	118.16	109.10
2	AB	1515	A	C1'-O4'-C4'	-7.55	103.86	109.90
2	AB	2128	G	C8-N9-C4	-7.55	103.38	106.40
2	AB	2264	C	C4-C5-C6	-7.55	113.63	117.40
2	AB	2860	A	P-O3'-C3'	7.55	128.76	119.70
36	BB	23	C	C6-N1-C2	7.55	123.32	120.30
2	AB	382	A	N3-C4-N9	7.54	133.44	127.40
2	AB	585	G	N7-C8-N9	7.54	116.87	113.10
2	AB	2149	U	C5-C4-O4	-7.54	121.37	125.90
35	BA	843	U	O4'-C1'-N1	7.54	114.24	108.20
2	AB	179	C	N1-C2-O2	7.54	123.43	118.90
2	AB	1100	C	P-O3'-C3'	7.54	128.75	119.70
35	BA	507	C	O4'-C1'-N1	7.54	114.23	108.20
2	AB	124	G	C4-C5-C6	7.54	123.32	118.80
2	AB	695	G	C5-N7-C8	7.54	108.07	104.30
2	AB	1426	G	C4-C5-N7	7.54	113.82	110.80
2	AB	1600	C	C5-C4-N4	-7.54	114.92	120.20
2	AB	2094	A	C8-N9-C4	-7.54	102.78	105.80
2	AB	2097	A	N9-C4-C5	7.54	108.82	105.80
2	AB	2148	G	N1-C2-N2	-7.54	109.41	116.20
35	BA	358	U	O4'-C1'-N1	7.54	114.23	108.20
35	BA	692	U	C5-C6-N1	-7.54	118.93	122.70
35	BA	693	G	C3'-C2'-C1'	7.54	107.53	101.50
2	AB	332	A	C6-N1-C2	-7.54	114.08	118.60
35	BA	161	A	N7-C8-N9	7.54	117.57	113.80
35	BA	345	C	C4'-C3'-C2'	-7.54	95.06	102.60
36	BB	42	U	N3-C4-O4	7.54	124.68	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	30	G	O4'-C1'-N9	7.54	114.23	108.20
2	AB	55	G	N9-C4-C5	7.54	108.42	105.40
2	AB	431	U	O4'-C1'-N1	7.54	114.23	108.20
35	BA	262	A	N1-C2-N3	-7.54	125.53	129.30
35	BA	1074	G	N1-C6-O6	7.54	124.42	119.90
2	AB	427	U	C4-C5-C6	7.54	124.22	119.70
2	AB	751	A	C4-C5-N7	7.54	114.47	110.70
2	AB	2518	A	N1-C6-N6	-7.54	114.08	118.60
37	BC	70	C	C1'-O4'-C4'	7.54	115.93	109.90
50	BP	41	TRP	NE1-CE2-CZ2	7.54	138.69	130.40
2	AB	1326	U	C1'-O4'-C4'	-7.54	103.87	109.90
2	AB	1603	A	O4'-C4'-C3'	7.54	112.13	106.10
2	AB	1611	C	C4-C5-C6	-7.54	113.63	117.40
2	AB	1699	G	C2-N3-C4	-7.54	108.13	111.90
35	BA	1209	C	N1-C2-O2	7.54	123.42	118.90
52	BR	25	ARG	NE-CZ-NH1	7.54	124.07	120.30
2	AB	927	A	N3-C4-N9	-7.53	121.37	127.40
2	AB	1326	U	C2-N3-C4	-7.53	122.48	127.00
2	AB	2340	A	C6-N1-C2	7.53	123.12	118.60
2	AB	2652	C	N1-C2-O2	7.53	123.42	118.90
35	BA	51	A	C3'-C2'-C1'	7.53	107.53	101.50
35	BA	347	G	C8-N9-C4	-7.53	103.39	106.40
35	BA	1253	G	C6-N1-C2	-7.53	120.58	125.10
35	BA	1328	C	C4-C5-C6	-7.53	113.63	117.40
1	AA	64	G	C4-N9-C1'	-7.53	116.71	126.50
2	AB	1757	A	N3-C4-C5	-7.53	121.53	126.80
2	AB	2303	G	N3-C2-N2	7.53	125.17	119.90
2	AB	10	A	C4'-C3'-C2'	-7.53	95.07	102.60
2	AB	314	C	C5-C6-N1	7.53	124.77	121.00
2	AB	1135	C	C5'-C4'-O4'	7.53	118.14	109.10
2	AB	1245	G	C4'-C3'-C2'	-7.53	95.07	102.60
2	AB	1703	G	N7-C8-N9	-7.53	109.33	113.10
2	AB	1809	A	N1-C6-N6	-7.53	114.08	118.60
2	AB	2204	G	C5-C6-O6	-7.53	124.08	128.60
2	AB	2406	A	P-O3'-C3'	7.53	128.74	119.70
2	AB	1435	G	C6-N1-C2	-7.53	120.58	125.10
2	AB	2005	A	C8-N9-C4	7.53	108.81	105.80
2	AB	2671	G	N1-C2-N3	-7.53	119.38	123.90
2	AB	2691	C	C5-C4-N4	7.53	125.47	120.20
35	BA	298	A	C4-C5-N7	-7.53	106.94	110.70
2	AB	271	G	O4'-C1'-N9	7.53	114.22	108.20
2	AB	534	U	C5-C6-N1	7.53	126.46	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2261	C	N3-C2-O2	-7.53	116.63	121.90
2	AB	2645	G	N3-C4-C5	-7.53	124.84	128.60
35	BA	129	A	N9-C4-C5	7.53	108.81	105.80
35	BA	444	G	C8-N9-C4	-7.53	103.39	106.40
35	BA	898	G	N9-C1'-C2'	-7.53	103.72	112.00
35	BA	1133	G	N1-C6-O6	7.53	124.42	119.90
35	BA	1332	A	N7-C8-N9	7.53	117.56	113.80
2	AB	1095	A	C3'-C2'-C1'	7.53	107.52	101.50
2	AB	1334	G	N9-C4-C5	-7.53	102.39	105.40
2	AB	1884	G	C8-N9-C4	-7.53	103.39	106.40
35	BA	894	G	C4'-C3'-C2'	-7.53	95.07	102.60
35	BA	1000	A	C5-C6-N1	7.53	121.46	117.70
35	BA	1001	C	C5-C6-N1	-7.53	117.24	121.00
35	BA	1385	G	N1-C6-O6	-7.53	115.39	119.90
2	AB	385	C	C2-N3-C4	7.52	123.66	119.90
2	AB	930	G	C4-C5-C6	7.52	123.31	118.80
2	AB	2333	A	N1-C2-N3	-7.52	125.54	129.30
35	BA	296	U	C4-C5-C6	7.52	124.21	119.70
1	AA	24	G	C5-C6-N1	7.52	115.26	111.50
2	AB	1582	C	C4'-C3'-C2'	-7.52	95.08	102.60
2	AB	2583	G	N3-C4-N9	7.52	130.51	126.00
35	BA	719	C	N3-C4-C5	-7.52	118.89	121.90
37	BC	29	C	O4'-C1'-C2'	-7.52	98.28	105.80
2	AB	704	G	C4-C5-C6	-7.52	114.29	118.80
2	AB	1182	G	N7-C8-N9	7.52	116.86	113.10
2	AB	1382	G	O4'-C1'-N9	7.52	114.22	108.20
2	AB	2697	G	O4'-C1'-N9	7.52	114.22	108.20
2	AB	232	G	C2-N3-C4	-7.52	108.14	111.90
2	AB	635	C	C4-C5-C6	-7.52	113.64	117.40
2	AB	1784	A	C6-N1-C2	7.52	123.11	118.60
2	AB	1905	C	O4'-C1'-N1	7.52	114.22	108.20
2	AB	2750	A	C2-N3-C4	7.52	114.36	110.60
35	BA	60	A	N3-C4-C5	-7.52	121.54	126.80
2	AB	656	G	C6-C5-N7	-7.52	125.89	130.40
2	AB	829	A	O4'-C4'-C3'	7.52	112.11	106.10
2	AB	1574	C	C4'-C3'-C2'	-7.52	95.08	102.60
2	AB	2148	G	C2-N3-C4	7.52	115.66	111.90
2	AB	2833	U	N3-C4-C5	-7.52	110.09	114.60
2	AB	2877	G	C2-N3-C4	7.52	115.66	111.90
4	AD	101	ARG	NE-CZ-NH2	-7.52	116.54	120.30
35	BA	324	G	N3-C4-C5	-7.52	124.84	128.60
2	AB	1654	A	C5-C6-N1	7.52	121.46	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1107	C	C6-N1-C2	-7.52	117.29	120.30
35	BA	1532	U	O4'-C1'-N1	7.52	114.21	108.20
2	AB	185	G	N3-C4-N9	7.51	130.51	126.00
2	AB	499	U	N1-C2-N3	7.51	119.41	114.90
2	AB	1839	G	C5-C6-N1	7.51	115.26	111.50
2	AB	2601	C	O4'-C1'-N1	7.51	114.21	108.20
2	AB	2826	A	N7-C8-N9	7.51	117.56	113.80
13	AM	32	TYR	CG-CD2-CE2	-7.51	115.29	121.30
35	BA	333	U	C1'-O4'-C4'	7.51	115.91	109.90
35	BA	436	C	C5-C4-N4	7.51	125.46	120.20
35	BA	711	G	N3-C4-C5	-7.51	124.84	128.60
35	BA	1334	G	C5-C6-O6	-7.51	124.09	128.60
2	AB	1284	A	C8-N9-C4	-7.51	102.80	105.80
2	AB	1603	A	C1'-O4'-C4'	-7.51	103.89	109.90
2	AB	1740	G	C5-N7-C8	-7.51	100.54	104.30
35	BA	774	G	N3-C2-N2	7.51	125.16	119.90
1	AA	39	A	C4'-C3'-C2'	-7.51	95.09	102.60
2	AB	7	G	C2-N3-C4	7.51	115.66	111.90
2	AB	65	U	C4-C5-C6	7.51	124.21	119.70
2	AB	209	C	N3-C4-C5	-7.51	118.89	121.90
2	AB	993	G	P-O3'-C3'	7.51	128.72	119.70
35	BA	210	C	C5-C4-N4	7.51	125.46	120.20
35	BA	471	U	C5-C4-O4	-7.51	121.39	125.90
35	BA	1265	C	C2-N3-C4	7.51	123.66	119.90
40	BF	183	ARG	NE-CZ-NH2	7.51	124.06	120.30
1	AA	17	C	C2-N3-C4	7.51	123.66	119.90
2	AB	707	G	N9-C4-C5	7.51	108.40	105.40
2	AB	1110	G	C3'-C2'-C1'	-7.51	95.49	101.50
2	AB	1427	A	N1-C2-N3	-7.51	125.55	129.30
2	AB	1518	C	N3-C4-C5	-7.51	118.90	121.90
2	AB	1767	G	C4-C5-N7	-7.51	107.80	110.80
2	AB	1818	U	C5-C4-O4	7.51	130.41	125.90
35	BA	160	A	O4'-C1'-N9	7.51	114.21	108.20
35	BA	1219	A	C2-N3-C4	7.51	114.36	110.60
2	AB	15	G	C5-N7-C8	-7.51	100.55	104.30
2	AB	592	A	N1-C6-N6	7.51	123.10	118.60
2	AB	1441	G	C5-C6-N1	7.51	115.25	111.50
2	AB	1761	C	C5-C4-N4	7.51	125.45	120.20
2	AB	1868	C	C4'-C3'-C2'	-7.51	95.09	102.60
2	AB	2068	U	N3-C2-O2	-7.51	116.95	122.20
2	AB	2180	U	N1-C2-O2	7.51	128.06	122.80
2	AB	2417	C	O4'-C1'-N1	7.51	114.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2725	A	C5'-C4'-O4'	7.51	118.11	109.10
35	BA	7	A	N9-C4-C5	7.51	108.80	105.80
35	BA	254	G	N3-C4-C5	-7.51	124.85	128.60
2	AB	1837	C	C5-C6-N1	7.50	124.75	121.00
2	AB	2538	C	N3-C2-O2	-7.50	116.65	121.90
35	BA	572	A	N7-C8-N9	7.50	117.55	113.80
35	BA	1461	G	C4'-C3'-C2'	-7.50	95.09	102.60
1	AA	21	G	N1-C2-N3	-7.50	119.40	123.90
1	AA	106	G	C5-C6-O6	-7.50	124.10	128.60
2	AB	5	A	C6-N1-C2	7.50	123.10	118.60
2	AB	643	A	C2-N3-C4	7.50	114.35	110.60
2	AB	1219	U	N1-C2-N3	7.50	119.40	114.90
2	AB	1355	G	N3-C4-C5	-7.50	124.85	128.60
2	AB	1535	A	C1'-O4'-C4'	-7.50	103.90	109.90
2	AB	2798	U	C6-N1-C2	-7.50	116.50	121.00
35	BA	588	G	C5-C6-O6	7.50	133.10	128.60
35	BA	764	C	P-O3'-C3'	7.50	128.70	119.70
35	BA	1306	A	C1'-O4'-C4'	-7.50	103.90	109.90
2	AB	584	C	C5'-C4'-O4'	7.50	118.10	109.10
2	AB	962	G	C3'-C2'-C1'	7.50	107.50	101.50
2	AB	2054	A	C5-N7-C8	-7.50	100.15	103.90
2	AB	2323	G	N1-C2-N2	7.50	122.95	116.20
2	AB	2534	A	C6-N1-C2	7.50	123.10	118.60
13	AM	100	PHE	CG-CD1-CE1	7.50	129.05	120.80
35	BA	577	G	C4-C5-C6	7.50	123.30	118.80
35	BA	634	C	N3-C4-N4	-7.50	112.75	118.00
2	AB	92	U	N1-C2-N3	-7.50	110.40	114.90
35	BA	1445	U	N3-C2-O2	-7.50	116.95	122.20
2	AB	277	G	C8-N9-C4	-7.50	103.40	106.40
2	AB	1789	A	N1-C2-N3	7.50	133.05	129.30
2	AB	1857	G	N7-C8-N9	7.50	116.85	113.10
2	AB	2887	A	C3'-C2'-C1'	-7.50	95.50	101.50
12	AL	34	ARG	NE-CZ-NH1	7.50	124.05	120.30
35	BA	413	G	N1-C2-N2	7.50	122.95	116.20
35	BA	1326	U	C2-N3-C4	-7.50	122.50	127.00
2	AB	43	G	N3-C4-C5	-7.50	124.85	128.60
2	AB	2487	G	C2-N3-C4	7.50	115.65	111.90
2	AB	2543	G	C6-N1-C2	7.50	129.60	125.10
35	BA	28	A	C5-C6-N6	-7.50	117.70	123.70
35	BA	609	A	C5-C6-N6	-7.50	117.70	123.70
35	BA	1307	U	N1-C2-O2	-7.50	117.55	122.80
2	AB	2562	U	O4'-C1'-N1	7.50	114.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2817	U	N1-C2-O2	7.50	128.05	122.80
35	BA	1127	G	C5-C6-O6	-7.50	124.10	128.60
35	BA	1246	A	N9-C1'-C2'	-7.50	103.75	112.00
37	BC	72	C	O4'-C1'-N1	7.50	114.20	108.20
2	AB	57	C	N1-C1'-C2'	-7.49	103.76	112.00
2	AB	588	U	C3'-C2'-C1'	-7.49	95.50	101.50
2	AB	603	A	C5'-C4'-C3'	-7.49	104.01	116.00
2	AB	751	A	C5'-C4'-O4'	7.49	118.09	109.10
2	AB	1356	G	C5-N7-C8	-7.49	100.55	104.30
2	AB	2093	G	N9-C4-C5	7.49	108.40	105.40
2	AB	2900	A	N7-C8-N9	7.49	117.55	113.80
2	AB	635	C	C1'-O4'-C4'	7.49	115.89	109.90
2	AB	729	G	O4'-C1'-N9	7.49	114.19	108.20
35	BA	816	A	C5'-C4'-O4'	7.49	118.09	109.10
35	BA	1253	G	N3-C2-N2	-7.49	114.66	119.90
2	AB	179	C	O4'-C1'-N1	7.49	114.19	108.20
2	AB	1071	G	N9-C4-C5	7.49	108.40	105.40
2	AB	1281	G	N7-C8-N9	7.49	116.84	113.10
2	AB	1938	A	C6-N1-C2	-7.49	114.11	118.60
2	AB	2207	C	C4'-C3'-C2'	-7.49	95.11	102.60
35	BA	323	U	C4-C5-C6	7.49	124.19	119.70
35	BA	682	G	C2-N3-C4	7.49	115.65	111.90
35	BA	715	A	N7-C8-N9	7.49	117.55	113.80
35	BA	995	C	C2-N3-C4	7.49	123.64	119.90
35	BA	1006	G	O4'-C1'-N9	7.49	114.19	108.20
2	AB	69	C	C5'-C4'-O4'	7.49	118.09	109.10
2	AB	156	A	N9-C4-C5	7.49	108.80	105.80
2	AB	277	G	N1-C6-O6	-7.49	115.41	119.90
2	AB	468	G	N1-C2-N3	-7.49	119.41	123.90
2	AB	1362	C	C5-C6-N1	7.49	124.74	121.00
2	AB	2146	C	C3'-C2'-C1'	-7.49	95.51	101.50
2	AB	2233	U	N1-C1'-C2'	-7.49	103.76	112.00
2	AB	2653	U	N1-C1'-C2'	7.49	123.74	114.00
2	AB	2796	U	C2-N3-C4	-7.49	122.51	127.00
17	AQ	33	ARG	NE-CZ-NH1	7.49	124.04	120.30
17	AQ	111	ARG	NE-CZ-NH2	-7.49	116.56	120.30
35	BA	49	U	C6-N1-C1'	-7.49	110.72	121.20
35	BA	1069	C	C1'-O4'-C4'	7.49	115.89	109.90
35	BA	1085	U	N1-C2-N3	7.49	119.39	114.90
35	BA	1176	A	C2-N3-C4	7.49	114.34	110.60
35	BA	1437	A	C2-N3-C4	-7.49	106.86	110.60
2	AB	168	G	C5-N7-C8	-7.49	100.56	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	560	C	N3-C4-C5	-7.49	118.91	121.90
2	AB	1072	C	O4'-C4'-C3'	-7.49	96.51	104.00
2	AB	1309	G	C4-C5-C6	7.49	123.29	118.80
2	AB	1667	G	O4'-C1'-N9	7.49	114.19	108.20
2	AB	1724	G	C2-N3-C4	7.49	115.64	111.90
2	AB	1995	U	N1-C2-N3	-7.49	110.41	114.90
2	AB	404	A	C1'-O4'-C4'	-7.49	103.91	109.90
2	AB	954	G	C8-N9-C4	-7.49	103.41	106.40
2	AB	1124	G	N3-C4-N9	-7.49	121.51	126.00
2	AB	1195	G	N3-C2-N2	7.49	125.14	119.90
2	AB	1589	U	N1-C2-O2	7.49	128.04	122.80
2	AB	2024	G	N1-C6-O6	7.49	124.39	119.90
35	BA	263	A	C2-N3-C4	-7.49	106.86	110.60
35	BA	760	G	N9-C4-C5	7.49	108.39	105.40
36	BB	16	A	N1-C6-N6	-7.49	114.11	118.60
2	AB	1510	G	C6-N1-C2	7.48	129.59	125.10
2	AB	543	G	C4'-C3'-C2'	-7.48	95.12	102.60
2	AB	796	C	C3'-C2'-C1'	7.48	107.49	101.50
2	AB	1445	G	C5-C6-O6	-7.48	124.11	128.60
2	AB	2545	G	N9-C4-C5	7.48	108.39	105.40
35	BA	150	U	O4'-C1'-N1	7.48	114.19	108.20
35	BA	654	G	N1-C2-N2	7.48	122.94	116.20
35	BA	703	G	C8-N9-C4	-7.48	103.41	106.40
35	BA	905	U	C5-C6-N1	-7.48	118.96	122.70
35	BA	1218	C	C5-C4-N4	7.48	125.44	120.20
37	BC	29	C	N3-C4-C5	-7.48	118.91	121.90
1	AA	38	C	C3'-C2'-C1'	-7.48	95.52	101.50
1	AA	64	G	C4-C5-N7	-7.48	107.81	110.80
2	AB	180	G	N9-C4-C5	-7.48	102.41	105.40
2	AB	442	G	C5-C6-N1	7.48	115.24	111.50
2	AB	645	C	N3-C2-O2	7.48	127.14	121.90
2	AB	915	C	C1'-O4'-C4'	-7.48	103.92	109.90
2	AB	1612	C	N1-C2-N3	-7.48	113.96	119.20
2	AB	2351	G	C4'-C3'-C2'	-7.48	95.12	102.60
35	BA	521	G	C2-N3-C4	7.48	115.64	111.90
35	BA	581	G	O4'-C1'-N9	7.48	114.18	108.20
35	BA	978	A	C6-N1-C2	7.48	123.09	118.60
35	BA	1249	C	C6-N1-C2	-7.48	117.31	120.30
35	BA	1304	G	C6-N1-C2	-7.48	120.61	125.10
36	BB	14	G	N7-C8-N9	7.48	116.84	113.10
49	BO	10	ASP	CB-CG-OD2	-7.48	111.57	118.30
2	AB	823	C	C2-N3-C4	7.48	123.64	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	942	G	C8-N9-C1'	7.48	136.72	127.00
2	AB	2138	G	C5-C6-N1	7.48	115.24	111.50
2	AB	2389	G	C5-C6-N1	7.48	115.24	111.50
47	BM	92	ARG	NE-CZ-NH2	-7.48	116.56	120.30
2	AB	342	A	N9-C4-C5	-7.48	102.81	105.80
2	AB	1663	G	N1-C2-N3	-7.48	119.41	123.90
2	AB	1673	G	C5-C6-O6	-7.48	124.11	128.60
2	AB	2778	A	C8-N9-C4	-7.48	102.81	105.80
35	BA	176	C	C5-C4-N4	-7.48	114.97	120.20
35	BA	620	C	C2-N3-C4	7.48	123.64	119.90
35	BA	1390	U	C4'-C3'-C2'	-7.48	95.12	102.60
35	BA	1431	A	C5-C6-N1	7.48	121.44	117.70
48	BN	37	TYR	CG-CD1-CE1	7.48	127.28	121.30
2	AB	696	G	N9-C4-C5	7.48	108.39	105.40
2	AB	1224	U	N1-C2-N3	7.48	119.39	114.90
2	AB	245	G	N7-C8-N9	7.47	116.84	113.10
2	AB	472	A	C5'-C4'-O4'	7.47	118.07	109.10
2	AB	1103	A	P-O3'-C3'	7.47	128.67	119.70
2	AB	2083	G	P-O3'-C3'	7.47	128.67	119.70
2	AB	2138	G	C4-C5-C6	-7.47	114.31	118.80
2	AB	2226	C	C2-N3-C4	7.47	123.64	119.90
2	AB	2667	C	C5-C4-N4	7.47	125.43	120.20
2	AB	2834	G	C5-C6-N1	-7.47	107.76	111.50
2	AB	2838	G	C4-C5-C6	7.47	123.28	118.80
35	BA	871	U	C5-C6-N1	-7.47	118.96	122.70
35	BA	1285	A	N3-C4-C5	-7.47	121.57	126.80
37	BC	52	C	C2-N3-C4	7.47	123.64	119.90
2	AB	132	G	C4-C5-N7	-7.47	107.81	110.80
2	AB	875	G	C6-C5-N7	-7.47	125.92	130.40
2	AB	1189	A	C8-N9-C4	7.47	108.79	105.80
2	AB	2076	U	C5-C6-N1	-7.47	118.96	122.70
2	AB	2288	A	C1'-O4'-C4'	7.47	115.88	109.90
2	AB	2366	A	C4'-C3'-C2'	-7.47	95.13	102.60
2	AB	2727	A	N9-C4-C5	7.47	108.79	105.80
2	AB	2777	G	P-O3'-C3'	7.47	128.67	119.70
35	BA	819	A	C4-C5-N7	-7.47	106.96	110.70
35	BA	1499	A	C8-N9-C4	-7.47	102.81	105.80
2	AB	8	C	C5'-C4'-O4'	7.47	118.06	109.10
2	AB	1122	G	N3-C4-C5	-7.47	124.87	128.60
2	AB	1460	U	O4'-C1'-C2'	-7.47	98.33	105.80
2	AB	1970	A	C4-C5-N7	-7.47	106.97	110.70
2	AB	2346	A	C4-C5-N7	-7.47	106.97	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2674	G	N3-C4-C5	-7.47	124.86	128.60
35	BA	983	A	C2-N3-C4	7.47	114.33	110.60
35	BA	1074	G	C1'-O4'-C4'	7.47	115.88	109.90
35	BA	1173	U	C2-N3-C4	-7.47	122.52	127.00
35	BA	1510	C	C4'-C3'-C2'	-7.47	95.13	102.60
2	AB	989	G	O4'-C1'-N9	7.47	114.17	108.20
2	AB	2872	A	C8-N9-C4	-7.47	102.81	105.80
1	AA	9	G	C5'-C4'-O4'	7.47	118.06	109.10
1	AA	110	C	C1'-O4'-C4'	7.47	115.87	109.90
2	AB	398	C	O4'-C1'-N1	7.47	114.17	108.20
2	AB	426	C	N3-C2-O2	-7.47	116.67	121.90
2	AB	864	G	N1-C2-N2	7.47	122.92	116.20
2	AB	872	U	C4'-C3'-C2'	-7.47	95.13	102.60
2	AB	985	C	O4'-C1'-N1	7.47	114.17	108.20
2	AB	1766	G	O4'-C1'-N9	7.47	114.17	108.20
2	AB	1826	G	N9-C4-C5	7.47	108.39	105.40
2	AB	1900	A	N7-C8-N9	-7.47	110.07	113.80
2	AB	2477	U	C3'-C2'-C1'	7.47	107.47	101.50
35	BA	217	C	C5-C6-N1	-7.47	117.27	121.00
35	BA	471	U	N3-C4-O4	7.47	124.63	119.40
35	BA	1160	G	C5-N7-C8	7.47	108.03	104.30
2	AB	1124	G	C5-C6-O6	7.46	133.08	128.60
2	AB	2748	A	C8-N9-C4	-7.46	102.81	105.80
2	AB	2860	A	C3'-C2'-C1'	7.46	107.47	101.50
35	BA	300	A	C5-C6-N6	-7.46	117.73	123.70
35	BA	515	G	O4'-C1'-N9	7.46	114.17	108.20
35	BA	903	G	N9-C4-C5	7.46	108.39	105.40
35	BA	1511	G	C1'-O4'-C4'	7.46	115.87	109.90
2	AB	956	G	O4'-C1'-N9	7.46	114.17	108.20
2	AB	1081	U	P-O5'-C5'	7.46	132.84	120.90
2	AB	1259	G	N9-C4-C5	7.46	108.39	105.40
2	AB	2697	G	C4-C5-N7	-7.46	107.81	110.80
35	BA	117	G	N1-C6-O6	-7.46	115.42	119.90
35	BA	256	U	N3-C4-C5	-7.46	110.12	114.60
35	BA	642	A	O4'-C1'-N9	-7.46	102.23	108.20
35	BA	717	U	N3-C4-O4	7.46	124.62	119.40
2	AB	753	A	C8-N9-C4	-7.46	102.82	105.80
2	AB	1116	G	C4-C5-N7	-7.46	107.82	110.80
2	AB	1339	G	N3-C4-N9	7.46	130.48	126.00
2	AB	1455	G	C2-N3-C4	7.46	115.63	111.90
2	AB	2517	C	C4-C5-C6	-7.46	113.67	117.40
2	AB	918	A	C4-C5-N7	-7.46	106.97	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	260	G	N9-C4-C5	7.46	108.38	105.40
35	BA	694	A	O4'-C1'-N9	7.46	114.17	108.20
1	AA	102	G	C4-C5-N7	-7.46	107.82	110.80
2	AB	173	A	C6-N1-C2	7.46	123.08	118.60
2	AB	585	G	O4'-C1'-N9	-7.46	102.23	108.20
2	AB	645	C	N1-C2-N3	-7.46	113.98	119.20
2	AB	962	G	N3-C4-C5	-7.46	124.87	128.60
2	AB	2239	G	C4-C5-C6	7.46	123.28	118.80
2	AB	2536	G	C2-N3-C4	7.46	115.63	111.90
2	AB	2686	G	O4'-C1'-N9	7.46	114.17	108.20
35	BA	95	C	O4'-C1'-N1	7.46	114.17	108.20
35	BA	324	G	C2-N3-C4	7.46	115.63	111.90
2	AB	1348	C	N3-C2-O2	-7.46	116.68	121.90
35	BA	478	A	C8-N9-C4	7.46	108.78	105.80
35	BA	745	G	N1-C2-N3	7.46	128.37	123.90
35	BA	1268	G	N1-C6-O6	-7.46	115.43	119.90
2	AB	366	C	C4'-C3'-C2'	-7.46	95.14	102.60
2	AB	465	G	C5-N7-C8	-7.46	100.57	104.30
2	AB	796	C	N1-C1'-C2'	-7.46	103.80	112.00
2	AB	1569	A	C2-N3-C4	7.46	114.33	110.60
2	AB	2119	A	N9-C4-C5	-7.46	102.82	105.80
2	AB	2736	A	N1-C2-N3	-7.46	125.57	129.30
2	AB	2777	G	C6-C5-N7	-7.46	125.93	130.40
35	BA	121	U	C5-C6-N1	-7.46	118.97	122.70
36	BB	19	A	O4'-C1'-N9	7.46	114.16	108.20
2	AB	932	U	C3'-C2'-C1'	7.45	107.46	101.50
35	BA	1222	G	C4-C5-C6	7.45	123.27	118.80
37	BC	52	C	O4'-C1'-N1	7.45	114.16	108.20
2	AB	600	G	O4'-C1'-N9	7.45	114.16	108.20
2	AB	2410	G	C2-N3-C4	7.45	115.63	111.90
35	BA	376	G	C6-C5-N7	7.45	134.87	130.40
35	BA	1074	G	N9-C4-C5	7.45	108.38	105.40
2	AB	544	C	C3'-C2'-C1'	7.45	107.46	101.50
2	AB	853	C	N3-C2-O2	-7.45	116.68	121.90
2	AB	2008	C	C2-N3-C4	7.45	123.62	119.90
2	AB	2235	G	C3'-C2'-C1'	7.45	107.46	101.50
35	BA	1472	U	O4'-C1'-N1	7.45	114.16	108.20
1	AA	72	G	N3-C2-N2	-7.45	114.69	119.90
2	AB	94	A	P-O3'-C3'	7.45	128.64	119.70
2	AB	380	G	C5-N7-C8	7.45	108.02	104.30
2	AB	579	G	C4'-C3'-C2'	-7.45	95.15	102.60
2	AB	1008	A	O4'-C1'-N9	7.45	114.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1940	U	C4-C5-C6	7.45	124.17	119.70
2	AB	2411	A	O4'-C1'-N9	7.45	114.16	108.20
30	A3	51	ARG	NE-CZ-NH1	-7.45	116.58	120.30
37	BC	65	G	C4-C5-N7	7.45	113.78	110.80
2	AB	2597	G	C4-C5-N7	-7.45	107.82	110.80
35	BA	120	A	C5-C6-N6	7.45	129.66	123.70
35	BA	386	C	C5-C6-N1	-7.45	117.28	121.00
35	BA	1229	A	N7-C8-N9	7.45	117.52	113.80
2	AB	372	G	C4-C5-C6	7.45	123.27	118.80
2	AB	1042	G	N1-C2-N3	-7.45	119.43	123.90
2	AB	1388	G	N1-C2-N2	-7.45	109.50	116.20
2	AB	2184	A	N9-C1'-C2'	-7.45	103.81	112.00
2	AB	2185	U	O4'-C1'-C2'	7.45	114.30	107.60
2	AB	2270	A	N1-C2-N3	7.45	133.02	129.30
2	AB	2346	A	C2-N3-C4	7.45	114.32	110.60
2	AB	2359	C	N1-C2-O2	7.45	123.37	118.90
35	BA	172	A	C5-N7-C8	-7.45	100.18	103.90
35	BA	260	G	C8-N9-C4	-7.45	103.42	106.40
35	BA	481	G	C3'-C2'-C1'	7.45	107.46	101.50
35	BA	570	G	N7-C8-N9	7.45	116.82	113.10
35	BA	1136	C	N1-C2-O2	7.45	123.37	118.90
35	BA	1239	A	O4'-C4'-C3'	7.45	112.06	106.10
2	AB	1008	A	C8-N9-C4	7.44	108.78	105.80
35	BA	776	G	O4'-C1'-N9	7.44	114.16	108.20
1	AA	2	G	N3-C4-C5	-7.44	124.88	128.60
1	AA	9	G	N1-C2-N2	7.44	122.90	116.20
1	AA	56	G	N3-C2-N2	-7.44	114.69	119.90
2	AB	298	G	N1-C2-N3	-7.44	119.43	123.90
2	AB	336	C	C5-C4-N4	-7.44	114.99	120.20
2	AB	482	A	C4-C5-N7	7.44	114.42	110.70
2	AB	880	G	C5-N7-C8	-7.44	100.58	104.30
35	BA	104	G	C4-C5-N7	-7.44	107.82	110.80
35	BA	213	G	C8-N9-C4	-7.44	103.42	106.40
2	AB	1093	G	C2-N3-C4	7.44	115.62	111.90
2	AB	1208	C	N3-C4-C5	-7.44	118.92	121.90
2	AB	1653	G	C8-N9-C4	-7.44	103.42	106.40
2	AB	1740	G	N9-C4-C5	-7.44	102.42	105.40
4	AD	100	ARG	NE-CZ-NH2	-7.44	116.58	120.30
35	BA	349	A	C3'-C2'-C1'	7.44	107.45	101.50
35	BA	566	G	C5-C6-O6	7.44	133.06	128.60
2	AB	24	G	C4-C5-N7	-7.44	107.82	110.80
2	AB	540	C	C4'-C3'-C2'	-7.44	95.16	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2111	U	N3-C4-C5	-7.44	110.14	114.60
35	BA	528	C	N3-C4-N4	7.44	123.21	118.00
2	AB	539	G	C3'-C2'-C1'	-7.44	95.55	101.50
2	AB	721	A	C3'-C2'-C1'	7.44	107.45	101.50
2	AB	869	G	C6-N1-C2	-7.44	120.64	125.10
2	AB	1852	U	O4'-C1'-N1	7.44	114.15	108.20
35	BA	1164	G	C5-N7-C8	-7.44	100.58	104.30
2	AB	519	U	N3-C2-O2	-7.43	117.00	122.20
2	AB	580	U	N3-C2-O2	-7.43	117.00	122.20
2	AB	946	C	O4'-C1'-N1	7.43	114.15	108.20
2	AB	2618	G	C5-C6-N1	-7.43	107.78	111.50
2	AB	2812	G	N3-C4-N9	7.43	130.46	126.00
35	BA	786	G	N3-C4-C5	-7.43	124.88	128.60
35	BA	1158	C	N3-C4-C5	-7.43	118.93	121.90
35	BA	1279	G	C5-C6-O6	-7.43	124.14	128.60
35	BA	1525	G	C4-C5-C6	7.43	123.26	118.80
52	BR	2	VAL	CG1-CB-CG2	-7.43	99.01	110.90
2	AB	647	G	C8-N9-C4	7.43	109.37	106.40
2	AB	1110	G	C5'-C4'-C3'	-7.43	104.11	116.00
2	AB	1949	G	C2-N3-C4	7.43	115.62	111.90
35	BA	441	A	C5-C6-N6	7.43	129.65	123.70
35	BA	786	G	N7-C8-N9	7.43	116.82	113.10
35	BA	1452	C	N3-C4-C5	-7.43	118.93	121.90
2	AB	2053	G	N1-C2-N2	7.43	122.89	116.20
2	AB	2511	U	O4'-C1'-N1	7.43	114.14	108.20
2	AB	2585	U	C6-N1-C2	-7.43	116.54	121.00
35	BA	10	A	C8-N9-C4	-7.43	102.83	105.80
35	BA	117	G	N1-C2-N3	-7.43	119.44	123.90
35	BA	463	U	C3'-C2'-C1'	7.43	107.44	101.50
35	BA	942	G	C8-N9-C1'	7.43	136.66	127.00
2	AB	557	C	N3-C4-N4	7.43	123.20	118.00
2	AB	2679	A	N9-C4-C5	7.43	108.77	105.80
35	BA	1485	U	N3-C2-O2	-7.43	117.00	122.20
2	AB	177	G	N3-C4-N9	7.43	130.46	126.00
2	AB	547	A	C5-C6-N1	-7.43	113.99	117.70
2	AB	1645	G	C4-C5-N7	-7.43	107.83	110.80
2	AB	1687	G	N7-C8-N9	7.43	116.81	113.10
2	AB	2726	A	N9-C4-C5	7.43	108.77	105.80
2	AB	2787	C	C5'-C4'-O4'	7.43	118.01	109.10
21	AU	76	VAL	CG1-CB-CG2	7.43	122.78	110.90
35	BA	142	G	N3-C4-N9	7.43	130.46	126.00
35	BA	191	G	N9-C1'-C2'	-7.43	103.83	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	196	A	N9-C4-C5	7.43	108.77	105.80
2	AB	514	A	P-O3'-C3'	7.42	128.61	119.70
2	AB	528	A	N7-C8-N9	7.42	117.51	113.80
2	AB	547	A	C1'-O4'-C4'	-7.42	103.96	109.90
2	AB	802	A	C4-C5-N7	-7.42	106.99	110.70
2	AB	1092	C	N3-C4-N4	-7.42	112.80	118.00
2	AB	1381	G	N9-C1'-C2'	-7.42	103.83	112.00
2	AB	1738	G	N7-C8-N9	7.42	116.81	113.10
2	AB	2335	A	N3-C4-C5	-7.42	121.60	126.80
35	BA	1537	U	C4-C5-C6	7.42	124.15	119.70
2	AB	106	C	C2-N3-C4	7.42	123.61	119.90
2	AB	726	G	C5-C6-N1	7.42	115.21	111.50
2	AB	1869	G	N1-C2-N3	7.42	128.35	123.90
2	AB	2637	U	C6-N1-C2	-7.42	116.55	121.00
35	BA	734	G	O4'-C1'-N9	-7.42	102.26	108.20
2	AB	592	A	N7-C8-N9	7.42	117.51	113.80
2	AB	1406	U	C2-N3-C4	-7.42	122.55	127.00
2	AB	2325	G	C5-C6-O6	7.42	133.05	128.60
35	BA	587	G	C5-C6-O6	-7.42	124.15	128.60
35	BA	1420	U	C4'-C3'-C2'	-7.42	95.18	102.60
2	AB	623	C	C5-C6-N1	-7.42	117.29	121.00
2	AB	961	C	C5-C6-N1	-7.42	117.29	121.00
2	AB	1286	A	C3'-C2'-C1'	-7.42	95.56	101.50
2	AB	1482	G	N1-C2-N3	-7.42	119.45	123.90
2	AB	1535	A	N7-C8-N9	-7.42	110.09	113.80
2	AB	2198	A	C4-C5-N7	-7.42	106.99	110.70
2	AB	2246	G	C5-C6-O6	7.42	133.05	128.60
35	BA	212	G	C2-N3-C4	7.42	115.61	111.90
48	BN	108	ASP	CB-CG-OD1	-7.42	111.62	118.30
2	AB	436	C	N3-C2-O2	-7.42	116.71	121.90
2	AB	739	A	N3-C4-C5	-7.42	121.61	126.80
2	AB	1134	A	C5-C6-N1	7.42	121.41	117.70
2	AB	1560	G	C5'-C4'-C3'	-7.42	104.13	116.00
2	AB	2096	C	C5'-C4'-O4'	7.42	118.00	109.10
35	BA	402	G	C2-N3-C4	7.42	115.61	111.90
35	BA	434	U	O4'-C4'-C3'	7.42	112.03	106.10
35	BA	588	G	C1'-O4'-C4'	-7.42	103.96	109.90
35	BA	1305	G	N3-C4-C5	-7.42	124.89	128.60
2	AB	133	U	O4'-C1'-N1	7.42	114.13	108.20
2	AB	1683	U	C5-C6-N1	-7.42	118.99	122.70
2	AB	2090	A	N1-C6-N6	-7.42	114.15	118.60
2	AB	2268	A	N1-C2-N3	7.42	133.01	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2661	G	O4'-C1'-N9	7.42	114.13	108.20
35	BA	251	G	O4'-C1'-N9	7.42	114.13	108.20
35	BA	412	A	N9-C4-C5	-7.42	102.83	105.80
35	BA	453	G	C5-N7-C8	7.42	108.01	104.30
35	BA	454	G	C6-N1-C2	-7.42	120.65	125.10
1	AA	117	G	N9-C4-C5	-7.42	102.43	105.40
2	AB	324	A	N1-C6-N6	7.42	123.05	118.60
2	AB	539	G	N3-C4-N9	-7.42	121.55	126.00
2	AB	695	G	C4-C5-N7	-7.42	107.83	110.80
2	AB	1124	G	C5-N7-C8	-7.42	100.59	104.30
2	AB	473	G	N3-C4-N9	7.41	130.45	126.00
2	AB	857	G	N1-C2-N2	-7.41	109.53	116.20
2	AB	1012	U	N1-C2-O2	7.41	127.99	122.80
2	AB	1208	C	C1'-O4'-C4'	-7.41	103.97	109.90
2	AB	2134	A	C6-C5-N7	7.41	137.49	132.30
16	AP	83	LEU	CB-CG-CD2	7.41	123.60	111.00
35	BA	331	G	C5'-C4'-O4'	7.41	118.00	109.10
35	BA	483	C	C4-C5-C6	-7.41	113.69	117.40
2	AB	1232	G	N7-C8-N9	7.41	116.81	113.10
2	AB	1513	U	N1-C2-N3	7.41	119.35	114.90
2	AB	2421	G	N1-C6-O6	-7.41	115.45	119.90
1	AA	53	A	O4'-C1'-N9	7.41	114.13	108.20
2	AB	970	U	C4'-C3'-C2'	-7.41	95.19	102.60
2	AB	1314	C	O4'-C1'-N1	7.41	114.13	108.20
2	AB	2263	C	C4-C5-C6	7.41	121.11	117.40
2	AB	2430	A	C8-N9-C4	7.41	108.76	105.80
35	BA	908	A	N1-C2-N3	7.41	133.00	129.30
35	BA	1467	C	N3-C2-O2	-7.41	116.71	121.90
35	BA	1535	C	N1-C2-O2	7.41	123.35	118.90
2	AB	410	G	O4'-C1'-N9	7.41	114.13	108.20
2	AB	486	C	N1-C2-O2	7.41	123.34	118.90
2	AB	2201	G	C5-C6-O6	7.41	133.04	128.60
35	BA	66	A	O4'-C1'-N9	7.41	114.13	108.20
35	BA	539	A	C5-C6-N6	7.41	129.63	123.70
37	BC	74	A	C5-C6-N1	7.41	121.41	117.70
2	AB	530	G	C2-N3-C4	7.41	115.60	111.90
2	AB	1326	U	C5'-C4'-C3'	-7.41	104.15	116.00
2	AB	1346	G	C3'-C2'-C1'	7.41	107.43	101.50
2	AB	2167	U	O4'-C1'-N1	7.41	114.12	108.20
2	AB	2446	G	C5-C6-N1	7.41	115.20	111.50
35	BA	100	G	C5-C6-N1	7.41	115.20	111.50
37	BC	10	G	C2-N3-C4	7.41	115.60	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1940	U	N3-C4-O4	7.41	124.58	119.40
2	AB	2631	G	N3-C4-C5	-7.41	124.90	128.60
35	BA	123	U	N3-C4-O4	7.41	124.58	119.40
35	BA	480	U	C3'-C2'-C1'	7.41	107.42	101.50
35	BA	1243	C	N3-C2-O2	-7.41	116.72	121.90
35	BA	1370	G	N3-C4-N9	7.41	130.44	126.00
37	BC	23	G	N7-C8-N9	7.41	116.80	113.10
1	AA	41	G	C4-C5-N7	-7.40	107.84	110.80
2	AB	712	G	C2-N3-C4	7.40	115.60	111.90
2	AB	1846	G	N3-C4-C5	-7.40	124.90	128.60
2	AB	2531	A	C5-C6-N6	-7.40	117.78	123.70
35	BA	1166	G	C6-N1-C2	-7.40	120.66	125.10
35	BA	1227	A	O4'-C1'-N9	7.40	114.12	108.20
2	AB	422	A	C2-N3-C4	7.40	114.30	110.60
2	AB	986	C	N3-C2-O2	-7.40	116.72	121.90
2	AB	2268	A	C5-C6-N6	-7.40	117.78	123.70
2	AB	2603	G	N3-C4-N9	7.40	130.44	126.00
35	BA	17	U	C3'-C2'-C1'	7.40	107.42	101.50
35	BA	220	G	N1-C2-N3	-7.40	119.46	123.90
35	BA	575	G	N3-C4-C5	-7.40	124.90	128.60
35	BA	648	A	N3-C4-C5	7.40	131.98	126.80
35	BA	1281	C	C6-N1-C2	-7.40	117.34	120.30
35	BA	1355	G	O4'-C1'-N9	7.40	114.12	108.20
37	BC	50	G	C5'-C4'-O4'	7.40	117.98	109.10
1	AA	90	C	O4'-C4'-C3'	7.40	112.02	106.10
1	AA	105	G	C5-N7-C8	7.40	108.00	104.30
2	AB	27	G	O4'-C1'-N9	7.40	114.12	108.20
2	AB	111	A	C4-C5-C6	-7.40	113.30	117.00
2	AB	312	G	N9-C4-C5	-7.40	102.44	105.40
2	AB	332	A	O4'-C1'-C2'	-7.40	98.40	105.80
2	AB	504	A	O4'-C1'-C2'	-7.40	98.40	105.80
2	AB	1174	U	C4-C5-C6	7.40	124.14	119.70
35	BA	1198	G	C1'-O4'-C4'	-7.40	103.98	109.90
35	BA	1291	U	O4'-C4'-C3'	-7.40	96.60	104.00
37	BC	10	G	O4'-C4'-C3'	7.40	112.02	106.10
2	AB	2077	A	C8-N9-C4	7.40	108.76	105.80
35	BA	306	A	C4-C5-C6	-7.40	113.30	117.00
2	AB	341	C	C4-C5-C6	-7.40	113.70	117.40
2	AB	1388	G	C4'-C3'-C2'	-7.40	95.20	102.60
2	AB	1524	G	C5'-C4'-C3'	-7.40	104.16	116.00
2	AB	1538	G	C5-C6-N1	7.40	115.20	111.50
2	AB	2033	A	C8-N9-C4	-7.40	102.84	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2206	C	C5-C6-N1	7.40	124.70	121.00
2	AB	2230	G	C6-N1-C2	-7.40	120.66	125.10
2	AB	2255	G	P-O3'-C3'	7.40	128.58	119.70
7	AG	172	PHE	CB-CG-CD1	-7.40	115.62	120.80
28	A1	29	ARG	NH1-CZ-NH2	-7.40	111.26	119.40
35	BA	155	A	C5-C6-N1	7.40	121.40	117.70
35	BA	338	A	C5'-C4'-O4'	7.40	117.98	109.10
35	BA	833	G	C6-N1-C2	-7.40	120.66	125.10
35	BA	1298	U	N3-C2-O2	-7.40	117.02	122.20
2	AB	22	C	N3-C2-O2	7.40	127.08	121.90
2	AB	432	A	C5-N7-C8	7.40	107.60	103.90
35	BA	1081	A	C6-C5-N7	7.40	137.48	132.30
2	AB	135	U	O4'-C1'-N1	7.39	114.12	108.20
2	AB	2284	A	C8-N9-C4	-7.39	102.84	105.80
2	AB	2330	G	N3-C4-C5	-7.39	124.90	128.60
2	AB	2561	U	N3-C4-O4	7.39	124.58	119.40
35	BA	820	U	O4'-C1'-N1	7.39	114.11	108.20
35	BA	1018	G	C5-N7-C8	-7.39	100.60	104.30
35	BA	1140	C	N3-C4-C5	7.39	124.86	121.90
48	BN	53	ARG	NE-CZ-NH2	-7.39	116.60	120.30
2	AB	8	C	O4'-C4'-C3'	-7.39	96.61	104.00
2	AB	46	G	O4'-C1'-N9	7.39	114.11	108.20
2	AB	111	A	O4'-C1'-N9	7.39	114.11	108.20
2	AB	1356	G	C2-N3-C4	7.39	115.60	111.90
2	AB	1450	G	C8-N9-C4	-7.39	103.44	106.40
35	BA	13	U	C4-C5-C6	7.39	124.14	119.70
35	BA	97	G	C3'-C2'-C1'	7.39	107.41	101.50
2	AB	1221	C	N1-C2-O2	7.39	123.33	118.90
2	AB	1450	G	C1'-O4'-C4'	-7.39	103.99	109.90
2	AB	1702	G	C4'-C3'-C2'	-7.39	95.21	102.60
2	AB	2824	C	P-O3'-C3'	7.39	128.57	119.70
19	AS	63	ARG	NE-CZ-NH1	7.39	124.00	120.30
35	BA	345	C	C3'-C2'-C1'	7.39	107.41	101.50
35	BA	395	C	C1'-O4'-C4'	-7.39	103.99	109.90
35	BA	698	G	C3'-C2'-C1'	-7.39	95.59	101.50
2	AB	2243	U	C5-C6-N1	-7.39	119.01	122.70
2	AB	184	C	N1-C2-O2	-7.39	114.47	118.90
2	AB	533	G	C5-C6-O6	-7.39	124.17	128.60
35	BA	202	G	C4-C5-C6	-7.39	114.37	118.80
35	BA	753	A	C5-N7-C8	7.39	107.59	103.90
35	BA	1486	G	O4'-C1'-N9	7.39	114.11	108.20
2	AB	529	A	N9-C4-C5	7.38	108.75	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	764	A	O4'-C1'-N9	7.38	114.11	108.20
2	AB	1169	A	N1-C6-N6	7.38	123.03	118.60
2	AB	1274	A	N7-C8-N9	-7.38	110.11	113.80
2	AB	1631	G	O4'-C1'-N9	7.38	114.11	108.20
2	AB	2409	G	C5-C6-O6	-7.38	124.17	128.60
35	BA	46	G	N3-C4-C5	-7.38	124.91	128.60
35	BA	373	A	C5-C6-N1	7.38	121.39	117.70
2	AB	993	G	N1-C6-O6	7.38	124.33	119.90
2	AB	1644	C	C6-N1-C2	7.38	123.25	120.30
2	AB	1712	U	C5-C6-N1	-7.38	119.01	122.70
35	BA	971	G	C3'-C2'-C1'	-7.38	95.59	101.50
2	AB	804	A	C1'-O4'-C4'	-7.38	104.00	109.90
2	AB	942	G	N3-C4-N9	-7.38	121.57	126.00
2	AB	1034	G	C2-N3-C4	7.38	115.59	111.90
2	AB	1546	G	N3-C4-C5	-7.38	124.91	128.60
24	AX	66	ASP	CB-CG-OD1	-7.38	111.66	118.30
35	BA	53	A	C4-C5-C6	-7.38	113.31	117.00
35	BA	462	G	N9-C4-C5	7.38	108.35	105.40
35	BA	933	G	C6-C5-N7	-7.38	125.97	130.40
35	BA	1099	G	C8-N9-C4	-7.38	103.45	106.40
2	AB	931	U	N1-C2-O2	7.38	127.97	122.80
35	BA	1432	G	C6-N1-C2	-7.38	120.67	125.10
2	AB	976	G	C3'-C2'-C1'	-7.38	95.60	101.50
2	AB	1972	G	C4-C5-N7	7.38	113.75	110.80
2	AB	2400	G	C2-N3-C4	7.38	115.59	111.90
35	BA	264	C	C5-C4-N4	-7.38	115.03	120.20
35	BA	318	G	N9-C1'-C2'	-7.38	103.89	112.00
35	BA	933	G	C5-N7-C8	-7.38	100.61	104.30
36	BB	45	G	C5-N7-C8	-7.38	100.61	104.30
2	AB	373	U	N1-C2-O2	7.38	127.96	122.80
2	AB	1059	G	C4-C5-N7	7.38	113.75	110.80
2	AB	1319	C	C6-N1-C2	-7.38	117.35	120.30
2	AB	1560	G	O4'-C1'-N9	7.38	114.10	108.20
2	AB	1588	G	N3-C4-N9	7.38	130.43	126.00
2	AB	1613	G	C5-C6-N1	7.38	115.19	111.50
35	BA	489	C	N3-C4-C5	-7.38	118.95	121.90
35	BA	964	A	N1-C2-N3	-7.38	125.61	129.30
40	BF	19	PHE	CB-CG-CD2	-7.38	115.64	120.80
54	BT	24	ASP	CB-CG-OD2	7.38	124.94	118.30
2	AB	1683	U	C4-C5-C6	7.38	124.12	119.70
2	AB	2018	G	C6-N1-C2	-7.38	120.67	125.10
25	AY	38	ARG	NE-CZ-NH1	7.38	123.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	445	G	C5-C6-N1	7.38	115.19	111.50
35	BA	1343	G	N7-C8-N9	-7.38	109.41	113.10
2	AB	406	G	C2-N3-C4	7.37	115.59	111.90
2	AB	632	A	N1-C2-N3	-7.37	125.61	129.30
2	AB	1220	G	P-O3'-C3'	7.37	128.55	119.70
2	AB	1484	U	C4-C5-C6	7.37	124.12	119.70
2	AB	1491	G	C2-N3-C4	7.37	115.59	111.90
2	AB	2325	G	C2-N3-C4	7.37	115.59	111.90
2	AB	2669	G	C5-N7-C8	-7.37	100.61	104.30
2	AB	2797	U	N3-C2-O2	-7.37	117.04	122.20
35	BA	651	C	N3-C2-O2	-7.37	116.74	121.90
35	BA	1168	U	N3-C2-O2	-7.37	117.04	122.20
2	AB	53	A	C6-N1-C2	7.37	123.02	118.60
2	AB	205	G	C5-C6-O6	-7.37	124.18	128.60
2	AB	718	A	C6-N1-C2	-7.37	114.18	118.60
2	AB	1234	U	C5'-C4'-O4'	7.37	117.95	109.10
2	AB	1597	A	O4'-C1'-N9	7.37	114.10	108.20
2	AB	1669	A	C5-C6-N1	7.37	121.39	117.70
2	AB	1787	A	C5'-C4'-O4'	7.37	117.94	109.10
2	AB	2558	C	O4'-C1'-N1	7.37	114.10	108.20
35	BA	299	G	C5-C6-N1	7.37	115.19	111.50
35	BA	430	A	C8-N9-C4	-7.37	102.85	105.80
2	AB	587	C	N3-C4-C5	-7.37	118.95	121.90
2	AB	2112	G	C4-C5-N7	-7.37	107.85	110.80
35	BA	1492	A	C3'-C2'-C1'	7.37	107.40	101.50
2	AB	928	A	N9-C1'-C2'	-7.37	103.89	112.00
2	AB	2789	C	C5-C4-N4	-7.37	115.04	120.20
35	BA	199	A	C5-C6-N1	7.37	121.39	117.70
35	BA	658	C	N3-C4-C5	-7.37	118.95	121.90
35	BA	668	G	C5-N7-C8	-7.37	100.61	104.30
35	BA	1070	U	C6-N1-C2	-7.37	116.58	121.00
35	BA	1108	G	N9-C4-C5	7.37	108.35	105.40
35	BA	1138	G	N9-C4-C5	7.37	108.35	105.40
2	AB	1512	C	C4'-C3'-C2'	-7.37	95.23	102.60
2	AB	2215	C	C4-C5-C6	-7.37	113.72	117.40
35	BA	115	G	O4'-C4'-C3'	7.37	111.99	106.10
35	BA	427	U	C4'-C3'-C2'	7.37	109.97	102.60
2	AB	377	G	N9-C4-C5	7.37	108.35	105.40
2	AB	784	G	C8-N9-C4	-7.37	103.45	106.40
2	AB	1097	U	C2-N3-C4	-7.37	122.58	127.00
2	AB	1734	G	C4'-C3'-C2'	-7.37	95.23	102.60
2	AB	2127	G	C8-N9-C4	-7.37	103.45	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	237	G	N3-C4-C5	-7.37	124.92	128.60
35	BA	457	G	C4'-C3'-C2'	-7.37	95.23	102.60
35	BA	520	A	C4-C5-C6	-7.37	113.32	117.00
35	BA	839	C	C6-N1-C2	-7.37	117.35	120.30
35	BA	982	U	C5-C6-N1	-7.37	119.02	122.70
2	AB	1889	A	O4'-C1'-N9	7.36	114.09	108.20
2	AB	1936	A	N1-C2-N3	-7.36	125.62	129.30
2	AB	2225	A	C5'-C4'-C3'	-7.36	104.22	116.00
35	BA	85	U	C4-C5-C6	7.36	124.12	119.70
35	BA	219	U	N3-C2-O2	-7.36	117.05	122.20
35	BA	1239	A	C3'-C2'-C1'	7.36	107.39	101.50
35	BA	1270	G	C5-N7-C8	-7.36	100.62	104.30
2	AB	82	U	C4'-C3'-C2'	7.36	109.96	102.60
2	AB	1549	A	C5'-C4'-O4'	7.36	117.93	109.10
2	AB	1969	A	C2-N3-C4	7.36	114.28	110.60
2	AB	2811	G	C5-N7-C8	7.36	107.98	104.30
35	BA	105	G	C5-C6-O6	-7.36	124.18	128.60
35	BA	744	C	C4-C5-C6	-7.36	113.72	117.40
35	BA	1025	U	N3-C2-O2	-7.36	117.05	122.20
1	AA	8	C	N1-C2-O2	7.36	123.32	118.90
2	AB	186	G	C6-N1-C2	-7.36	120.68	125.10
2	AB	287	G	C5-C6-N1	7.36	115.18	111.50
2	AB	972	A	O4'-C1'-N9	7.36	114.09	108.20
2	AB	1483	G	N3-C4-C5	-7.36	124.92	128.60
2	AB	2441	U	C2-N3-C4	-7.36	122.58	127.00
35	BA	114	U	C1'-O4'-C4'	-7.36	104.01	109.90
35	BA	284	C	C4-C5-C6	-7.36	113.72	117.40
35	BA	508	U	C2-N3-C4	-7.36	122.58	127.00
35	BA	752	G	C2-N3-C4	7.36	115.58	111.90
35	BA	934	C	C4-C5-C6	7.36	121.08	117.40
2	AB	797	G	C3'-C2'-C1'	7.36	107.39	101.50
2	AB	1135	C	N1-C2-O2	7.36	123.31	118.90
2	AB	1301	A	C5-N7-C8	7.36	107.58	103.90
2	AB	1863	G	N1-C2-N3	7.36	128.32	123.90
2	AB	439	A	C4-C5-C6	-7.36	113.32	117.00
2	AB	499	U	C5'-C4'-C3'	-7.36	104.23	116.00
2	AB	2757	A	C5'-C4'-C3'	-7.36	104.23	116.00
12	AL	120	ARG	NH1-CZ-NH2	-7.36	111.31	119.40
35	BA	588	G	N9-C4-C5	7.36	108.34	105.40
35	BA	742	G	C4-C5-C6	7.36	123.22	118.80
35	BA	943	U	O4'-C1'-N1	7.36	114.09	108.20
35	BA	1067	A	C4-C5-N7	-7.36	107.02	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1139	G	O4'-C1'-C2'	7.36	114.22	107.60
35	BA	1171	A	N1-C6-N6	-7.36	114.19	118.60
37	BC	23	G	N3-C4-C5	-7.36	124.92	128.60
2	AB	266	G	C2-N3-C4	7.36	115.58	111.90
2	AB	2125	G	C5'-C4'-O4'	7.36	117.93	109.10
2	AB	2261	C	C4-C5-C6	-7.36	113.72	117.40
2	AB	2301	C	N1-C2-N3	-7.36	114.05	119.20
2	AB	2308	G	N7-C8-N9	7.36	116.78	113.10
35	BA	142	G	N3-C2-N2	-7.36	114.75	119.90
35	BA	669	G	C2-N3-C4	7.36	115.58	111.90
35	BA	854	U	C3'-C2'-C1'	7.36	107.38	101.50
35	BA	1058	G	C5-C6-N1	7.36	115.18	111.50
35	BA	1225	A	C5-N7-C8	-7.36	100.22	103.90
2	AB	1947	C	O4'-C1'-N1	7.35	114.08	108.20
35	BA	181	A	O4'-C1'-C2'	-7.35	98.45	105.80
35	BA	477	C	C4-C5-C6	-7.35	113.72	117.40
2	AB	591	U	C5-C6-N1	-7.35	119.02	122.70
2	AB	863	A	N9-C1'-C2'	-7.35	103.91	112.00
2	AB	1380	G	N3-C4-N9	7.35	130.41	126.00
2	AB	1552	A	C8-N9-C4	7.35	108.74	105.80
2	AB	1775	U	N3-C2-O2	-7.35	117.05	122.20
35	BA	182	A	C8-N9-C4	-7.35	102.86	105.80
35	BA	772	U	N3-C4-C5	-7.35	110.19	114.60
36	BB	53	G	N1-C6-O6	-7.35	115.49	119.90
35	BA	590	U	C4-C5-C6	7.35	124.11	119.70
35	BA	1103	C	C2-N3-C4	7.35	123.58	119.90
49	BO	86	ARG	NE-CZ-NH1	7.35	123.98	120.30
1	AA	27	C	C2-N3-C4	7.35	123.57	119.90
2	AB	1469	A	C5-C6-N1	7.35	121.38	117.70
36	BB	19	A	C8-N9-C4	-7.35	102.86	105.80
2	AB	160	A	C5-C6-N1	7.35	121.37	117.70
2	AB	450	G	N3-C4-C5	-7.35	124.93	128.60
2	AB	733	G	N3-C4-N9	7.35	130.41	126.00
2	AB	1115	G	N7-C8-N9	7.35	116.77	113.10
2	AB	1666	G	C6-N1-C2	-7.35	120.69	125.10
2	AB	2245	U	O4'-C1'-N1	7.35	114.08	108.20
2	AB	2425	A	C6-N1-C2	7.35	123.01	118.60
2	AB	2609	U	C6-N1-C2	-7.35	116.59	121.00
2	AB	2851	A	N1-C2-N3	-7.35	125.63	129.30
35	BA	378	G	O4'-C1'-N9	7.35	114.08	108.20
35	BA	424	G	C8-N9-C1'	7.35	136.55	127.00
35	BA	753	A	N3-C4-N9	-7.35	121.52	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	927	G	N7-C8-N9	7.35	116.77	113.10
2	AB	623	C	N3-C2-O2	-7.35	116.76	121.90
2	AB	987	C	C5-C4-N4	-7.35	115.06	120.20
2	AB	1257	C	N3-C2-O2	-7.35	116.76	121.90
2	AB	2362	C	C4-C5-C6	-7.35	113.73	117.40
2	AB	2409	G	C2-N3-C4	7.35	115.57	111.90
35	BA	203	G	C4-C5-N7	-7.35	107.86	110.80
35	BA	889	A	O4'-C1'-C2'	-7.35	98.45	105.80
35	BA	1540	U	C4-C5-C6	7.35	124.11	119.70
40	BF	196	GLU	OE1-CD-OE2	7.35	132.12	123.30
2	AB	973	A	O4'-C1'-N9	7.34	114.08	108.20
2	AB	1469	A	C5'-C4'-C3'	7.34	127.75	116.00
2	AB	2156	G	N9-C4-C5	-7.34	102.46	105.40
2	AB	2554	U	N1-C2-O2	7.34	127.94	122.80
35	BA	205	A	N1-C2-N3	-7.34	125.63	129.30
35	BA	612	C	C4'-C3'-C2'	-7.34	95.25	102.60
35	BA	1194	U	O4'-C1'-N1	7.34	114.08	108.20
2	AB	292	U	C5-C4-O4	7.34	130.31	125.90
35	BA	895	G	C4-C5-C6	7.34	123.21	118.80
35	BA	1275	A	C2-N3-C4	-7.34	106.93	110.60
2	AB	819	A	C5'-C4'-C3'	-7.34	104.25	116.00
2	AB	2597	G	N1-C2-N3	-7.34	119.50	123.90
2	AB	2673	G	C5'-C4'-O4'	7.34	117.91	109.10
35	BA	573	A	C5-C6-N1	7.34	121.37	117.70
35	BA	777	A	O4'-C4'-C3'	7.34	111.97	106.10
2	AB	535	G	N1-C2-N3	-7.34	119.50	123.90
2	AB	1412	U	C4'-C3'-C2'	-7.34	95.26	102.60
2	AB	1832	C	C5-C6-N1	7.34	124.67	121.00
2	AB	2304	G	C5-C6-O6	-7.34	124.20	128.60
2	AB	2758	A	C6-C5-N7	7.34	137.44	132.30
35	BA	911	U	C6-N1-C2	7.34	125.40	121.00
36	BB	59	A	N9-C4-C5	7.34	108.73	105.80
37	BC	30	G	C4-C5-C6	7.34	123.20	118.80
2	AB	843	G	N3-C4-C5	-7.34	124.93	128.60
2	AB	1949	G	N3-C4-N9	7.34	130.40	126.00
35	BA	304	U	C5'-C4'-C3'	-7.34	104.26	116.00
2	AB	13	A	N3-C4-N9	7.34	133.27	127.40
2	AB	159	G	O4'-C4'-C3'	7.34	111.97	106.10
2	AB	787	C	N1-C2-O2	7.34	123.30	118.90
2	AB	974	G	O4'-C1'-N9	7.34	114.07	108.20
2	AB	2283	C	N1-C2-O2	7.34	123.30	118.90
2	AB	2333	A	C3'-C2'-C1'	7.34	107.37	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	177	G	C4'-C3'-C2'	-7.34	95.26	102.60
2	AB	1536	C	O4'-C1'-N1	7.33	114.07	108.20
2	AB	2166	U	N3-C4-O4	7.33	124.53	119.40
35	BA	79	G	C2-N3-C4	7.33	115.57	111.90
26	AZ	10	ARG	NE-CZ-NH2	7.33	123.97	120.30
35	BA	1089	G	O4'-C1'-N9	7.33	114.07	108.20
2	AB	774	G	C8-N9-C4	-7.33	103.47	106.40
2	AB	1346	G	N1-C2-N3	-7.33	119.50	123.90
2	AB	1922	G	N1-C2-N3	-7.33	119.50	123.90
2	AB	2846	G	N3-C2-N2	7.33	125.03	119.90
13	AM	18	ARG	NE-CZ-NH2	-7.33	116.63	120.30
35	BA	437	U	N3-C4-O4	-7.33	114.27	119.40
35	BA	668	G	N3-C4-N9	7.33	130.40	126.00
35	BA	1371	G	N9-C1'-C2'	-7.33	103.94	112.00
35	BA	1503	A	N7-C8-N9	-7.33	110.13	113.80
2	AB	257	C	N1-C2-N3	7.33	124.33	119.20
2	AB	775	G	C6-N1-C2	-7.33	120.70	125.10
2	AB	1016	G	C5'-C4'-O4'	7.33	117.90	109.10
2	AB	2440	C	N1-C2-O2	7.33	123.30	118.90
1	AA	83	G	O4'-C1'-N9	7.33	114.06	108.20
1	AA	104	A	N1-C2-N3	7.33	132.96	129.30
2	AB	519	U	O4'-C1'-N1	7.33	114.06	108.20
2	AB	768	G	N9-C4-C5	7.33	108.33	105.40
35	BA	360	G	C5-N7-C8	7.33	107.96	104.30
35	BA	749	A	C8-N9-C4	-7.33	102.87	105.80
35	BA	879	C	N1-C2-N3	7.33	124.33	119.20
35	BA	1081	A	N7-C8-N9	7.33	117.46	113.80
35	BA	1337	G	C4-C5-N7	-7.33	107.87	110.80
2	AB	98	G	C6-C5-N7	-7.33	126.00	130.40
2	AB	471	A	C5'-C4'-O4'	7.33	117.89	109.10
2	AB	1331	G	N3-C4-C5	-7.33	124.94	128.60
2	AB	1404	C	N3-C4-N4	7.33	123.13	118.00
2	AB	2187	U	C5-C4-O4	7.33	130.30	125.90
35	BA	673	A	C2-N3-C4	7.33	114.26	110.60
1	AA	54	G	N7-C8-N9	7.33	116.76	113.10
2	AB	347	A	P-O5'-C5'	7.33	132.62	120.90
2	AB	812	C	C6-N1-C2	-7.33	117.37	120.30
2	AB	2308	G	O4'-C1'-N9	7.33	114.06	108.20
19	AS	105	PHE	CB-CG-CD2	7.33	125.93	120.80
35	BA	821	G	C2-N3-C4	7.33	115.56	111.90
35	BA	958	A	C4-C5-C6	7.33	120.66	117.00
35	BA	1228	C	N1-C1'-C2'	-7.33	103.94	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1423	G	N1-C6-O6	7.33	124.30	119.90
2	AB	438	G	C3'-C2'-C1'	-7.32	95.64	101.50
2	AB	474	G	N3-C4-N9	7.32	130.40	126.00
2	AB	601	C	N3-C2-O2	-7.32	116.77	121.90
2	AB	659	G	C5'-C4'-O4'	7.32	117.89	109.10
2	AB	664	G	C3'-C2'-C1'	7.32	107.36	101.50
2	AB	2070	A	N1-C6-N6	-7.32	114.21	118.60
2	AB	2323	G	P-O3'-C3'	7.32	128.49	119.70
2	AB	2542	A	C5'-C4'-O4'	7.32	117.89	109.10
2	AB	2869	G	C2-N3-C4	7.32	115.56	111.90
35	BA	758	C	C5-C6-N1	7.32	124.66	121.00
35	BA	941	G	N9-C4-C5	7.32	108.33	105.40
2	AB	426	C	N1-C2-O2	7.32	123.29	118.90
2	AB	494	G	N1-C2-N3	-7.32	119.51	123.90
35	BA	323	U	N1-C2-N3	7.32	119.29	114.90
35	BA	855	U	C4-C5-C6	7.32	124.09	119.70
1	AA	92	C	N3-C2-O2	-7.32	116.78	121.90
2	AB	1055	G	C6-C5-N7	7.32	134.79	130.40
2	AB	1646	C	C1'-O4'-C4'	-7.32	104.04	109.90
35	BA	815	A	O4'-C1'-N9	7.32	114.06	108.20
45	BK	40	ARG	NE-CZ-NH1	-7.32	116.64	120.30
1	AA	13	G	C2-N3-C4	-7.32	108.24	111.90
2	AB	2412	A	C5'-C4'-C3'	-7.32	104.29	116.00
35	BA	316	C	N1-C2-O2	7.32	123.29	118.90
35	BA	1349	A	C2-N3-C4	7.32	114.26	110.60
38	BD	236	PHE	CB-CG-CD1	7.32	125.92	120.80
2	AB	1535	A	C5-N7-C8	7.32	107.56	103.90
2	AB	1699	G	C1'-O4'-C4'	-7.32	104.05	109.90
2	AB	2205	A	C5-C6-N6	-7.32	117.85	123.70
2	AB	2318	G	C6-C5-N7	-7.32	126.01	130.40
2	AB	2452	C	C4-C5-C6	7.32	121.06	117.40
15	AO	103	TYR	CB-CG-CD1	-7.32	116.61	121.00
35	BA	142	G	O4'-C1'-N9	7.32	114.05	108.20
35	BA	188	C	C6-N1-C2	-7.32	117.37	120.30
35	BA	792	A	N3-C4-C5	-7.32	121.68	126.80
35	BA	1352	C	O4'-C1'-N1	7.32	114.05	108.20
35	BA	1489	G	N3-C4-C5	-7.32	124.94	128.60
2	AB	44	A	N9-C1'-C2'	-7.32	103.95	112.00
2	AB	329	G	C6-C5-N7	-7.32	126.01	130.40
2	AB	370	G	C6-N1-C2	-7.32	120.71	125.10
2	AB	381	G	O4'-C1'-N9	7.32	114.05	108.20
2	AB	727	A	N1-C2-N3	-7.32	125.64	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1523	U	N1-C2-N3	7.32	119.29	114.90
2	AB	1799	G	C4-C5-N7	-7.32	107.87	110.80
2	AB	1859	U	C4'-C3'-C2'	-7.32	95.28	102.60
2	AB	2520	C	N1-C2-O2	7.32	123.29	118.90
2	AB	2530	A	N7-C8-N9	7.32	117.46	113.80
2	AB	2832	U	C5-C6-N1	-7.32	119.04	122.70
35	BA	505	G	C1'-O4'-C4'	-7.32	104.05	109.90
35	BA	1357	A	N9-C4-C5	-7.32	102.87	105.80
37	BC	4	G	C2-N3-C4	-7.32	108.24	111.90
2	AB	188	G	C4-C5-N7	-7.31	107.88	110.80
2	AB	1187	G	C5-C6-O6	-7.31	124.21	128.60
2	AB	1488	C	C4-C5-C6	-7.31	113.74	117.40
2	AB	2196	C	O4'-C1'-N1	7.31	114.05	108.20
35	BA	1270	G	N3-C4-C5	-7.31	124.94	128.60
35	BA	1273	C	C4'-C3'-C2'	-7.31	95.29	102.60
2	AB	242	G	C2-N3-C4	7.31	115.56	111.90
2	AB	250	G	C5-C6-N1	-7.31	107.84	111.50
2	AB	498	G	N3-C4-C5	-7.31	124.94	128.60
2	AB	994	C	C5-C4-N4	-7.31	115.08	120.20
2	AB	1153	C	O4'-C1'-N1	7.31	114.05	108.20
2	AB	1877	A	C8-N9-C4	-7.31	102.88	105.80
35	BA	547	A	N7-C8-N9	7.31	117.46	113.80
37	BC	45	A	N9-C4-C5	-7.31	102.88	105.80
2	AB	1271	G	C4-C5-N7	7.31	113.72	110.80
2	AB	1746	A	C4-C5-C6	7.31	120.66	117.00
35	BA	770	C	C6-N1-C2	-7.31	117.38	120.30
2	AB	24	G	N3-C2-N2	-7.31	114.78	119.90
2	AB	2318	G	C8-N9-C4	-7.31	103.48	106.40
2	AB	2540	C	C5-C4-N4	-7.31	115.08	120.20
2	AB	2713	U	C1'-O4'-C4'	7.31	115.75	109.90
35	BA	479	U	O4'-C1'-N1	7.31	114.05	108.20
35	BA	1077	G	C4-C5-C6	7.31	123.19	118.80
35	BA	1509	C	C5'-C4'-O4'	7.31	117.87	109.10
2	AB	1001	A	C4-C5-C6	-7.31	113.35	117.00
2	AB	1539	U	N1-C2-N3	7.31	119.28	114.90
2	AB	2270	A	C4-C5-N7	-7.31	107.05	110.70
2	AB	2284	A	O4'-C1'-N9	7.31	114.05	108.20
10	AJ	4	LEU	CB-CG-CD2	7.31	123.42	111.00
35	BA	306	A	N1-C6-N6	-7.31	114.22	118.60
35	BA	612	C	N3-C4-N4	7.31	123.12	118.00
35	BA	1081	A	C4-C5-N7	-7.31	107.05	110.70
2	AB	573	U	C5'-C4'-C3'	-7.31	104.31	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1018	G	N9-C4-C5	-7.31	102.48	105.40
35	BA	1342	C	N1-C2-N3	7.31	124.31	119.20
1	AA	105	G	N3-C2-N2	-7.30	114.79	119.90
2	AB	1778	U	C5-C6-N1	-7.30	119.05	122.70
35	BA	498	A	C4-C5-C6	7.30	120.65	117.00
35	BA	725	G	O4'-C1'-N9	7.30	114.04	108.20
2	AB	1138	G	C5-C6-N1	7.30	115.15	111.50
2	AB	1222	U	O4'-C1'-N1	7.30	114.04	108.20
2	AB	1640	A	C6-N1-C2	-7.30	114.22	118.60
2	AB	1823	G	N3-C4-C5	-7.30	124.95	128.60
2	AB	2323	G	C5'-C4'-O4'	7.30	117.86	109.10
2	AB	2366	A	C6-N1-C2	7.30	122.98	118.60
35	BA	15	G	C4-C5-N7	7.30	113.72	110.80
35	BA	190	A	N1-C6-N6	-7.30	114.22	118.60
1	AA	61	G	N3-C4-C5	-7.30	124.95	128.60
2	AB	480	A	N9-C4-C5	-7.30	102.88	105.80
2	AB	888	C	C2-N3-C4	7.30	123.55	119.90
2	AB	927	A	C4-C5-C6	-7.30	113.35	117.00
2	AB	2270	A	C4'-C3'-C2'	-7.30	95.30	102.60
35	BA	402	G	N7-C8-N9	-7.30	109.45	113.10
35	BA	651	C	C6-N1-C2	-7.30	117.38	120.30
35	BA	842	U	C1'-O4'-C4'	7.30	115.74	109.90
35	BA	861	G	C5-C6-N1	7.30	115.15	111.50
35	BA	1235	U	C5-C4-O4	-7.30	121.52	125.90
37	BC	16	C	C5-C4-N4	-7.30	115.09	120.20
2	AB	272	A	C8-N9-C4	-7.30	102.88	105.80
35	BA	303	A	N1-C2-N3	-7.30	125.65	129.30
35	BA	1069	C	O4'-C1'-C2'	-7.30	98.50	105.80
35	BA	1118	U	C1'-O4'-C4'	-7.30	104.06	109.90
2	AB	8	C	O4'-C1'-N1	7.30	114.04	108.20
2	AB	171	U	O4'-C1'-N1	7.30	114.04	108.20
2	AB	1913	A	C2-N3-C4	7.30	114.25	110.60
2	AB	2382	G	C6-N1-C2	-7.30	120.72	125.10
35	BA	605	U	C5-C6-N1	-7.30	119.05	122.70
2	AB	2347	C	C6-N1-C2	7.29	123.22	120.30
35	BA	1245	C	N1-C1'-C2'	-7.29	103.97	112.00
2	AB	134	G	N1-C2-N3	-7.29	119.52	123.90
2	AB	625	G	C4'-C3'-C2'	-7.29	95.31	102.60
2	AB	1315	C	O4'-C1'-C2'	-7.29	98.51	105.80
2	AB	1789	A	C4-C5-N7	-7.29	107.05	110.70
2	AB	1806	C	C5-C4-N4	7.29	125.31	120.20
2	AB	1961	C	O4'-C1'-N1	7.29	114.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	328	C	P-O3'-C3'	7.29	128.45	119.70
42	BH	59	TYR	CB-CG-CD1	-7.29	116.62	121.00
2	AB	152	A	C5'-C4'-C3'	-7.29	104.33	116.00
2	AB	548	G	C2-N3-C4	7.29	115.55	111.90
2	AB	627	A	O4'-C1'-N9	7.29	114.03	108.20
2	AB	634	C	C5-C6-N1	7.29	124.65	121.00
2	AB	787	C	N3-C4-C5	-7.29	118.98	121.90
2	AB	1047	G	C8-N9-C4	7.29	109.32	106.40
2	AB	1181	U	C5-C6-N1	-7.29	119.06	122.70
2	AB	1293	C	C2-N3-C4	7.29	123.55	119.90
2	AB	1884	G	C4-C5-C6	-7.29	114.42	118.80
35	BA	8	A	N1-C6-N6	7.29	122.97	118.60
35	BA	230	G	C5-N7-C8	7.29	107.94	104.30
35	BA	702	A	C5'-C4'-C3'	-7.29	104.33	116.00
2	AB	494	G	C2-N3-C4	7.29	115.55	111.90
2	AB	620	G	C2-N3-C4	7.29	115.55	111.90
2	AB	1175	A	C8-N9-C4	-7.29	102.88	105.80
35	BA	926	G	O4'-C4'-C3'	7.29	111.93	106.10
35	BA	1496	C	C3'-C2'-C1'	-7.29	95.67	101.50
2	AB	186	G	N3-C4-C5	-7.29	124.96	128.60
2	AB	218	A	C5-N7-C8	7.29	107.54	103.90
2	AB	237	C	N3-C2-O2	-7.29	116.80	121.90
2	AB	463	G	C5'-C4'-O4'	7.29	117.85	109.10
2	AB	820	A	N3-C4-C5	-7.29	121.70	126.80
2	AB	2330	G	C8-N9-C4	-7.29	103.48	106.40
2	AB	2375	G	O4'-C4'-C3'	7.29	111.93	106.10
2	AB	2447	G	N3-C4-C5	-7.29	124.96	128.60
2	AB	2583	G	C2-N3-C4	7.29	115.54	111.90
35	BA	152	A	C8-N9-C4	7.29	108.72	105.80
35	BA	1078	U	C5-C6-N1	-7.29	119.06	122.70
35	BA	1333	A	N1-C2-N3	-7.29	125.66	129.30
35	BA	1490	U	C5-C6-N1	-7.29	119.06	122.70
2	AB	1053	C	N1-C2-O2	7.29	123.27	118.90
2	AB	1342	A	N1-C6-N6	-7.29	114.23	118.60
2	AB	2042	A	C2-N3-C4	-7.29	106.96	110.60
1	AA	1	U	C2-N3-C4	-7.29	122.63	127.00
2	AB	133	U	C6-N1-C2	-7.29	116.63	121.00
2	AB	163	C	C2-N3-C4	7.29	123.54	119.90
2	AB	1282	U	N1-C2-O2	7.29	127.90	122.80
2	AB	1783	A	N1-C2-N3	7.29	132.94	129.30
2	AB	1904	G	C6-N1-C2	-7.29	120.73	125.10
2	AB	2507	C	C4-C5-C6	-7.29	113.76	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	22	G	N3-C4-C5	-7.29	124.96	128.60
35	BA	65	A	C8-N9-C4	-7.29	102.89	105.80
35	BA	411	A	C4-C5-N7	-7.29	107.06	110.70
35	BA	481	G	C4-C5-C6	7.29	123.17	118.80
35	BA	689	C	C1'-O4'-C4'	7.29	115.73	109.90
35	BA	840	C	N1-C2-O2	7.29	123.27	118.90
35	BA	1270	G	N1-C2-N2	7.29	122.76	116.20
2	AB	26	G	C1'-O4'-C4'	-7.28	104.07	109.90
2	AB	428	A	O4'-C4'-C3'	7.28	111.93	106.10
2	AB	825	A	C5-C6-N1	7.28	121.34	117.70
2	AB	930	G	C5-C6-O6	7.28	132.97	128.60
2	AB	1042	G	N3-C4-N9	7.28	130.37	126.00
2	AB	1551	A	N1-C2-N3	-7.28	125.66	129.30
2	AB	2193	G	N9-C4-C5	7.28	108.31	105.40
2	AB	2713	U	C2-N3-C4	-7.28	122.63	127.00
35	BA	21	G	C5-C6-N1	7.28	115.14	111.50
35	BA	136	C	C4-C5-C6	7.28	121.04	117.40
35	BA	342	C	C6-N1-C2	7.28	123.21	120.30
35	BA	1069	C	O4'-C1'-N1	7.28	114.03	108.20
35	BA	1118	U	P-O5'-C5'	7.28	132.55	120.90
35	BA	1422	G	N7-C8-N9	7.28	116.74	113.10
2	AB	121	G	C2-N3-C4	7.28	115.54	111.90
2	AB	612	G	N1-C6-O6	-7.28	115.53	119.90
7	AG	96	TRP	NE1-CE2-CZ2	7.28	138.41	130.40
35	BA	714	G	C8-N9-C4	7.28	109.31	106.40
35	BA	775	G	C6-N1-C2	7.28	129.47	125.10
1	AA	9	G	C8-N9-C4	-7.28	103.49	106.40
1	AA	26	C	N1-C2-N3	-7.28	114.10	119.20
2	AB	1861	G	N3-C4-N9	7.28	130.37	126.00
2	AB	2708	G	C4-C5-N7	-7.28	107.89	110.80
35	BA	218	U	C6-N1-C2	-7.28	116.63	121.00
35	BA	741	G	C5-N7-C8	-7.28	100.66	104.30
35	BA	771	G	C6-C5-N7	-7.28	126.03	130.40
35	BA	1097	C	N3-C2-O2	-7.28	116.80	121.90
35	BA	1502	A	C5-C6-N6	-7.28	117.88	123.70
37	BC	36	A	C6-N1-C2	-7.28	114.23	118.60
2	AB	1832	C	N3-C2-O2	-7.28	116.81	121.90
2	AB	1978	A	O4'-C1'-N9	7.28	114.02	108.20
35	BA	524	G	C8-N9-C4	-7.28	103.49	106.40
35	BA	717	U	C2'-C3'-O3'	7.28	125.51	109.50
35	BA	1215	G	C8-N9-C4	-7.28	103.49	106.40
35	BA	1406	U	O4'-C4'-C3'	7.28	111.92	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	BE	10	ARG	NE-CZ-NH1	7.28	123.94	120.30
2	AB	1339	G	N9-C1'-C2'	-7.28	104.00	112.00
2	AB	1425	G	C4-C5-C6	7.28	123.17	118.80
2	AB	2209	G	N7-C8-N9	7.28	116.74	113.10
35	BA	126	G	C6-C5-N7	-7.28	126.03	130.40
35	BA	1141	C	C5-C6-N1	7.28	124.64	121.00
37	BC	18	U	C2-N3-C4	7.28	131.37	127.00
37	BC	44	A	C4-C5-C6	-7.28	113.36	117.00
37	BC	65	G	C2-N3-C4	-7.28	108.26	111.90
2	AB	338	G	C5-C6-N1	7.27	115.14	111.50
2	AB	753	A	C2-N3-C4	7.27	114.24	110.60
2	AB	1726	C	O4'-C1'-N1	7.27	114.02	108.20
2	AB	1766	G	C5-N7-C8	7.27	107.94	104.30
2	AB	2884	U	O4'-C1'-N1	7.27	114.02	108.20
35	BA	307	C	C3'-C2'-C1'	7.27	107.32	101.50
55	BU	1	PRO	CA-N-CD	-7.27	101.32	111.50
2	AB	685	A	C1'-O4'-C4'	7.27	115.72	109.90
2	AB	1960	A	C4-C5-C6	-7.27	113.36	117.00
2	AB	2189	U	C3'-C2'-C1'	7.27	107.32	101.50
35	BA	300	A	N9-C4-C5	7.27	108.71	105.80
35	BA	727	G	N9-C4-C5	-7.27	102.49	105.40
35	BA	1053	G	N1-C6-O6	7.27	124.26	119.90
35	BA	1059	C	C4-C5-C6	-7.27	113.76	117.40
35	BA	1154	G	N7-C8-N9	7.27	116.74	113.10
2	AB	2035	G	N3-C4-C5	-7.27	124.96	128.60
2	AB	2387	U	C6-N1-C2	-7.27	116.64	121.00
2	AB	2803	G	C5-C6-O6	-7.27	124.24	128.60
35	BA	115	G	C5-C6-O6	-7.27	124.24	128.60
1	AA	96	G	C4-C5-N7	7.27	113.71	110.80
2	AB	1069	A	N7-C8-N9	7.27	117.43	113.80
2	AB	1764	C	C4-C5-C6	-7.27	113.77	117.40
2	AB	1919	A	C8-N9-C4	7.27	108.71	105.80
2	AB	2589	A	C4-C5-C6	-7.27	113.36	117.00
6	AF	60	TRP	NE1-CE2-CZ2	7.27	138.40	130.40
35	BA	2	A	C6-C5-N7	7.27	137.39	132.30
35	BA	182	A	O4'-C1'-N9	7.27	114.02	108.20
35	BA	430	A	C4-C5-N7	-7.27	107.06	110.70
35	BA	675	A	C4-C5-N7	7.27	114.33	110.70
35	BA	947	G	C4'-C3'-C2'	-7.27	95.33	102.60
35	BA	1525	G	C3'-C2'-C1'	-7.27	95.69	101.50
2	AB	923	G	N9-C1'-C2'	-7.27	104.01	112.00
2	AB	1300	G	C4-C5-N7	-7.27	107.89	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1486	U	O4'-C1'-N1	7.27	114.01	108.20
35	BA	588	G	O4'-C4'-C3'	7.27	111.91	106.10
35	BA	767	A	O4'-C1'-N9	7.27	114.01	108.20
35	BA	1065	U	N3-C4-O4	7.27	124.49	119.40
2	AB	185	G	N9-C1'-C2'	-7.27	104.01	112.00
2	AB	2659	G	C4-C5-N7	-7.27	107.89	110.80
35	BA	1206	G	C4-C5-C6	7.27	123.16	118.80
2	AB	51	G	C5-C6-O6	-7.26	124.24	128.60
2	AB	73	A	N3-C4-C5	7.26	131.89	126.80
2	AB	1008	A	N9-C4-C5	-7.26	102.89	105.80
2	AB	1317	G	N9-C4-C5	7.26	108.31	105.40
2	AB	1359	A	N1-C2-N3	-7.26	125.67	129.30
2	AB	1709	U	C2-N3-C4	-7.26	122.64	127.00
2	AB	2759	G	C3'-C2'-C1'	-7.26	95.69	101.50
4	AD	31	PRO	N-CD-CG	7.26	114.10	103.20
1	AA	76	G	C4-C5-C6	-7.26	114.44	118.80
2	AB	387	U	O4'-C1'-N1	7.26	114.01	108.20
2	AB	1485	U	N1-C1'-C2'	-7.26	104.01	112.00
2	AB	2519	U	C3'-C2'-C1'	-7.26	95.69	101.50
35	BA	1387	G	N1-C2-N3	-7.26	119.54	123.90
46	BL	48	ARG	NE-CZ-NH1	7.26	123.93	120.30
2	AB	565	C	C5'-C4'-O4'	7.26	117.81	109.10
2	AB	752	A	C2-N3-C4	7.26	114.23	110.60
2	AB	914	G	N9-C4-C5	7.26	108.31	105.40
2	AB	952	G	C6-N1-C2	-7.26	120.74	125.10
45	BK	79	ARG	NE-CZ-NH1	7.26	123.93	120.30
2	AB	1667	G	C5-N7-C8	-7.26	100.67	104.30
2	AB	1857	G	N9-C4-C5	7.26	108.30	105.40
2	AB	2024	G	O4'-C1'-N9	7.26	114.01	108.20
2	AB	2352	A	N3-C4-C5	-7.26	121.72	126.80
2	AB	2365	G	N3-C4-N9	7.26	130.35	126.00
35	BA	103	U	N3-C2-O2	-7.26	117.12	122.20
35	BA	835	U	C5-C6-N1	-7.26	119.07	122.70
35	BA	1389	C	C5-C4-N4	-7.26	115.12	120.20
37	BC	44	A	N9-C4-C5	-7.26	102.90	105.80
1	AA	118	C	C3'-C2'-C1'	-7.26	95.69	101.50
35	BA	461	A	C4-C5-N7	-7.26	107.07	110.70
2	AB	503	A	P-O3'-C3'	7.26	128.41	119.70
2	AB	561	G	C4-C5-N7	7.26	113.70	110.80
2	AB	581	C	C5-C6-N1	7.26	124.63	121.00
2	AB	1199	U	C5'-C4'-O4'	7.26	117.81	109.10
2	AB	1241	A	O4'-C1'-N9	7.26	114.00	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1258	U	C4'-C3'-C2'	-7.26	95.34	102.60
2	AB	2589	A	C6-N1-C2	-7.26	114.25	118.60
2	AB	2801	G	C6-N1-C2	-7.26	120.75	125.10
35	BA	362	G	C5-C6-N1	7.26	115.13	111.50
35	BA	370	C	C2-N3-C4	-7.26	116.27	119.90
35	BA	745	G	C2-N3-C4	-7.26	108.27	111.90
35	BA	748	G	N3-C4-C5	-7.26	124.97	128.60
35	BA	1084	G	N3-C4-C5	-7.26	124.97	128.60
1	AA	21	G	O4'-C1'-N9	7.25	114.00	108.20
2	AB	101	A	C1'-O4'-C4'	7.25	115.70	109.90
2	AB	1551	A	O4'-C1'-N9	7.25	114.00	108.20
2	AB	1756	G	N3-C4-C5	-7.25	124.97	128.60
2	AB	2063	C	N1-C2-O2	7.25	123.25	118.90
35	BA	718	A	C6-N1-C2	7.25	122.95	118.60
35	BA	1147	C	O4'-C1'-N1	7.25	114.00	108.20
1	AA	30	C	C4'-C3'-C2'	-7.25	95.35	102.60
1	AA	31	C	C4-C5-C6	7.25	121.03	117.40
1	AA	36	C	O4'-C1'-N1	7.25	114.00	108.20
2	AB	112	U	C4-C5-C6	7.25	124.05	119.70
2	AB	124	G	C5-N7-C8	7.25	107.93	104.30
2	AB	1205	A	N7-C8-N9	-7.25	110.17	113.80
2	AB	1715	G	C4-C5-N7	-7.25	107.90	110.80
2	AB	2036	C	O4'-C1'-N1	7.25	114.00	108.20
2	AB	2440	C	N3-C2-O2	-7.25	116.82	121.90
2	AB	2522	U	C4-C5-C6	7.25	124.05	119.70
35	BA	802	A	C5-C6-N6	7.25	129.50	123.70
2	AB	161	A	N9-C4-C5	7.25	108.70	105.80
2	AB	212	G	N9-C4-C5	-7.25	102.50	105.40
2	AB	388	G	C5-C6-O6	-7.25	124.25	128.60
2	AB	1146	C	N1-C2-O2	7.25	123.25	118.90
2	AB	1303	G	N9-C4-C5	7.25	108.30	105.40
2	AB	1790	C	N3-C4-C5	-7.25	119.00	121.90
2	AB	2053	G	C4-C5-C6	7.25	123.15	118.80
2	AB	2234	G	N7-C8-N9	7.25	116.73	113.10
35	BA	47	C	N3-C4-C5	-7.25	119.00	121.90
35	BA	337	G	C6-C5-N7	-7.25	126.05	130.40
35	BA	498	A	C5-C6-N1	-7.25	114.08	117.70
35	BA	800	G	C8-N9-C4	-7.25	103.50	106.40
39	BE	125	ARG	NE-CZ-NH2	-7.25	116.67	120.30
2	AB	485	C	C5'-C4'-O4'	7.25	117.80	109.10
2	AB	664	G	O4'-C1'-N9	7.25	114.00	108.20
2	AB	1546	G	C5-C6-O6	-7.25	124.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	75	G	N7-C8-N9	7.25	116.72	113.10
35	BA	769	G	C1'-O4'-C4'	-7.25	104.10	109.90
2	AB	321	U	C4'-C3'-C2'	-7.25	95.35	102.60
2	AB	351	C	N1-C1'-C2'	-7.25	104.03	112.00
2	AB	423	A	N1-C2-N3	-7.25	125.67	129.30
2	AB	797	G	N3-C4-C5	-7.25	124.97	128.60
2	AB	2619	C	O4'-C1'-N1	7.25	114.00	108.20
35	BA	74	A	C8-N9-C4	7.25	108.70	105.80
35	BA	367	U	N3-C4-C5	-7.25	110.25	114.60
35	BA	1312	G	C8-N9-C4	-7.25	103.50	106.40
41	BG	156	ARG	NE-CZ-NH2	7.25	123.92	120.30
2	AB	521	U	C3'-C2'-C1'	7.25	107.30	101.50
2	AB	778	G	C5-C6-O6	-7.25	124.25	128.60
2	AB	795	C	N3-C4-N4	7.25	123.07	118.00
2	AB	1368	G	N1-C2-N3	-7.25	119.55	123.90
2	AB	1826	G	C8-N9-C4	-7.25	103.50	106.40
35	BA	76	G	O4'-C1'-N9	7.25	114.00	108.20
36	BB	41	A	C5-C6-N6	7.25	129.50	123.70
37	BC	76	C	N3-C4-C5	-7.25	119.00	121.90
2	AB	815	C	C6-N1-C2	7.25	123.20	120.30
2	AB	1323	C	N1-C2-O2	7.25	123.25	118.90
2	AB	1966	A	C3'-C2'-C1'	7.25	107.30	101.50
2	AB	2307	G	N3-C4-N9	-7.25	121.65	126.00
35	BA	55	A	C5-N7-C8	7.25	107.52	103.90
35	BA	162	A	N7-C8-N9	7.25	117.42	113.80
35	BA	191	G	N9-C4-C5	-7.25	102.50	105.40
35	BA	901	A	C6-C5-N7	7.25	137.37	132.30
1	AA	13	G	C4-C5-N7	-7.24	107.90	110.80
2	AB	61	C	C4-C5-C6	-7.24	113.78	117.40
2	AB	1481	U	N3-C2-O2	-7.24	117.13	122.20
2	AB	1525	A	N9-C1'-C2'	-7.24	104.03	112.00
35	BA	587	G	O4'-C1'-C2'	7.24	114.12	107.60
2	AB	404	A	C5-C6-N1	7.24	121.32	117.70
2	AB	598	U	N3-C4-C5	-7.24	110.25	114.60
2	AB	2004	G	N3-C4-C5	-7.24	124.98	128.60
2	AB	2692	G	C8-N9-C4	-7.24	103.50	106.40
35	BA	1203	C	O4'-C1'-N1	7.24	113.99	108.20
35	BA	1323	G	N9-C4-C5	7.24	108.30	105.40
1	AA	120	U	N1-C1'-C2'	-7.24	104.03	112.00
2	AB	270	A	C2-N3-C4	-7.24	106.98	110.60
2	AB	598	U	N1-C2-O2	-7.24	117.73	122.80
2	AB	2548	U	C5-C4-O4	7.24	130.25	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2866	U	N1-C2-O2	7.24	127.87	122.80
6	AF	61	ARG	NE-CZ-NH1	-7.24	116.68	120.30
35	BA	661	G	C4'-C3'-C2'	-7.24	95.36	102.60
35	BA	794	A	C8-N9-C4	-7.24	102.90	105.80
35	BA	858	G	C2-N3-C4	7.24	115.52	111.90
35	BA	982	U	C4-C5-C6	7.24	124.05	119.70
35	BA	1156	G	N9-C4-C5	7.24	108.30	105.40
35	BA	1341	U	C5'-C4'-O4'	7.24	117.79	109.10
35	BA	1487	G	O4'-C1'-N9	7.24	113.99	108.20
37	BC	65	G	C4'-C3'-C2'	-7.24	95.36	102.60
1	AA	58	A	C5-C6-N6	-7.24	117.91	123.70
2	AB	390	U	N3-C2-O2	-7.24	117.13	122.20
2	AB	802	A	N3-C4-C5	-7.24	121.73	126.80
2	AB	1242	U	C5-C4-O4	7.24	130.24	125.90
2	AB	1337	G	N7-C8-N9	7.24	116.72	113.10
2	AB	1451	C	N3-C4-N4	7.24	123.07	118.00
2	AB	1465	G	N3-C4-N9	7.24	130.34	126.00
2	AB	2292	U	C5'-C4'-O4'	7.24	117.79	109.10
2	AB	2330	G	C6-N1-C2	-7.24	120.76	125.10
2	AB	2536	G	N3-C4-N9	7.24	130.34	126.00
2	AB	2655	G	C6-C5-N7	7.24	134.74	130.40
35	BA	46	G	N7-C8-N9	7.24	116.72	113.10
35	BA	117	G	N3-C4-C5	-7.24	124.98	128.60
35	BA	759	A	N9-C4-C5	7.24	108.69	105.80
35	BA	769	G	N9-C4-C5	-7.24	102.50	105.40
35	BA	1212	U	C5-C4-O4	-7.24	121.56	125.90
36	BB	44	U	P-O3'-C3'	7.24	128.39	119.70
1	AA	30	C	C5-C4-N4	-7.24	115.13	120.20
2	AB	2694	G	O4'-C1'-N9	7.24	113.99	108.20
2	AB	492	A	O4'-C1'-N9	7.24	113.99	108.20
2	AB	1037	G	N3-C2-N2	-7.24	114.83	119.90
2	AB	1292	G	O4'-C1'-N9	-7.24	102.41	108.20
2	AB	1342	A	C6-N1-C2	-7.24	114.26	118.60
2	AB	1581	G	N3-C2-N2	-7.24	114.83	119.90
2	AB	1591	A	N1-C6-N6	-7.24	114.26	118.60
2	AB	2330	G	C4-C5-C6	7.24	123.14	118.80
2	AB	2379	G	N3-C2-N2	-7.24	114.84	119.90
36	BB	21	U	C1'-O4'-C4'	-7.24	104.11	109.90
2	AB	1312	U	O4'-C1'-N1	7.23	113.99	108.20
2	AB	2421	G	N1-C2-N3	7.23	128.24	123.90
2	AB	2609	U	N1-C2-O2	7.23	127.86	122.80
35	BA	914	A	C8-N9-C4	-7.23	102.91	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	990	C	O4'-C1'-N1	7.23	113.99	108.20
37	BC	10	G	C5'-C4'-C3'	-7.23	104.43	116.00
1	AA	87	U	N1-C1'-C2'	-7.23	104.04	112.00
2	AB	1703	G	C2-N3-C4	7.23	115.52	111.90
2	AB	2817	U	C5-C6-N1	7.23	126.32	122.70
35	BA	41	G	C5-C6-O6	-7.23	124.26	128.60
35	BA	281	G	N3-C4-C5	-7.23	124.98	128.60
35	BA	829	G	N9-C4-C5	7.23	108.29	105.40
35	BA	1275	A	C5-C6-N1	-7.23	114.08	117.70
2	AB	543	G	N9-C4-C5	7.23	108.29	105.40
2	AB	779	U	N1-C2-O2	7.23	127.86	122.80
2	AB	1037	G	C5-N7-C8	-7.23	100.68	104.30
2	AB	1232	G	N1-C6-O6	-7.23	115.56	119.90
2	AB	1246	A	C4'-C3'-C2'	-7.23	95.37	102.60
2	AB	1365	A	N7-C8-N9	-7.23	110.18	113.80
2	AB	2536	G	N1-C6-O6	-7.23	115.56	119.90
2	AB	2632	A	N7-C8-N9	-7.23	110.19	113.80
16	AP	47	VAL	CA-CB-CG2	-7.23	100.06	110.90
35	BA	432	A	C2-N3-C4	7.23	114.22	110.60
35	BA	881	G	O4'-C1'-N9	7.23	113.98	108.20
35	BA	1078	U	C5-C4-O4	-7.23	121.56	125.90
2	AB	569	U	C3'-C2'-C1'	7.23	107.28	101.50
2	AB	1388	G	C2-N3-C4	7.23	115.51	111.90
2	AB	2015	A	C6-N1-C2	7.23	122.94	118.60
2	AB	2112	G	C3'-C2'-C1'	7.23	107.28	101.50
2	AB	2146	C	O4'-C1'-N1	7.23	113.98	108.20
2	AB	2336	A	P-O3'-C3'	7.23	128.38	119.70
35	BA	1132	C	C6-N1-C2	7.23	123.19	120.30
1	AA	15	A	C5-C6-N1	7.23	121.31	117.70
2	AB	842	U	C5-C4-O4	-7.23	121.56	125.90
2	AB	1246	A	C3'-C2'-C1'	7.23	107.28	101.50
2	AB	2735	G	C6-C5-N7	-7.23	126.06	130.40
35	BA	65	A	N9-C4-C5	-7.23	102.91	105.80
35	BA	81	A	P-O3'-C3'	7.23	128.37	119.70
35	BA	378	G	N3-C4-C5	-7.23	124.99	128.60
35	BA	453	G	N3-C4-N9	7.23	130.34	126.00
35	BA	725	G	C4-C5-N7	-7.23	107.91	110.80
35	BA	831	A	C5-N7-C8	7.23	107.51	103.90
35	BA	1084	G	N9-C4-C5	7.23	108.29	105.40
35	BA	80	A	C6-N1-C2	-7.23	114.27	118.60
2	AB	1351	C	N1-C2-O2	7.22	123.23	118.90
2	AB	2091	C	C4'-C3'-C2'	-7.22	95.38	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	183	C	C4'-C3'-C2'	-7.22	95.38	102.60
35	BA	1119	C	C5'-C4'-O4'	7.22	117.77	109.10
35	BA	1304	G	C5-N7-C8	-7.22	100.69	104.30
2	AB	408	G	N3-C2-N2	7.22	124.95	119.90
2	AB	517	C	N3-C4-N4	7.22	123.06	118.00
2	AB	1389	G	N3-C4-C5	-7.22	124.99	128.60
2	AB	1678	A	C5-C6-N1	7.22	121.31	117.70
2	AB	2788	C	O4'-C1'-N1	7.22	113.98	108.20
8	AH	169	ARG	NE-CZ-NH2	7.22	123.91	120.30
35	BA	287	U	O4'-C1'-N1	7.22	113.98	108.20
35	BA	1140	C	C4-C5-C6	-7.22	113.79	117.40
2	AB	5	A	C4-C5-C6	7.22	120.61	117.00
2	AB	443	A	C2-N3-C4	7.22	114.21	110.60
2	AB	488	G	N3-C2-N2	-7.22	114.84	119.90
2	AB	611	C	N3-C4-C5	-7.22	119.01	121.90
2	AB	900	A	N3-C4-N9	7.22	133.18	127.40
35	BA	208	U	C1'-O4'-C4'	-7.22	104.12	109.90
35	BA	210	C	C2-N3-C4	7.22	123.51	119.90
35	BA	823	C	C3'-C2'-C1'	7.22	107.28	101.50
35	BA	838	G	C6-N1-C2	-7.22	120.77	125.10
2	AB	377	G	C4'-C3'-C2'	-7.22	95.38	102.60
2	AB	561	G	O4'-C1'-N9	7.22	113.98	108.20
2	AB	597	G	C6-C5-N7	7.22	134.73	130.40
2	AB	894	U	C5-C6-N1	-7.22	119.09	122.70
2	AB	1134	A	N1-C6-N6	-7.22	114.27	118.60
2	AB	1488	C	C6-N1-C2	-7.22	117.41	120.30
2	AB	1601	G	N7-C8-N9	7.22	116.71	113.10
2	AB	1734	G	O4'-C1'-N9	7.22	113.98	108.20
2	AB	2544	G	N3-C2-N2	-7.22	114.85	119.90
2	AB	2633	G	C5-C6-N1	7.22	115.11	111.50
35	BA	1383	C	N3-C4-C5	-7.22	119.01	121.90
44	BJ	77	VAL	CG1-CB-CG2	-7.22	99.35	110.90
2	AB	2476	A	C6-C5-N7	7.22	137.35	132.30
14	AN	132	ARG	NE-CZ-NH2	7.22	123.91	120.30
2	AB	742	A	N1-C2-N3	-7.22	125.69	129.30
2	AB	775	G	C4-C5-N7	7.22	113.69	110.80
2	AB	1951	U	N1-C1'-C2'	-7.22	104.06	112.00
2	AB	2267	A	N1-C6-N6	-7.22	114.27	118.60
2	AB	2358	A	N1-C2-N3	7.22	132.91	129.30
2	AB	2367	G	C5'-C4'-O4'	7.22	117.76	109.10
35	BA	1488	G	C5-C6-N1	-7.22	107.89	111.50
2	AB	354	A	N9-C1'-C2'	-7.21	104.06	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	460	A	C5-N7-C8	-7.21	100.29	103.90
2	AB	1025	G	C4'-C3'-C2'	7.21	109.81	102.60
2	AB	1238	G	N1-C2-N3	-7.21	119.57	123.90
2	AB	1455	G	N3-C4-C5	-7.21	124.99	128.60
2	AB	1847	A	N9-C4-C5	7.21	108.69	105.80
2	AB	2638	G	C5'-C4'-O4'	7.21	117.76	109.10
35	BA	389	A	C5'-C4'-O4'	7.21	117.76	109.10
1	AA	91	C	C3'-C2'-C1'	7.21	107.27	101.50
2	AB	1000	A	C5-C6-N1	-7.21	114.09	117.70
2	AB	1394	U	C4-C5-C6	7.21	124.03	119.70
2	AB	1825	U	C5-C6-N1	-7.21	119.09	122.70
2	AB	2238	G	N1-C2-N2	7.21	122.69	116.20
2	AB	2476	A	C5-C6-N1	7.21	121.31	117.70
20	AT	80	ARG	NE-CZ-NH1	7.21	123.91	120.30
35	BA	1488	G	C4-C5-C6	7.21	123.13	118.80
35	BA	1515	G	C8-N9-C4	-7.21	103.52	106.40
36	BB	13	A	O4'-C1'-N9	7.21	113.97	108.20
36	BB	55	A	C6-N1-C2	-7.21	114.27	118.60
2	AB	123	G	C1'-O4'-C4'	7.21	115.67	109.90
2	AB	198	C	C5-C6-N1	-7.21	117.39	121.00
2	AB	715	A	N1-C2-N3	7.21	132.91	129.30
2	AB	2834	G	C5'-C4'-C3'	7.21	127.54	116.00
35	BA	888	G	N7-C8-N9	-7.21	109.50	113.10
2	AB	493	G	C4-C5-C6	7.21	123.12	118.80
2	AB	523	C	N3-C4-N4	7.21	123.05	118.00
2	AB	639	U	N3-C4-O4	7.21	124.45	119.40
2	AB	1034	G	C4-C5-C6	7.21	123.13	118.80
2	AB	1241	A	C2-N3-C4	7.21	114.20	110.60
2	AB	1340	U	P-O3'-C3'	7.21	128.35	119.70
2	AB	1814	G	C2-N3-C4	7.21	115.50	111.90
35	BA	17	U	N1-C2-O2	7.21	127.85	122.80
35	BA	324	G	N1-C2-N2	7.21	122.69	116.20
35	BA	1044	A	C4-C5-C6	7.21	120.60	117.00
35	BA	1342	C	C2-N3-C4	-7.21	116.30	119.90
2	AB	633	A	N9-C4-C5	-7.21	102.92	105.80
2	AB	684	G	C5-C6-N1	7.21	115.10	111.50
2	AB	1142	A	C5'-C4'-O4'	7.21	117.75	109.10
2	AB	1467	U	N3-C4-O4	-7.21	114.36	119.40
2	AB	1909	C	N1-C2-O2	7.21	123.22	118.90
2	AB	1968	G	C6-N1-C2	-7.21	120.78	125.10
2	AB	1975	G	C5-C6-O6	-7.21	124.28	128.60
35	BA	54	C	C4'-C3'-C2'	-7.21	95.39	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	350	G	C5-C6-O6	-7.21	124.28	128.60
35	BA	401	C	O4'-C1'-N1	7.21	113.97	108.20
35	BA	589	U	O4'-C1'-N1	7.21	113.97	108.20
35	BA	631	C	N3-C2-O2	-7.21	116.86	121.90
35	BA	674	G	C8-N9-C4	-7.21	103.52	106.40
35	BA	1175	G	N1-C2-N2	7.21	122.69	116.20
36	BB	34	U	C4'-C3'-C2'	-7.21	95.39	102.60
2	AB	2593	U	C1'-O4'-C4'	-7.21	104.14	109.90
35	BA	514	C	C4'-C3'-C2'	-7.21	95.39	102.60
2	AB	410	G	C2-N3-C4	7.20	115.50	111.90
2	AB	425	G	N1-C2-N3	-7.20	119.58	123.90
2	AB	1246	A	N9-C4-C5	7.20	108.68	105.80
2	AB	1717	A	N9-C4-C5	7.20	108.68	105.80
2	AB	1906	G	N7-C8-N9	-7.20	109.50	113.10
2	AB	2114	A	N1-C6-N6	-7.20	114.28	118.60
35	BA	504	C	N1-C2-O2	-7.20	114.58	118.90
2	AB	44	A	C4-C5-C6	-7.20	113.40	117.00
2	AB	717	C	C4'-C3'-C2'	-7.20	95.40	102.60
35	BA	98	A	C4-C5-C6	-7.20	113.40	117.00
2	AB	155	A	O4'-C1'-N9	7.20	113.96	108.20
2	AB	262	A	N1-C2-N3	-7.20	125.70	129.30
2	AB	1601	G	N1-C2-N3	-7.20	119.58	123.90
2	AB	2328	A	C5-C6-N6	7.20	129.46	123.70
2	AB	2369	A	C6-C5-N7	7.20	137.34	132.30
35	BA	497	G	N1-C6-O6	-7.20	115.58	119.90
35	BA	1075	U	N3-C4-C5	-7.20	110.28	114.60
37	BC	14	A	C8-N9-C4	-7.20	102.92	105.80
2	AB	728	G	C5-C6-N1	7.20	115.10	111.50
2	AB	829	A	N7-C8-N9	7.20	117.40	113.80
2	AB	1371	G	C5'-C4'-O4'	7.20	117.74	109.10
2	AB	1428	C	C4-C5-C6	-7.20	113.80	117.40
2	AB	2053	G	N1-C2-N3	-7.20	119.58	123.90
35	BA	278	G	N7-C8-N9	7.20	116.70	113.10
35	BA	1445	U	O4'-C1'-N1	7.20	113.96	108.20
2	AB	419	U	C6-N1-C2	-7.20	116.68	121.00
35	BA	65	A	C5-N7-C8	-7.20	100.30	103.90
35	BA	168	G	C2-N3-C4	7.20	115.50	111.90
35	BA	566	G	N3-C4-N9	7.20	130.32	126.00
35	BA	1194	U	C4'-C3'-C2'	-7.20	95.40	102.60
35	BA	1450	U	N3-C2-O2	-7.20	117.16	122.20
37	BC	62	C	N1-C2-O2	7.20	123.22	118.90
1	AA	59	A	C1'-O4'-C4'	7.20	115.66	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	111	A	N9-C4-C5	-7.20	102.92	105.80
2	AB	145	C	N3-C4-C5	7.20	124.78	121.90
2	AB	1545	A	O4'-C1'-N9	7.20	113.96	108.20
2	AB	2236	U	O4'-C1'-N1	7.20	113.96	108.20
35	BA	219	U	O4'-C4'-C3'	-7.20	96.81	104.00
35	BA	242	G	N7-C8-N9	7.20	116.70	113.10
35	BA	1310	G	C6-C5-N7	-7.20	126.08	130.40
37	BC	2	G	C5-C6-O6	-7.20	124.28	128.60
43	BI	5	VAL	CA-CB-CG1	7.20	121.69	110.90
2	AB	834	G	N3-C4-C5	-7.19	125.00	128.60
2	AB	280	U	C2-N3-C4	-7.19	122.68	127.00
2	AB	446	G	C5-C6-N1	7.19	115.10	111.50
2	AB	751	A	O4'-C1'-N9	7.19	113.95	108.20
2	AB	849	A	C5-N7-C8	7.19	107.50	103.90
2	AB	1387	A	C4'-C3'-C2'	-7.19	95.41	102.60
2	AB	2753	A	N3-C4-C5	-7.19	121.77	126.80
2	AB	2865	U	C5-C4-O4	-7.19	121.58	125.90
7	AG	132	ARG	NE-CZ-NH2	7.19	123.90	120.30
35	BA	446	G	C2-N3-C4	7.19	115.50	111.90
35	BA	601	G	O4'-C1'-N9	7.19	113.95	108.20
35	BA	728	A	P-O3'-C3'	7.19	128.33	119.70
35	BA	1245	C	N3-C4-C5	-7.19	119.02	121.90
2	AB	206	U	C4-C5-C6	7.19	124.02	119.70
2	AB	1165	A	P-O3'-C3'	7.19	128.33	119.70
2	AB	1507	C	C1'-O4'-C4'	-7.19	104.15	109.90
2	AB	2355	G	N7-C8-N9	7.19	116.69	113.10
2	AB	2376	A	N3-C4-N9	-7.19	121.65	127.40
2	AB	2497	A	C3'-C2'-C1'	7.19	107.25	101.50
35	BA	43	C	O4'-C1'-N1	7.19	113.95	108.20
35	BA	127	G	N9-C4-C5	-7.19	102.52	105.40
35	BA	700	G	C2-N3-C4	7.19	115.50	111.90
49	BO	22	TYR	CB-CG-CD2	-7.19	116.69	121.00
2	AB	295	G	N3-C4-C5	-7.19	125.00	128.60
2	AB	529	A	O4'-C1'-C2'	-7.19	98.61	105.80
2	AB	809	G	C8-N9-C4	7.19	109.28	106.40
2	AB	886	A	C6-N1-C2	-7.19	114.29	118.60
2	AB	1035	U	O4'-C1'-N1	7.19	113.95	108.20
2	AB	2556	C	N1-C2-O2	7.19	123.21	118.90
35	BA	307	C	N1-C2-N3	-7.19	114.17	119.20
35	BA	801	U	C5-C4-O4	-7.19	121.59	125.90
1	AA	19	C	N3-C4-C5	-7.19	119.03	121.90
2	AB	253	C	O4'-C1'-N1	7.19	113.95	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	856	G	C1'-O4'-C4'	-7.19	104.15	109.90
2	AB	913	U	C3'-C2'-C1'	-7.19	95.75	101.50
2	AB	1469	A	C1'-O4'-C4'	7.19	115.65	109.90
2	AB	1902	C	P-O5'-C5'	7.19	132.40	120.90
2	AB	2038	G	O4'-C1'-N9	7.19	113.95	108.20
35	BA	1304	G	C2-N3-C4	7.19	115.49	111.90
35	BA	1530	G	C5-C6-O6	-7.19	124.29	128.60
2	AB	1425	G	N3-C2-N2	7.19	124.93	119.90
2	AB	1550	C	C4-C5-C6	7.19	120.99	117.40
2	AB	2200	C	N1-C2-O2	7.19	123.21	118.90
2	AB	2329	U	C5-C4-O4	-7.19	121.59	125.90
2	AB	473	G	N1-C2-N3	7.18	128.21	123.90
2	AB	1061	U	O4'-C4'-C3'	7.18	111.85	106.10
2	AB	1636	U	C5-C4-O4	-7.18	121.59	125.90
2	AB	1730	C	N1-C2-N3	7.18	124.23	119.20
2	AB	2027	G	C8-N9-C4	-7.18	103.53	106.40
2	AB	2572	A	C5'-C4'-C3'	-7.18	104.50	116.00
2	AB	2737	G	C6-N1-C2	-7.18	120.79	125.10
36	BB	21	U	O4'-C1'-N1	7.18	113.95	108.20
37	BC	64	G	N3-C4-N9	7.18	130.31	126.00
2	AB	669	G	N9-C4-C5	7.18	108.27	105.40
2	AB	802	A	N7-C8-N9	-7.18	110.21	113.80
2	AB	1899	A	C2-N3-C4	7.18	114.19	110.60
35	BA	577	G	N3-C4-N9	7.18	130.31	126.00
35	BA	1317	C	C5-C4-N4	-7.18	115.17	120.20
2	AB	1912	A	O4'-C1'-N9	7.18	113.94	108.20
2	AB	1916	A	C4-C5-C6	-7.18	113.41	117.00
2	AB	2327	A	C8-N9-C4	-7.18	102.93	105.80
35	BA	1227	A	N9-C4-C5	7.18	108.67	105.80
35	BA	1304	G	C4'-C3'-C2'	-7.18	95.42	102.60
35	BA	1398	A	C6-C5-N7	7.18	137.33	132.30
2	AB	30	G	C8-N9-C4	-7.18	103.53	106.40
2	AB	1665	A	N1-C6-N6	7.18	122.91	118.60
2	AB	2476	A	N9-C1'-C2'	-7.18	104.10	112.00
35	BA	1059	C	N3-C2-O2	-7.18	116.88	121.90
2	AB	1057	A	N7-C8-N9	-7.18	110.21	113.80
2	AB	1364	G	C5-N7-C8	7.18	107.89	104.30
2	AB	2475	C	P-O5'-C5'	7.18	132.38	120.90
35	BA	1101	A	P-O3'-C3'	7.18	128.31	119.70
2	AB	54	G	N3-C4-N9	7.18	130.31	126.00
2	AB	1537	G	N9-C4-C5	7.18	108.27	105.40
2	AB	1768	C	N1-C2-O2	7.18	123.21	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1799	G	N9-C4-C5	7.18	108.27	105.40
2	AB	2043	C	C4'-C3'-C2'	-7.18	95.42	102.60
2	AB	2532	G	C1'-O4'-C4'	7.18	115.64	109.90
9	AI	139	PHE	CB-CG-CD1	-7.18	115.78	120.80
35	BA	159	G	C5-N7-C8	-7.18	100.71	104.30
35	BA	432	A	N3-C4-C5	-7.18	121.78	126.80
35	BA	563	A	N9-C4-C5	7.18	108.67	105.80
35	BA	727	G	O5'-C5'-C4'	7.18	125.34	111.70
35	BA	990	C	C4-C5-C6	-7.18	113.81	117.40
35	BA	1439	G	C6-C5-N7	-7.18	126.09	130.40
2	AB	538	A	C4-C5-C6	-7.17	113.41	117.00
2	AB	1872	A	C5-C6-N1	-7.17	114.11	117.70
2	AB	1914	C	N3-C4-C5	-7.17	119.03	121.90
35	BA	94	G	N3-C4-N9	-7.17	121.69	126.00
36	BB	33	A	C4'-C3'-C2'	-7.17	95.42	102.60
2	AB	436	C	C5-C6-N1	7.17	124.59	121.00
2	AB	2269	G	C6-N1-C2	7.17	129.40	125.10
35	BA	231	U	C5'-C4'-O4'	7.17	117.71	109.10
35	BA	365	U	N3-C4-O4	7.17	124.42	119.40
35	BA	846	G	C6-N1-C2	-7.17	120.80	125.10
35	BA	1225	A	O4'-C1'-N9	7.17	113.94	108.20
35	BA	1524	C	N1-C2-O2	7.17	123.20	118.90
35	BA	1525	G	N1-C2-N3	-7.17	119.60	123.90
1	AA	47	C	N3-C4-C5	-7.17	119.03	121.90
2	AB	1034	G	O4'-C1'-N9	7.17	113.94	108.20
2	AB	1900	A	N3-C4-N9	7.17	133.14	127.40
2	AB	2183	A	C2-N3-C4	-7.17	107.01	110.60
2	AB	2385	C	C5'-C4'-O4'	7.17	117.71	109.10
35	BA	203	G	C5-C6-O6	-7.17	124.30	128.60
35	BA	344	A	N3-C4-C5	-7.17	121.78	126.80
35	BA	803	G	C3'-C2'-C1'	-7.17	95.76	101.50
35	BA	1317	C	N3-C2-O2	-7.17	116.88	121.90
35	BA	1449	C	N3-C4-N4	7.17	123.02	118.00
36	BB	52	U	C5'-C4'-O4'	7.17	117.71	109.10
40	BF	10	LEU	CB-CG-CD2	7.17	123.19	111.00
2	AB	1998	A	N9-C1'-C2'	-7.17	104.11	112.00
35	BA	440	C	C3'-C2'-C1'	7.17	107.24	101.50
35	BA	1227	A	O4'-C1'-C2'	-7.17	98.63	105.80
48	BN	90	PRO	N-CA-CB	7.17	111.90	103.30
2	AB	63	A	O5'-P-OP2	-7.17	99.25	105.70
2	AB	297	G	C6-C5-N7	-7.17	126.10	130.40
2	AB	1746	A	C5-C6-N1	-7.17	114.11	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1320	C	N3-C2-O2	-7.17	116.88	121.90
35	BA	1369	C	N3-C4-N4	-7.17	112.98	118.00
2	AB	496	G	C2-N3-C4	-7.17	108.32	111.90
2	AB	605	G	C6-C5-N7	-7.17	126.10	130.40
2	AB	1009	A	N7-C8-N9	-7.17	110.22	113.80
2	AB	1341	G	N3-C4-N9	7.17	130.30	126.00
2	AB	1533	C	C6-N1-C2	-7.17	117.43	120.30
2	AB	1860	G	C5'-C4'-O4'	7.17	117.70	109.10
2	AB	1953	A	C8-N9-C4	-7.17	102.93	105.80
2	AB	2071	A	O4'-C1'-N9	7.17	113.93	108.20
2	AB	2876	G	N3-C4-N9	7.17	130.30	126.00
35	BA	338	A	C6-N1-C2	7.17	122.90	118.60
35	BA	1072	G	C8-N9-C4	-7.17	103.53	106.40
35	BA	1337	G	N3-C4-N9	7.17	130.30	126.00
2	AB	935	C	C4'-C3'-C2'	-7.17	95.44	102.60
35	BA	39	G	C5'-C4'-O4'	7.17	117.70	109.10
35	BA	794	A	O4'-C1'-N9	7.17	113.93	108.20
2	AB	87	U	C1'-O4'-C4'	-7.16	104.17	109.90
2	AB	290	U	O4'-C1'-N1	7.16	113.93	108.20
2	AB	1393	A	C5'-C4'-C3'	-7.16	104.54	116.00
2	AB	1742	U	N1-C2-N3	7.16	119.20	114.90
2	AB	2710	C	N3-C4-N4	7.16	123.01	118.00
35	BA	442	G	N1-C6-O6	-7.16	115.60	119.90
35	BA	484	G	N3-C2-N2	7.16	124.92	119.90
35	BA	557	G	C4-C5-N7	-7.16	107.94	110.80
35	BA	582	C	C5'-C4'-O4'	7.16	117.70	109.10
35	BA	777	A	C4'-C3'-C2'	-7.16	95.44	102.60
35	BA	1026	G	N3-C4-C5	-7.16	125.02	128.60
2	AB	310	A	N1-C2-N3	7.16	132.88	129.30
2	AB	571	U	N3-C2-O2	-7.16	117.19	122.20
2	AB	1876	A	N1-C6-N6	-7.16	114.30	118.60
2	AB	500	G	C5-N7-C8	7.16	107.88	104.30
2	AB	1303	G	N3-C2-N2	7.16	124.91	119.90
35	BA	677	U	C5-C4-O4	-7.16	121.60	125.90
2	AB	371	A	C3'-C2'-C1'	7.16	107.23	101.50
2	AB	371	A	C4-C5-C6	-7.16	113.42	117.00
2	AB	622	G	N3-C4-N9	7.16	130.29	126.00
2	AB	674	G	N3-C4-N9	7.16	130.29	126.00
2	AB	1729	U	O4'-C1'-N1	7.16	113.93	108.20
2	AB	1874	C	N1-C1'-C2'	-7.16	104.12	112.00
2	AB	2132	U	N1-C2-N3	7.16	119.19	114.90
2	AB	2160	C	N3-C2-O2	-7.16	116.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2299	U	N1-C2-N3	7.16	119.19	114.90
35	BA	245	U	C5-C4-O4	-7.16	121.61	125.90
35	BA	695	A	O4'-C1'-N9	7.16	113.93	108.20
35	BA	1450	U	C5-C6-N1	-7.16	119.12	122.70
36	BB	22	G	P-O3'-C3'	7.16	128.29	119.70
2	AB	260	G	C3'-C2'-C1'	-7.16	95.77	101.50
2	AB	466	A	N1-C6-N6	-7.16	114.31	118.60
2	AB	1076	C	O4'-C4'-C3'	-7.16	96.84	104.00
2	AB	2307	G	C5'-C4'-C3'	-7.16	104.55	116.00
35	BA	280	C	N3-C4-C5	7.16	124.76	121.90
35	BA	727	G	C4'-C3'-C2'	-7.16	95.44	102.60
37	BC	34	U	O4'-C1'-N1	7.16	113.93	108.20
2	AB	518	G	C2-N3-C4	-7.16	108.32	111.90
2	AB	792	A	C5-C6-N1	7.16	121.28	117.70
2	AB	1608	A	C2-N3-C4	-7.16	107.02	110.60
2	AB	2042	A	P-O3'-C3'	7.16	128.29	119.70
2	AB	2398	U	C5'-C4'-O4'	7.16	117.69	109.10
8	AH	165	ASP	CB-CG-OD1	7.16	124.74	118.30
21	AU	25	ARG	NE-CZ-NH2	-7.16	116.72	120.30
35	BA	1249	C	C2-N3-C4	7.16	123.48	119.90
36	BB	48	C	C2-N1-C1'	-7.16	110.93	118.80
2	AB	576	U	C5'-C4'-O4'	7.15	117.69	109.10
2	AB	2614	A	N9-C4-C5	7.15	108.66	105.80
35	BA	280	C	O4'-C1'-N1	7.15	113.92	108.20
35	BA	444	G	N7-C8-N9	7.15	116.68	113.10
35	BA	1002	G	C4'-C3'-C2'	-7.15	95.45	102.60
2	AB	112	U	O4'-C1'-N1	7.15	113.92	108.20
2	AB	264	C	C1'-O4'-C4'	-7.15	104.18	109.90
2	AB	620	G	N3-C4-C5	-7.15	125.02	128.60
2	AB	822	G	C5-N7-C8	7.15	107.88	104.30
2	AB	1117	C	N3-C4-C5	-7.15	119.04	121.90
2	AB	2046	G	N3-C2-N2	7.15	124.91	119.90
2	AB	2208	C	C4'-C3'-C2'	-7.15	95.45	102.60
2	AB	2825	G	N1-C2-N3	7.15	128.19	123.90
35	BA	254	G	N3-C4-N9	7.15	130.29	126.00
35	BA	317	U	N1-C1'-C2'	-7.15	104.13	112.00
35	BA	752	G	N3-C2-N2	7.15	124.91	119.90
35	BA	1109	C	N3-C4-C5	-7.15	119.04	121.90
35	BA	1262	C	O4'-C1'-N1	7.15	113.92	108.20
35	BA	1471	U	N3-C2-O2	-7.15	117.19	122.20
37	BC	22	A	C1'-O4'-C4'	-7.15	104.18	109.90
2	AB	83	A	C4-C5-C6	7.15	120.58	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	669	G	C1'-O4'-C4'	7.15	115.62	109.90
2	AB	1754	A	C4-C5-N7	7.15	114.28	110.70
2	AB	1816	C	N1-C2-O2	7.15	123.19	118.90
2	AB	2100	G	N7-C8-N9	7.15	116.67	113.10
35	BA	65	A	C6-N1-C2	-7.15	114.31	118.60
35	BA	905	U	N1-C2-N3	7.15	119.19	114.90
35	BA	1274	A	N7-C8-N9	-7.15	110.22	113.80
35	BA	1457	G	N7-C8-N9	7.15	116.68	113.10
35	BA	1487	G	C5-C6-O6	-7.15	124.31	128.60
2	AB	1616	A	N1-C6-N6	7.15	122.89	118.60
2	AB	1753	G	N1-C2-N2	-7.15	109.77	116.20
35	BA	1456	A	C2-N3-C4	-7.15	107.03	110.60
36	BB	34	U	C5'-C4'-C3'	-7.15	104.56	116.00
2	AB	1752	C	O4'-C1'-C2'	7.15	114.03	107.60
2	AB	1868	C	N3-C4-C5	-7.15	119.04	121.90
2	AB	2333	A	C2-N3-C4	7.15	114.17	110.60
2	AB	2455	G	C8-N9-C4	-7.15	103.54	106.40
2	AB	2769	U	N3-C4-C5	-7.15	110.31	114.60
2	AB	2818	U	P-O3'-C3'	7.15	128.28	119.70
35	BA	194	C	C5-C6-N1	7.15	124.57	121.00
35	BA	256	U	O4'-C1'-N1	7.15	113.92	108.20
35	BA	264	C	N3-C4-C5	7.15	124.76	121.90
1	AA	56	G	N9-C4-C5	7.15	108.26	105.40
2	AB	1663	G	C4'-C3'-C2'	-7.15	95.45	102.60
2	AB	2051	A	C5-C6-N6	-7.15	117.98	123.70
35	BA	633	G	C4-C5-N7	-7.15	107.94	110.80
35	BA	662	U	O4'-C1'-N1	7.15	113.92	108.20
35	BA	1459	G	N9-C4-C5	7.15	108.26	105.40
2	AB	276	U	C5-C6-N1	-7.14	119.13	122.70
2	AB	332	A	O4'-C1'-N9	7.14	113.92	108.20
2	AB	560	C	C4-C5-C6	7.14	120.97	117.40
2	AB	785	G	N7-C8-N9	7.14	116.67	113.10
35	BA	656	G	N3-C4-C5	-7.14	125.03	128.60
35	BA	738	C	C2-N3-C4	7.14	123.47	119.90
35	BA	1362	A	N1-C2-N3	-7.14	125.73	129.30
2	AB	3	U	N3-C4-C5	7.14	118.89	114.60
2	AB	160	A	C6-N1-C2	-7.14	114.31	118.60
2	AB	474	G	N3-C4-C5	-7.14	125.03	128.60
2	AB	1776	G	C5'-C4'-O4'	7.14	117.67	109.10
2	AB	2633	G	C6-N1-C2	-7.14	120.81	125.10
4	AD	101	ARG	NE-CZ-NH1	7.14	123.87	120.30
35	BA	694	A	N9-C1'-C2'	-7.14	104.14	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1025	U	O3'-P-O5'	7.14	117.57	104.00
35	BA	1099	G	C6-C5-N7	-7.14	126.11	130.40
36	BB	38	G	N9-C1'-C2'	-7.14	104.14	112.00
2	AB	95	A	C5'-C4'-O4'	7.14	117.67	109.10
2	AB	273	G	N3-C4-N9	7.14	130.28	126.00
2	AB	1479	G	C5-N7-C8	-7.14	100.73	104.30
2	AB	2631	G	C6-C5-N7	-7.14	126.11	130.40
35	BA	177	G	N1-C6-O6	-7.14	115.62	119.90
35	BA	628	G	C5-N7-C8	-7.14	100.73	104.30
2	AB	30	G	C5-N7-C8	-7.14	100.73	104.30
2	AB	1270	C	N1-C2-O2	7.14	123.18	118.90
2	AB	1373	A	C2-N3-C4	7.14	114.17	110.60
2	AB	2277	G	N7-C8-N9	7.14	116.67	113.10
2	AB	2309	A	N1-C2-N3	-7.14	125.73	129.30
2	AB	2454	G	C5-C6-N1	7.14	115.07	111.50
35	BA	737	C	N3-C4-C5	-7.14	119.04	121.90
2	AB	420	C	N3-C2-O2	-7.14	116.90	121.90
2	AB	1151	A	N1-C6-N6	7.14	122.88	118.60
2	AB	2553	G	N3-C4-C5	-7.14	125.03	128.60
2	AB	2758	A	O4'-C1'-N9	7.14	113.91	108.20
1	AA	7	G	N1-C2-N3	-7.14	119.62	123.90
2	AB	637	A	C8-N9-C4	7.14	108.65	105.80
2	AB	1612	C	C2-N3-C4	7.14	123.47	119.90
2	AB	2470	G	C4-C5-N7	-7.14	107.94	110.80
2	AB	2542	A	C6-C5-N7	7.14	137.30	132.30
35	BA	207	C	N1-C2-O2	7.14	123.18	118.90
35	BA	315	A	C5-C6-N1	7.14	121.27	117.70
35	BA	1005	A	C8-N9-C4	-7.14	102.94	105.80
35	BA	1275	A	N1-C2-N3	7.14	132.87	129.30
2	AB	133	U	C5'-C4'-O4'	7.13	117.66	109.10
2	AB	220	G	C6-N1-C2	-7.13	120.82	125.10
2	AB	659	G	O4'-C1'-N9	7.13	113.91	108.20
2	AB	771	G	C8-N9-C4	-7.13	103.55	106.40
2	AB	874	G	N1-C2-N3	-7.13	119.62	123.90
2	AB	1292	G	N9-C4-C5	7.13	108.25	105.40
2	AB	2782	G	O4'-C1'-N9	7.13	113.91	108.20
35	BA	614	C	C6-N1-C2	-7.13	117.45	120.30
35	BA	1261	A	C5'-C4'-O4'	7.13	117.66	109.10
37	BC	13	C	C2-N3-C4	7.13	123.47	119.90
56	BV	50	PHE	CB-CG-CD1	-7.13	115.81	120.80
2	AB	41	C	C4-C5-C6	7.13	120.97	117.40
2	AB	150	U	O4'-C1'-N1	7.13	113.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1988	G	C2-N3-C4	7.13	115.47	111.90
2	AB	2124	G	C6-C5-N7	-7.13	126.12	130.40
2	AB	2228	G	N9-C4-C5	7.13	108.25	105.40
2	AB	2240	U	C6-N1-C2	-7.13	116.72	121.00
2	AB	231	A	C6-N1-C2	7.13	122.88	118.60
2	AB	902	C	C2-N3-C4	-7.13	116.33	119.90
2	AB	2363	G	N1-C6-O6	7.13	124.18	119.90
2	AB	2432	A	P-O3'-C3'	7.13	128.26	119.70
2	AB	2732	G	N3-C2-N2	-7.13	114.91	119.90
2	AB	2881	U	C3'-C2'-C1'	7.13	107.21	101.50
1	AA	93	C	N3-C4-N4	7.13	122.99	118.00
2	AB	416	U	C4'-C3'-C2'	-7.13	95.47	102.60
2	AB	1659	G	C2-N3-C4	7.13	115.47	111.90
19	AS	52	ARG	NE-CZ-NH2	-7.13	116.73	120.30
35	BA	744	C	C6-N1-C2	-7.13	117.45	120.30
35	BA	830	G	N9-C4-C5	7.13	108.25	105.40
35	BA	845	A	N7-C8-N9	-7.13	110.23	113.80
35	BA	1046	A	C8-N9-C4	-7.13	102.95	105.80
35	BA	1244	G	C4'-C3'-C2'	-7.13	95.47	102.60
35	BA	1446	A	C6-N1-C2	-7.13	114.32	118.60
2	AB	349	U	C5-C6-N1	-7.13	119.14	122.70
2	AB	1977	A	N1-C2-N3	-7.13	125.74	129.30
2	AB	2609	U	C4-C5-C6	7.13	123.98	119.70
35	BA	64	G	N7-C8-N9	7.13	116.66	113.10
35	BA	533	A	O4'-C1'-N9	7.13	113.90	108.20
49	BO	62	PHE	CB-CG-CD2	-7.13	115.81	120.80
2	AB	241	A	C5-C6-N1	7.13	121.26	117.70
2	AB	1829	A	C2-N3-C4	7.13	114.16	110.60
2	AB	2027	G	C6-C5-N7	-7.13	126.12	130.40
2	AB	2772	C	C5-C6-N1	7.13	124.56	121.00
7	AG	19	PHE	CB-CG-CD1	-7.13	115.81	120.80
29	A2	9	TYR	CB-CG-CD2	7.13	125.28	121.00
35	BA	304	U	N1-C2-O2	7.13	127.79	122.80
35	BA	525	C	C4-C5-C6	-7.13	113.84	117.40
2	AB	41	C	N3-C4-C5	-7.12	119.05	121.90
2	AB	290	U	N3-C4-O4	-7.12	114.41	119.40
2	AB	1477	A	C5-C6-N6	-7.12	118.00	123.70
2	AB	1920	C	N3-C2-O2	-7.12	116.91	121.90
2	AB	2090	A	C4'-C3'-C2'	-7.12	95.47	102.60
35	BA	1318	A	O4'-C4'-C3'	7.12	111.80	106.10
2	AB	498	G	C1'-O4'-C4'	7.12	115.60	109.90
2	AB	1280	G	O4'-C1'-N9	7.12	113.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1510	G	N3-C2-N2	7.12	124.89	119.90
2	AB	2283	C	N3-C2-O2	-7.12	116.91	121.90
2	AB	2846	G	C2-N3-C4	7.12	115.46	111.90
32	A5	33	ARG	CD-NE-CZ	7.12	133.57	123.60
35	BA	796	C	C6-N1-C2	-7.12	117.45	120.30
35	BA	909	A	C4-C5-N7	-7.12	107.14	110.70
35	BA	960	U	O4'-C1'-N1	7.12	113.90	108.20
2	AB	361	G	O4'-C4'-C3'	7.12	111.80	106.10
2	AB	1177	G	C8-N9-C4	-7.12	103.55	106.40
2	AB	1613	G	N7-C8-N9	7.12	116.66	113.10
2	AB	2543	G	N1-C2-N3	-7.12	119.63	123.90
35	BA	291	U	C5'-C4'-O4'	7.12	117.65	109.10
36	BB	22	G	O4'-C1'-C2'	-7.12	98.68	105.80
2	AB	455	C	C4-C5-C6	-7.12	113.84	117.40
2	AB	815	C	O4'-C1'-N1	7.12	113.90	108.20
21	AU	109	ASP	CB-CG-OD2	-7.12	111.89	118.30
35	BA	461	A	N1-C6-N6	7.12	122.87	118.60
35	BA	970	C	C6-N1-C2	-7.12	117.45	120.30
35	BA	1515	G	N3-C4-N9	-7.12	121.73	126.00
1	AA	83	G	N3-C4-C5	-7.12	125.04	128.60
2	AB	62	U	N3-C4-C5	-7.12	110.33	114.60
2	AB	1030	C	C5'-C4'-O4'	7.12	117.64	109.10
2	AB	1392	A	C2-N3-C4	-7.12	107.04	110.60
2	AB	1724	G	N1-C6-O6	-7.12	115.63	119.90
2	AB	2567	G	C4-C5-N7	-7.12	107.95	110.80
2	AB	2858	C	O4'-C1'-N1	7.12	113.89	108.20
2	AB	2867	G	C5-C6-O6	7.12	132.87	128.60
35	BA	355	C	C3'-C2'-C1'	7.12	107.19	101.50
35	BA	661	G	C3'-C2'-C1'	7.12	107.19	101.50
2	AB	798	G	C4-C5-N7	-7.12	107.95	110.80
35	BA	274	A	C8-N9-C4	-7.12	102.95	105.80
35	BA	1401	G	C8-N9-C4	-7.12	103.55	106.40
2	AB	92	U	N1-C2-O2	7.12	127.78	122.80
2	AB	427	U	O4'-C4'-C3'	7.12	111.79	106.10
2	AB	1653	G	C5-C6-N1	7.12	115.06	111.50
2	AB	1905	C	P-O3'-C3'	7.12	128.24	119.70
2	AB	2126	A	C4-C5-C6	-7.12	113.44	117.00
2	AB	2144	G	N9-C4-C5	7.12	108.25	105.40
2	AB	2406	A	C6-N1-C2	-7.12	114.33	118.60
2	AB	2555	U	N1-C2-N3	-7.12	110.63	114.90
35	BA	482	A	N1-C6-N6	-7.12	114.33	118.60
35	BA	718	A	C5'-C4'-O4'	7.12	117.64	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	44	A	N1-C2-N3	7.12	132.86	129.30
38	BD	195	VAL	CA-CB-CG2	7.12	121.57	110.90
2	AB	472	A	C5-C6-N1	-7.11	114.14	117.70
2	AB	901	C	C5-C6-N1	7.11	124.56	121.00
2	AB	968	C	C3'-C2'-C1'	7.11	107.19	101.50
2	AB	1133	A	C8-N9-C4	7.11	108.65	105.80
2	AB	1223	G	C1'-O4'-C4'	7.11	115.59	109.90
2	AB	2539	C	N3-C4-C5	7.11	124.75	121.90
2	AB	2790	U	N3-C2-O2	-7.11	117.22	122.20
35	BA	846	G	C5-N7-C8	-7.11	100.74	104.30
35	BA	1131	G	C5-C6-N1	7.11	115.06	111.50
37	BC	37	U	C2-N3-C4	-7.11	122.73	127.00
37	BC	67	C	C6-N1-C2	-7.11	117.45	120.30
55	BU	31	ARG	NE-CZ-NH2	-7.11	116.74	120.30
2	AB	592	A	C1'-O4'-C4'	-7.11	104.21	109.90
2	AB	970	U	N1-C2-O2	-7.11	117.82	122.80
2	AB	2098	U	C6-N1-C2	-7.11	116.73	121.00
2	AB	2720	U	C5'-C4'-O4'	7.11	117.63	109.10
35	BA	52	C	N3-C4-C5	-7.11	119.06	121.90
35	BA	1119	C	C3'-C2'-C1'	-7.11	95.81	101.50
2	AB	500	G	C6-N1-C2	-7.11	120.83	125.10
2	AB	2788	C	C5'-C4'-O4'	7.11	117.63	109.10
5	AE	141	ARG	NE-CZ-NH2	7.11	123.86	120.30
15	AO	92	TRP	CD1-NE1-CE2	7.11	115.40	109.00
35	BA	271	C	O4'-C1'-N1	7.11	113.89	108.20
35	BA	1147	C	N1-C2-O2	7.11	123.17	118.90
35	BA	1155	A	N7-C8-N9	7.11	117.36	113.80
2	AB	61	C	C2-N3-C4	-7.11	116.34	119.90
2	AB	596	U	C4-C5-C6	7.11	123.97	119.70
2	AB	824	U	C5-C4-O4	7.11	130.17	125.90
2	AB	1261	C	N3-C2-O2	-7.11	116.92	121.90
2	AB	2024	G	C2-N3-C4	7.11	115.45	111.90
2	AB	2495	G	C5-C6-O6	-7.11	124.33	128.60
8	AH	156	TYR	CG-CD1-CE1	7.11	126.99	121.30
9	AI	47	PHE	CB-CG-CD1	7.11	125.78	120.80
35	BA	1148	U	C5-C6-N1	-7.11	119.14	122.70
35	BA	1467	C	C5-C6-N1	-7.11	117.44	121.00
45	BK	94	ARG	NH1-CZ-NH2	-7.11	111.58	119.40
2	AB	1047	G	C5-C6-O6	7.11	132.87	128.60
2	AB	1778	U	N3-C2-O2	-7.11	117.22	122.20
1	AA	26	C	O4'-C1'-N1	7.11	113.88	108.20
1	AA	115	A	N9-C4-C5	-7.11	102.96	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	23	G	C8-N9-C4	-7.11	103.56	106.40
2	AB	101	A	C6-N1-C2	-7.11	114.34	118.60
2	AB	200	U	C5-C6-N1	-7.11	119.15	122.70
2	AB	279	A	C3'-C2'-C1'	7.11	107.19	101.50
2	AB	320	A	N3-C4-N9	7.11	133.09	127.40
2	AB	463	G	C6-N1-C2	-7.11	120.84	125.10
2	AB	1805	A	N1-C6-N6	-7.11	114.34	118.60
2	AB	2106	U	N3-C4-C5	7.11	118.86	114.60
2	AB	2682	A	N3-C4-C5	-7.11	121.83	126.80
35	BA	1058	G	C1'-O4'-C4'	7.11	115.58	109.90
2	AB	70	G	O4'-C1'-N9	7.10	113.88	108.20
2	AB	135	U	C4-C5-C6	7.10	123.96	119.70
2	AB	235	U	C2-N3-C4	-7.10	122.74	127.00
2	AB	518	G	N3-C4-C5	7.10	132.15	128.60
2	AB	604	G	C8-N9-C4	-7.10	103.56	106.40
2	AB	1239	G	C1'-O4'-C4'	-7.10	104.22	109.90
2	AB	2764	A	O5'-P-OP2	-7.10	99.31	105.70
36	BB	25	U	C4-C5-C6	7.10	123.96	119.70
2	AB	207	A	C8-N9-C4	-7.10	102.96	105.80
2	AB	2718	G	C5-C6-N1	7.10	115.05	111.50
2	AB	893	C	C6-N1-C2	7.10	123.14	120.30
2	AB	1617	C	C4-C5-C6	7.10	120.95	117.40
2	AB	1865	U	C3'-C2'-C1'	-7.10	95.82	101.50
35	BA	53	A	C2-N3-C4	-7.10	107.05	110.60
35	BA	1079	G	C4-C5-N7	-7.10	107.96	110.80
35	BA	1526	G	C6-N1-C2	-7.10	120.84	125.10
2	AB	43	G	C4-C5-N7	-7.10	107.96	110.80
2	AB	892	A	N3-C4-C5	7.10	131.77	126.80
2	AB	1064	C	C5'-C4'-O4'	7.10	117.62	109.10
2	AB	1180	U	C2-N3-C4	-7.10	122.74	127.00
2	AB	1271	G	N7-C8-N9	7.10	116.65	113.10
2	AB	1863	G	C1'-O4'-C4'	7.10	115.58	109.90
2	AB	2145	C	O4'-C1'-N1	7.10	113.88	108.20
35	BA	322	C	C5-C6-N1	-7.10	117.45	121.00
35	BA	817	C	C2-N3-C4	7.10	123.45	119.90
35	BA	1143	G	C5-C6-N1	-7.10	107.95	111.50
35	BA	1221	G	N3-C4-C5	-7.10	125.05	128.60
2	AB	157	C	C5-C6-N1	7.10	124.55	121.00
2	AB	1031	G	N7-C8-N9	7.10	116.65	113.10
2	AB	2567	G	C2-N3-C4	7.10	115.45	111.90
35	BA	276	G	N3-C2-N2	-7.10	114.93	119.90
35	BA	514	C	C5-C6-N1	-7.10	117.45	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	888	G	C5-N7-C8	7.10	107.85	104.30
2	AB	515	A	C5-N7-C8	7.09	107.45	103.90
2	AB	880	G	N3-C4-C5	-7.09	125.05	128.60
2	AB	1145	C	O4'-C1'-N1	7.09	113.88	108.20
2	AB	1685	C	P-O3'-C3'	7.09	128.21	119.70
2	AB	1787	A	C5-C6-N1	7.09	121.25	117.70
2	AB	2426	A	C5-C6-N6	-7.09	118.03	123.70
2	AB	2559	C	N3-C2-O2	-7.09	116.93	121.90
35	BA	443	C	N3-C4-C5	-7.09	119.06	121.90
35	BA	508	U	C4-C5-C6	7.09	123.96	119.70
36	BB	54	U	C5-C6-N1	7.09	126.25	122.70
2	AB	285	G	N9-C4-C5	7.09	108.24	105.40
2	AB	1055	G	C6-N1-C2	-7.09	120.84	125.10
2	AB	1540	G	O4'-C1'-N9	7.09	113.87	108.20
35	BA	196	A	O4'-C4'-C3'	7.09	111.78	106.10
35	BA	899	C	N1-C2-O2	7.09	123.16	118.90
35	BA	1049	U	C5-C4-O4	-7.09	121.64	125.90
2	AB	190	A	N7-C8-N9	7.09	117.35	113.80
2	AB	302	C	C6-N1-C2	-7.09	117.46	120.30
2	AB	762	U	N1-C1'-C2'	7.09	123.22	114.00
2	AB	1206	G	O4'-C1'-N9	7.09	113.87	108.20
2	AB	1571	A	O4'-C1'-N9	7.09	113.87	108.20
2	AB	2395	C	C5'-C4'-O4'	7.09	117.61	109.10
35	BA	513	C	N3-C4-N4	7.09	122.97	118.00
35	BA	636	U	O4'-C1'-N1	7.09	113.87	108.20
35	BA	867	G	O4'-C1'-N9	7.09	113.87	108.20
2	AB	2343	U	N3-C4-C5	-7.09	110.35	114.60
2	AB	2530	A	C4-C5-C6	7.09	120.55	117.00
2	AB	2654	A	C6-N1-C2	7.09	122.85	118.60
35	BA	356	A	N1-C2-N3	7.09	132.84	129.30
35	BA	782	A	N9-C1'-C2'	-7.09	104.20	112.00
35	BA	876	C	C5'-C4'-C3'	-7.09	104.66	116.00
35	BA	935	A	C5-N7-C8	-7.09	100.36	103.90
35	BA	1454	G	C5-N7-C8	7.09	107.84	104.30
1	AA	23	G	N3-C4-N9	-7.09	121.75	126.00
2	AB	916	G	N9-C1'-C2'	7.09	123.21	114.00
2	AB	1753	G	C4'-C3'-C2'	7.09	109.69	102.60
2	AB	2147	A	O4'-C4'-C3'	7.09	111.77	106.10
2	AB	2169	A	C4-C5-N7	-7.09	107.16	110.70
2	AB	2825	G	C6-C5-N7	-7.09	126.15	130.40
35	BA	1053	G	C1'-O4'-C4'	-7.09	104.23	109.90
35	BA	1095	U	N3-C2-O2	-7.09	117.24	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1437	A	C1'-O4'-C4'	-7.09	104.23	109.90
47	BM	36	ARG	NH1-CZ-NH2	-7.09	111.60	119.40
2	AB	121	G	C5-C6-O6	-7.09	124.35	128.60
35	BA	628	G	N7-C8-N9	7.09	116.64	113.10
35	BA	941	G	C6-N1-C2	-7.09	120.85	125.10
2	AB	139	U	O4'-C1'-N1	7.08	113.87	108.20
2	AB	160	A	C5-C6-N6	7.08	129.37	123.70
2	AB	1681	G	C5-C6-N1	7.08	115.04	111.50
35	BA	188	C	C2-N3-C4	7.08	123.44	119.90
35	BA	674	G	C5-C6-N1	7.08	115.04	111.50
35	BA	902	G	C5-C6-O6	-7.08	124.35	128.60
42	BH	84	VAL	CG1-CB-CG2	-7.08	99.56	110.90
2	AB	1400	U	C5'-C4'-O4'	7.08	117.60	109.10
2	AB	1740	G	N3-C4-C5	-7.08	125.06	128.60
2	AB	2036	C	C4-C5-C6	7.08	120.94	117.40
2	AB	2496	C	C2-N3-C4	7.08	123.44	119.90
35	BA	37	U	N1-C1'-C2'	-7.08	104.21	112.00
35	BA	412	A	C4'-C3'-C2'	-7.08	95.52	102.60
35	BA	691	G	N1-C2-N3	-7.08	119.65	123.90
46	BL	31	ARG	NE-CZ-NH2	-7.08	116.76	120.30
1	AA	35	C	P-O3'-C3'	7.08	128.20	119.70
2	AB	1149	G	C6-N1-C2	-7.08	120.85	125.10
2	AB	2061	G	N1-C2-N2	7.08	122.57	116.20
35	BA	759	A	C5'-C4'-O4'	7.08	117.60	109.10
35	BA	944	G	N9-C4-C5	7.08	108.23	105.40
2	AB	465	G	C6-C5-N7	-7.08	126.15	130.40
2	AB	2071	A	C2-N3-C4	7.08	114.14	110.60
2	AB	2684	U	N1-C2-O2	7.08	127.76	122.80
35	BA	866	C	C2-N3-C4	7.08	123.44	119.90
35	BA	1401	G	C4-C5-N7	-7.08	107.97	110.80
2	AB	1174	U	N1-C2-N3	7.08	119.15	114.90
2	AB	1453	A	N1-C6-N6	7.08	122.85	118.60
2	AB	2637	U	C4'-C3'-C2'	-7.08	95.52	102.60
35	BA	1119	C	O4'-C1'-N1	7.08	113.86	108.20
35	BA	1508	A	N1-C2-N3	-7.08	125.76	129.30
35	BA	1542	A	O4'-C4'-C3'	7.08	111.76	106.10
2	AB	154	U	N3-C2-O2	-7.08	117.25	122.20
2	AB	318	C	C4-C5-C6	7.08	120.94	117.40
2	AB	1068	G	C5-N7-C8	7.08	107.84	104.30
2	AB	1166	G	C4-C5-N7	-7.08	107.97	110.80
2	AB	1217	U	C2-N3-C4	-7.08	122.75	127.00
2	AB	1502	A	C5'-C4'-O4'	7.08	117.59	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	723	U	C4-C5-C6	7.08	123.95	119.70
35	BA	787	A	C5-N7-C8	7.08	107.44	103.90
35	BA	1255	G	N9-C4-C5	7.08	108.23	105.40
2	AB	1974	C	N3-C4-C5	-7.08	119.07	121.90
35	BA	41	G	N3-C2-N2	7.08	124.85	119.90
35	BA	159	G	C5-C6-O6	-7.08	124.36	128.60
35	BA	929	G	C2-N3-C4	7.08	115.44	111.90
35	BA	1051	C	N1-C2-O2	7.08	123.14	118.90
54	BT	69	TYR	CG-CD2-CE2	-7.08	115.64	121.30
2	AB	205	G	C6-N1-C2	-7.07	120.86	125.10
2	AB	896	A	C2-N3-C4	7.07	114.14	110.60
2	AB	2283	C	N3-C4-N4	7.07	122.95	118.00
2	AB	2297	A	C5'-C4'-C3'	-7.07	104.68	116.00
2	AB	2365	G	C4-C5-C6	7.07	123.04	118.80
2	AB	2549	G	N9-C4-C5	-7.07	102.57	105.40
2	AB	2724	U	O4'-C1'-N1	7.07	113.86	108.20
35	BA	112	G	C4-C5-N7	7.07	113.63	110.80
35	BA	507	C	N1-C2-N3	7.07	124.15	119.20
35	BA	763	G	C4-C5-N7	-7.07	107.97	110.80
35	BA	1131	G	C4-C5-N7	-7.07	107.97	110.80
2	AB	322	A	N1-C6-N6	7.07	122.84	118.60
2	AB	1397	U	O4'-C1'-N1	7.07	113.86	108.20
35	BA	497	G	P-O3'-C3'	7.07	128.19	119.70
35	BA	697	U	C5-C6-N1	-7.07	119.16	122.70
35	BA	920	U	C4'-C3'-C2'	-7.07	95.53	102.60
35	BA	1344	C	N3-C4-C5	-7.07	119.07	121.90
1	AA	62	C	N3-C2-O2	-7.07	116.95	121.90
2	AB	82	U	O4'-C4'-C3'	-7.07	96.93	104.00
2	AB	265	A	N7-C8-N9	7.07	117.34	113.80
2	AB	800	A	C8-N9-C4	-7.07	102.97	105.80
2	AB	1749	A	C8-N9-C4	-7.07	102.97	105.80
10	AJ	28	ASP	CB-CG-OD2	-7.07	111.94	118.30
35	BA	748	G	N1-C2-N3	-7.07	119.66	123.90
35	BA	773	G	N9-C4-C5	-7.07	102.57	105.40
35	BA	1288	A	C4-C5-C6	-7.07	113.47	117.00
35	BA	1291	U	N3-C4-O4	7.07	124.35	119.40
35	BA	1338	G	C5'-C4'-O4'	7.07	117.58	109.10
35	BA	1347	G	C3'-C2'-C1'	7.07	107.16	101.50
35	BA	1535	C	O4'-C4'-C3'	-7.07	96.93	104.00
37	BC	9	G	N9-C4-C5	7.07	108.23	105.40
37	BC	31	G	C2-N3-C4	7.07	115.44	111.90
2	AB	1664	A	O4'-C1'-N9	7.07	113.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	676	A	C4-C5-C6	7.07	120.53	117.00
35	BA	953	G	C6-N1-C2	-7.07	120.86	125.10
50	BP	74	ARG	NE-CZ-NH1	7.07	123.83	120.30
2	AB	1151	A	C5-C6-N6	-7.07	118.05	123.70
2	AB	1233	C	C6-N1-C2	7.07	123.13	120.30
2	AB	1422	G	C8-N9-C4	7.07	109.23	106.40
2	AB	1800	C	C6-N1-C2	-7.07	117.47	120.30
2	AB	2068	U	N1-C2-N3	7.07	119.14	114.90
2	AB	2174	C	O4'-C1'-N1	7.07	113.85	108.20
12	AL	53	TYR	CG-CD1-CE1	7.07	126.95	121.30
35	BA	1169	A	O4'-C4'-C3'	7.07	111.75	106.10
2	AB	963	U	C4-C5-C6	7.07	123.94	119.70
35	BA	692	U	C4-C5-C6	7.07	123.94	119.70
2	AB	60	G	N1-C2-N3	-7.06	119.66	123.90
2	AB	85	G	N9-C4-C5	7.06	108.23	105.40
2	AB	2810	A	N7-C8-N9	7.06	117.33	113.80
35	BA	727	G	C3'-C2'-C1'	7.06	107.15	101.50
2	AB	360	U	N1-C2-N3	7.06	119.14	114.90
2	AB	369	U	C5-C6-N1	-7.06	119.17	122.70
2	AB	778	G	C8-N9-C4	-7.06	103.58	106.40
2	AB	1052	C	C5-C4-N4	-7.06	115.26	120.20
2	AB	1269	A	C2-N3-C4	7.06	114.13	110.60
2	AB	2340	A	C5-C6-N1	-7.06	114.17	117.70
35	BA	10	A	C5-C6-N1	7.06	121.23	117.70
35	BA	153	C	C3'-C2'-C1'	7.06	107.15	101.50
35	BA	195	A	C5'-C4'-O4'	7.06	117.58	109.10
35	BA	345	C	P-O3'-C3'	7.06	128.18	119.70
35	BA	874	G	C6-N1-C2	-7.06	120.86	125.10
35	BA	1159	U	C3'-C2'-C1'	7.06	107.15	101.50
2	AB	137	U	O4'-C1'-N1	7.06	113.85	108.20
2	AB	654	A	P-O3'-C3'	7.06	128.17	119.70
2	AB	2634	A	C5-C6-N1	7.06	121.23	117.70
35	BA	53	A	N3-C4-N9	-7.06	121.75	127.40
35	BA	111	G	C4-C5-C6	7.06	123.04	118.80
2	AB	251	A	O4'-C1'-N9	7.06	113.85	108.20
2	AB	684	G	C6-C5-N7	7.06	134.63	130.40
2	AB	1084	A	C8-N9-C4	-7.06	102.98	105.80
2	AB	1173	U	C5-C6-N1	-7.06	119.17	122.70
2	AB	1540	G	C2-N3-C4	7.06	115.43	111.90
2	AB	1863	G	C5-C6-O6	-7.06	124.36	128.60
2	AB	2585	U	N1-C2-N3	7.06	119.14	114.90
35	BA	671	G	C5-C6-O6	-7.06	124.36	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	791	G	N1-C2-N3	-7.06	119.67	123.90
1	AA	56	G	O4'-C1'-N9	7.06	113.85	108.20
2	AB	10	A	C3'-C2'-C1'	7.06	107.14	101.50
2	AB	977	G	N9-C4-C5	7.06	108.22	105.40
35	BA	931	C	N3-C4-C5	-7.06	119.08	121.90
35	BA	1279	G	O4'-C1'-N9	-7.06	102.55	108.20
35	BA	1314	C	C2-N3-C4	7.06	123.43	119.90
2	AB	777	G	N9-C1'-C2'	-7.06	104.24	112.00
2	AB	1870	C	N1-C2-O2	7.06	123.13	118.90
2	AB	2026	U	C4'-C3'-C2'	-7.06	95.54	102.60
2	AB	2036	C	N3-C2-O2	-7.06	116.96	121.90
2	AB	2729	G	N1-C6-O6	-7.06	115.67	119.90
35	BA	77	A	C8-N9-C4	-7.06	102.98	105.80
35	BA	760	G	C6-N1-C2	-7.06	120.87	125.10
35	BA	1410	A	N9-C4-C5	-7.06	102.98	105.80
2	AB	135	U	C5-C4-O4	-7.05	121.67	125.90
2	AB	276	U	C5-C4-O4	-7.05	121.67	125.90
2	AB	1246	A	C8-N9-C4	-7.05	102.98	105.80
2	AB	2032	G	O4'-C1'-N9	7.05	113.84	108.20
2	AB	2229	U	C5'-C4'-O4'	7.05	117.56	109.10
5	AE	125	TRP	NE1-CE2-CD2	-7.05	100.25	107.30
35	BA	591	U	P-O3'-C3'	7.05	128.17	119.70
35	BA	974	A	C4-C5-N7	-7.05	107.17	110.70
2	AB	117	G	N3-C4-C5	-7.05	125.07	128.60
2	AB	119	A	N3-C4-C5	-7.05	121.86	126.80
2	AB	297	G	O5'-C5'-C4'	7.05	125.10	111.70
2	AB	524	G	C6-N1-C2	-7.05	120.87	125.10
2	AB	572	A	C5-C6-N6	-7.05	118.06	123.70
2	AB	952	G	C8-N9-C4	-7.05	103.58	106.40
2	AB	1238	G	C5-N7-C8	-7.05	100.77	104.30
2	AB	1371	G	N3-C2-N2	7.05	124.84	119.90
2	AB	1679	A	C5-C6-N6	-7.05	118.06	123.70
2	AB	1777	U	C4-C5-C6	7.05	123.93	119.70
2	AB	1871	A	N1-C6-N6	-7.05	114.37	118.60
2	AB	2201	G	O4'-C1'-N9	7.05	113.84	108.20
2	AB	2369	A	N7-C8-N9	-7.05	110.28	113.80
7	AG	70	ARG	NE-CZ-NH1	-7.05	116.77	120.30
2	AB	465	G	C6-N1-C2	-7.05	120.87	125.10
2	AB	774	G	P-O3'-C3'	7.05	128.16	119.70
2	AB	1186	G	C4-C5-C6	7.05	123.03	118.80
2	AB	1218	G	N3-C2-N2	-7.05	114.97	119.90
2	AB	1341	G	N9-C4-C5	-7.05	102.58	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1548	A	C5'-C4'-O4'	7.05	117.56	109.10
2	AB	2045	C	N3-C2-O2	-7.05	116.97	121.90
2	AB	2226	C	N1-C2-O2	7.05	123.13	118.90
2	AB	2601	C	C2-N3-C4	-7.05	116.38	119.90
35	BA	355	C	O4'-C1'-N1	7.05	113.84	108.20
2	AB	777	G	C8-N9-C4	-7.05	103.58	106.40
2	AB	840	C	C4-C5-C6	-7.05	113.88	117.40
2	AB	1799	G	C4-C5-C6	7.05	123.03	118.80
2	AB	1826	G	C2-N3-C4	7.05	115.42	111.90
2	AB	242	G	C4-C5-C6	7.05	123.03	118.80
2	AB	801	G	C3'-C2'-C1'	7.05	107.14	101.50
2	AB	917	A	C5-N7-C8	-7.05	100.38	103.90
35	BA	73	C	C4-C5-C6	-7.05	113.88	117.40
35	BA	332	G	N9-C1'-C2'	-7.05	104.25	112.00
35	BA	579	A	C4-C5-C6	7.05	120.52	117.00
1	AA	70	C	C4'-C3'-C2'	-7.04	95.56	102.60
2	AB	94	A	C5-C6-N1	7.04	121.22	117.70
2	AB	258	G	N3-C4-C5	-7.04	125.08	128.60
2	AB	1673	G	O4'-C1'-N9	7.04	113.84	108.20
35	BA	86	G	O4'-C1'-N9	7.04	113.84	108.20
37	BC	11	A	C8-N9-C4	7.04	108.62	105.80
2	AB	511	U	C5'-C4'-C3'	-7.04	104.73	116.00
2	AB	995	C	P-O3'-C3'	7.04	128.15	119.70
2	AB	1002	G	OP1-P-O3'	7.04	120.69	105.20
2	AB	1547	C	N3-C4-C5	-7.04	119.08	121.90
2	AB	2012	G	C2-N3-C4	7.04	115.42	111.90
2	AB	2438	U	C5-C4-O4	-7.04	121.67	125.90
2	AB	2502	G	C6-N1-C2	-7.04	120.87	125.10
2	AB	2590	A	N9-C4-C5	7.04	108.62	105.80
2	AB	2686	G	C5-N7-C8	7.04	107.82	104.30
2	AB	2692	G	C6-N1-C2	-7.04	120.87	125.10
12	AL	35	ARG	NE-CZ-NH1	7.04	123.82	120.30
15	AO	55	ARG	NH1-CZ-NH2	-7.04	111.65	119.40
35	BA	127	G	N3-C4-C5	-7.04	125.08	128.60
35	BA	1077	G	C4-C5-N7	-7.04	107.98	110.80
2	AB	1285	A	C1'-O4'-C4'	7.04	115.53	109.90
2	AB	1664	A	C5'-C4'-C3'	-7.04	104.73	116.00
4	AD	213	ARG	NE-CZ-NH1	7.04	123.82	120.30
35	BA	185	U	N3-C2-O2	-7.04	117.27	122.20
35	BA	1231	G	O4'-C1'-N9	7.04	113.83	108.20
2	AB	91	A	C6-C5-N7	7.04	137.23	132.30
2	AB	860	U	N1-C2-N3	7.04	119.12	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1851	U	C5-C4-O4	-7.04	121.68	125.90
2	AB	2263	C	O4'-C1'-N1	7.04	113.83	108.20
35	BA	113	G	N3-C2-N2	7.04	124.83	119.90
35	BA	430	A	C4'-C3'-C2'	-7.04	95.56	102.60
1	AA	61	G	N9-C4-C5	7.04	108.22	105.40
2	AB	227	A	C3'-C2'-C1'	-7.04	95.87	101.50
2	AB	429	A	C2-N3-C4	-7.04	107.08	110.60
2	AB	1160	G	C1'-O4'-C4'	7.04	115.53	109.90
2	AB	1840	G	N7-C8-N9	7.04	116.62	113.10
2	AB	2146	C	C1'-O4'-C4'	7.04	115.53	109.90
2	AB	2366	A	C8-N9-C4	-7.04	102.98	105.80
35	BA	322	C	N3-C2-O2	-7.04	116.97	121.90
35	BA	844	G	C4-C5-C6	7.04	123.02	118.80
37	BC	29	C	C1'-O4'-C4'	7.04	115.53	109.90
1	AA	67	G	N1-C6-O6	7.04	124.12	119.90
2	AB	476	G	C2-N3-C4	7.04	115.42	111.90
2	AB	544	C	C1'-O4'-C4'	7.04	115.53	109.90
2	AB	891	G	O4'-C1'-N9	7.04	113.83	108.20
2	AB	1473	G	N7-C8-N9	7.04	116.62	113.10
35	BA	593	U	N3-C4-C5	-7.04	110.38	114.60
2	AB	467	G	C6-C5-N7	7.04	134.62	130.40
2	AB	2425	A	C4'-C3'-C2'	7.04	109.64	102.60
51	BQ	87	ARG	NE-CZ-NH2	-7.04	116.78	120.30
2	AB	858	G	N1-C6-O6	-7.03	115.68	119.90
2	AB	957	C	O4'-C4'-C3'	7.03	111.73	106.10
2	AB	1288	G	N1-C2-N2	-7.03	109.87	116.20
2	AB	1597	A	N1-C6-N6	-7.03	114.38	118.60
2	AB	1654	A	C5'-C4'-C3'	-7.03	104.75	116.00
2	AB	1958	C	C5'-C4'-O4'	7.03	117.54	109.10
35	BA	91	U	C5-C4-O4	7.03	130.12	125.90
35	BA	481	G	C5'-C4'-C3'	-7.03	104.75	116.00
35	BA	1246	A	O4'-C1'-N9	7.03	113.83	108.20
35	BA	1252	A	C4'-C3'-C2'	-7.03	95.57	102.60
50	BP	39	ASP	CB-CG-OD1	-7.03	111.97	118.30
2	AB	276	U	O4'-C1'-N1	7.03	113.83	108.20
35	BA	399	G	N1-C6-O6	-7.03	115.68	119.90
2	AB	946	C	C5-C6-N1	-7.03	117.48	121.00
2	AB	1602	U	C5-C4-O4	-7.03	121.68	125.90
2	AB	1841	U	N3-C2-O2	-7.03	117.28	122.20
2	AB	2246	G	N1-C2-N2	7.03	122.53	116.20
2	AB	2780	G	C8-N9-C4	-7.03	103.59	106.40
2	AB	2809	A	N9-C1'-C2'	-7.03	104.27	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2861	U	N1-C2-N3	7.03	119.12	114.90
5	AE	13	ARG	NE-CZ-NH2	7.03	123.82	120.30
26	AZ	10	ARG	NE-CZ-NH1	-7.03	116.78	120.30
35	BA	587	G	C5-N7-C8	-7.03	100.78	104.30
2	AB	308	G	C6-C5-N7	7.03	134.62	130.40
2	AB	969	G	N1-C2-N2	7.03	122.53	116.20
2	AB	1049	C	C2-N3-C4	7.03	123.41	119.90
2	AB	1490	A	C5'-C4'-O4'	7.03	117.53	109.10
35	BA	45	G	C6-N1-C2	-7.03	120.88	125.10
35	BA	228	A	C5'-C4'-C3'	-7.03	104.75	116.00
35	BA	500	G	O4'-C1'-N9	7.03	113.82	108.20
35	BA	1021	A	C4-C5-N7	-7.03	107.19	110.70
1	AA	54	G	C5'-C4'-O4'	7.03	117.53	109.10
1	AA	120	U	N3-C2-O2	-7.03	117.28	122.20
2	AB	106	C	C3'-C2'-C1'	-7.03	95.88	101.50
2	AB	186	G	O4'-C1'-N9	7.03	113.82	108.20
2	AB	1260	A	O4'-C1'-N9	7.03	113.82	108.20
2	AB	1346	G	N1-C2-N2	7.03	122.53	116.20
2	AB	1469	A	N9-C4-C5	7.03	108.61	105.80
2	AB	2003	A	C4-C5-N7	7.03	114.21	110.70
2	AB	2083	G	C5-C6-O6	-7.03	124.38	128.60
35	BA	1263	C	C5-C4-N4	-7.03	115.28	120.20
35	BA	1366	C	C4'-C3'-C2'	-7.03	95.57	102.60
1	AA	69	G	C5'-C4'-O4'	7.03	117.53	109.10
2	AB	512	G	C6-N1-C2	-7.03	120.88	125.10
2	AB	1037	G	C2-N3-C4	7.03	115.41	111.90
2	AB	2632	A	N3-C4-C5	-7.03	121.88	126.80
17	AQ	99	TYR	CB-CG-CD2	-7.03	116.78	121.00
35	BA	199	A	C5'-C4'-O4'	7.03	117.53	109.10
35	BA	205	A	C2'-C3'-O3'	7.03	124.96	109.50
35	BA	430	A	C5'-C4'-C3'	-7.03	104.76	116.00
35	BA	512	U	O4'-C1'-N1	7.03	113.82	108.20
35	BA	775	G	N7-C8-N9	7.03	116.61	113.10
35	BA	1357	A	C4-C5-C6	-7.03	113.49	117.00
35	BA	1365	G	N7-C8-N9	7.03	116.61	113.10
2	AB	94	A	O4'-C1'-N9	7.02	113.82	108.20
2	AB	1519	G	N1-C2-N3	-7.02	119.69	123.90
2	AB	1981	A	C2-N3-C4	-7.02	107.09	110.60
35	BA	1079	G	N3-C4-N9	7.02	130.22	126.00
37	BC	65	G	C5-C6-O6	-7.02	124.39	128.60
2	AB	481	G	C5-N7-C8	-7.02	100.79	104.30
2	AB	826	U	C5-C4-O4	-7.02	121.69	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2270	A	C5-C6-N1	7.02	121.21	117.70
2	AB	2295	C	O4'-C4'-C3'	7.02	111.72	106.10
2	AB	2545	G	C6-C5-N7	7.02	134.61	130.40
2	AB	2639	A	N7-C8-N9	-7.02	110.29	113.80
35	BA	530	G	C6-C5-N7	-7.02	126.19	130.40
35	BA	644	U	N1-C1'-C2'	-7.02	104.27	112.00
35	BA	901	A	C4-C5-N7	-7.02	107.19	110.70
35	BA	1191	A	O4'-C1'-N9	7.02	113.82	108.20
1	AA	76	G	C5-C6-N1	7.02	115.01	111.50
2	AB	559	G	N1-C2-N3	-7.02	119.69	123.90
2	AB	1142	A	O4'-C1'-N9	7.02	113.82	108.20
2	AB	2143	C	N3-C4-N4	-7.02	113.08	118.00
35	BA	1004	A	C4-C5-C6	7.02	120.51	117.00
35	BA	1061	G	N3-C2-N2	7.02	124.81	119.90
56	BV	73	ARG	NE-CZ-NH2	-7.02	116.79	120.30
2	AB	1325	U	N3-C4-O4	7.02	124.31	119.40
2	AB	2657	A	C5'-C4'-O4'	7.02	117.52	109.10
2	AB	2877	G	O4'-C1'-N9	7.02	113.82	108.20
35	BA	497	G	N1-C2-N3	-7.02	119.69	123.90
35	BA	522	C	C3'-C2'-C1'	7.02	107.12	101.50
35	BA	593	U	N3-C2-O2	-7.02	117.29	122.20
2	AB	448	U	C4-C5-C6	-7.02	115.49	119.70
2	AB	1787	A	O4'-C1'-N9	-7.02	102.59	108.20
2	AB	1830	C	C3'-C2'-C1'	7.02	107.11	101.50
35	BA	31	G	N3-C2-N2	7.02	124.81	119.90
35	BA	155	A	C5-C6-N6	-7.02	118.09	123.70
35	BA	760	G	C2-N3-C4	7.02	115.41	111.90
35	BA	979	C	C3'-C2'-C1'	7.02	107.11	101.50
1	AA	86	G	N1-C2-N3	7.02	128.11	123.90
2	AB	1007	C	C4'-C3'-C2'	-7.02	95.58	102.60
2	AB	1477	A	N1-C6-N6	7.02	122.81	118.60
35	BA	403	C	C2-N3-C4	7.02	123.41	119.90
35	BA	409	U	N3-C4-O4	-7.02	114.49	119.40
1	AA	26	C	N1-C2-O2	7.01	123.11	118.90
2	AB	352	A	C5-C6-N1	7.01	121.21	117.70
2	AB	523	C	N1-C2-O2	7.01	123.11	118.90
2	AB	1074	G	N9-C4-C5	7.01	108.21	105.40
2	AB	1631	G	N7-C8-N9	-7.01	109.59	113.10
2	AB	2668	G	C6-N1-C2	-7.01	120.89	125.10
35	BA	502	A	C5-C6-N1	7.01	121.21	117.70
35	BA	1158	C	C2-N3-C4	7.01	123.41	119.90
35	BA	36	C	N3-C2-O2	-7.01	116.99	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1115	U	N3-C4-C5	-7.01	110.39	114.60
35	BA	1422	G	C4'-C3'-C2'	-7.01	95.59	102.60
2	AB	380	G	C4-C5-N7	-7.01	108.00	110.80
2	AB	773	U	N1-C2-N3	7.01	119.11	114.90
2	AB	832	U	C5-C6-N1	-7.01	119.19	122.70
2	AB	1011	G	C4-C5-C6	7.01	123.01	118.80
2	AB	1134	A	C8-N9-C4	-7.01	103.00	105.80
2	AB	1143	A	C1'-O4'-C4'	7.01	115.51	109.90
2	AB	2093	G	C5-C6-N1	-7.01	108.00	111.50
2	AB	2547	A	C1'-O4'-C4'	-7.01	104.29	109.90
2	AB	2903	U	N3-C2-O2	-7.01	117.29	122.20
35	BA	189	A	N9-C4-C5	7.01	108.61	105.80
35	BA	289	G	N1-C2-N3	-7.01	119.69	123.90
35	BA	985	C	C4-C5-C6	7.01	120.91	117.40
35	BA	1390	U	C5'-C4'-C3'	-7.01	104.78	116.00
2	AB	543	G	C6-N1-C2	-7.01	120.89	125.10
2	AB	816	C	O4'-C1'-N1	7.01	113.81	108.20
2	AB	2017	U	N3-C2-O2	-7.01	117.29	122.20
35	BA	291	U	C4-C5-C6	7.01	123.91	119.70
35	BA	816	A	N1-C2-N3	-7.01	125.80	129.30
37	BC	63	C	C2-N3-C4	7.01	123.41	119.90
2	AB	962	G	N3-C4-N9	7.01	130.21	126.00
2	AB	1322	A	C4-C5-N7	-7.01	107.20	110.70
2	AB	1653	G	N7-C8-N9	7.01	116.60	113.10
35	BA	457	G	C4-C5-N7	-7.01	108.00	110.80
37	BC	66	C	C5-C6-N1	7.01	124.50	121.00
2	AB	521	U	N3-C2-O2	-7.01	117.30	122.20
2	AB	571	U	C6-N1-C2	-7.01	116.80	121.00
2	AB	687	C	O4'-C1'-N1	7.01	113.80	108.20
2	AB	1179	G	N3-C4-C5	-7.01	125.10	128.60
2	AB	1601	G	N1-C6-O6	-7.01	115.70	119.90
2	AB	1615	C	C6-N1-C2	-7.01	117.50	120.30
2	AB	1796	U	C3'-C2'-C1'	7.01	107.11	101.50
2	AB	2289	G	N7-C8-N9	7.01	116.60	113.10
2	AB	2482	A	P-O3'-C3'	7.01	128.11	119.70
2	AB	2865	U	C5'-C4'-O4'	7.01	117.51	109.10
35	BA	765	G	C2-N3-C4	7.01	115.40	111.90
35	BA	1245	C	P-O3'-C3'	7.01	128.11	119.70
35	BA	1287	A	P-O3'-C3'	7.01	128.11	119.70
35	BA	1381	U	C5'-C4'-O4'	7.01	117.51	109.10
35	BA	1429	A	N1-C2-N3	-7.01	125.80	129.30
35	BA	1465	A	P-O3'-C3'	7.01	128.11	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	BV	17	ARG	NE-CZ-NH1	7.01	123.80	120.30
2	AB	755	U	C6-N1-C2	-7.00	116.80	121.00
2	AB	1405	U	O4'-C4'-C3'	7.00	111.70	106.10
2	AB	1862	G	N1-C2-N3	7.00	128.10	123.90
35	BA	1370	G	C5-C6-N1	7.00	115.00	111.50
35	BA	1493	A	C5'-C4'-C3'	-7.00	104.79	116.00
1	AA	119	A	C2-N3-C4	7.00	114.10	110.60
2	AB	430	A	N1-C2-N3	-7.00	125.80	129.30
2	AB	570	G	C6-C5-N7	-7.00	126.20	130.40
2	AB	952	G	N3-C2-N2	7.00	124.80	119.90
2	AB	1121	C	N3-C2-O2	-7.00	117.00	121.90
2	AB	2188	U	C1'-O4'-C4'	-7.00	104.30	109.90
2	AB	2532	G	C2-N3-C4	7.00	115.40	111.90
2	AB	2613	U	O4'-C1'-N1	7.00	113.80	108.20
43	BI	125	ASP	CB-CG-OD2	7.00	124.60	118.30
54	BT	69	TYR	CD1-CE1-CZ	-7.00	113.50	119.80
1	AA	48	U	C5-C6-N1	-7.00	119.20	122.70
2	AB	553	G	O4'-C1'-C2'	7.00	113.90	107.60
2	AB	834	G	N9-C1'-C2'	-7.00	104.30	112.00
2	AB	1331	G	C8-N9-C4	-7.00	103.60	106.40
2	AB	1656	C	N3-C4-N4	7.00	122.90	118.00
2	AB	1660	G	C2-N3-C4	7.00	115.40	111.90
35	BA	354	G	O4'-C1'-N9	7.00	113.80	108.20
35	BA	912	C	C4-C5-C6	-7.00	113.90	117.40
35	BA	1126	U	N1-C2-O2	7.00	127.70	122.80
35	BA	1446	A	N1-C2-N3	7.00	132.80	129.30
35	BA	1492	A	C1'-O4'-C4'	-7.00	104.30	109.90
35	BA	761	G	C4-C5-C6	7.00	123.00	118.80
43	BI	110	ARG	NE-CZ-NH1	7.00	123.80	120.30
1	AA	6	G	C3'-C2'-C1'	-7.00	95.90	101.50
2	AB	77	G	C5-C6-N1	7.00	115.00	111.50
2	AB	1736	U	C6-N1-C2	-7.00	116.80	121.00
2	AB	1799	G	C5-C6-O6	7.00	132.80	128.60
2	AB	2310	C	N3-C4-N4	-7.00	113.10	118.00
2	AB	2355	G	C8-N9-C4	-7.00	103.60	106.40
5	AE	125	TRP	CE2-CD2-CG	7.00	112.90	107.30
35	BA	425	G	C8-N9-C4	-7.00	103.60	106.40
35	BA	605	U	C1'-O4'-C4'	-7.00	104.30	109.90
1	AA	4	C	C4-C5-C6	7.00	120.90	117.40
2	AB	107	G	N7-C8-N9	7.00	116.60	113.10
2	AB	1076	C	C5'-C4'-O4'	7.00	117.50	109.10
2	AB	1399	C	C6-N1-C2	-7.00	117.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1966	A	O4'-C4'-C3'	7.00	111.70	106.10
35	BA	127	G	C5-C6-O6	-7.00	124.40	128.60
35	BA	197	A	C5-C6-N1	7.00	121.20	117.70
35	BA	1028	C	C5'-C4'-O4'	7.00	117.50	109.10
2	AB	956	G	N9-C4-C5	7.00	108.20	105.40
2	AB	1233	C	C4-C5-C6	-7.00	113.90	117.40
2	AB	1593	A	C2-N3-C4	7.00	114.10	110.60
2	AB	1816	C	P-O3'-C3'	7.00	128.09	119.70
2	AB	2356	U	C5-C6-N1	-7.00	119.20	122.70
2	AB	2490	G	C5-C6-N1	-7.00	108.00	111.50
35	BA	105	G	C2-N3-C4	7.00	115.40	111.90
35	BA	313	A	C5-C6-N1	7.00	121.20	117.70
35	BA	748	G	C4-C5-C6	7.00	123.00	118.80
2	AB	166	U	C2-N3-C4	-6.99	122.80	127.00
2	AB	1391	U	N3-C4-C5	6.99	118.80	114.60
2	AB	2072	C	N1-C2-O2	6.99	123.10	118.90
2	AB	2361	G	C3'-C2'-C1'	-6.99	95.91	101.50
2	AB	2367	G	N1-C2-N3	-6.99	119.70	123.90
2	AB	2889	C	O4'-C1'-N1	6.99	113.79	108.20
35	BA	236	A	N7-C8-N9	6.99	117.30	113.80
35	BA	365	U	N3-C4-C5	-6.99	110.40	114.60
35	BA	919	A	N1-C6-N6	-6.99	114.40	118.60
35	BA	1152	A	N7-C8-N9	6.99	117.30	113.80
2	AB	359	G	C8-N9-C4	-6.99	103.60	106.40
2	AB	2106	U	C2'-C3'-O3'	6.99	124.89	113.70
35	BA	761	G	C6-N1-C2	-6.99	120.91	125.10
35	BA	1044	A	C4'-C3'-C2'	-6.99	95.61	102.60
35	BA	1061	G	N3-C4-C5	6.99	132.10	128.60
2	AB	675	A	C3'-C2'-C1'	6.99	107.09	101.50
2	AB	880	G	C5-C6-O6	-6.99	124.41	128.60
2	AB	2025	C	C3'-C2'-C1'	6.99	107.09	101.50
2	AB	2126	A	C5-C6-N1	6.99	121.20	117.70
2	AB	2282	G	P-O3'-C3'	6.99	128.09	119.70
2	AB	2828	G	C5-C6-N1	6.99	115.00	111.50
35	BA	318	G	C2-N3-C4	-6.99	108.41	111.90
35	BA	407	U	O4'-C1'-N1	6.99	113.79	108.20
35	BA	1223	C	N3-C4-N4	-6.99	113.11	118.00
56	BV	24	ARG	NE-CZ-NH2	6.99	123.80	120.30
1	AA	11	C	C2-N3-C4	6.99	123.39	119.90
2	AB	4	U	C2-N3-C4	-6.99	122.81	127.00
2	AB	638	G	O4'-C1'-N9	6.99	113.79	108.20
2	AB	762	U	C5-C4-O4	-6.99	121.71	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1265	A	C5-C6-N6	-6.99	118.11	123.70
2	AB	1634	A	O4'-C4'-C3'	6.99	111.69	106.10
2	AB	1944	U	P-O3'-C3'	6.99	128.09	119.70
35	BA	910	C	C4'-C3'-C2'	-6.99	95.61	102.60
35	BA	1057	G	C2-N3-C4	6.99	115.39	111.90
37	BC	5	G	O4'-C1'-N9	6.99	113.79	108.20
2	AB	456	C	O4'-C1'-N1	6.99	113.79	108.20
2	AB	1450	G	O4'-C1'-N9	6.99	113.79	108.20
2	AB	2216	G	C5'-C4'-O4'	6.99	117.48	109.10
2	AB	2424	C	C5-C4-N4	-6.99	115.31	120.20
2	AB	2601	C	N3-C2-O2	-6.99	117.01	121.90
35	BA	312	C	C5-C4-N4	-6.99	115.31	120.20
35	BA	742	G	C4-C5-N7	-6.99	108.00	110.80
2	AB	34	U	O4'-C1'-N1	6.99	113.79	108.20
2	AB	1010	A	C2-N3-C4	6.99	114.09	110.60
2	AB	1400	U	O4'-C1'-N1	6.99	113.79	108.20
2	AB	1887	C	N3-C2-O2	-6.99	117.01	121.90
2	AB	2619	C	C2-N1-C1'	-6.99	111.12	118.80
35	BA	354	G	N3-C4-N9	-6.99	121.81	126.00
35	BA	710	G	C5-C6-O6	-6.99	124.41	128.60
35	BA	1216	A	C4-C5-N7	-6.99	107.21	110.70
35	BA	1487	G	C8-N9-C4	-6.99	103.61	106.40
37	BC	73	A	N7-C8-N9	-6.99	110.31	113.80
1	AA	31	C	O4'-C1'-N1	6.98	113.79	108.20
2	AB	731	C	O4'-C1'-N1	6.98	113.79	108.20
2	AB	1256	G	C4-C5-C6	6.98	122.99	118.80
2	AB	2738	A	C1'-O4'-C4'	-6.98	104.31	109.90
2	AB	2789	C	N3-C4-C5	-6.98	119.11	121.90
35	BA	1134	G	C1'-O4'-C4'	-6.98	104.31	109.90
1	AA	51	G	C4-C5-C6	6.98	122.99	118.80
2	AB	112	U	N3-C4-C5	-6.98	110.41	114.60
2	AB	172	A	C5-N7-C8	6.98	107.39	103.90
2	AB	388	G	C6-N1-C2	-6.98	120.91	125.10
2	AB	965	C	C4-C5-C6	-6.98	113.91	117.40
2	AB	1047	G	P-O3'-C3'	6.98	128.08	119.70
2	AB	1579	A	C5-C6-N1	-6.98	114.21	117.70
3	AC	164	ARG	NE-CZ-NH1	6.98	123.79	120.30
36	BB	29	G	C4'-C3'-C2'	6.98	109.58	102.60
2	AB	783	A	C5-N7-C8	6.98	107.39	103.90
2	AB	999	U	O4'-C1'-N1	6.98	113.78	108.20
2	AB	1322	A	C2'-C3'-O3'	6.98	124.87	113.70
2	AB	1834	U	N3-C4-C5	-6.98	110.41	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1839	G	N7-C8-N9	6.98	116.59	113.10
2	AB	1869	G	C4-C5-N7	-6.98	108.01	110.80
35	BA	15	G	N3-C4-N9	6.98	130.19	126.00
35	BA	689	C	N3-C2-O2	-6.98	117.01	121.90
35	BA	849	G	C6-C5-N7	6.98	134.59	130.40
37	BC	52	C	N3-C4-C5	-6.98	119.11	121.90
2	AB	1360	G	N9-C4-C5	6.98	108.19	105.40
2	AB	1654	A	N3-C4-N9	-6.98	121.82	127.40
2	AB	1849	G	C6-N1-C2	-6.98	120.91	125.10
2	AB	2420	C	N3-C4-C5	-6.98	119.11	121.90
35	BA	62	U	C5-C4-O4	-6.98	121.71	125.90
2	AB	968	C	C2-N3-C4	6.98	123.39	119.90
2	AB	1359	A	C1'-O4'-C4'	-6.98	104.32	109.90
2	AB	1891	G	C5'-C4'-O4'	6.98	117.47	109.10
2	AB	1937	A	N9-C4-C5	6.98	108.59	105.80
2	AB	2506	U	N3-C2-O2	-6.98	117.32	122.20
2	AB	2904	U	O4'-C1'-N1	6.98	113.78	108.20
35	BA	266	G	C2-N3-C4	6.98	115.39	111.90
35	BA	670	G	N1-C6-O6	-6.98	115.71	119.90
35	BA	1242	G	C6-N1-C2	-6.98	120.91	125.10
47	BM	126	ARG	NE-CZ-NH2	-6.98	116.81	120.30
1	AA	66	A	C4'-C3'-O3'	6.98	126.95	113.00
2	AB	1685	C	C1'-O4'-C4'	6.98	115.48	109.90
2	AB	1950	G	N7-C8-N9	6.98	116.59	113.10
2	AB	2153	C	N3-C2-O2	-6.98	117.02	121.90
35	BA	883	C	N3-C2-O2	-6.98	117.02	121.90
2	AB	55	G	C8-N9-C1'	6.97	136.07	127.00
2	AB	187	G	C5-N7-C8	-6.97	100.81	104.30
2	AB	344	A	C3'-C2'-C1'	6.97	107.08	101.50
2	AB	645	C	N1-C1'-C2'	-6.97	104.33	112.00
2	AB	811	U	O4'-C1'-N1	6.97	113.78	108.20
2	AB	1031	G	C2-N3-C4	6.97	115.39	111.90
2	AB	2475	C	C5'-C4'-O4'	6.97	117.47	109.10
2	AB	2657	A	N9-C1'-C2'	6.97	123.07	114.00
2	AB	2722	G	C4-C5-N7	-6.97	108.01	110.80
2	AB	2776	A	C4-C5-C6	-6.97	113.51	117.00
3	AC	112	ASP	CB-CG-OD1	-6.97	112.02	118.30
29	A2	49	ARG	NE-CZ-NH1	6.97	123.79	120.30
35	BA	122	G	C5-C6-N1	6.97	114.99	111.50
35	BA	776	G	C4-C5-C6	-6.97	114.61	118.80
35	BA	1387	G	N3-C2-N2	6.97	124.78	119.90
37	BC	53	G	C1'-O4'-C4'	-6.97	104.32	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	34	A	C4'-C3'-O3'	6.97	126.95	113.00
1	AA	36	C	C6-N1-C2	6.97	123.09	120.30
2	AB	285	G	N1-C6-O6	-6.97	115.72	119.90
2	AB	589	U	C4-C5-C6	6.97	123.88	119.70
2	AB	660	C	C6-N1-C2	-6.97	117.51	120.30
2	AB	1375	U	C5-C6-N1	-6.97	119.21	122.70
2	AB	2630	G	N1-C2-N2	6.97	122.47	116.20
2	AB	2648	G	O4'-C1'-N9	6.97	113.78	108.20
35	BA	470	C	C5'-C4'-O4'	6.97	117.47	109.10
35	BA	1288	A	C4-C5-N7	6.97	114.19	110.70
42	BH	113	ARG	NE-CZ-NH2	6.97	123.79	120.30
2	AB	2152	G	N3-C4-N9	6.97	130.18	126.00
2	AB	2799	A	N9-C4-C5	-6.97	103.01	105.80
35	BA	230	G	C5-C6-O6	-6.97	124.42	128.60
35	BA	724	G	O4'-C4'-C3'	6.97	111.68	106.10
35	BA	1253	G	N9-C1'-C2'	-6.97	104.33	112.00
1	AA	112	G	N1-C6-O6	-6.97	115.72	119.90
2	AB	157	C	C2-N3-C4	6.97	123.39	119.90
2	AB	803	U	C5-C6-N1	-6.97	119.22	122.70
2	AB	2111	U	P-O3'-C3'	6.97	128.06	119.70
35	BA	98	A	N7-C8-N9	6.97	117.28	113.80
35	BA	340	U	N3-C2-O2	-6.97	117.32	122.20
35	BA	1025	U	N3-C4-C5	-6.97	110.42	114.60
35	BA	1042	A	C8-N9-C4	-6.97	103.01	105.80
35	BA	1397	C	N3-C2-O2	-6.97	117.02	121.90
36	BB	59	A	C5-N7-C8	-6.97	100.42	103.90
57	BW	70	TYR	CD1-CE1-CZ	6.97	126.07	119.80
2	AB	802	A	C4-C5-C6	6.97	120.48	117.00
2	AB	1621	U	C4-C5-C6	6.97	123.88	119.70
2	AB	2761	A	C8-N9-C4	-6.97	103.01	105.80
2	AB	2852	G	N1-C2-N2	-6.97	109.93	116.20
2	AB	27	G	C8-N9-C4	-6.97	103.61	106.40
2	AB	510	C	C3'-C2'-C1'	6.97	107.07	101.50
2	AB	751	A	N9-C4-C5	-6.97	103.01	105.80
2	AB	2641	G	N3-C4-C5	-6.97	125.12	128.60
2	AB	2754	U	O4'-C1'-N1	6.97	113.77	108.20
35	BA	562	U	C3'-C2'-C1'	6.97	107.07	101.50
35	BA	821	G	C4-C5-C6	6.97	122.98	118.80
35	BA	956	U	N1-C2-N3	6.97	119.08	114.90
35	BA	1414	U	C5-C6-N1	-6.97	119.22	122.70
2	AB	411	G	C2-N3-C4	6.96	115.38	111.90
2	AB	986	C	O4'-C1'-N1	6.96	113.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1650	A	N7-C8-N9	6.96	117.28	113.80
2	AB	1992	G	C4-C5-N7	-6.96	108.01	110.80
2	AB	2216	G	C5-C6-N1	6.96	114.98	111.50
2	AB	2452	C	N3-C4-C5	-6.96	119.11	121.90
2	AB	2616	C	N3-C4-N4	6.96	122.88	118.00
19	AS	78	PHE	CB-CG-CD2	-6.96	115.92	120.80
35	BA	172	A	N7-C8-N9	6.96	117.28	113.80
35	BA	289	G	C4-C5-N7	-6.96	108.01	110.80
35	BA	529	G	C5-C6-O6	6.96	132.78	128.60
35	BA	630	A	C5-N7-C8	-6.96	100.42	103.90
35	BA	1070	U	N1-C2-O2	-6.96	117.92	122.80
36	BB	42	U	C5-C4-O4	-6.96	121.72	125.90
2	AB	88	G	C5'-C4'-C3'	-6.96	104.86	116.00
2	AB	2634	A	C8-N9-C4	-6.96	103.02	105.80
35	BA	279	A	P-O3'-C3'	6.96	128.06	119.70
1	AA	62	C	C3'-C2'-C1'	6.96	107.07	101.50
2	AB	1829	A	C4'-C3'-C2'	-6.96	95.64	102.60
2	AB	1840	G	N3-C2-N2	-6.96	115.03	119.90
2	AB	2365	G	C6-C5-N7	-6.96	126.22	130.40
2	AB	1566	A	N7-C8-N9	6.96	117.28	113.80
35	BA	324	G	C5-N7-C8	-6.96	100.82	104.30
2	AB	358	U	O4'-C1'-N1	6.96	113.77	108.20
2	AB	401	A	O4'-C1'-N9	6.96	113.77	108.20
2	AB	843	G	N9-C1'-C2'	-6.96	104.35	112.00
2	AB	1024	G	C2-N3-C4	-6.96	108.42	111.90
2	AB	1431	A	O5'-P-OP2	-6.96	99.44	105.70
2	AB	1735	A	C6-N1-C2	6.96	122.78	118.60
2	AB	2100	G	C5-C6-O6	-6.96	124.42	128.60
2	AB	2297	A	C4'-C3'-C2'	-6.96	95.64	102.60
2	AB	2302	U	N1-C2-N3	6.96	119.08	114.90
2	AB	2416	C	N3-C2-O2	-6.96	117.03	121.90
2	AB	359	G	N7-C8-N9	6.96	116.58	113.10
2	AB	410	G	N3-C4-N9	6.96	130.17	126.00
2	AB	942	G	C5-N7-C8	6.96	107.78	104.30
2	AB	1368	G	N3-C4-C5	-6.96	125.12	128.60
2	AB	1608	A	C8-N9-C4	6.96	108.58	105.80
2	AB	1896	G	C8-N9-C4	6.96	109.18	106.40
2	AB	2403	C	C6-N1-C2	6.96	123.08	120.30
2	AB	2735	G	O4'-C1'-N9	6.96	113.76	108.20
2	AB	2777	G	N9-C4-C5	-6.96	102.62	105.40
35	BA	402	G	N3-C4-C5	-6.96	125.12	128.60
35	BA	728	A	N9-C4-C5	6.96	108.58	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	23	G	N3-C4-N9	6.96	130.17	126.00
2	AB	2612	C	C1'-O4'-C4'	-6.96	104.34	109.90
35	BA	247	G	C5'-C4'-O4'	6.96	117.45	109.10
2	AB	266	G	C4-C5-N7	-6.95	108.02	110.80
2	AB	948	C	C2-N3-C4	6.95	123.38	119.90
2	AB	1232	G	N3-C2-N2	6.95	124.77	119.90
2	AB	1681	G	C4'-C3'-C2'	6.95	109.55	102.60
2	AB	1789	A	N7-C8-N9	6.95	117.28	113.80
35	BA	129	A	C5-C6-N1	6.95	121.18	117.70
35	BA	262	A	N1-C6-N6	-6.95	114.43	118.60
35	BA	451	A	P-O3'-C3'	6.95	128.04	119.70
35	BA	978	A	C5'-C4'-O4'	6.95	117.44	109.10
2	AB	1029	A	C5-C6-N1	-6.95	114.22	117.70
2	AB	1626	A	C4-C5-N7	6.95	114.18	110.70
2	AB	2159	G	N3-C4-C5	-6.95	125.12	128.60
2	AB	2845	U	N1-C1'-C2'	-6.95	104.35	112.00
1	AA	37	C	O4'-C1'-N1	6.95	113.76	108.20
2	AB	303	G	N3-C4-C5	-6.95	125.12	128.60
2	AB	408	G	N9-C4-C5	-6.95	102.62	105.40
2	AB	807	U	C3'-C2'-C1'	-6.95	95.94	101.50
2	AB	1051	G	C8-N9-C4	-6.95	103.62	106.40
2	AB	1165	A	C4-C5-N7	6.95	114.17	110.70
2	AB	1449	G	C4-C5-N7	6.95	113.58	110.80
2	AB	1936	A	C4-C5-N7	6.95	114.17	110.70
2	AB	2187	U	C6-N1-C2	-6.95	116.83	121.00
35	BA	124	C	C5-C6-N1	6.95	124.47	121.00
35	BA	604	G	O4'-C1'-N9	6.95	113.76	108.20
35	BA	937	A	O4'-C1'-N9	6.95	113.76	108.20
35	BA	1177	G	O4'-C1'-N9	6.95	113.76	108.20
35	BA	1248	A	C5-N7-C8	6.95	107.38	103.90
35	BA	1336	C	C5-C6-N1	-6.95	117.53	121.00
35	BA	1406	U	C3'-C2'-C1'	6.95	107.06	101.50
2	AB	706	A	P-O3'-C3'	6.95	128.04	119.70
2	AB	1867	G	C4-C5-N7	-6.95	108.02	110.80
2	AB	2006	C	C2-N1-C1'	-6.95	111.16	118.80
2	AB	2146	C	C6-N1-C2	-6.95	117.52	120.30
2	AB	2351	G	N3-C4-N9	6.95	130.17	126.00
35	BA	1036	A	C4-C5-N7	6.95	114.17	110.70
37	BC	49	C	C5'-C4'-C3'	-6.95	104.88	116.00
2	AB	2385	C	O4'-C4'-C3'	-6.95	97.05	104.00
35	BA	190	A	C5-C6-N6	6.95	129.26	123.70
2	AB	563	A	C1'-O4'-C4'	-6.95	104.34	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	587	C	N1-C2-O2	6.95	123.07	118.90
2	AB	592	A	O4'-C4'-C3'	6.95	111.66	106.10
2	AB	858	G	N3-C2-N2	-6.95	115.04	119.90
2	AB	1522	A	C6-N1-C2	6.95	122.77	118.60
2	AB	1632	A	C4-C5-N7	-6.95	107.23	110.70
2	AB	2058	A	N7-C8-N9	6.95	117.27	113.80
15	AO	66	ARG	NE-CZ-NH1	6.95	123.77	120.30
35	BA	152	A	C4-C5-C6	-6.95	113.53	117.00
35	BA	751	U	N1-C2-N3	6.95	119.07	114.90
35	BA	1154	G	C8-N9-C4	-6.95	103.62	106.40
35	BA	1210	C	N1-C1'-C2'	-6.95	104.36	112.00
37	BC	29	C	C4-C5-C6	6.95	120.87	117.40
2	AB	1129	A	N1-C2-N3	-6.94	125.83	129.30
2	AB	1342	A	P-O3'-C3'	6.94	128.03	119.70
2	AB	2077	A	N9-C4-C5	-6.94	103.02	105.80
2	AB	2412	A	N7-C8-N9	6.94	117.27	113.80
15	AO	68	PHE	CB-CG-CD2	-6.94	115.94	120.80
35	BA	1540	U	C5-C6-N1	-6.94	119.23	122.70
1	AA	56	G	C4-C5-N7	-6.94	108.02	110.80
2	AB	360	U	C2-N3-C4	-6.94	122.83	127.00
2	AB	523	C	N3-C4-C5	-6.94	119.12	121.90
2	AB	766	U	C6-N1-C2	-6.94	116.83	121.00
2	AB	1242	U	N3-C4-C5	-6.94	110.43	114.60
2	AB	1324	G	C5-C6-N1	6.94	114.97	111.50
2	AB	1355	G	N9-C4-C5	6.94	108.18	105.40
2	AB	2870	C	C5'-C4'-O4'	6.94	117.43	109.10
35	BA	116	A	C5-C6-N1	6.94	121.17	117.70
35	BA	212	G	N3-C4-C5	-6.94	125.13	128.60
35	BA	1096	C	N3-C4-N4	6.94	122.86	118.00
35	BA	1102	A	C8-N9-C4	-6.94	103.02	105.80
50	BP	8	ARG	NE-CZ-NH1	6.94	123.77	120.30
1	AA	14	U	C3'-C2'-C1'	6.94	107.05	101.50
2	AB	331	C	C1'-O4'-C4'	-6.94	104.35	109.90
2	AB	721	A	O4'-C1'-C2'	-6.94	98.86	105.80
2	AB	882	G	C5-C6-O6	-6.94	124.44	128.60
2	AB	1266	G	C2-N3-C4	6.94	115.37	111.90
2	AB	1779	U	C5-C4-O4	-6.94	121.74	125.90
2	AB	1882	U	C5'-C4'-O4'	6.94	117.43	109.10
2	AB	2021	C	C2-N3-C4	6.94	123.37	119.90
2	AB	2038	G	C6-C5-N7	-6.94	126.24	130.40
2	AB	2103	C	N1-C1'-C2'	-6.94	104.36	112.00
2	AB	2171	A	C6-C5-N7	-6.94	127.44	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	2362	C	C5-C6-N1	6.94	124.47	121.00
2	AB	2508	G	C4-C5-N7	-6.94	108.02	110.80
5	AE	118	PHE	CB-CG-CD2	6.94	125.66	120.80
35	BA	310	G	C5-C6-O6	-6.94	124.44	128.60
35	BA	820	U	N3-C4-O4	6.94	124.26	119.40
35	BA	1300	G	C5-C6-N1	-6.94	108.03	111.50
35	BA	1487	G	N1-C2-N3	-6.94	119.74	123.90
40	BF	64	TYR	CG-CD2-CE2	6.94	126.85	121.30
2	AB	2181	U	C3'-C2'-C1'	-6.94	95.95	101.50
35	BA	124	C	C5'-C4'-O4'	6.94	117.43	109.10
47	BM	105	ARG	NE-CZ-NH1	6.94	123.77	120.30
2	AB	229	C	C3'-C2'-C1'	-6.94	95.95	101.50
2	AB	411	G	C4-C5-N7	6.94	113.58	110.80
2	AB	532	A	C5-C6-N6	-6.94	118.15	123.70
2	AB	599	A	C5-C6-N1	6.94	121.17	117.70
2	AB	1055	G	C5-N7-C8	6.94	107.77	104.30
2	AB	1729	U	C6-N1-C2	-6.94	116.84	121.00
2	AB	2330	G	N7-C8-N9	6.94	116.57	113.10
2	AB	2664	G	N1-C6-O6	-6.94	115.74	119.90
2	AB	2760	C	C5-C6-N1	6.94	124.47	121.00
35	BA	282	A	O4'-C1'-C2'	-6.94	98.86	105.80
35	BA	378	G	C5-C6-O6	-6.94	124.44	128.60
35	BA	925	G	N3-C4-N9	6.94	130.16	126.00
35	BA	1215	G	N9-C1'-C2'	-6.94	104.37	112.00
35	BA	1316	G	N1-C6-O6	6.94	124.06	119.90
40	BF	164	ARG	NE-CZ-NH2	-6.94	116.83	120.30
2	AB	2231	U	C5-C4-O4	-6.94	121.74	125.90
11	AK	133	ARG	NE-CZ-NH1	6.94	123.77	120.30
35	BA	376	G	N3-C2-N2	-6.94	115.05	119.90
2	AB	327	G	C2-N3-C4	6.93	115.37	111.90
2	AB	663	G	C4'-C3'-C2'	-6.93	95.67	102.60
2	AB	1213	A	C4-C5-C6	-6.93	113.53	117.00
2	AB	1642	G	N3-C4-C5	-6.93	125.13	128.60
2	AB	2697	G	N3-C2-N2	-6.93	115.05	119.90
2	AB	2827	C	C4-C5-C6	6.93	120.87	117.40
35	BA	192	A	N9-C1'-C2'	-6.93	104.37	112.00
35	BA	606	G	O4'-C1'-C2'	6.93	113.84	107.60
37	BC	22	A	C8-N9-C4	6.93	108.57	105.80
2	AB	690	G	C8-N9-C4	-6.93	103.63	106.40
2	AB	718	A	C5-N7-C8	-6.93	100.43	103.90
2	AB	907	G	O4'-C1'-C2'	6.93	113.84	107.60
2	AB	1070	A	C5-C6-N6	-6.93	118.15	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1477	A	N1-C2-N3	6.93	132.77	129.30
2	AB	2886	A	C1'-O4'-C4'	-6.93	104.35	109.90
2	AB	2903	U	N1-C2-O2	6.93	127.65	122.80
35	BA	119	A	N9-C4-C5	-6.93	103.03	105.80
35	BA	183	C	N3-C4-C5	-6.93	119.13	121.90
35	BA	604	G	C3'-C2'-C1'	6.93	107.05	101.50
35	BA	728	A	C8-N9-C4	-6.93	103.03	105.80
35	BA	914	A	C3'-C2'-C1'	6.93	107.05	101.50
35	BA	1110	A	N1-C6-N6	-6.93	114.44	118.60
2	AB	576	U	N3-C4-O4	6.93	124.25	119.40
2	AB	696	G	C4-C5-N7	-6.93	108.03	110.80
2	AB	1459	G	C2-N3-C4	6.93	115.36	111.90
2	AB	1606	C	C6-N1-C2	6.93	123.07	120.30
2	AB	28	A	N1-C2-N3	-6.93	125.83	129.30
2	AB	442	G	N3-C4-C5	-6.93	125.14	128.60
2	AB	720	U	C4-C5-C6	6.93	123.86	119.70
2	AB	1526	C	N3-C4-N4	-6.93	113.15	118.00
2	AB	2476	A	C2-N3-C4	6.93	114.06	110.60
35	BA	164	G	C6-N1-C2	-6.93	120.94	125.10
35	BA	371	A	C2-N3-C4	6.93	114.06	110.60
35	BA	714	G	N3-C4-N9	6.93	130.16	126.00
35	BA	1504	G	C5-C6-O6	-6.93	124.44	128.60
1	AA	66	A	P-O3'-C3'	6.93	128.01	119.70
2	AB	700	G	N3-C4-C5	-6.93	125.14	128.60
2	AB	1853	A	N1-C2-N3	-6.93	125.84	129.30
2	AB	2368	C	C5'-C4'-O4'	6.93	117.41	109.10
35	BA	1258	G	C5-N7-C8	-6.93	100.84	104.30
2	AB	368	A	C4-C5-C6	6.93	120.46	117.00
2	AB	519	U	C3'-C2'-C1'	6.93	107.04	101.50
2	AB	1418	G	N1-C6-O6	-6.93	115.74	119.90
2	AB	2019	A	N1-C2-N3	-6.93	125.84	129.30
2	AB	2386	A	C5'-C4'-O4'	6.93	117.41	109.10
2	AB	2602	A	O4'-C1'-N9	-6.93	102.66	108.20
2	AB	2673	G	C6-C5-N7	6.93	134.56	130.40
35	BA	246	A	N1-C6-N6	6.93	122.76	118.60
35	BA	750	C	N1-C1'-C2'	-6.93	104.38	112.00
35	BA	844	G	N7-C8-N9	6.93	116.56	113.10
35	BA	864	A	O4'-C4'-C3'	6.93	111.64	106.10
35	BA	865	A	C5-C6-N1	-6.93	114.24	117.70
35	BA	1468	A	N9-C1'-C2'	-6.93	104.38	112.00
2	AB	313	G	C4-C5-C6	6.92	122.95	118.80
2	AB	852	U	C6-N1-C2	-6.92	116.84	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1753	G	C5'-C4'-O4'	6.92	117.41	109.10
2	AB	1916	A	N9-C4-C5	-6.92	103.03	105.80
2	AB	2526	G	N9-C4-C5	6.92	108.17	105.40
2	AB	2656	U	C1'-O4'-C4'	-6.92	104.36	109.90
35	BA	327	A	C6-C5-N7	-6.92	127.45	132.30
37	BC	44	A	C2-N3-C4	-6.92	107.14	110.60
2	AB	1091	G	N7-C8-N9	6.92	116.56	113.10
2	AB	1127	A	C4-C5-N7	-6.92	107.24	110.70
2	AB	1210	G	C4-C5-C6	-6.92	114.65	118.80
2	AB	2635	A	C8-N9-C4	-6.92	103.03	105.80
5	AE	13	ARG	NE-CZ-NH1	-6.92	116.84	120.30
27	A0	33	ALA	N-CA-CB	-6.92	100.41	110.10
35	BA	430	A	C5'-C4'-O4'	6.92	117.41	109.10
35	BA	1043	G	C6-C5-N7	-6.92	126.25	130.40
2	AB	105	C	C6-N1-C2	-6.92	117.53	120.30
2	AB	127	A	P-O3'-C3'	6.92	128.01	119.70
2	AB	376	G	C2-N3-C4	6.92	115.36	111.90
2	AB	425	G	C5-C6-N1	-6.92	108.04	111.50
2	AB	450	G	C4-C5-N7	-6.92	108.03	110.80
2	AB	640	C	N3-C4-C5	-6.92	119.13	121.90
2	AB	932	U	C2-N1-C1'	6.92	126.00	117.70
2	AB	1056	G	C5-N7-C8	-6.92	100.84	104.30
2	AB	1581	G	C4-C5-C6	6.92	122.95	118.80
2	AB	2216	G	N3-C2-N2	6.92	124.75	119.90
2	AB	2350	C	O4'-C1'-N1	6.92	113.74	108.20
2	AB	2481	G	C4-C5-N7	-6.92	108.03	110.80
35	BA	261	U	N1-C1'-C2'	-6.92	104.39	112.00
35	BA	338	A	N1-C2-N3	-6.92	125.84	129.30
35	BA	435	A	N1-C6-N6	-6.92	114.45	118.60
35	BA	803	G	P-O3'-C3'	6.92	128.01	119.70
2	AB	750	A	N9-C4-C5	-6.92	103.03	105.80
2	AB	1345	C	C5-C4-N4	-6.92	115.36	120.20
2	AB	1418	G	N3-C4-N9	6.92	130.15	126.00
2	AB	2719	G	O4'-C1'-N9	-6.92	102.66	108.20
2	AB	2886	A	N1-C6-N6	-6.92	114.45	118.60
35	BA	422	C	N3-C4-N4	-6.92	113.16	118.00
35	BA	596	A	N7-C8-N9	6.92	117.26	113.80
49	BO	22	TYR	CG-CD1-CE1	-6.92	115.76	121.30
2	AB	70	G	N1-C2-N3	-6.92	119.75	123.90
2	AB	70	G	N9-C1'-C2'	-6.92	104.39	112.00
2	AB	85	G	C4-C5-C6	6.92	122.95	118.80
2	AB	706	A	C8-N9-C4	-6.92	103.03	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	891	G	C8-N9-C4	-6.92	103.63	106.40
2	AB	1021	A	C3'-C2'-C1'	-6.92	95.97	101.50
2	AB	2102	G	C5-C6-N1	6.92	114.96	111.50
2	AB	2255	G	N1-C6-O6	-6.92	115.75	119.90
2	AB	2462	C	N3-C4-C5	6.92	124.67	121.90
2	AB	2800	A	N9-C1'-C2'	-6.92	104.39	112.00
7	AG	147	ARG	NE-CZ-NH1	6.92	123.76	120.30
35	BA	64	G	N9-C4-C5	6.92	108.17	105.40
40	BF	46	ARG	NE-CZ-NH2	-6.92	116.84	120.30
2	AB	173	A	C4-C5-C6	-6.92	113.54	117.00
2	AB	553	G	C3'-C2'-C1'	-6.92	95.97	101.50
2	AB	721	A	N7-C8-N9	6.92	117.26	113.80
2	AB	1370	C	N1-C2-O2	6.92	123.05	118.90
2	AB	1434	A	C6-N1-C2	-6.92	114.45	118.60
2	AB	1958	C	N3-C4-C5	-6.92	119.13	121.90
2	AB	2395	C	C5-C4-N4	-6.92	115.36	120.20
2	AB	2826	A	C8-N9-C4	-6.92	103.03	105.80
35	BA	150	U	N3-C2-O2	-6.92	117.36	122.20
35	BA	934	C	N1-C1'-C2'	6.92	122.99	114.00
36	BB	39	U	O4'-C1'-N1	6.92	113.73	108.20
48	BN	102	ASP	CB-CG-OD2	6.92	124.53	118.30
49	BO	97	ARG	NE-CZ-NH2	-6.92	116.84	120.30
2	AB	14	A	O4'-C1'-N9	6.92	113.73	108.20
2	AB	1173	U	C5-C4-O4	6.92	130.05	125.90
2	AB	1777	U	N3-C2-O2	-6.92	117.36	122.20
2	AB	2443	C	O4'-C1'-N1	6.92	113.73	108.20
35	BA	1426	G	C4-C5-C6	6.92	122.95	118.80
2	AB	301	G	C2-N3-C4	6.91	115.36	111.90
2	AB	316	C	N1-C2-O2	6.91	123.05	118.90
2	AB	471	A	C4-C5-C6	-6.91	113.54	117.00
2	AB	689	A	C5-N7-C8	-6.91	100.44	103.90
2	AB	1072	C	N1-C1'-C2'	-6.91	104.40	112.00
2	AB	1079	C	C4-C5-C6	-6.91	113.94	117.40
2	AB	1452	G	C8-N9-C4	-6.91	103.63	106.40
2	AB	1506	U	C4-C5-C6	6.91	123.85	119.70
2	AB	1742	U	N1-C2-O2	6.91	127.64	122.80
2	AB	1928	A	C5-C6-N6	6.91	129.23	123.70
2	AB	2674	G	C1'-O4'-C4'	-6.91	104.37	109.90
2	AB	2756	U	C5-C4-O4	-6.91	121.75	125.90
35	BA	60	A	C8-N9-C4	-6.91	103.03	105.80
35	BA	174	A	C5-C6-N6	6.91	129.23	123.70
35	BA	800	G	C4'-C3'-C2'	-6.91	95.69	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	955	U	C2-N3-C4	-6.91	122.85	127.00
35	BA	1144	G	N3-C4-C5	-6.91	125.14	128.60
35	BA	1155	A	C5'-C4'-C3'	-6.91	104.94	116.00
2	AB	224	U	C5-C6-N1	-6.91	119.24	122.70
2	AB	286	U	C1'-O4'-C4'	6.91	115.43	109.90
2	AB	752	A	C5-C6-N6	6.91	129.23	123.70
2	AB	1607	C	N1-C2-O2	6.91	123.05	118.90
2	AB	1810	A	C4-C5-C6	-6.91	113.54	117.00
35	BA	1023	U	C2-N3-C4	-6.91	122.85	127.00
35	BA	1032	G	N1-C6-O6	-6.91	115.75	119.90
36	BB	13	A	C5-N7-C8	6.91	107.36	103.90
2	AB	131	A	C4-C5-C6	-6.91	113.55	117.00
35	BA	776	G	N1-C6-O6	-6.91	115.75	119.90
35	BA	813	U	C4-C5-C6	6.91	123.85	119.70
46	BL	5	ARG	CA-CB-CG	6.91	128.60	113.40
2	AB	582	A	O4'-C1'-N9	6.91	113.73	108.20
2	AB	784	G	C5-C6-O6	-6.91	124.45	128.60
2	AB	1191	G	C6-C5-N7	-6.91	126.25	130.40
2	AB	1416	G	P-O3'-C3'	6.91	127.99	119.70
2	AB	2468	A	C6-N1-C2	-6.91	114.45	118.60
2	AB	2738	A	N3-C4-C5	-6.91	121.96	126.80
35	BA	27	G	N1-C2-N2	6.91	122.42	116.20
35	BA	111	G	C5-N7-C8	6.91	107.75	104.30
35	BA	155	A	N7-C8-N9	-6.91	110.35	113.80
35	BA	653	U	P-O3'-C3'	6.91	127.99	119.70
35	BA	1285	A	N7-C8-N9	6.91	117.25	113.80
35	BA	1440	U	C2-N3-C4	-6.91	122.86	127.00
2	AB	694	U	N3-C2-O2	-6.91	117.36	122.20
2	AB	1042	G	N1-C2-N2	6.91	122.42	116.20
2	AB	1424	G	N3-C4-C5	-6.91	125.15	128.60
35	BA	536	C	N3-C4-N4	-6.91	113.17	118.00
2	AB	192	C	N3-C2-O2	-6.91	117.07	121.90
2	AB	299	A	P-O3'-C3'	6.91	127.99	119.70
2	AB	1010	A	N7-C8-N9	6.91	117.25	113.80
2	AB	1549	A	C3'-C2'-C1'	-6.91	95.98	101.50
2	AB	2453	A	C4-C5-C6	-6.91	113.55	117.00
2	AB	2475	C	N1-C2-O2	6.91	123.04	118.90
2	AB	2720	U	C5-C6-N1	-6.91	119.25	122.70
36	BB	22	G	N7-C8-N9	6.91	116.55	113.10
2	AB	1366	A	C5-C6-N6	-6.90	118.18	123.70
2	AB	2392	A	N1-C2-N3	-6.90	125.85	129.30
2	AB	2747	G	N1-C6-O6	6.90	124.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2822	G	C8-N9-C4	-6.90	103.64	106.40
35	BA	710	G	C6-N1-C2	-6.90	120.96	125.10
2	AB	1420	A	O4'-C1'-N9	6.90	113.72	108.20
2	AB	1680	U	O4'-C1'-N1	6.90	113.72	108.20
2	AB	2283	C	C3'-C2'-C1'	-6.90	95.98	101.50
2	AB	2520	C	C3'-C2'-C1'	-6.90	95.98	101.50
35	BA	1066	C	C5-C6-N1	6.90	124.45	121.00
35	BA	1190	G	N3-C4-N9	6.90	130.14	126.00
35	BA	1473	G	C5'-C4'-C3'	-6.90	104.96	116.00
46	BL	45	ARG	NE-CZ-NH2	-6.90	116.85	120.30
2	AB	83	A	N1-C2-N3	6.90	132.75	129.30
2	AB	163	C	N3-C4-C5	-6.90	119.14	121.90
2	AB	1367	A	N1-C2-N3	-6.90	125.85	129.30
2	AB	2148	G	N3-C4-C5	-6.90	125.15	128.60
2	AB	2206	C	C2-N3-C4	-6.90	116.45	119.90
2	AB	2650	U	N3-C4-C5	6.90	118.74	114.60
35	BA	568	G	C5-C6-O6	-6.90	124.46	128.60
35	BA	843	U	P-O3'-C3'	6.90	127.98	119.70
35	BA	1005	A	C4'-C3'-C2'	-6.90	95.70	102.60
43	BI	150	PHE	CB-CG-CD1	-6.90	115.97	120.80
35	BA	779	C	C4-C5-C6	-6.90	113.95	117.40
35	BA	788	U	C4-C5-C6	6.90	123.84	119.70
35	BA	1244	G	C1'-O4'-C4'	-6.90	104.38	109.90
2	AB	36	G	C5'-C4'-O4'	6.90	117.38	109.10
2	AB	504	A	C1'-O4'-C4'	6.90	115.42	109.90
2	AB	534	U	N3-C4-O4	6.90	124.23	119.40
2	AB	2564	A	C3'-C2'-C1'	-6.90	95.98	101.50
35	BA	404	G	N9-C1'-C2'	-6.90	104.41	112.00
35	BA	836	G	C1'-O4'-C4'	6.90	115.42	109.90
35	BA	1490	U	C1'-O4'-C4'	-6.90	104.38	109.90
2	AB	697	G	C6-C5-N7	-6.90	126.26	130.40
2	AB	2743	U	C5-C6-N1	-6.90	119.25	122.70
35	BA	1411	C	C4'-C3'-C2'	-6.90	95.70	102.60
2	AB	52	A	C8-N9-C4	6.89	108.56	105.80
2	AB	233	A	C4-C5-C6	6.89	120.45	117.00
2	AB	543	G	N3-C2-N2	-6.89	115.07	119.90
2	AB	692	C	C2-N3-C4	6.89	123.35	119.90
2	AB	1275	A	C4-C5-N7	6.89	114.15	110.70
2	AB	2156	G	C5-C6-N1	6.89	114.95	111.50
35	BA	240	G	C6-N1-C2	-6.89	120.96	125.10
35	BA	1014	A	C6-N1-C2	6.89	122.74	118.60
35	BA	1272	G	N7-C8-N9	6.89	116.55	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1446	A	C5-C6-N1	6.89	121.15	117.70
2	AB	53	A	N1-C2-N3	-6.89	125.85	129.30
2	AB	997	G	C1'-O4'-C4'	-6.89	104.39	109.90
2	AB	1529	G	C6-N1-C2	-6.89	120.97	125.10
2	AB	1535	A	N9-C1'-C2'	-6.89	104.42	112.00
2	AB	1706	C	C6-N1-C2	6.89	123.06	120.30
2	AB	2020	A	C5-C6-N1	6.89	121.15	117.70
35	BA	124	C	N3-C4-C5	6.89	124.66	121.90
35	BA	666	G	C6-N1-C2	-6.89	120.96	125.10
35	BA	1410	A	C4-C5-N7	6.89	114.15	110.70
36	BB	43	U	C2'-C3'-O3'	6.89	124.73	113.70
2	AB	114	U	C2'-C3'-O3'	6.89	124.72	113.70
2	AB	427	U	C4'-C3'-C2'	-6.89	95.71	102.60
2	AB	2274	A	N9-C4-C5	6.89	108.56	105.80
2	AB	53	A	C5-N7-C8	-6.89	100.46	103.90
2	AB	128	C	N1-C2-N3	6.89	124.02	119.20
2	AB	820	A	O4'-C1'-N9	6.89	113.71	108.20
35	BA	608	A	P-O3'-C3'	6.89	127.97	119.70
35	BA	1272	G	N1-C2-N2	-6.89	110.00	116.20
35	BA	1386	G	N3-C4-C5	-6.89	125.16	128.60
35	BA	1448	C	O4'-C4'-C3'	6.89	111.61	106.10
35	BA	42	G	C5-C6-O6	6.89	132.73	128.60
35	BA	76	G	N3-C4-N9	6.89	130.13	126.00
35	BA	747	A	C6-C5-N7	-6.89	127.48	132.30
35	BA	1073	U	C5-C6-N1	-6.89	119.26	122.70
35	BA	1284	C	C4-C5-C6	-6.89	113.96	117.40
35	BA	1382	C	C2-N3-C4	6.89	123.34	119.90
35	BA	1427	C	C4'-C3'-C2'	-6.89	95.71	102.60
2	AB	63	A	C4'-C3'-C2'	-6.89	95.71	102.60
2	AB	876	C	C5'-C4'-O4'	6.89	117.36	109.10
2	AB	1156	A	C3'-C2'-C1'	6.89	107.01	101.50
2	AB	2894	G	N1-C6-O6	-6.89	115.77	119.90
35	BA	576	C	O4'-C1'-N1	6.89	113.71	108.20
35	BA	1096	C	C2-N3-C4	6.89	123.34	119.90
2	AB	401	A	C5-N7-C8	-6.88	100.46	103.90
2	AB	638	G	C5'-C4'-O4'	6.88	117.36	109.10
2	AB	1773	A	C8-N9-C4	6.88	108.55	105.80
2	AB	2490	G	C6-C5-N7	-6.88	126.27	130.40
2	AB	2544	G	C5-C6-N1	6.88	114.94	111.50
2	AB	2822	G	C5'-C4'-C3'	-6.88	104.99	116.00
35	BA	1214	C	N1-C2-O2	6.88	123.03	118.90
43	BI	159	ARG	NE-CZ-NH1	6.88	123.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
53	BS	64	ARG	NE-CZ-NH1	6.88	123.74	120.30
2	AB	506	G	C5-C6-O6	-6.88	124.47	128.60
2	AB	1410	G	N3-C4-N9	6.88	130.13	126.00
2	AB	1755	A	C6-C5-N7	6.88	137.12	132.30
2	AB	2204	G	C4-C5-C6	-6.88	114.67	118.80
2	AB	2417	C	C6-N1-C2	-6.88	117.55	120.30
35	BA	742	G	C6-N1-C2	-6.88	120.97	125.10
35	BA	1029	U	P-O3'-C3'	6.88	127.96	119.70
2	AB	667	U	O4'-C1'-N1	6.88	113.70	108.20
2	AB	702	U	C2-N3-C4	-6.88	122.87	127.00
2	AB	821	A	C5'-C4'-C3'	-6.88	104.99	116.00
2	AB	1531	C	C4-C5-C6	-6.88	113.96	117.40
2	AB	2130	U	C2-N1-C1'	6.88	125.96	117.70
2	AB	2280	G	C5'-C4'-O4'	6.88	117.36	109.10
2	AB	2711	A	C6-N1-C2	6.88	122.73	118.60
2	AB	2819	G	N1-C6-O6	-6.88	115.77	119.90
2	AB	2888	C	C3'-C2'-C1'	6.88	107.00	101.50
35	BA	394	G	N3-C4-N9	6.88	130.13	126.00
35	BA	1482	G	N3-C4-C5	-6.88	125.16	128.60
2	AB	422	A	C4'-C3'-C2'	-6.88	95.72	102.60
2	AB	1309	G	C2-N3-C4	6.88	115.34	111.90
35	BA	481	G	O4'-C1'-N9	6.88	113.70	108.20
35	BA	536	C	C1'-O4'-C4'	6.88	115.40	109.90
2	AB	859	G	N3-C4-C5	-6.88	125.16	128.60
2	AB	2192	U	O4'-C1'-N1	6.88	113.70	108.20
10	AJ	105	PHE	CB-CG-CD1	-6.88	115.99	120.80
35	BA	283	U	N1-C2-N3	6.88	119.03	114.90
35	BA	380	G	C5-C6-O6	-6.88	124.47	128.60
35	BA	456	A	C5'-C4'-O4'	6.88	117.35	109.10
35	BA	861	G	C4-C5-N7	6.88	113.55	110.80
35	BA	970	C	O4'-C1'-C2'	6.88	113.79	107.60
35	BA	1182	G	N1-C2-N3	-6.88	119.77	123.90
35	BA	1478	U	O4'-C1'-N1	6.88	113.70	108.20
1	AA	80	U	N3-C2-O2	-6.88	117.39	122.20
2	AB	256	A	C5-C6-N1	6.88	121.14	117.70
2	AB	411	G	N9-C4-C5	-6.88	102.65	105.40
2	AB	582	A	C2-N3-C4	6.88	114.04	110.60
2	AB	793	A	P-O3'-C3'	6.88	127.95	119.70
2	AB	936	A	C6-N1-C2	-6.88	114.47	118.60
2	AB	2417	C	N1-C2-O2	6.88	123.03	118.90
35	BA	93	U	N1-C1'-C2'	-6.88	104.44	112.00
35	BA	767	A	C6-N1-C2	-6.88	114.47	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	991	U	N3-C2-O2	-6.88	117.39	122.20
35	BA	1208	C	C5'-C4'-O4'	6.88	117.35	109.10
40	BF	110	ARG	NE-CZ-NH2	-6.88	116.86	120.30
2	AB	968	C	C4'-C3'-C2'	-6.88	95.72	102.60
19	AS	49	ARG	NE-CZ-NH2	6.88	123.74	120.30
35	BA	408	A	C5-N7-C8	-6.88	100.46	103.90
35	BA	627	G	C4-C5-C6	6.88	122.92	118.80
35	BA	1411	C	C2-N3-C4	6.88	123.34	119.90
2	AB	152	A	C8-N9-C4	-6.87	103.05	105.80
2	AB	1400	U	C6-N1-C2	-6.87	116.88	121.00
2	AB	2010	G	C6-C5-N7	-6.87	126.28	130.40
2	AB	2619	C	N3-C4-C5	-6.87	119.15	121.90
35	BA	146	G	N9-C4-C5	6.87	108.15	105.40
35	BA	254	G	N7-C8-N9	-6.87	109.66	113.10
35	BA	657	U	N1-C1'-C2'	-6.87	104.44	112.00
35	BA	1074	G	C4-C5-N7	-6.87	108.05	110.80
2	AB	111	A	N1-C6-N6	-6.87	114.48	118.60
2	AB	623	C	N3-C4-C5	-6.87	119.15	121.90
2	AB	804	A	C8-N9-C4	-6.87	103.05	105.80
2	AB	1336	A	C4'-C3'-C2'	-6.87	95.73	102.60
2	AB	1731	G	C5-N7-C8	6.87	107.74	104.30
2	AB	1951	U	N3-C2-O2	-6.87	117.39	122.20
2	AB	2115	G	C5-C6-O6	-6.87	124.48	128.60
2	AB	2321	U	P-O3'-C3'	6.87	127.95	119.70
4	AD	267	VAL	CA-CB-CG2	6.87	121.21	110.90
35	BA	119	A	C8-N9-C4	6.87	108.55	105.80
35	BA	315	A	C6-N1-C2	-6.87	114.48	118.60
35	BA	419	C	C5-C6-N1	6.87	124.44	121.00
35	BA	933	G	N7-C8-N9	6.87	116.54	113.10
43	BI	94	ARG	NE-CZ-NH1	6.87	123.73	120.30
2	AB	443	A	C4-C5-C6	6.87	120.44	117.00
2	AB	1031	G	C6-N1-C2	-6.87	120.98	125.10
2	AB	1556	C	C3'-C2'-C1'	6.87	107.00	101.50
2	AB	1602	U	C2-N3-C4	-6.87	122.88	127.00
2	AB	1815	A	C6-N1-C2	-6.87	114.48	118.60
2	AB	2568	U	N3-C4-C5	-6.87	110.48	114.60
35	BA	526	C	C6-N1-C1'	6.87	129.04	120.80
1	AA	44	G	C2-N3-C4	6.87	115.33	111.90
2	AB	542	C	C5-C4-N4	-6.87	115.39	120.20
2	AB	693	A	C3'-C2'-C1'	6.87	107.00	101.50
2	AB	911	A	C2-N3-C4	6.87	114.03	110.60
2	AB	1068	G	N3-C4-C5	-6.87	125.17	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1389	G	C5-N7-C8	6.87	107.73	104.30
2	AB	1530	G	C4-C5-N7	6.87	113.55	110.80
2	AB	1677	A	C6-C5-N7	6.87	137.11	132.30
2	AB	1709	U	C4-C5-C6	6.87	123.82	119.70
2	AB	2168	G	N1-C2-N3	6.87	128.02	123.90
2	AB	2354	C	N3-C2-O2	-6.87	117.09	121.90
2	AB	2823	A	N3-C4-C5	-6.87	121.99	126.80
35	BA	1349	A	C6-N1-C2	-6.87	114.48	118.60
2	AB	86	G	C6-N1-C2	-6.87	120.98	125.10
2	AB	1959	G	C8-N9-C4	-6.87	103.65	106.40
2	AB	2754	U	C4'-C3'-C2'	-6.87	95.73	102.60
14	AN	117	THR	CA-CB-CG2	6.87	122.01	112.40
1	AA	41	G	C4'-C3'-C2'	-6.87	95.73	102.60
2	AB	143	C	C6-N1-C2	6.87	123.05	120.30
2	AB	278	A	C5-C6-N6	-6.87	118.21	123.70
2	AB	540	C	C1'-O4'-C4'	-6.87	104.41	109.90
2	AB	699	A	C5-C6-N1	6.87	121.13	117.70
2	AB	793	A	C3'-C2'-C1'	6.87	106.99	101.50
2	AB	1216	G	C4'-C3'-C2'	-6.87	95.73	102.60
2	AB	1519	G	C5'-C4'-C3'	-6.87	105.01	116.00
2	AB	2031	A	O4'-C1'-C2'	-6.87	98.94	105.80
2	AB	2032	G	P-O3'-C3'	6.87	127.94	119.70
2	AB	2313	C	O4'-C1'-N1	6.87	113.69	108.20
19	AS	57	ARG	NH1-CZ-NH2	-6.87	111.85	119.40
35	BA	635	A	N1-C6-N6	6.87	122.72	118.60
35	BA	1450	U	O4'-C1'-N1	6.87	113.69	108.20
1	AA	101	A	N3-C4-C5	-6.86	122.00	126.80
1	AA	119	A	C4-C5-C6	-6.86	113.57	117.00
2	AB	84	A	C8-N9-C4	-6.86	103.06	105.80
2	AB	1259	G	N1-C2-N3	-6.86	119.78	123.90
2	AB	1966	A	C5'-C4'-O4'	-6.86	100.86	109.10
2	AB	2152	G	N3-C4-C5	-6.86	125.17	128.60
2	AB	2153	C	N1-C2-O2	6.86	123.02	118.90
2	AB	2459	A	C5-N7-C8	-6.86	100.47	103.90
2	AB	2631	G	C1'-O4'-C4'	6.86	115.39	109.90
2	AB	2638	G	C6-C5-N7	-6.86	126.28	130.40
35	BA	308	C	C3'-C2'-C1'	-6.86	96.01	101.50
35	BA	700	G	C4-C5-C6	6.86	122.92	118.80
35	BA	774	G	C2-N3-C4	6.86	115.33	111.90
35	BA	1179	A	C4-C5-C6	-6.86	113.57	117.00
2	AB	950	G	O4'-C1'-N9	6.86	113.69	108.20
2	AB	1066	U	C4-C5-C6	-6.86	115.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1408	G	O4'-C1'-N9	6.86	113.69	108.20
2	AB	1575	C	N3-C4-N4	6.86	122.80	118.00
2	AB	1661	G	N1-C2-N3	-6.86	119.78	123.90
35	BA	195	A	N3-C4-C5	-6.86	122.00	126.80
1	AA	79	G	C5'-C4'-O4'	6.86	117.33	109.10
2	AB	187	G	C8-N9-C4	-6.86	103.66	106.40
2	AB	623	C	C4-C5-C6	6.86	120.83	117.40
2	AB	779	U	N3-C2-O2	-6.86	117.40	122.20
2	AB	799	G	C4-C5-C6	6.86	122.92	118.80
2	AB	1217	U	C5-C4-O4	-6.86	121.78	125.90
2	AB	1259	G	C4-C5-N7	-6.86	108.06	110.80
2	AB	2355	G	C4-C5-N7	-6.86	108.06	110.80
35	BA	533	A	N9-C1'-C2'	-6.86	104.45	112.00
35	BA	567	G	N9-C4-C5	6.86	108.14	105.40
35	BA	1167	A	C6-N1-C2	6.86	122.72	118.60
35	BA	1182	G	N9-C4-C5	6.86	108.14	105.40
35	BA	1194	U	C3'-C2'-C1'	6.86	106.99	101.50
35	BA	1479	C	N3-C4-C5	6.86	124.64	121.90
35	BA	1492	A	P-O3'-C3'	6.86	127.93	119.70
2	AB	230	G	N9-C1'-C2'	-6.86	104.45	112.00
2	AB	469	G	C4-C5-C6	6.86	122.92	118.80
35	BA	8	A	C2-N3-C4	6.86	114.03	110.60
35	BA	400	C	C5-C4-N4	-6.86	115.40	120.20
2	AB	252	G	O4'-C1'-N9	6.86	113.69	108.20
2	AB	1997	C	C5'-C4'-O4'	6.86	117.33	109.10
2	AB	2083	G	N9-C1'-C2'	-6.86	104.46	112.00
2	AB	2154	A	C5-C6-N6	-6.86	118.21	123.70
2	AB	2609	U	N3-C4-C5	-6.86	110.49	114.60
2	AB	2629	U	O4'-C1'-N1	6.86	113.69	108.20
2	AB	2644	G	N3-C4-C5	-6.86	125.17	128.60
2	AB	2821	A	C6-N1-C2	-6.86	114.49	118.60
35	BA	435	A	C5-C6-N1	6.86	121.13	117.70
35	BA	565	U	C3'-C2'-C1'	6.86	106.99	101.50
35	BA	743	A	O4'-C4'-C3'	6.86	111.59	106.10
35	BA	1174	G	C1'-O4'-C4'	-6.86	104.41	109.90
40	BF	80	ARG	NH1-CZ-NH2	6.86	126.94	119.40
2	AB	827	U	N1-C2-N3	6.86	119.01	114.90
2	AB	1975	G	N9-C4-C5	6.86	108.14	105.40
2	AB	2004	G	C8-N9-C4	6.86	109.14	106.40
35	BA	620	C	N3-C4-N4	-6.86	113.20	118.00
35	BA	1413	A	N7-C8-N9	6.86	117.23	113.80
2	AB	231	A	C5'-C4'-O4'	6.85	117.33	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	389	G	C2-N3-C4	6.85	115.33	111.90
2	AB	776	G	N7-C8-N9	6.85	116.53	113.10
2	AB	1436	G	N1-C2-N2	6.85	122.37	116.20
2	AB	2371	G	C5-N7-C8	-6.85	100.87	104.30
2	AB	2857	G	N3-C4-N9	6.85	130.11	126.00
15	AO	103	TYR	CG-CD1-CE1	-6.85	115.82	121.30
2	AB	75	G	N1-C6-O6	6.85	124.01	119.90
2	AB	1424	G	C5-C6-O6	-6.85	124.49	128.60
2	AB	2775	G	C6-N1-C2	-6.85	120.99	125.10
2	AB	2880	C	C5-C4-N4	-6.85	115.40	120.20
35	BA	476	U	C6-N1-C2	-6.85	116.89	121.00
1	AA	12	C	C6-N1-C2	6.85	123.04	120.30
1	AA	86	G	N3-C2-N2	-6.85	115.10	119.90
2	AB	136	G	C1'-O4'-C4'	6.85	115.38	109.90
2	AB	2446	G	C4-C5-C6	-6.85	114.69	118.80
35	BA	159	G	C6-N1-C2	-6.85	120.99	125.10
41	BG	28	ARG	NE-CZ-NH2	-6.85	116.87	120.30
2	AB	690	G	O5'-C5'-C4'	-6.85	98.69	111.70
2	AB	701	G	C2-N3-C4	6.85	115.32	111.90
2	AB	1216	G	C5-C6-O6	-6.85	124.49	128.60
2	AB	1243	C	C4-C5-C6	-6.85	113.97	117.40
2	AB	1412	U	P-O3'-C3'	6.85	127.92	119.70
2	AB	1842	G	N3-C4-C5	-6.85	125.17	128.60
2	AB	1945	G	C5-C6-O6	-6.85	124.49	128.60
2	AB	2572	A	N1-C2-N3	-6.85	125.88	129.30
2	AB	2828	G	C4-C5-N7	6.85	113.54	110.80
35	BA	694	A	C6-N1-C2	6.85	122.71	118.60
35	BA	733	G	N1-C6-O6	-6.85	115.79	119.90
37	BC	31	G	C5-C6-N1	-6.85	108.08	111.50
2	AB	131	A	N9-C4-C5	-6.85	103.06	105.80
2	AB	370	G	C5-C6-N1	6.85	114.92	111.50
2	AB	1703	G	N3-C4-N9	6.85	130.11	126.00
2	AB	2247	A	C4-C5-C6	-6.85	113.58	117.00
2	AB	2454	G	C4'-C3'-C2'	-6.85	95.75	102.60
2	AB	2521	C	C5'-C4'-O4'	6.85	117.32	109.10
2	AB	2792	A	C5'-C4'-O4'	6.85	117.32	109.10
35	BA	120	A	C5-C6-N1	6.85	121.12	117.70
35	BA	265	G	C5-C6-N1	6.85	114.92	111.50
35	BA	803	G	N3-C2-N2	-6.85	115.11	119.90
35	BA	1074	G	C3'-C2'-C1'	6.85	106.98	101.50
35	BA	1206	G	N7-C8-N9	6.85	116.52	113.10
35	BA	1423	G	C4-C5-N7	-6.85	108.06	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1244	A	C2-N3-C4	6.85	114.02	110.60
13	AM	64	ARG	NE-CZ-NH2	-6.85	116.88	120.30
35	BA	120	A	P-O3'-C3'	6.85	127.92	119.70
35	BA	296	U	N3-C2-O2	-6.85	117.41	122.20
35	BA	615	G	N1-C2-N3	-6.85	119.79	123.90
35	BA	622	A	C3'-C2'-C1'	6.85	106.98	101.50
35	BA	1440	U	O3'-P-O5'	-6.85	90.99	104.00
1	AA	34	A	C8-N9-C4	6.84	108.54	105.80
2	AB	193	U	N1-C1'-C2'	-6.84	104.47	112.00
2	AB	841	G	N9-C4-C5	6.84	108.14	105.40
2	AB	940	G	O4'-C1'-N9	6.84	113.68	108.20
2	AB	1312	U	C3'-C2'-C1'	6.84	106.97	101.50
2	AB	1765	U	N1-C1'-C2'	-6.84	104.47	112.00
20	AT	90	ARG	NE-CZ-NH2	-6.84	116.88	120.30
35	BA	1173	U	C4'-C3'-C2'	-6.84	95.75	102.60
35	BA	1233	G	N7-C8-N9	6.84	116.52	113.10
36	BB	14	G	O3'-P-O5'	-6.84	91.00	104.00
1	AA	75	G	C6-N1-C2	-6.84	120.99	125.10
2	AB	386	G	O4'-C4'-C3'	-6.84	97.16	104.00
2	AB	1377	G	C2-N3-C4	-6.84	108.48	111.90
2	AB	1459	G	C5-N7-C8	-6.84	100.88	104.30
2	AB	1671	U	N3-C4-C5	-6.84	110.49	114.60
2	AB	1900	A	O5'-C5'-C4'	-6.84	98.70	111.70
1	AA	48	U	O4'-C4'-C3'	6.84	111.57	106.10
1	AA	67	G	N9-C1'-C2'	-6.84	104.47	112.00
1	AA	116	G	C4'-C3'-C2'	-6.84	95.76	102.60
2	AB	113	U	C6-N1-C2	-6.84	116.89	121.00
2	AB	411	G	N1-C2-N3	-6.84	119.80	123.90
2	AB	1361	G	C4'-C3'-C2'	-6.84	95.76	102.60
2	AB	2447	G	C5'-C4'-O4'	6.84	117.31	109.10
15	AO	50	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
35	BA	814	A	C6-C5-N7	6.84	137.09	132.30
35	BA	1342	C	N3-C2-O2	-6.84	117.11	121.90
35	BA	1356	G	C4-C5-N7	6.84	113.54	110.80
35	BA	1427	C	C2-N3-C4	6.84	123.32	119.90
36	BB	22	G	N1-C2-N2	6.84	122.36	116.20
1	AA	58	A	N9-C4-C5	6.84	108.54	105.80
2	AB	62	U	N1-C2-N3	6.84	119.00	114.90
2	AB	136	G	P-O5'-C5'	-6.84	109.96	120.90
2	AB	936	A	C2-N3-C4	6.84	114.02	110.60
2	AB	993	G	O4'-C1'-N9	6.84	113.67	108.20
2	AB	1226	A	C6-N1-C2	-6.84	114.50	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	375	U	C4'-C3'-C2'	-6.84	95.76	102.60
35	BA	995	C	C5-C6-N1	6.84	124.42	121.00
35	BA	1528	U	N1-C2-N3	6.84	119.00	114.90
2	AB	57	C	C4'-C3'-C2'	-6.84	95.76	102.60
2	AB	848	C	O4'-C1'-N1	6.84	113.67	108.20
2	AB	1872	A	C4'-C3'-C2'	-6.84	95.76	102.60
35	BA	763	G	N7-C8-N9	-6.84	109.68	113.10
37	BC	26	C	C6-N1-C2	6.84	123.03	120.30
2	AB	16	C	C6-N1-C2	-6.84	117.56	120.30
2	AB	651	G	C4-C5-C6	6.84	122.90	118.80
2	AB	775	G	N3-C4-C5	-6.84	125.18	128.60
2	AB	882	G	C5-C6-N1	6.84	114.92	111.50
2	AB	1137	G	C5-C6-O6	-6.84	124.50	128.60
2	AB	1424	G	N9-C4-C5	6.84	108.14	105.40
2	AB	2334	U	C6-N1-C2	-6.84	116.90	121.00
27	A0	48	ARG	NE-CZ-NH1	6.84	123.72	120.30
35	BA	1298	U	C2-N3-C4	-6.84	122.90	127.00
2	AB	2100	G	C6-C5-N7	-6.83	126.30	130.40
2	AB	2212	A	N3-C4-C5	-6.83	122.02	126.80
2	AB	2485	G	C6-C5-N7	-6.83	126.30	130.40
35	BA	51	A	C8-N9-C4	-6.83	103.07	105.80
35	BA	329	A	C4-C5-N7	-6.83	107.28	110.70
35	BA	724	G	C4-C5-C6	-6.83	114.70	118.80
2	AB	98	G	C4-C5-N7	-6.83	108.07	110.80
2	AB	199	A	O4'-C1'-N9	6.83	113.67	108.20
2	AB	212	G	C5'-C4'-O4'	6.83	117.30	109.10
2	AB	1640	A	C2-N3-C4	6.83	114.02	110.60
2	AB	1641	A	C8-N9-C4	6.83	108.53	105.80
2	AB	1963	U	C3'-C2'-C1'	6.83	106.97	101.50
2	AB	2227	A	C2-N3-C4	6.83	114.02	110.60
12	AL	27	ARG	NE-CZ-NH2	6.83	123.72	120.30
35	BA	548	G	N3-C4-N9	6.83	130.10	126.00
35	BA	815	A	N7-C8-N9	-6.83	110.38	113.80
35	BA	994	A	C4-C5-C6	-6.83	113.58	117.00
35	BA	1283	U	N1-C1'-C2'	-6.83	104.48	112.00
35	BA	1323	G	C5-C6-N1	6.83	114.92	111.50
35	BA	1373	G	N3-C4-C5	-6.83	125.18	128.60
37	BC	43	G	O4'-C1'-N9	6.83	113.67	108.20
2	AB	65	U	C6-N1-C2	-6.83	116.90	121.00
2	AB	278	A	N9-C1'-C2'	6.83	122.88	114.00
2	AB	512	G	C5-C6-O6	-6.83	124.50	128.60
2	AB	610	C	C5-C4-N4	-6.83	115.42	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	890	C	C2-N3-C4	6.83	123.32	119.90
2	AB	938	G	C6-C5-N7	-6.83	126.30	130.40
2	AB	1613	G	C6-N1-C2	-6.83	121.00	125.10
2	AB	2572	A	C5-C6-N6	-6.83	118.23	123.70
2	AB	2781	A	O4'-C1'-N9	6.83	113.67	108.20
35	BA	128	G	C5-N7-C8	-6.83	100.88	104.30
35	BA	756	C	N3-C4-N4	-6.83	113.22	118.00
35	BA	1058	G	C6-N1-C2	-6.83	121.00	125.10
35	BA	1455	G	C5-C6-N1	6.83	114.92	111.50
35	BA	1491	G	P-O3'-C3'	6.83	127.90	119.70
35	BA	1499	A	C2-N3-C4	-6.83	107.19	110.60
1	AA	30	C	N3-C4-N4	6.83	122.78	118.00
2	AB	595	C	C2-N3-C4	6.83	123.31	119.90
2	AB	1022	G	C1'-O4'-C4'	-6.83	104.44	109.90
2	AB	1495	A	N1-C6-N6	-6.83	114.50	118.60
2	AB	2342	C	O4'-C4'-C3'	6.83	111.56	106.10
2	AB	2650	U	C2-N3-C4	-6.83	122.90	127.00
37	BC	46	G	C4-C5-N7	-6.83	108.07	110.80
1	AA	29	A	C8-N9-C4	-6.83	103.07	105.80
2	AB	534	U	N1-C2-N3	6.83	119.00	114.90
2	AB	694	U	N1-C2-O2	6.83	127.58	122.80
2	AB	969	G	C4-C5-C6	6.83	122.90	118.80
2	AB	1390	U	N3-C4-C5	-6.83	110.50	114.60
2	AB	2237	G	C6-C5-N7	-6.83	126.30	130.40
2	AB	2718	G	C3'-C2'-C1'	-6.83	96.04	101.50
35	BA	826	C	C6-N1-C2	6.83	123.03	120.30
35	BA	837	U	C5-C6-N1	-6.83	119.28	122.70
35	BA	902	G	N7-C8-N9	6.83	116.51	113.10
35	BA	1083	U	O4'-C1'-N1	6.83	113.66	108.20
2	AB	633	A	C6-N1-C2	6.83	122.70	118.60
2	AB	827	U	O4'-C1'-C2'	-6.83	98.97	105.80
2	AB	1624	U	C6-N1-C2	-6.83	116.90	121.00
2	AB	1884	G	C5-N7-C8	-6.83	100.89	104.30
35	BA	107	G	O4'-C1'-C2'	6.83	113.74	107.60
35	BA	1205	U	C5-C4-O4	6.83	130.00	125.90
37	BC	53	G	O4'-C1'-N9	6.83	113.66	108.20
2	AB	1539	U	N3-C2-O2	-6.83	117.42	122.20
2	AB	1727	C	O4'-C1'-N1	6.83	113.66	108.20
2	AB	2054	A	C5'-C4'-O4'	6.83	117.29	109.10
2	AB	2088	A	C4-C5-N7	6.83	114.11	110.70
2	AB	2310	C	P-O3'-C3'	6.83	127.89	119.70
2	AB	2422	C	C5-C6-N1	6.83	124.41	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2724	U	C5-C4-O4	6.83	130.00	125.90
35	BA	613	C	C5-C4-N4	6.83	124.98	120.20
35	BA	1215	G	N3-C4-C5	-6.83	125.19	128.60
1	AA	9	G	C5'-C4'-C3'	-6.82	105.08	116.00
2	AB	344	A	O5'-P-OP2	-6.82	99.56	105.70
2	AB	385	C	O4'-C4'-C3'	6.82	111.56	106.10
2	AB	623	C	P-O3'-C3'	6.82	127.89	119.70
2	AB	1303	G	C6-C5-N7	-6.82	126.31	130.40
2	AB	1501	G	P-O3'-C3'	6.82	127.89	119.70
2	AB	2264	C	N1-C2-N3	-6.82	114.42	119.20
35	BA	428	G	N7-C8-N9	6.82	116.51	113.10
35	BA	439	U	C2-N3-C4	-6.82	122.91	127.00
35	BA	462	G	O4'-C1'-C2'	-6.82	98.98	105.80
35	BA	504	C	N3-C2-O2	6.82	126.68	121.90
35	BA	623	C	N1-C2-O2	6.82	123.00	118.90
35	BA	656	G	C5-C6-O6	-6.82	124.51	128.60
36	BB	49	U	N1-C2-N3	6.82	118.99	114.90
2	AB	461	C	N3-C2-O2	-6.82	117.12	121.90
2	AB	1378	A	C8-N9-C4	-6.82	103.07	105.80
2	AB	1406	U	N3-C2-O2	-6.82	117.42	122.20
35	BA	247	G	N3-C4-C5	-6.82	125.19	128.60
35	BA	506	G	C6-N1-C2	-6.82	121.01	125.10
37	BC	76	C	O4'-C1'-N1	6.82	113.66	108.20
2	AB	390	U	P-O3'-C3'	6.82	127.89	119.70
2	AB	1215	G	C6-C5-N7	6.82	134.49	130.40
2	AB	1544	A	C5-C6-N1	-6.82	114.29	117.70
2	AB	1697	G	C2'-C3'-O3'	6.82	124.61	113.70
2	AB	1843	C	C2-N3-C4	6.82	123.31	119.90
35	BA	155	A	O4'-C1'-N9	6.82	113.66	108.20
35	BA	1197	A	N9-C4-C5	6.82	108.53	105.80
2	AB	94	A	C2-N3-C4	6.82	114.01	110.60
35	BA	921	U	P-O3'-C3'	6.82	127.88	119.70
1	AA	10	G	N3-C4-C5	-6.82	125.19	128.60
2	AB	22	C	N1-C2-O2	-6.82	114.81	118.90
2	AB	1135	C	C6-N1-C2	6.82	123.03	120.30
2	AB	1238	G	C5-C6-O6	-6.82	124.51	128.60
2	AB	2169	A	N3-C4-N9	6.82	132.85	127.40
2	AB	2235	G	N3-C2-N2	-6.82	115.13	119.90
35	BA	393	A	N1-C6-N6	6.82	122.69	118.60
35	BA	561	U	C2-N3-C4	-6.82	122.91	127.00
35	BA	679	C	C4-C5-C6	6.82	120.81	117.40
35	BA	755	G	N1-C2-N2	-6.82	110.06	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	35	G	C5-C6-N1	6.82	114.91	111.50
1	AA	41	G	N1-C6-O6	-6.82	115.81	119.90
2	AB	277	G	C6-N1-C2	-6.82	121.01	125.10
2	AB	801	G	C8-N9-C4	-6.82	103.67	106.40
2	AB	966	G	C5-N7-C8	-6.82	100.89	104.30
2	AB	2584	U	P-O3'-C3'	6.82	127.88	119.70
2	AB	2700	A	C5-N7-C8	6.82	107.31	103.90
35	BA	87	C	C5'-C4'-O4'	-6.82	100.92	109.10
35	BA	1076	U	N1-C2-N3	6.82	118.99	114.90
35	BA	1330	U	N3-C4-C5	-6.82	110.51	114.60
2	AB	962	G	C5-N7-C8	-6.81	100.89	104.30
2	AB	2602	A	C5-C6-N1	-6.81	114.29	117.70
2	AB	2780	G	N9-C4-C5	6.81	108.13	105.40
35	BA	1399	C	C5-C6-N1	-6.81	117.59	121.00
2	AB	81	G	N9-C4-C5	6.81	108.12	105.40
2	AB	435	C	N1-C2-O2	6.81	122.99	118.90
2	AB	818	G	C5-N7-C8	-6.81	100.89	104.30
2	AB	1177	G	C5-N7-C8	6.81	107.71	104.30
2	AB	1929	G	C6-C5-N7	6.81	134.49	130.40
2	AB	2722	G	P-O3'-C3'	6.81	127.88	119.70
8	AH	156	TYR	CD1-CE1-CZ	-6.81	113.67	119.80
27	A0	26	PHE	CB-CG-CD1	-6.81	116.03	120.80
35	BA	604	G	C6-C5-N7	-6.81	126.31	130.40
35	BA	1118	U	N1-C1'-C2'	-6.81	104.51	112.00
1	AA	97	C	C5-C6-N1	-6.81	117.59	121.00
2	AB	164	C	C4'-C3'-C2'	-6.81	95.79	102.60
2	AB	388	G	N3-C2-N2	-6.81	115.13	119.90
2	AB	2270	A	O4'-C1'-N9	6.81	113.65	108.20
35	BA	934	C	N3-C4-C5	-6.81	119.18	121.90
35	BA	1334	G	C8-N9-C4	-6.81	103.68	106.40
35	BA	1447	A	C6-C5-N7	-6.81	127.53	132.30
2	AB	127	A	C5'-C4'-O4'	6.81	117.27	109.10
2	AB	148	U	N3-C4-O4	6.81	124.17	119.40
2	AB	718	A	N3-C4-C5	-6.81	122.03	126.80
2	AB	1559	U	O4'-C1'-N1	6.81	113.65	108.20
2	AB	2646	C	O4'-C1'-N1	6.81	113.65	108.20
2	AB	2897	U	C5-C4-O4	-6.81	121.81	125.90
35	BA	34	C	O4'-C1'-C2'	6.81	113.73	107.60
35	BA	41	G	C5-C6-N1	6.81	114.91	111.50
2	AB	1315	C	C5-C6-N1	-6.81	117.60	121.00
2	AB	1748	C	N3-C2-O2	-6.81	117.14	121.90
2	AB	1887	C	C6-N1-C2	-6.81	117.58	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1977	A	C5-C6-N1	6.81	121.10	117.70
2	AB	2178	C	C5-C6-N1	6.81	124.40	121.00
2	AB	2889	C	C6-N1-C2	6.81	123.02	120.30
35	BA	392	C	C5'-C4'-O4'	6.81	117.27	109.10
35	BA	649	A	C4-C5-C6	6.81	120.40	117.00
35	BA	864	A	P-O3'-C3'	6.81	127.87	119.70
35	BA	1025	U	C5-C4-O4	6.81	129.98	125.90
35	BA	1045	C	N1-C1'-C2'	-6.81	104.51	112.00
35	BA	1062	U	C3'-C2'-C1'	6.81	106.95	101.50
35	BA	1393	U	C4-C5-C6	6.81	123.78	119.70
35	BA	1509	C	C2-N3-C4	6.81	123.30	119.90
2	AB	521	U	N1-C2-N3	6.81	118.98	114.90
2	AB	616	A	N1-C6-N6	6.81	122.68	118.60
2	AB	761	A	N7-C8-N9	6.81	117.20	113.80
2	AB	876	C	N1-C2-O2	6.81	122.98	118.90
2	AB	966	G	C5'-C4'-O4'	6.81	117.27	109.10
2	AB	2000	C	N3-C4-C5	6.81	124.62	121.90
35	BA	358	U	N3-C4-O4	6.81	124.16	119.40
36	BB	18	A	N1-C2-N3	-6.81	125.90	129.30
2	AB	62	U	O4'-C1'-N1	6.80	113.64	108.20
2	AB	298	G	N9-C1'-C2'	-6.80	104.52	112.00
2	AB	318	C	C5-C6-N1	6.80	124.40	121.00
2	AB	513	A	N3-C4-C5	-6.80	122.04	126.80
2	AB	1244	A	O4'-C1'-N9	6.80	113.64	108.20
2	AB	1251	C	N3-C4-C5	6.80	124.62	121.90
2	AB	1383	A	C8-N9-C4	6.80	108.52	105.80
2	AB	1725	U	N3-C4-O4	6.80	124.16	119.40
35	BA	302	G	O4'-C1'-N9	6.80	113.64	108.20
35	BA	813	U	C6-N1-C2	-6.80	116.92	121.00
2	AB	565	C	C5-C4-N4	-6.80	115.44	120.20
2	AB	649	G	N3-C2-N2	-6.80	115.14	119.90
2	AB	1865	U	N3-C2-O2	-6.80	117.44	122.20
2	AB	2369	A	C4-C5-C6	-6.80	113.60	117.00
35	BA	807	A	C4'-C3'-C2'	-6.80	95.80	102.60
35	BA	850	U	C2-N3-C4	-6.80	122.92	127.00
2	AB	792	A	N1-C6-N6	-6.80	114.52	118.60
2	AB	1046	A	N7-C8-N9	6.80	117.20	113.80
2	AB	2183	A	C4-C5-C6	-6.80	113.60	117.00
2	AB	2756	U	C2'-C3'-O3'	6.80	124.58	113.70
2	AB	2798	U	C5-C4-O4	-6.80	121.82	125.90
9	AI	87	GLU	OE1-CD-OE2	6.80	131.46	123.30
35	BA	787	A	C6-C5-N7	6.80	137.06	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1135	U	P-O3'-C3'	6.80	127.86	119.70
37	BC	30	G	N1-C2-N2	-6.80	110.08	116.20
2	AB	127	A	C8-N9-C4	-6.80	103.08	105.80
35	BA	456	A	C6-N1-C2	-6.80	114.52	118.60
35	BA	1405	G	N1-C2-N3	6.80	127.98	123.90
2	AB	313	G	N9-C1'-C2'	-6.80	104.52	112.00
2	AB	883	G	N1-C6-O6	-6.80	115.82	119.90
2	AB	1366	A	C4-C5-N7	-6.80	107.30	110.70
2	AB	2539	C	C1'-O4'-C4'	-6.80	104.46	109.90
2	AB	2691	C	C6-N1-C2	-6.80	117.58	120.30
2	AB	2826	A	N9-C4-C5	-6.80	103.08	105.80
35	BA	266	G	C6-C5-N7	-6.80	126.32	130.40
35	BA	1446	A	N1-C6-N6	-6.80	114.52	118.60
2	AB	52	A	C6-C5-N7	-6.80	127.54	132.30
2	AB	277	G	O4'-C4'-C3'	-6.80	97.20	104.00
2	AB	299	A	N1-C6-N6	-6.80	114.52	118.60
2	AB	484	C	N1-C1'-C2'	-6.80	104.52	112.00
2	AB	1154	G	C5'-C4'-O4'	6.80	117.26	109.10
2	AB	1482	G	C8-N9-C4	-6.80	103.68	106.40
2	AB	1719	G	C8-N9-C4	-6.80	103.68	106.40
2	AB	2337	G	O4'-C1'-N9	6.80	113.64	108.20
2	AB	2354	C	C2-N3-C4	-6.80	116.50	119.90
35	BA	127	G	C5-N7-C8	6.80	107.70	104.30
35	BA	213	G	P-O3'-C3'	-6.80	111.54	119.70
35	BA	338	A	C8-N9-C4	-6.80	103.08	105.80
35	BA	934	C	C5'-C4'-O4'	-6.80	100.94	109.10
37	BC	1	C	N3-C4-C5	6.80	124.62	121.90
2	AB	1285	A	N9-C4-C5	-6.79	103.08	105.80
2	AB	2653	U	P-O3'-C3'	6.79	127.85	119.70
35	BA	82	G	N7-C8-N9	6.79	116.50	113.10
35	BA	876	C	O4'-C1'-N1	6.79	113.64	108.20
2	AB	147	C	N3-C2-O2	-6.79	117.14	121.90
2	AB	1011	G	N3-C2-N2	-6.79	115.14	119.90
2	AB	1215	G	O4'-C1'-N9	6.79	113.63	108.20
2	AB	2223	G	N1-C6-O6	6.79	123.98	119.90
2	AB	2830	C	C5'-C4'-O4'	6.79	117.25	109.10
35	BA	310	G	C6-N1-C2	-6.79	121.02	125.10
35	BA	830	G	N3-C4-C5	-6.79	125.20	128.60
2	AB	1211	C	C3'-C2'-C1'	6.79	106.93	101.50
2	AB	1239	G	C5-C6-N1	6.79	114.90	111.50
2	AB	1846	G	C5'-C4'-C3'	-6.79	105.14	116.00
2	AB	2186	G	O4'-C1'-N9	6.79	113.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2635	A	C5-N7-C8	-6.79	100.50	103.90
7	AG	111	ARG	NE-CZ-NH2	6.79	123.70	120.30
35	BA	275	G	C3'-C2'-C1'	-6.79	96.07	101.50
35	BA	393	A	N9-C4-C5	6.79	108.52	105.80
35	BA	1012	A	N9-C1'-C2'	-6.79	104.53	112.00
35	BA	1061	G	C2-N3-C4	-6.79	108.50	111.90
35	BA	1333	A	C2-N3-C4	6.79	114.00	110.60
35	BA	1416	G	N1-C2-N3	6.79	127.97	123.90
35	BA	1471	U	C5-C4-O4	-6.79	121.83	125.90
2	AB	75	G	N9-C1'-C2'	-6.79	104.53	112.00
2	AB	1146	C	N3-C4-N4	-6.79	113.25	118.00
35	BA	1200	C	C5-C6-N1	-6.79	117.61	121.00
2	AB	176	A	C5-N7-C8	-6.79	100.51	103.90
2	AB	517	C	C5-C4-N4	-6.79	115.45	120.20
2	AB	1394	U	N1-C2-N3	6.79	118.97	114.90
2	AB	1854	A	C4-C5-N7	6.79	114.09	110.70
2	AB	2189	U	N3-C4-O4	6.79	124.15	119.40
2	AB	2239	G	C8-N9-C4	-6.79	103.68	106.40
2	AB	2897	U	C2-N3-C4	-6.79	122.93	127.00
12	AL	60	ASP	CB-CG-OD1	-6.79	112.19	118.30
35	BA	706	A	C2-N3-C4	6.79	113.99	110.60
35	BA	778	G	C6-N1-C2	-6.79	121.03	125.10
35	BA	907	A	C4-C5-N7	-6.79	107.31	110.70
35	BA	920	U	C5'-C4'-C3'	-6.79	105.14	116.00
37	BC	61	U	N3-C2-O2	-6.79	117.45	122.20
48	BN	37	TYR	CB-CG-CD2	-6.79	116.93	121.00
2	AB	386	G	N3-C2-N2	-6.79	115.15	119.90
2	AB	2592	G	C3'-C2'-C1'	-6.79	96.07	101.50
35	BA	665	A	N9-C1'-C2'	-6.79	104.53	112.00
35	BA	1344	C	N3-C4-N4	6.79	122.75	118.00
36	BB	41	A	C5'-C4'-O4'	6.79	117.24	109.10
1	AA	24	G	C1'-O4'-C4'	-6.79	104.47	109.90
2	AB	546	U	C6-N1-C2	6.79	125.07	121.00
2	AB	1661	G	C6-C5-N7	6.79	134.47	130.40
4	AD	183	VAL	CG1-CB-CG2	-6.79	100.04	110.90
35	BA	131	A	C8-N9-C4	-6.79	103.09	105.80
35	BA	486	U	C6-N1-C2	-6.79	116.93	121.00
35	BA	1185	G	N3-C2-N2	-6.79	115.15	119.90
49	BO	22	TYR	CD1-CE1-CZ	6.79	125.91	119.80
2	AB	19	A	N1-C2-N3	6.78	132.69	129.30
2	AB	181	A	C5-C6-N1	-6.78	114.31	117.70
2	AB	606	U	N1-C2-N3	6.78	118.97	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	682	G	C2-N3-C4	6.78	115.29	111.90
2	AB	881	G	O4'-C1'-N9	6.78	113.63	108.20
2	AB	2355	G	C1'-O4'-C4'	-6.78	104.47	109.90
35	BA	1391	U	O4'-C1'-N1	6.78	113.63	108.20
1	AA	39	A	O4'-C4'-C3'	6.78	111.53	106.10
2	AB	917	A	N3-C4-N9	6.78	132.83	127.40
2	AB	992	C	C6-N1-C2	6.78	123.01	120.30
2	AB	2373	G	C8-N9-C4	-6.78	103.69	106.40
2	AB	2483	C	O3'-P-O5'	-6.78	91.11	104.00
35	BA	104	G	C5-C6-N1	6.78	114.89	111.50
35	BA	1360	A	C5-N7-C8	6.78	107.29	103.90
1	AA	50	A	C1'-O4'-C4'	-6.78	104.47	109.90
2	AB	647	G	C6-C5-N7	-6.78	126.33	130.40
2	AB	1239	G	N1-C2-N3	-6.78	119.83	123.90
2	AB	1374	G	N1-C2-N3	-6.78	119.83	123.90
2	AB	2090	A	C1'-O4'-C4'	-6.78	104.48	109.90
35	BA	442	G	O4'-C4'-C3'	6.78	111.52	106.10
35	BA	634	C	N1-C2-O2	6.78	122.97	118.90
2	AB	905	A	N1-C6-N6	6.78	122.67	118.60
2	AB	2428	G	N3-C2-N2	-6.78	115.16	119.90
35	BA	795	C	N3-C4-N4	-6.78	113.25	118.00
35	BA	1102	A	C6-C5-N7	-6.78	127.55	132.30
2	AB	340	A	C2-N3-C4	6.78	113.99	110.60
2	AB	1854	A	C3'-C2'-C1'	-6.78	96.08	101.50
2	AB	1949	G	C5'-C4'-O4'	6.78	117.23	109.10
2	AB	2128	G	N7-C8-N9	6.78	116.49	113.10
2	AB	2670	A	O4'-C1'-N9	6.78	113.62	108.20
2	AB	2691	C	N1-C2-O2	6.78	122.97	118.90
35	BA	292	G	O4'-C1'-N9	6.78	113.62	108.20
35	BA	309	A	N1-C2-N3	6.78	132.69	129.30
35	BA	351	G	O4'-C1'-N9	6.78	113.62	108.20
35	BA	917	G	C1'-O4'-C4'	6.78	115.32	109.90
35	BA	1242	G	N3-C4-C5	-6.78	125.21	128.60
35	BA	1242	G	N3-C4-N9	6.78	130.07	126.00
50	BP	60	ARG	C-N-CA	6.78	138.65	121.70
2	AB	70	G	C5-N7-C8	6.78	107.69	104.30
2	AB	296	U	N3-C2-O2	-6.78	117.46	122.20
2	AB	480	A	O4'-C1'-N9	6.78	113.62	108.20
2	AB	733	G	C4-C5-N7	6.78	113.51	110.80
2	AB	1022	G	N1-C2-N2	6.78	122.30	116.20
2	AB	1501	G	C5-C6-N1	-6.78	108.11	111.50
2	AB	1828	G	N3-C4-C5	-6.78	125.21	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2408	U	O4'-C1'-N1	6.78	113.62	108.20
2	AB	2567	G	C6-N1-C2	-6.78	121.03	125.10
35	BA	183	C	N1-C2-N3	6.78	123.94	119.20
35	BA	368	U	C4-C5-C6	6.78	123.77	119.70
35	BA	1188	A	N7-C8-N9	6.78	117.19	113.80
49	BO	42	VAL	CA-CB-CG1	6.78	121.06	110.90
2	AB	241	A	N1-C2-N3	-6.77	125.91	129.30
2	AB	1740	G	C5-C6-O6	-6.77	124.54	128.60
2	AB	2469	A	C8-N9-C4	-6.77	103.09	105.80
35	BA	738	C	C5'-C4'-O4'	6.77	117.23	109.10
35	BA	1058	G	N7-C8-N9	-6.77	109.71	113.10
2	AB	219	A	N9-C4-C5	6.77	108.51	105.80
2	AB	471	A	C5-N7-C8	-6.77	100.51	103.90
2	AB	675	A	C1'-O4'-C4'	-6.77	104.48	109.90
2	AB	1231	U	C4'-C3'-C2'	-6.77	95.83	102.60
2	AB	1272	A	C8-N9-C4	-6.77	103.09	105.80
2	AB	1595	C	N1-C1'-C2'	-6.77	104.55	112.00
2	AB	1745	A	C4-C5-C6	6.77	120.39	117.00
2	AB	2721	A	O4'-C1'-N9	6.77	113.62	108.20
2	AB	2753	A	C4'-C3'-C2'	-6.77	95.83	102.60
28	A1	15	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
35	BA	71	A	C6-C5-N7	-6.77	127.56	132.30
35	BA	433	G	C5'-C4'-O4'	6.77	117.23	109.10
35	BA	530	G	C1'-O4'-C4'	6.77	115.32	109.90
35	BA	761	G	N3-C4-C5	-6.77	125.21	128.60
36	BB	33	A	N3-C4-N9	6.77	132.82	127.40
2	AB	877	A	N1-C2-N3	-6.77	125.91	129.30
2	AB	1642	G	C5'-C4'-O4'	6.77	117.22	109.10
2	AB	2160	C	C4-C5-C6	-6.77	114.02	117.40
2	AB	2869	G	C6-N1-C2	6.77	129.16	125.10
35	BA	342	C	C5-C4-N4	-6.77	115.46	120.20
35	BA	1204	A	C8-N9-C4	-6.77	103.09	105.80
35	BA	1260	G	C2-N3-C4	6.77	115.28	111.90
35	BA	1458	G	C6-N1-C2	-6.77	121.04	125.10
2	AB	128	C	C2-N3-C4	-6.77	116.52	119.90
2	AB	496	G	N1-C2-N3	6.77	127.96	123.90
2	AB	1300	G	N3-C4-C5	-6.77	125.22	128.60
2	AB	1812	U	C5'-C4'-O4'	6.77	117.22	109.10
2	AB	2602	A	C4-C5-C6	6.77	120.39	117.00
2	AB	2699	C	C5'-C4'-C3'	6.77	126.83	116.00
2	AB	2872	A	N3-C4-N9	-6.77	121.98	127.40
36	BB	57	C	P-O3'-C3'	6.77	127.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	BH	110	ARG	NE-CZ-NH2	-6.77	116.92	120.30
1	AA	100	G	C8-N9-C4	-6.77	103.69	106.40
2	AB	470	A	C1'-O4'-C4'	6.77	115.31	109.90
2	AB	1251	C	N1-C2-O2	6.77	122.96	118.90
2	AB	1650	A	C2-N3-C4	6.77	113.98	110.60
35	BA	340	U	C4-C5-C6	6.77	123.76	119.70
35	BA	1210	C	C4-C5-C6	-6.77	114.02	117.40
46	BL	45	ARG	NH1-CZ-NH2	-6.77	111.96	119.40
2	AB	384	A	C1'-O4'-C4'	6.77	115.31	109.90
2	AB	475	C	N3-C4-C5	-6.77	119.19	121.90
2	AB	1131	G	C5-C6-O6	6.77	132.66	128.60
2	AB	1206	G	N3-C4-N9	-6.77	121.94	126.00
35	BA	138	G	C1'-O4'-C4'	-6.77	104.49	109.90
35	BA	496	A	C5-N7-C8	-6.77	100.52	103.90
35	BA	803	G	C6-N1-C2	-6.77	121.04	125.10
35	BA	1094	G	C5'-C4'-O4'	6.77	117.22	109.10
2	AB	1153	C	C5-C6-N1	6.76	124.38	121.00
2	AB	1514	G	O4'-C1'-N9	6.76	113.61	108.20
2	AB	1528	A	C4-C5-C6	-6.76	113.62	117.00
2	AB	1894	C	P-O3'-C3'	6.76	127.82	119.70
2	AB	2259	U	O4'-C1'-N1	6.76	113.61	108.20
12	AL	69	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
35	BA	727	G	O3'-P-O5'	-6.76	91.15	104.00
35	BA	1023	U	N3-C4-O4	-6.76	114.67	119.40
35	BA	1495	U	C4'-C3'-C2'	-6.76	95.84	102.60
35	BA	1497	G	C1'-O4'-C4'	-6.76	104.49	109.90
35	BA	1291	U	N1-C2-N3	6.76	118.96	114.90
2	AB	699	A	C6-N1-C2	-6.76	114.54	118.60
2	AB	786	C	N3-C4-C5	-6.76	119.19	121.90
2	AB	1548	A	N9-C4-C5	6.76	108.50	105.80
2	AB	1563	U	C5-C6-N1	6.76	126.08	122.70
2	AB	2027	G	N9-C1'-C2'	-6.76	104.56	112.00
2	AB	2059	A	C5-C6-N1	-6.76	114.32	117.70
2	AB	2135	A	N7-C8-N9	6.76	117.18	113.80
2	AB	2228	G	N1-C2-N3	6.76	127.96	123.90
2	AB	2548	U	N3-C2-O2	-6.76	117.47	122.20
35	BA	724	G	C4'-C3'-C2'	-6.76	95.84	102.60
35	BA	810	C	C5-C6-N1	6.76	124.38	121.00
35	BA	901	A	N7-C8-N9	-6.76	110.42	113.80
35	BA	1420	U	C4-C5-C6	6.76	123.76	119.70
2	AB	778	G	C5-N7-C8	-6.76	100.92	104.30
2	AB	1069	A	C5-C6-N1	6.76	121.08	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1377	G	N7-C8-N9	6.76	116.48	113.10
2	AB	1434	A	C2-N3-C4	6.76	113.98	110.60
2	AB	1528	A	N1-C6-N6	-6.76	114.55	118.60
2	AB	1987	A	C6-N1-C2	-6.76	114.55	118.60
2	AB	2102	G	C1'-O4'-C4'	-6.76	104.49	109.90
2	AB	2327	A	N7-C8-N9	6.76	117.18	113.80
35	BA	464	U	N1-C2-N3	6.76	118.96	114.90
2	AB	311	A	C8-N9-C4	-6.76	103.10	105.80
2	AB	1192	G	C4'-C3'-C2'	-6.76	95.84	102.60
2	AB	2197	U	N3-C4-O4	6.76	124.13	119.40
2	AB	516	C	C5-C6-N1	-6.76	117.62	121.00
2	AB	1632	A	C5-C6-N6	6.76	129.11	123.70
35	BA	203	G	O4'-C1'-C2'	6.76	113.68	107.60
35	BA	346	G	C5-C6-O6	6.76	132.65	128.60
35	BA	612	C	O4'-C1'-N1	6.76	113.61	108.20
35	BA	793	U	C2-N1-C1'	6.76	125.81	117.70
35	BA	1087	G	C5'-C4'-C3'	-6.76	105.19	116.00
35	BA	1240	U	N1-C2-N3	6.76	118.95	114.90
35	BA	1289	A	C4'-C3'-C2'	-6.76	95.84	102.60
35	BA	1302	C	C5'-C4'-C3'	-6.76	105.19	116.00
2	AB	207	A	C2-N3-C4	6.75	113.98	110.60
2	AB	1536	C	N3-C2-O2	-6.75	117.17	121.90
29	A2	64	PHE	CB-CG-CD2	-6.75	116.07	120.80
35	BA	417	G	N9-C4-C5	6.75	108.10	105.40
2	AB	219	A	O4'-C4'-C3'	6.75	111.50	106.10
2	AB	1210	G	C5-C6-O6	-6.75	124.55	128.60
2	AB	1450	G	C4'-C3'-C2'	-6.75	95.85	102.60
2	AB	2038	G	N3-C2-N2	-6.75	115.17	119.90
2	AB	2198	A	C4'-C3'-C2'	-6.75	95.85	102.60
35	BA	71	A	C5'-C4'-C3'	-6.75	105.19	116.00
35	BA	500	G	N3-C2-N2	-6.75	115.17	119.90
35	BA	769	G	N3-C2-N2	6.75	124.63	119.90
35	BA	1222	G	C6-C5-N7	-6.75	126.35	130.40
35	BA	1410	A	C5-C6-N1	6.75	121.08	117.70
42	BH	108	GLU	OE1-CD-OE2	-6.75	115.20	123.30
2	AB	2836	U	C6-N1-C2	-6.75	116.95	121.00
35	BA	727	G	C5-N7-C8	-6.75	100.92	104.30
35	BA	739	C	N1-C2-O2	6.75	122.95	118.90
35	BA	1169	A	C1'-O4'-C4'	-6.75	104.50	109.90
35	BA	1503	A	N1-C6-N6	-6.75	114.55	118.60
35	BA	1536	C	C3'-C2'-C1'	6.75	106.90	101.50
2	AB	1352	U	N1-C2-N3	6.75	118.95	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1459	G	C5'-C4'-O4'	6.75	117.20	109.10
2	AB	1616	A	C3'-C2'-C1'	6.75	106.90	101.50
2	AB	2447	G	O4'-C1'-N9	6.75	113.60	108.20
35	BA	223	A	C4-C5-C6	-6.75	113.62	117.00
35	BA	1422	G	C4-C5-N7	6.75	113.50	110.80
35	BA	1452	C	P-O3'-C3'	6.75	127.80	119.70
2	AB	1005	C	C5'-C4'-O4'	6.75	117.20	109.10
2	AB	1181	U	C4-C5-C6	6.75	123.75	119.70
2	AB	1589	U	C4'-C3'-C2'	-6.75	95.85	102.60
2	AB	1600	C	C5'-C4'-C3'	-6.75	105.20	116.00
2	AB	2323	G	N7-C8-N9	6.75	116.47	113.10
2	AB	2367	G	N3-C4-C5	-6.75	125.23	128.60
2	AB	2602	A	N9-C4-C5	6.75	108.50	105.80
2	AB	2870	C	N1-C2-O2	6.75	122.95	118.90
31	A4	48	TYR	CB-CG-CD2	-6.75	116.95	121.00
35	BA	243	A	P-O3'-C3'	6.75	127.80	119.70
35	BA	1101	A	O4'-C1'-N9	6.75	113.60	108.20
2	AB	254	G	O4'-C1'-N9	6.75	113.60	108.20
2	AB	1464	G	C4'-C3'-C2'	-6.75	95.85	102.60
2	AB	1848	A	N7-C8-N9	6.75	117.17	113.80
2	AB	2162	G	C5-C6-N1	6.75	114.87	111.50
10	AJ	131	TYR	CB-CG-CD1	-6.75	116.95	121.00
12	AL	57	LEU	CB-CG-CD1	6.75	122.47	111.00
35	BA	884	U	O4'-C4'-C3'	6.75	111.50	106.10
35	BA	1045	C	C4-C5-C6	6.75	120.77	117.40
2	AB	293	U	N1-C2-O2	6.75	127.52	122.80
2	AB	1176	U	C3'-C2'-C1'	6.75	106.90	101.50
2	AB	2162	G	C2-N3-C4	6.75	115.27	111.90
2	AB	2199	A	O5'-P-OP2	-6.75	99.63	105.70
2	AB	261	G	C6-C5-N7	6.74	134.45	130.40
2	AB	520	G	C5-C6-N1	6.74	114.87	111.50
2	AB	553	G	N1-C2-N2	-6.74	110.13	116.20
2	AB	568	U	N1-C2-O2	6.74	127.52	122.80
2	AB	1068	G	N3-C2-N2	6.74	124.62	119.90
2	AB	1409	U	C5-C4-O4	-6.74	121.85	125.90
2	AB	2197	U	N1-C2-O2	6.74	127.52	122.80
2	AB	2279	G	C6-N1-C2	-6.74	121.05	125.10
2	AB	2416	C	N3-C4-C5	-6.74	119.20	121.90
35	BA	680	C	C4-C5-C6	6.74	120.77	117.40
35	BA	1272	G	O4'-C1'-N9	6.74	113.59	108.20
37	BC	53	G	N9-C4-C5	6.74	108.10	105.40
47	BM	109	ILE	CA-CB-CG1	6.74	123.81	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	BN	65	TYR	CB-CG-CD2	-6.74	116.95	121.00
2	AB	1059	G	C3'-C2'-C1'	6.74	106.89	101.50
2	AB	1955	U	C1'-O4'-C4'	-6.74	104.51	109.90
2	AB	2437	G	C8-N9-C4	-6.74	103.70	106.40
2	AB	2799	A	C4-C5-C6	-6.74	113.63	117.00
35	BA	363	A	O4'-C1'-N9	6.74	113.59	108.20
35	BA	890	G	N9-C4-C5	6.74	108.10	105.40
35	BA	1023	U	C4-C5-C6	6.74	123.75	119.70
35	BA	1098	C	O4'-C1'-N1	6.74	113.59	108.20
35	BA	1496	C	N1-C1'-C2'	-6.74	104.58	112.00
2	AB	248	G	N7-C8-N9	6.74	116.47	113.10
2	AB	1551	A	C2-N3-C4	6.74	113.97	110.60
2	AB	1594	U	C2-N3-C4	-6.74	122.95	127.00
2	AB	2375	G	C1'-O4'-C4'	-6.74	104.51	109.90
35	BA	916	U	C6-N1-C2	-6.74	116.95	121.00
2	AB	1945	G	C2-N3-C4	6.74	115.27	111.90
2	AB	2008	C	O5'-P-OP1	-6.74	99.64	105.70
22	AV	12	ARG	CA-CB-CG	6.74	128.22	113.40
35	BA	31	G	C5-C6-O6	6.74	132.64	128.60
35	BA	767	A	C5-C6-N1	6.74	121.07	117.70
35	BA	787	A	N7-C8-N9	-6.74	110.43	113.80
35	BA	1046	A	C5-C6-N6	-6.74	118.31	123.70
2	AB	913	U	C2-N3-C4	-6.74	122.96	127.00
2	AB	1732	C	N1-C2-N3	6.74	123.92	119.20
2	AB	2576	G	C8-N9-C4	-6.74	103.70	106.40
2	AB	346	A	O4'-C1'-N9	6.74	113.59	108.20
2	AB	1246	A	C6-C5-N7	6.74	137.01	132.30
2	AB	1503	A	C4'-C3'-C2'	-6.74	95.86	102.60
2	AB	1552	A	C6-N1-C2	6.74	122.64	118.60
2	AB	2112	G	C8-N9-C4	6.74	109.09	106.40
2	AB	2176	A	C4-C5-N7	6.74	114.07	110.70
2	AB	2624	G	N1-C2-N2	6.74	122.26	116.20
2	AB	2678	C	O4'-C1'-N1	6.74	113.59	108.20
2	AB	2894	G	C5-N7-C8	6.74	107.67	104.30
35	BA	27	G	N1-C6-O6	6.74	123.94	119.90
35	BA	727	G	N7-C8-N9	6.74	116.47	113.10
35	BA	1199	U	N1-C2-O2	-6.74	118.08	122.80
35	BA	1216	A	C6-C5-N7	6.74	137.01	132.30
2	AB	559	G	N7-C8-N9	-6.73	109.73	113.10
2	AB	824	U	N3-C4-O4	-6.73	114.69	119.40
2	AB	2896	C	C2-N3-C4	-6.73	116.53	119.90
35	BA	192	A	C5-C6-N1	6.73	121.07	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	111	A	C3'-C2'-C1'	6.73	106.89	101.50
2	AB	416	U	C5-C4-O4	6.73	129.94	125.90
2	AB	431	U	C1'-O4'-C4'	-6.73	104.51	109.90
2	AB	480	A	C5-C6-N1	6.73	121.07	117.70
2	AB	606	U	C4'-C3'-C2'	-6.73	95.87	102.60
2	AB	1928	A	C8-N9-C4	-6.73	103.11	105.80
2	AB	2006	C	C3'-C2'-C1'	6.73	106.89	101.50
43	BI	43	TYR	CB-CG-CD2	-6.73	116.96	121.00
2	AB	80	G	N3-C2-N2	6.73	124.61	119.90
2	AB	481	G	C5'-C4'-O4'	-6.73	101.02	109.10
2	AB	576	U	O4'-C1'-N1	6.73	113.58	108.20
2	AB	1111	A	C5-C6-N1	-6.73	114.33	117.70
2	AB	1687	G	N9-C4-C5	-6.73	102.71	105.40
2	AB	1863	G	N3-C4-N9	-6.73	121.96	126.00
2	AB	1945	G	N3-C4-C5	-6.73	125.23	128.60
2	AB	2054	A	C8-N9-C4	-6.73	103.11	105.80
2	AB	2091	C	O4'-C1'-N1	6.73	113.58	108.20
2	AB	2209	G	C6-N1-C2	-6.73	121.06	125.10
2	AB	2710	C	C5-C6-N1	6.73	124.36	121.00
2	AB	2723	C	C4'-C3'-C2'	-6.73	95.87	102.60
6	AF	169	VAL	CG1-CB-CG2	-6.73	100.13	110.90
12	AL	125	TYR	CG-CD1-CE1	-6.73	115.92	121.30
35	BA	415	A	N9-C4-C5	6.73	108.49	105.80
35	BA	575	G	C4-C5-C6	6.73	122.84	118.80
35	BA	647	C	C2-N3-C4	-6.73	116.53	119.90
35	BA	1399	C	N3-C2-O2	-6.73	117.19	121.90
2	AB	522	A	C5'-C4'-O4'	6.73	117.17	109.10
2	AB	1430	G	C5-N7-C8	-6.73	100.94	104.30
35	BA	104	G	N1-C6-O6	-6.73	115.86	119.90
35	BA	639	G	C4-C5-N7	-6.73	108.11	110.80
35	BA	816	A	N9-C4-C5	6.73	108.49	105.80
35	BA	1146	A	N3-C4-C5	-6.73	122.09	126.80
2	AB	83	A	N7-C8-N9	6.73	117.16	113.80
2	AB	323	C	C1'-O4'-C4'	6.73	115.28	109.90
2	AB	426	C	C4-C5-C6	6.73	120.76	117.40
2	AB	626	A	O4'-C4'-C3'	-6.73	97.27	104.00
2	AB	2826	A	C4-C5-N7	6.73	114.06	110.70
35	BA	130	A	C5-N7-C8	6.73	107.26	103.90
2	AB	1801	A	C8-N9-C4	-6.73	103.11	105.80
35	BA	228	A	N7-C8-N9	-6.73	110.44	113.80
35	BA	773	G	O4'-C1'-N9	6.73	113.58	108.20
2	AB	1301	A	O4'-C1'-N9	6.72	113.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1352	U	C4'-C3'-C2'	-6.72	95.88	102.60
2	AB	1583	A	O4'-C1'-N9	6.72	113.58	108.20
2	AB	2004	G	C5-C6-N1	6.72	114.86	111.50
2	AB	2128	G	C5-C6-O6	-6.72	124.56	128.60
2	AB	2339	C	O4'-C4'-C3'	6.72	111.48	106.10
2	AB	2363	G	N3-C4-N9	6.72	130.03	126.00
2	AB	2840	C	N3-C2-O2	-6.72	117.19	121.90
35	BA	12	U	P-O3'-C3'	6.72	127.77	119.70
35	BA	145	G	N7-C8-N9	6.72	116.46	113.10
35	BA	468	A	O4'-C1'-N9	6.72	113.58	108.20
35	BA	924	C	C2-N3-C4	-6.72	116.54	119.90
35	BA	973	G	C4'-C3'-C2'	-6.72	95.88	102.60
2	AB	325	G	N3-C2-N2	-6.72	115.19	119.90
2	AB	559	G	C2-N3-C4	6.72	115.26	111.90
2	AB	617	G	C5'-C4'-O4'	6.72	117.17	109.10
2	AB	718	A	N1-C2-N3	6.72	132.66	129.30
2	AB	1038	G	C5-C6-N1	6.72	114.86	111.50
2	AB	1139	G	N9-C4-C5	-6.72	102.71	105.40
2	AB	1521	G	C4-C5-C6	6.72	122.83	118.80
2	AB	1993	U	N3-C2-O2	-6.72	117.49	122.20
2	AB	2243	U	N3-C2-O2	-6.72	117.50	122.20
35	BA	279	A	N7-C8-N9	-6.72	110.44	113.80
35	BA	500	G	N9-C4-C5	-6.72	102.71	105.40
35	BA	576	C	C5'-C4'-O4'	-6.72	101.03	109.10
2	AB	176	A	C5-C6-N1	6.72	121.06	117.70
2	AB	470	A	C3'-C2'-C1'	6.72	106.88	101.50
2	AB	709	U	C4-C5-C6	6.72	123.73	119.70
2	AB	1288	G	N1-C2-N3	6.72	127.93	123.90
2	AB	1572	A	C5-C6-N1	-6.72	114.34	117.70
2	AB	2602	A	N7-C8-N9	6.72	117.16	113.80
2	AB	2667	C	N1-C2-O2	6.72	122.93	118.90
35	BA	770	C	C4-C5-C6	-6.72	114.04	117.40
2	AB	1364	G	N3-C2-N2	6.72	124.60	119.90
2	AB	2212	A	C6-N1-C2	-6.72	114.57	118.60
2	AB	2637	U	O4'-C4'-C3'	6.72	111.48	106.10
2	AB	2735	G	C4-C5-N7	-6.72	108.11	110.80
2	AB	2823	A	C5-N7-C8	6.72	107.26	103.90
17	AQ	81	ARG	NE-CZ-NH1	6.72	123.66	120.30
18	AR	52	ARG	NE-CZ-NH1	6.72	123.66	120.30
35	BA	317	U	C5-C6-N1	-6.72	119.34	122.70
35	BA	946	A	N7-C8-N9	6.72	117.16	113.80
1	AA	111	U	C2-N3-C4	-6.72	122.97	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1029	A	N7-C8-N9	-6.72	110.44	113.80
2	AB	1521	G	C3'-C2'-C1'	6.72	106.87	101.50
2	AB	2371	G	N1-C6-O6	-6.72	115.87	119.90
35	BA	100	G	O4'-C1'-N9	6.72	113.58	108.20
35	BA	199	A	O4'-C4'-C3'	6.72	111.47	106.10
35	BA	244	U	N3-C2-O2	-6.72	117.50	122.20
1	AA	29	A	N7-C8-N9	6.72	117.16	113.80
2	AB	532	A	O4'-C1'-N9	6.72	113.57	108.20
2	AB	1619	G	N3-C4-C5	-6.72	125.24	128.60
2	AB	2052	A	C5-C6-N1	6.72	121.06	117.70
2	AB	2081	U	C3'-C2'-C1'	6.72	106.87	101.50
2	AB	2816	G	C8-N9-C4	-6.72	103.71	106.40
35	BA	735	C	C6-N1-C2	-6.72	117.61	120.30
35	BA	1041	G	N3-C2-N2	-6.72	115.20	119.90
35	BA	1479	C	C5-C6-N1	-6.72	117.64	121.00
2	AB	822	G	O4'-C1'-N9	6.71	113.57	108.20
2	AB	1156	A	C2-N3-C4	6.71	113.96	110.60
2	AB	1193	G	C8-N9-C1'	6.71	135.73	127.00
2	AB	1409	U	N3-C4-O4	6.71	124.10	119.40
2	AB	1470	A	C5-N7-C8	6.71	107.26	103.90
2	AB	2536	G	N3-C4-C5	-6.71	125.24	128.60
20	AT	83	TYR	CB-CG-CD2	6.71	125.03	121.00
35	BA	315	A	N1-C6-N6	-6.71	114.57	118.60
35	BA	332	G	N3-C4-C5	6.71	131.96	128.60
35	BA	514	C	N3-C4-N4	6.71	122.70	118.00
35	BA	809	G	P-O3'-C3'	6.71	127.76	119.70
35	BA	1181	G	C5'-C4'-C3'	-6.71	105.26	116.00
35	BA	1251	A	N7-C8-N9	6.71	117.16	113.80
35	BA	1357	A	C4-C5-N7	6.71	114.06	110.70
37	BC	60	A	O4'-C1'-N9	6.71	113.57	108.20
2	AB	160	A	C2-N3-C4	6.71	113.96	110.60
2	AB	405	U	N3-C2-O2	-6.71	117.50	122.20
2	AB	2599	G	O4'-C1'-N9	6.71	113.57	108.20
35	BA	862	C	C3'-C2'-C1'	6.71	106.87	101.50
35	BA	1272	G	N3-C2-N2	6.71	124.60	119.90
1	AA	27	C	C1'-O4'-C4'	6.71	115.27	109.90
2	AB	79	C	N1-C2-O2	6.71	122.93	118.90
2	AB	132	G	C5-C6-O6	-6.71	124.57	128.60
2	AB	294	A	C3'-C2'-C1'	-6.71	96.13	101.50
2	AB	509	C	N3-C4-C5	-6.71	119.22	121.90
2	AB	1840	G	N1-C2-N2	6.71	122.24	116.20
2	AB	2892	G	C5-C6-N1	6.71	114.86	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1413	A	C5-N7-C8	-6.71	100.54	103.90
35	BA	1431	A	C1'-O4'-C4'	6.71	115.27	109.90
2	AB	66	C	N1-C2-N3	-6.71	114.50	119.20
2	AB	366	C	C4-C5-C6	-6.71	114.05	117.40
15	AO	92	TRP	NE1-CE2-CZ2	6.71	137.78	130.40
35	BA	212	G	P-O5'-C5'	6.71	131.64	120.90
35	BA	1171	A	C4-C5-C6	-6.71	113.64	117.00
2	AB	142	A	C4'-C3'-C2'	-6.71	95.89	102.60
2	AB	472	A	N1-C6-N6	6.71	122.62	118.60
2	AB	632	A	O4'-C1'-N9	6.71	113.57	108.20
2	AB	638	G	N1-C2-N3	-6.71	119.88	123.90
2	AB	832	U	C2-N3-C4	-6.71	122.97	127.00
2	AB	1847	A	C4-C5-N7	-6.71	107.35	110.70
2	AB	2122	U	C5-C4-O4	-6.71	121.88	125.90
2	AB	2246	G	C4-C5-N7	6.71	113.48	110.80
2	AB	2325	G	N1-C6-O6	-6.71	115.88	119.90
2	AB	2400	G	N3-C4-C5	-6.71	125.25	128.60
2	AB	2440	C	O4'-C1'-C2'	6.71	113.64	107.60
35	BA	954	G	C2-N3-C4	6.71	115.25	111.90
2	AB	205	G	N3-C4-C5	-6.71	125.25	128.60
2	AB	832	U	N3-C2-O2	-6.71	117.50	122.20
2	AB	938	G	C6-N1-C2	-6.71	121.08	125.10
35	BA	177	G	C8-N9-C1'	-6.71	118.28	127.00
36	BB	35	G	N7-C8-N9	6.71	116.45	113.10
2	AB	2184	A	O4'-C1'-N9	6.71	113.56	108.20
35	BA	1297	G	N3-C2-N2	-6.71	115.21	119.90
2	AB	168	G	N1-C2-N3	-6.70	119.88	123.90
2	AB	350	G	C6-C5-N7	-6.70	126.38	130.40
2	AB	448	U	C2-N3-C4	-6.70	122.98	127.00
2	AB	793	A	C4'-C3'-C2'	-6.70	95.90	102.60
2	AB	1058	U	N3-C4-C5	-6.70	110.58	114.60
2	AB	1280	G	C2-N3-C4	6.70	115.25	111.90
2	AB	1313	U	C5-C4-O4	-6.70	121.88	125.90
2	AB	1751	U	N1-C2-N3	6.70	118.92	114.90
2	AB	2070	A	C5-C6-N1	6.70	121.05	117.70
2	AB	2599	G	N1-C6-O6	-6.70	115.88	119.90
26	AZ	44	ARG	NE-CZ-NH1	-6.70	116.95	120.30
35	BA	8	A	O4'-C1'-C2'	-6.70	99.10	105.80
35	BA	492	C	N1-C2-O2	6.70	122.92	118.90
35	BA	1051	C	N3-C4-N4	6.70	122.69	118.00
37	BC	58	A	C8-N9-C4	-6.70	103.12	105.80
1	AA	25	U	O4'-C1'-N1	6.70	113.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	711	G	N3-C4-N9	6.70	130.02	126.00
35	BA	377	G	C6-N1-C2	-6.70	121.08	125.10
35	BA	440	C	O4'-C1'-N1	6.70	113.56	108.20
35	BA	1362	A	C4'-C3'-C2'	-6.70	95.90	102.60
1	AA	29	A	C4'-C3'-C2'	-6.70	95.90	102.60
2	AB	315	G	C2-N3-C4	6.70	115.25	111.90
2	AB	424	G	C4'-C3'-C2'	-6.70	95.90	102.60
2	AB	810	U	N3-C2-O2	-6.70	117.51	122.20
2	AB	901	C	N1-C1'-C2'	-6.70	104.63	112.00
2	AB	1694	C	C3'-C2'-C1'	-6.70	96.14	101.50
2	AB	2302	U	N3-C4-O4	6.70	124.09	119.40
5	AE	179	ARG	NE-CZ-NH1	6.70	123.65	120.30
1	AA	41	G	N9-C4-C5	6.70	108.08	105.40
2	AB	686	U	C6-N1-C2	-6.70	116.98	121.00
2	AB	1227	G	C5'-C4'-O4'	6.70	117.14	109.10
2	AB	1267	U	C5-C4-O4	-6.70	121.88	125.90
2	AB	1676	A	N7-C8-N9	6.70	117.15	113.80
2	AB	1811	G	C6-N1-C2	-6.70	121.08	125.10
2	AB	2260	C	C4'-C3'-C2'	-6.70	95.90	102.60
2	AB	2682	A	N7-C8-N9	-6.70	110.45	113.80
35	BA	82	G	C8-N9-C4	-6.70	103.72	106.40
35	BA	1500	A	C4-C5-C6	-6.70	113.65	117.00
37	BC	31	G	N3-C4-C5	-6.70	125.25	128.60
2	AB	695	G	C5-C6-N1	-6.70	108.15	111.50
2	AB	867	C	N1-C2-O2	6.70	122.92	118.90
2	AB	1081	U	O4'-C1'-N1	6.70	113.56	108.20
35	BA	1139	G	C8-N9-C4	-6.70	103.72	106.40
35	BA	1223	C	O4'-C1'-N1	6.70	113.56	108.20
53	BS	64	ARG	NE-CZ-NH2	-6.70	116.95	120.30
2	AB	332	A	C2-N3-C4	6.70	113.95	110.60
2	AB	501	A	C3'-C2'-C1'	6.70	106.86	101.50
2	AB	670	A	C1'-O4'-C4'	6.70	115.26	109.90
2	AB	709	U	O4'-C1'-N1	6.70	113.56	108.20
2	AB	727	A	O4'-C1'-C2'	-6.70	99.11	105.80
2	AB	1740	G	C3'-C2'-C1'	-6.70	96.14	101.50
2	AB	2572	A	C3'-C2'-C1'	6.70	106.86	101.50
2	AB	2842	G	N1-C2-N3	6.70	127.92	123.90
2	AB	2869	G	C8-N9-C4	-6.70	103.72	106.40
5	AE	113	SER	CB-CA-C	6.70	122.82	110.10
35	BA	252	U	C3'-C2'-C1'	-6.70	96.14	101.50
35	BA	419	C	N1-C2-O2	6.70	122.92	118.90
35	BA	718	A	N9-C4-C5	6.70	108.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	888	G	P-O3'-C3'	6.70	127.73	119.70
35	BA	976	G	N3-C4-C5	-6.70	125.25	128.60
35	BA	1214	C	C1'-O4'-C4'	-6.70	104.54	109.90
35	BA	1221	G	N3-C2-N2	6.70	124.59	119.90
2	AB	652	U	O4'-C1'-N1	6.69	113.56	108.20
2	AB	2246	G	N3-C4-N9	6.69	130.02	126.00
2	AB	2276	G	C5-C6-O6	-6.69	124.58	128.60
4	AD	216	ARG	NE-CZ-NH1	6.69	123.65	120.30
22	AV	16	VAL	CG1-CB-CG2	-6.69	100.19	110.90
35	BA	310	G	N3-C2-N2	-6.69	115.21	119.90
2	AB	362	A	N1-C6-N6	-6.69	114.58	118.60
2	AB	636	G	N9-C1'-C2'	-6.69	104.64	112.00
2	AB	1196	C	N3-C4-C5	-6.69	119.22	121.90
2	AB	1323	C	O4'-C4'-C3'	6.69	111.45	106.10
2	AB	1407	G	N1-C2-N2	-6.69	110.18	116.20
2	AB	1528	A	C5-C6-N1	6.69	121.05	117.70
2	AB	1633	G	N1-C2-N3	-6.69	119.88	123.90
2	AB	1753	G	N3-C2-N2	6.69	124.58	119.90
2	AB	1853	A	C4-C5-N7	6.69	114.05	110.70
2	AB	1870	C	O4'-C4'-C3'	6.69	111.45	106.10
2	AB	2606	C	C2-N3-C4	-6.69	116.55	119.90
35	BA	696	A	N1-C6-N6	-6.69	114.58	118.60
35	BA	1236	A	C2-N3-C4	-6.69	107.25	110.60
35	BA	1440	U	N3-C4-O4	-6.69	114.72	119.40
35	BA	1464	U	O4'-C1'-N1	6.69	113.55	108.20
37	BC	51	U	C3'-C2'-C1'	-6.69	96.15	101.50
2	AB	434	U	C2-N3-C4	-6.69	122.98	127.00
2	AB	612	G	N3-C4-C5	-6.69	125.25	128.60
2	AB	827	U	C3'-C2'-C1'	6.69	106.85	101.50
2	AB	948	C	N1-C2-O2	6.69	122.91	118.90
2	AB	1221	C	O4'-C1'-N1	6.69	113.55	108.20
35	BA	245	U	O4'-C1'-N1	6.69	113.55	108.20
35	BA	358	U	C5-C4-O4	-6.69	121.89	125.90
35	BA	423	G	C6-N1-C2	-6.69	121.09	125.10
35	BA	898	G	N7-C8-N9	6.69	116.44	113.10
35	BA	1100	C	N3-C4-N4	6.69	122.68	118.00
35	BA	1266	G	N3-C4-C5	-6.69	125.25	128.60
2	AB	1721	G	C5-C6-O6	6.69	132.61	128.60
2	AB	2143	C	C5-C6-N1	-6.69	117.66	121.00
35	BA	354	G	N3-C4-C5	6.69	131.94	128.60
35	BA	531	U	N3-C4-C5	-6.69	110.59	114.60
2	AB	1009	A	C4-C5-N7	-6.69	107.36	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1876	A	C4'-C3'-C2'	-6.69	95.91	102.60
2	AB	1926	U	C2-N3-C4	-6.69	122.99	127.00
2	AB	2136	G	N1-C6-O6	6.69	123.91	119.90
2	AB	661	A	C5-C6-N6	-6.69	118.35	123.70
2	AB	1020	A	C5-C6-N6	-6.69	118.35	123.70
2	AB	1851	U	C6-N1-C2	-6.69	116.99	121.00
2	AB	2576	G	N3-C4-C5	-6.69	125.26	128.60
35	BA	740	U	C5-C4-O4	-6.69	121.89	125.90
1	AA	74	U	N1-C2-N3	6.68	118.91	114.90
2	AB	323	C	N1-C2-O2	6.68	122.91	118.90
2	AB	695	G	N9-C4-C5	6.68	108.07	105.40
2	AB	743	A	C5-C6-N1	-6.68	114.36	117.70
2	AB	1032	A	C2-N3-C4	6.68	113.94	110.60
2	AB	1361	G	C5'-C4'-C3'	-6.68	105.31	116.00
35	BA	181	A	O4'-C1'-N9	6.68	113.55	108.20
35	BA	699	C	O4'-C1'-N1	6.68	113.55	108.20
35	BA	1181	G	N9-C4-C5	6.68	108.07	105.40
37	BC	38	A	P-O3'-C3'	6.68	127.72	119.70
2	AB	239	C	N3-C4-N4	6.68	122.68	118.00
2	AB	370	G	C8-N9-C1'	6.68	135.69	127.00
2	AB	512	G	N9-C4-C5	6.68	108.07	105.40
2	AB	1091	G	C6-N1-C2	-6.68	121.09	125.10
2	AB	1479	G	C4-C5-N7	-6.68	108.13	110.80
2	AB	1546	G	C5'-C4'-O4'	6.68	117.12	109.10
2	AB	1642	G	C2-N3-C4	6.68	115.24	111.90
2	AB	2053	G	C5-C6-O6	-6.68	124.59	128.60
2	AB	2070	A	N1-C2-N3	-6.68	125.96	129.30
2	AB	2444	G	N1-C6-O6	-6.68	115.89	119.90
2	AB	2786	U	N1-C2-N3	6.68	118.91	114.90
35	BA	319	G	N1-C6-O6	-6.68	115.89	119.90
35	BA	496	A	C4-C5-C6	-6.68	113.66	117.00
35	BA	510	A	N9-C4-C5	6.68	108.47	105.80
2	AB	3	U	C5-C4-O4	-6.68	121.89	125.90
2	AB	1897	G	C4-C5-N7	-6.68	108.13	110.80
2	AB	2266	A	C6-C5-N7	-6.68	127.62	132.30
2	AB	332	A	C1'-O4'-C4'	-6.68	104.56	109.90
2	AB	497	A	C4-C5-N7	-6.68	107.36	110.70
2	AB	539	G	C4-C5-N7	-6.68	108.13	110.80
2	AB	1304	A	C3'-C2'-C1'	-6.68	96.16	101.50
35	BA	768	A	N9-C4-C5	6.68	108.47	105.80
2	AB	1296	G	N3-C4-N9	-6.68	121.99	126.00
2	AB	1560	G	C1'-O4'-C4'	6.68	115.24	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1166	G	C8-N9-C4	-6.68	103.73	106.40
2	AB	1168	G	C1'-O4'-C4'	6.68	115.24	109.90
2	AB	1572	A	N9-C1'-C2'	-6.68	104.66	112.00
2	AB	1621	U	C5-C6-N1	-6.68	119.36	122.70
2	AB	2521	C	O4'-C1'-N1	6.68	113.54	108.20
17	AQ	36	TYR	CD1-CE1-CZ	-6.68	113.79	119.80
35	BA	477	C	O4'-C1'-N1	6.68	113.54	108.20
35	BA	779	C	N1-C2-O2	6.68	122.91	118.90
35	BA	1096	C	N1-C2-O2	6.68	122.91	118.90
36	BB	48	C	N1-C2-O2	6.68	122.91	118.90
42	BH	79	ARG	NE-CZ-NH2	-6.68	116.96	120.30
2	AB	911	A	C5-C6-N6	-6.67	118.36	123.70
2	AB	914	G	C8-N9-C4	-6.67	103.73	106.40
2	AB	1311	G	C5'-C4'-C3'	-6.67	105.32	116.00
2	AB	2821	A	N1-C2-N3	6.67	132.64	129.30
35	BA	236	A	C2-N3-C4	6.67	113.94	110.60
35	BA	741	G	N7-C8-N9	6.67	116.44	113.10
35	BA	775	G	C5-C6-N1	-6.67	108.16	111.50
35	BA	1014	A	C3'-C2'-C1'	-6.67	96.16	101.50
35	BA	1247	U	C5-C6-N1	6.67	126.04	122.70
35	BA	1319	A	C5'-C4'-O4'	6.67	117.11	109.10
35	BA	1488	G	C8-N9-C4	-6.67	103.73	106.40
2	AB	1178	C	C4-C5-C6	6.67	120.74	117.40
2	AB	2102	G	C5-N7-C8	-6.67	100.96	104.30
2	AB	29	U	C5-C6-N1	-6.67	119.36	122.70
2	AB	155	A	N3-C4-C5	6.67	131.47	126.80
2	AB	1041	G	O4'-C1'-N9	6.67	113.54	108.20
2	AB	1093	G	C5-N7-C8	-6.67	100.96	104.30
2	AB	2686	G	C4-C5-C6	6.67	122.80	118.80
35	BA	416	G	N3-C4-C5	-6.67	125.26	128.60
35	BA	623	C	C4'-C3'-C2'	-6.67	95.93	102.60
35	BA	1366	C	C5'-C4'-C3'	-6.67	105.33	116.00
2	AB	128	C	C1'-O4'-C4'	-6.67	104.56	109.90
2	AB	2872	A	C5-N7-C8	6.67	107.23	103.90
35	BA	227	G	C1'-O4'-C4'	6.67	115.24	109.90
2	AB	76	C	N1-C2-O2	6.67	122.90	118.90
2	AB	692	C	C5'-C4'-O4'	6.67	117.10	109.10
2	AB	1148	U	N1-C2-O2	6.67	127.47	122.80
2	AB	2625	G	N1-C6-O6	-6.67	115.90	119.90
35	BA	36	C	N1-C2-O2	6.67	122.90	118.90
37	BC	44	A	C5-N7-C8	-6.67	100.57	103.90
39	BE	155	ARG	NE-CZ-NH2	-6.67	116.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	50	A	C4-C5-N7	-6.67	107.37	110.70
2	AB	968	C	C5'-C4'-O4'	6.67	117.10	109.10
2	AB	1455	G	N1-C2-N3	-6.67	119.90	123.90
2	AB	1844	C	C5'-C4'-O4'	6.67	117.10	109.10
2	AB	2757	A	C5-N7-C8	6.67	107.23	103.90
2	AB	2833	U	C4-C5-C6	6.67	123.70	119.70
35	BA	425	G	C2-N3-C4	-6.67	108.57	111.90
35	BA	925	G	C4-C5-N7	6.67	113.47	110.80
35	BA	1414	U	C4-C5-C6	6.67	123.70	119.70
35	BA	1471	U	N1-C2-N3	6.67	118.90	114.90
1	AA	85	G	N3-C4-C5	-6.67	125.27	128.60
2	AB	582	A	C8-N9-C4	-6.67	103.13	105.80
2	AB	962	G	N1-C6-O6	-6.67	115.90	119.90
2	AB	2830	C	C5-C4-N4	-6.67	115.53	120.20
35	BA	111	G	C8-N9-C4	-6.67	103.73	106.40
35	BA	1135	U	N1-C2-N3	6.67	118.90	114.90
2	AB	205	G	C6-C5-N7	-6.66	126.40	130.40
2	AB	208	C	N1-C2-N3	-6.66	114.54	119.20
2	AB	916	G	C2-N3-C4	6.66	115.23	111.90
2	AB	1268	A	N9-C4-C5	6.66	108.47	105.80
2	AB	2403	C	C5-C6-N1	-6.66	117.67	121.00
2	AB	2515	C	C5-C6-N1	6.66	124.33	121.00
35	BA	171	A	C1'-O4'-C4'	6.66	115.23	109.90
35	BA	270	A	O4'-C1'-N9	6.66	113.53	108.20
35	BA	890	G	N7-C8-N9	6.66	116.43	113.10
1	AA	93	C	N1-C2-O2	6.66	122.90	118.90
2	AB	1509	A	C3'-C2'-C1'	6.66	106.83	101.50
2	AB	2370	G	N1-C2-N2	6.66	122.20	116.20
35	BA	312	C	C5'-C4'-C3'	-6.66	105.34	116.00
35	BA	1133	G	C8-N9-C4	-6.66	103.73	106.40
35	BA	1257	A	O4'-C1'-N9	-6.66	102.87	108.20
2	AB	27	G	N3-C4-C5	-6.66	125.27	128.60
2	AB	1437	C	C4'-C3'-C2'	-6.66	95.94	102.60
2	AB	1744	A	O4'-C1'-N9	6.66	113.53	108.20
2	AB	2578	G	N3-C4-C5	-6.66	125.27	128.60
6	AF	21	ARG	NE-CZ-NH2	6.66	123.63	120.30
35	BA	3	A	C2-N3-C4	6.66	113.93	110.60
35	BA	215	C	N3-C4-C5	-6.66	119.24	121.90
35	BA	301	G	N3-C2-N2	-6.66	115.24	119.90
35	BA	550	G	C8-N9-C4	-6.66	103.74	106.40
35	BA	702	A	N7-C8-N9	-6.66	110.47	113.80
35	BA	1011	C	N3-C2-O2	-6.66	117.24	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1141	C	C1'-O4'-C4'	-6.66	104.57	109.90
35	BA	1175	G	N3-C4-C5	-6.66	125.27	128.60
35	BA	1418	A	O4'-C1'-N9	6.66	113.53	108.20
36	BB	38	G	C1'-O4'-C4'	6.66	115.23	109.90
1	AA	17	C	C4-C5-C6	-6.66	114.07	117.40
2	AB	596	U	C5-C6-N1	-6.66	119.37	122.70
2	AB	1349	C	C5-C4-N4	-6.66	115.54	120.20
2	AB	1791	A	C8-N9-C4	6.66	108.46	105.80
2	AB	1845	G	O4'-C1'-N9	6.66	113.53	108.20
2	AB	2314	A	C5'-C4'-O4'	6.66	117.09	109.10
2	AB	2582	G	C2-N3-C4	6.66	115.23	111.90
2	AB	2757	A	C6-N1-C2	-6.66	114.61	118.60
33	A6	41	ARG	NE-CZ-NH2	-6.66	116.97	120.30
35	BA	921	U	N3-C4-C5	-6.66	110.61	114.60
35	BA	1195	C	C4'-C3'-C2'	-6.66	95.94	102.60
35	BA	1500	A	C5'-C4'-C3'	-6.66	105.35	116.00
2	AB	641	U	N3-C4-C5	-6.66	110.61	114.60
2	AB	974	G	N7-C8-N9	-6.66	109.77	113.10
2	AB	1831	G	C5-C6-N1	6.66	114.83	111.50
2	AB	2433	A	C3'-C2'-C1'	-6.66	96.17	101.50
1	AA	56	G	O4'-C4'-C3'	6.66	111.42	106.10
2	AB	335	C	N3-C4-C5	-6.66	119.24	121.90
2	AB	759	G	N9-C1'-C2'	-6.66	104.68	112.00
2	AB	1224	U	C5-C6-N1	-6.66	119.37	122.70
2	AB	1330	C	C6-N1-C2	-6.66	117.64	120.30
2	AB	1363	C	O4'-C1'-N1	6.66	113.53	108.20
2	AB	1538	G	C6-N1-C2	-6.66	121.11	125.10
2	AB	1602	U	N1-C2-O2	6.66	127.46	122.80
2	AB	2358	A	C4-C5-N7	6.66	114.03	110.70
2	AB	2502	G	C3'-C2'-C1'	6.66	106.83	101.50
2	AB	2518	A	N7-C8-N9	6.66	117.13	113.80
2	AB	2577	A	N7-C8-N9	-6.66	110.47	113.80
35	BA	304	U	C5-C6-N1	-6.66	119.37	122.70
35	BA	1097	C	C3'-C2'-C1'	6.66	106.82	101.50
35	BA	1127	G	C3'-C2'-C1'	-6.66	96.18	101.50
36	BB	53	G	C5-C6-N1	6.66	114.83	111.50
38	BD	6	ARG	NE-CZ-NH2	-6.66	116.97	120.30
2	AB	1204	A	O4'-C1'-N9	6.65	113.52	108.20
2	AB	1537	G	C6-C5-N7	-6.65	126.41	130.40
2	AB	2179	C	N1-C2-O2	6.65	122.89	118.90
7	AG	96	TRP	NE1-CE2-CD2	-6.65	100.65	107.30
35	BA	1073	U	C3'-C2'-C1'	6.65	106.82	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1208	C	C5'-C4'-C3'	-6.65	105.35	116.00
35	BA	1268	G	C2-N3-C4	6.65	115.23	111.90
35	BA	1455	G	N3-C4-N9	-6.65	122.01	126.00
2	AB	194	G	C4-C5-C6	6.65	122.79	118.80
2	AB	531	C	N1-C1'-C2'	6.65	122.65	114.00
2	AB	1793	C	C5-C6-N1	6.65	124.33	121.00
2	AB	2555	U	O4'-C1'-N1	6.65	113.52	108.20
2	AB	2846	G	N7-C8-N9	6.65	116.43	113.10
11	AK	55	PRO	CA-N-CD	-6.65	102.19	111.50
35	BA	71	A	C5-N7-C8	-6.65	100.57	103.90
35	BA	116	A	O4'-C1'-N9	6.65	113.52	108.20
35	BA	649	A	C5-N7-C8	6.65	107.23	103.90
35	BA	693	G	N9-C4-C5	6.65	108.06	105.40
35	BA	1140	C	N1-C2-O2	6.65	122.89	118.90
35	BA	1277	C	N1-C1'-C2'	-6.65	104.68	112.00
37	BC	7	G	N1-C6-O6	6.65	123.89	119.90
2	AB	595	C	N1-C2-N3	-6.65	114.55	119.20
2	AB	724	U	C6-N1-C2	-6.65	117.01	121.00
2	AB	731	C	N3-C4-N4	6.65	122.66	118.00
2	AB	768	G	C1'-O4'-C4'	6.65	115.22	109.90
2	AB	1676	A	C6-N1-C2	-6.65	114.61	118.60
2	AB	1781	U	C2-N3-C4	-6.65	123.01	127.00
2	AB	2305	U	C3'-C2'-C1'	-6.65	96.18	101.50
2	AB	2349	G	O4'-C1'-N9	6.65	113.52	108.20
35	BA	1426	G	N1-C6-O6	6.65	123.89	119.90
1	AA	31	C	C5-C6-N1	-6.65	117.68	121.00
2	AB	998	C	C5-C6-N1	-6.65	117.68	121.00
2	AB	2538	C	N3-C4-C5	-6.65	119.24	121.90
7	AG	98	PHE	CD1-CE1-CZ	6.65	128.08	120.10
35	BA	1353	G	C5-C6-O6	-6.65	124.61	128.60
2	AB	633	A	N7-C8-N9	-6.65	110.48	113.80
2	AB	840	C	N3-C4-N4	6.65	122.65	118.00
2	AB	975	A	N9-C4-C5	-6.65	103.14	105.80
2	AB	1186	G	N3-C2-N2	6.65	124.55	119.90
35	BA	246	A	C6-N1-C2	6.65	122.59	118.60
35	BA	915	A	C8-N9-C4	6.65	108.46	105.80
35	BA	1318	A	C8-N9-C4	6.65	108.46	105.80
35	BA	1320	C	N3-C4-C5	6.65	124.56	121.90
36	BB	13	A	C6-C5-N7	6.65	136.95	132.30
37	BC	3	C	C2-N3-C4	-6.65	116.58	119.90
1	AA	101	A	O4'-C1'-N9	6.65	113.52	108.20
2	AB	421	C	N3-C4-N4	6.65	122.65	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	509	C	O4'-C1'-C2'	6.65	113.58	107.60
2	AB	2664	G	O4'-C1'-N9	6.65	113.52	108.20
35	BA	74	A	O5'-C5'-C4'	-6.65	99.07	111.70
35	BA	483	C	C5-C6-N1	6.65	124.32	121.00
35	BA	1101	A	O5'-C5'-C4'	6.65	124.33	111.70
2	AB	293	U	N3-C2-O2	-6.64	117.55	122.20
2	AB	505	A	O4'-C1'-N9	6.64	113.52	108.20
2	AB	604	G	N9-C4-C5	6.64	108.06	105.40
2	AB	1187	G	P-O3'-C3'	6.64	127.67	119.70
2	AB	1328	A	N1-C6-N6	6.64	122.59	118.60
35	BA	472	U	P-O5'-C5'	6.64	131.53	120.90
35	BA	651	C	C5'-C4'-C3'	-6.64	105.37	116.00
35	BA	875	U	C5-C4-O4	-6.64	121.91	125.90
35	BA	1112	C	N1-C2-O2	6.64	122.89	118.90
35	BA	1244	G	C8-N9-C4	-6.64	103.74	106.40
35	BA	1466	C	O4'-C1'-N1	6.64	113.52	108.20
50	BP	76	PHE	CB-CG-CD1	6.64	125.45	120.80
2	AB	42	A	N1-C2-N3	-6.64	125.98	129.30
2	AB	42	A	O4'-C1'-C2'	-6.64	99.16	105.80
2	AB	134	G	C4-C5-C6	6.64	122.79	118.80
2	AB	1266	G	P-O3'-C3'	6.64	127.67	119.70
2	AB	1953	A	O4'-C1'-N9	-6.64	102.89	108.20
2	AB	2839	G	C5'-C4'-O4'	6.64	117.07	109.10
35	BA	991	U	N3-C4-O4	-6.64	114.75	119.40
55	BU	2	ARG	CD-NE-CZ	6.64	132.90	123.60
2	AB	1616	A	O4'-C4'-C3'	6.64	111.41	106.10
35	BA	35	G	N3-C2-N2	-6.64	115.25	119.90
35	BA	346	G	O4'-C1'-C2'	6.64	113.58	107.60
2	AB	75	G	C4-C5-N7	6.64	113.46	110.80
2	AB	396	G	N3-C4-C5	-6.64	125.28	128.60
2	AB	462	C	C5-C4-N4	-6.64	115.55	120.20
2	AB	1230	A	C2-N3-C4	6.64	113.92	110.60
2	AB	1521	G	N3-C4-C5	-6.64	125.28	128.60
2	AB	1805	A	C5-C6-N6	6.64	129.01	123.70
2	AB	2171	A	C5-N7-C8	-6.64	100.58	103.90
2	AB	2567	G	C6-C5-N7	6.64	134.38	130.40
2	AB	2742	G	N1-C2-N3	6.64	127.88	123.90
2	AB	2748	A	N1-C2-N3	-6.64	125.98	129.30
2	AB	2804	U	P-O5'-C5'	-6.64	110.28	120.90
18	AR	20	ARG	NE-CZ-NH2	6.64	123.62	120.30
35	BA	350	G	C6-N1-C2	-6.64	121.12	125.10
35	BA	1310	G	C8-N9-C4	-6.64	103.75	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	60	G	C2-N3-C4	6.64	115.22	111.90
2	AB	1309	G	C4'-C3'-C2'	-6.64	95.96	102.60
2	AB	73	A	C4-C5-C6	-6.64	113.68	117.00
2	AB	139	U	O4'-C1'-C2'	-6.64	99.16	105.80
2	AB	627	A	C1'-O4'-C4'	-6.64	104.59	109.90
2	AB	2285	C	N3-C4-C5	-6.64	119.25	121.90
2	AB	2772	C	C1'-O4'-C4'	6.64	115.21	109.90
35	BA	13	U	C5-C4-O4	-6.64	121.92	125.90
35	BA	947	G	C5-C6-N1	6.64	114.82	111.50
35	BA	1334	G	N7-C8-N9	6.64	116.42	113.10
47	BM	51	PHE	CG-CD1-CE1	-6.64	113.50	120.80
2	AB	757	G	O4'-C1'-N9	6.63	113.51	108.20
2	AB	1137	G	C8-N9-C4	-6.63	103.75	106.40
2	AB	1444	G	N9-C4-C5	-6.63	102.75	105.40
2	AB	1544	A	N7-C8-N9	-6.63	110.48	113.80
2	AB	1561	C	O4'-C1'-N1	6.63	113.51	108.20
2	AB	1697	G	C4-C5-N7	-6.63	108.15	110.80
19	AS	96	ASP	CB-CG-OD2	6.63	124.27	118.30
35	BA	150	U	C4-C5-C6	6.63	123.68	119.70
35	BA	184	G	C1'-O4'-C4'	-6.63	104.59	109.90
35	BA	249	U	C6-N1-C2	-6.63	117.02	121.00
35	BA	442	G	C8-N9-C4	-6.63	103.75	106.40
35	BA	712	A	C4-C5-N7	-6.63	107.38	110.70
35	BA	781	A	C5'-C4'-O4'	6.63	117.06	109.10
35	BA	882	C	N1-C2-O2	6.63	122.88	118.90
35	BA	1278	G	P-O3'-C3'	6.63	127.66	119.70
2	AB	1970	A	C6-N1-C2	-6.63	114.62	118.60
2	AB	2406	A	C2-N3-C4	-6.63	107.28	110.60
35	BA	324	G	N3-C2-N2	-6.63	115.26	119.90
44	BJ	18	ALA	CB-CA-C	6.63	120.05	110.10
1	AA	7	G	N9-C4-C5	6.63	108.05	105.40
2	AB	103	A	C5-C6-N1	6.63	121.02	117.70
2	AB	327	G	N3-C4-C5	-6.63	125.28	128.60
2	AB	866	A	C8-N9-C4	6.63	108.45	105.80
2	AB	1027	A	N7-C8-N9	6.63	117.12	113.80
2	AB	1040	A	C5-C6-N1	-6.63	114.39	117.70
2	AB	2164	C	C6-N1-C2	6.63	122.95	120.30
2	AB	2863	C	C5'-C4'-O4'	-6.63	101.14	109.10
35	BA	19	A	C5-C6-N6	6.63	129.00	123.70
35	BA	1510	C	O3'-P-O5'	-6.63	91.40	104.00
37	BC	73	A	C3'-C2'-C1'	-6.63	96.19	101.50
2	AB	500	G	N3-C4-C5	-6.63	125.28	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1080	A	N9-C1'-C2'	-6.63	104.71	112.00
2	AB	1725	U	O4'-C1'-N1	6.63	113.50	108.20
35	BA	434	U	N1-C2-N3	6.63	118.88	114.90
35	BA	519	C	C3'-C2'-C1'	-6.63	96.20	101.50
2	AB	869	G	C4-C5-N7	-6.63	108.15	110.80
2	AB	927	A	C5-C6-N6	6.63	129.00	123.70
2	AB	1429	G	N3-C2-N2	-6.63	115.26	119.90
2	AB	1500	G	C8-N9-C4	-6.63	103.75	106.40
2	AB	2316	G	N3-C4-C5	-6.63	125.29	128.60
2	AB	2422	C	C6-N1-C2	-6.63	117.65	120.30
2	AB	2817	U	N3-C2-O2	-6.63	117.56	122.20
35	BA	54	C	O4'-C1'-N1	6.63	113.50	108.20
2	AB	13	A	O4'-C1'-C2'	-6.63	99.17	105.80
2	AB	201	C	C2-N3-C4	-6.63	116.59	119.90
2	AB	809	G	N9-C4-C5	-6.63	102.75	105.40
2	AB	974	G	C1'-O4'-C4'	-6.63	104.60	109.90
2	AB	2072	C	N1-C1'-C2'	-6.63	104.71	112.00
2	AB	2111	U	C4-C5-C6	6.63	123.68	119.70
2	AB	2191	A	C6-N1-C2	6.63	122.58	118.60
2	AB	2262	U	O4'-C4'-C3'	6.63	111.40	106.10
2	AB	2313	C	N1-C2-O2	6.63	122.88	118.90
2	AB	2737	G	C5-C6-N1	6.63	114.81	111.50
14	AN	107	PHE	CB-CG-CD1	6.63	125.44	120.80
35	BA	1	A	C5'-C4'-C3'	-6.63	105.40	116.00
35	BA	1257	A	N1-C6-N6	6.63	122.58	118.60
35	BA	1313	U	N3-C4-O4	6.63	124.04	119.40
2	AB	752	A	O4'-C4'-C3'	6.62	111.40	106.10
2	AB	2432	A	N1-C2-N3	-6.62	125.99	129.30
35	BA	323	U	C5-C4-O4	6.62	129.88	125.90
35	BA	662	U	N1-C2-N3	6.62	118.88	114.90
2	AB	4	U	C4-C5-C6	6.62	123.67	119.70
2	AB	447	A	C5'-C4'-O4'	6.62	117.05	109.10
2	AB	1128	G	O4'-C1'-N9	6.62	113.50	108.20
2	AB	1307	A	C6-N1-C2	6.62	122.57	118.60
2	AB	2010	G	C5-N7-C8	-6.62	100.99	104.30
2	AB	2039	U	N3-C2-O2	-6.62	117.56	122.20
19	AS	44	TYR	CB-CG-CD2	6.62	124.97	121.00
35	BA	182	A	N7-C8-N9	6.62	117.11	113.80
35	BA	276	G	C2-N3-C4	6.62	115.21	111.90
35	BA	322	C	N1-C2-O2	6.62	122.87	118.90
35	BA	780	A	C2-N3-C4	6.62	113.91	110.60
35	BA	1016	A	C5-N7-C8	-6.62	100.59	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1226	C	P-O5'-C5'	6.62	131.50	120.90
37	BC	54	G	C4-C5-N7	-6.62	108.15	110.80
1	AA	78	A	N1-C2-N3	-6.62	125.99	129.30
2	AB	812	C	C4'-C3'-C2'	-6.62	95.98	102.60
2	AB	1096	A	C2-N3-C4	6.62	113.91	110.60
2	AB	1709	U	O4'-C1'-N1	6.62	113.50	108.20
2	AB	1818	U	N1-C2-N3	6.62	118.87	114.90
2	AB	2061	G	O4'-C1'-N9	6.62	113.50	108.20
2	AB	2076	U	C2-N1-C1'	6.62	125.65	117.70
2	AB	2403	C	O4'-C4'-C3'	6.62	111.40	106.10
3	AC	166	ASP	CB-CA-C	6.62	123.64	110.40
35	BA	750	C	O4'-C1'-N1	6.62	113.50	108.20
35	BA	827	U	O4'-C1'-N1	6.62	113.50	108.20
2	AB	158	U	N1-C2-N3	6.62	118.87	114.90
2	AB	357	C	C5-C6-N1	-6.62	117.69	121.00
2	AB	2592	G	C8-N9-C4	-6.62	103.75	106.40
35	BA	569	C	C6-N1-C2	-6.62	117.65	120.30
35	BA	1202	U	C5-C4-O4	6.62	129.87	125.90
1	AA	8	C	C2-N3-C4	-6.62	116.59	119.90
2	AB	117	G	C4-C5-C6	6.62	122.77	118.80
2	AB	206	U	N3-C4-O4	6.62	124.03	119.40
2	AB	480	A	C8-N9-C4	6.62	108.45	105.80
2	AB	770	G	N1-C2-N2	6.62	122.16	116.20
2	AB	1261	C	N1-C2-O2	6.62	122.87	118.90
2	AB	1303	G	C4-C5-N7	-6.62	108.15	110.80
2	AB	1775	U	N1-C2-N3	6.62	118.87	114.90
2	AB	1879	C	C4'-C3'-C2'	-6.62	95.98	102.60
2	AB	2121	G	C1'-O4'-C4'	6.62	115.19	109.90
2	AB	2146	C	O4'-C4'-C3'	-6.62	97.38	104.00
2	AB	2471	A	C2'-C3'-O3'	6.62	124.29	113.70
2	AB	2844	G	N7-C8-N9	6.62	116.41	113.10
35	BA	421	U	N3-C4-O4	6.62	124.03	119.40
35	BA	715	A	C8-N9-C4	-6.62	103.15	105.80
35	BA	1444	U	N3-C2-O2	6.62	126.83	122.20
35	BA	1502	A	N3-C4-C5	-6.62	122.17	126.80
35	BA	1524	C	C5-C4-N4	-6.62	115.57	120.20
2	AB	1878	G	C5-C6-N1	-6.62	108.19	111.50
2	AB	1923	U	C5-C4-O4	-6.62	121.93	125.90
12	AL	44	TYR	CB-CG-CD2	-6.62	117.03	121.00
35	BA	107	G	N1-C6-O6	-6.62	115.93	119.90
35	BA	691	G	N7-C8-N9	-6.62	109.79	113.10
2	AB	372	G	O4'-C1'-N9	6.62	113.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	678	C	C6-N1-C2	-6.62	117.65	120.30
2	AB	884	U	O4'-C1'-N1	6.62	113.49	108.20
2	AB	1602	U	C5'-C4'-C3'	-6.62	105.42	116.00
35	BA	554	A	C5-N7-C8	-6.62	100.59	103.90
35	BA	865	A	N7-C8-N9	-6.62	110.49	113.80
2	AB	1269	A	O4'-C1'-N9	6.61	113.49	108.20
2	AB	1779	U	C3'-C2'-C1'	6.61	106.79	101.50
2	AB	2200	C	N3-C4-N4	6.61	122.63	118.00
35	BA	371	A	O4'-C1'-N9	6.61	113.49	108.20
35	BA	891	U	C6-N1-C2	6.61	124.97	121.00
2	AB	234	U	C5-C6-N1	-6.61	119.39	122.70
2	AB	664	G	O4'-C4'-C3'	6.61	111.39	106.10
2	AB	1402	U	N1-C1'-C2'	-6.61	104.73	112.00
30	A3	12	ARG	NE-CZ-NH1	6.61	123.61	120.30
35	BA	155	A	N1-C2-N3	-6.61	125.99	129.30
35	BA	232	G	N1-C2-N3	6.61	127.87	123.90
35	BA	301	G	N7-C8-N9	6.61	116.41	113.10
35	BA	869	G	C6-N1-C2	-6.61	121.13	125.10
35	BA	1220	G	N1-C6-O6	-6.61	115.93	119.90
2	AB	195	A	N1-C2-N3	6.61	132.60	129.30
2	AB	394	C	O4'-C1'-N1	6.61	113.49	108.20
2	AB	401	A	O4'-C4'-C3'	-6.61	97.39	104.00
2	AB	535	G	C2-N3-C4	6.61	115.20	111.90
2	AB	719	C	C4-C5-C6	-6.61	114.09	117.40
2	AB	911	A	C8-N9-C4	-6.61	103.16	105.80
2	AB	1239	G	C4'-C3'-C2'	-6.61	95.99	102.60
2	AB	1367	A	O4'-C1'-N9	6.61	113.49	108.20
2	AB	1385	A	N7-C8-N9	6.61	117.11	113.80
2	AB	1796	U	N1-C2-N3	6.61	118.87	114.90
2	AB	1860	G	C5'-C4'-C3'	-6.61	105.42	116.00
2	AB	2388	A	C5-C6-N1	-6.61	114.39	117.70
2	AB	2707	U	N3-C4-C5	-6.61	110.63	114.60
2	AB	2803	G	C8-N9-C4	-6.61	103.76	106.40
35	BA	319	G	C4-C5-N7	-6.61	108.16	110.80
35	BA	378	G	N1-C2-N3	-6.61	119.93	123.90
35	BA	1254	A	C4-C5-N7	-6.61	107.39	110.70
1	AA	71	C	C4-C5-C6	-6.61	114.09	117.40
2	AB	163	C	C6-N1-C2	6.61	122.94	120.30
2	AB	485	C	N3-C4-C5	6.61	124.54	121.90
2	AB	625	G	P-O3'-C3'	6.61	127.63	119.70
2	AB	1187	G	N7-C8-N9	6.61	116.41	113.10
2	AB	1388	G	O4'-C4'-C3'	6.61	111.39	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1914	C	C2-N3-C4	6.61	123.20	119.90
2	AB	2152	G	C2-N3-C4	6.61	115.20	111.90
35	BA	267	C	C5-C6-N1	-6.61	117.69	121.00
35	BA	739	C	C2-N3-C4	6.61	123.20	119.90
35	BA	1043	G	C4'-C3'-C2'	-6.61	95.99	102.60
1	AA	20	G	C5-C6-O6	-6.61	124.64	128.60
2	AB	301	G	N3-C4-C5	-6.61	125.30	128.60
2	AB	380	G	C2-N3-C4	6.61	115.20	111.90
2	AB	1100	C	N3-C4-C5	6.61	124.54	121.90
2	AB	1511	G	C2-N3-C4	6.61	115.20	111.90
2	AB	1552	A	N1-C2-N3	-6.61	126.00	129.30
2	AB	1707	G	C5-C6-N1	6.61	114.80	111.50
2	AB	2154	A	N1-C6-N6	6.61	122.56	118.60
35	BA	510	A	C4-C5-C6	6.61	120.30	117.00
35	BA	898	G	C2-N3-C4	6.61	115.20	111.90
2	AB	701	G	C5-N7-C8	-6.61	101.00	104.30
2	AB	1226	A	N9-C1'-C2'	-6.61	104.73	112.00
2	AB	1265	A	O4'-C1'-C2'	6.61	113.55	107.60
2	AB	1448	G	C1'-O4'-C4'	-6.61	104.61	109.90
2	AB	1753	G	C3'-C2'-C1'	-6.61	96.22	101.50
2	AB	2766	A	C3'-C2'-C1'	6.61	106.78	101.50
18	AR	38	ARG	NE-CZ-NH2	-6.61	117.00	120.30
35	BA	315	A	C3'-C2'-C1'	-6.61	96.22	101.50
41	BG	130	THR	CA-CB-CG2	-6.61	103.15	112.40
2	AB	2604	U	N1-C2-N3	6.60	118.86	114.90
2	AB	2782	G	N9-C4-C5	-6.60	102.76	105.40
35	BA	869	G	C5-N7-C8	-6.60	101.00	104.30
35	BA	1108	G	C6-N1-C2	-6.60	121.14	125.10
37	BC	61	U	O4'-C1'-N1	6.60	113.48	108.20
1	AA	75	G	N9-C4-C5	6.60	108.04	105.40
2	AB	603	A	O4'-C1'-N9	6.60	113.48	108.20
2	AB	2254	C	C5'-C4'-O4'	6.60	117.02	109.10
2	AB	2589	A	C5-C6-N1	6.60	121.00	117.70
2	AB	2766	A	O4'-C4'-C3'	6.60	111.38	106.10
2	AB	2812	G	C2-N3-C4	6.60	115.20	111.90
35	BA	210	C	C5'-C4'-C3'	-6.60	105.44	116.00
35	BA	223	A	C8-N9-C4	-6.60	103.16	105.80
35	BA	282	A	C3'-C2'-C1'	6.60	106.78	101.50
35	BA	337	G	C4-C5-C6	6.60	122.76	118.80
35	BA	962	C	N3-C2-O2	-6.60	117.28	121.90
35	BA	1096	C	C5-C6-N1	6.60	124.30	121.00
46	BL	48	ARG	CA-CB-CG	6.60	127.93	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	580	U	O4'-C1'-N1	6.60	113.48	108.20
2	AB	1191	G	N3-C4-N9	6.60	129.96	126.00
2	AB	1588	G	N1-C2-N2	-6.60	110.26	116.20
35	BA	995	C	N3-C4-C5	-6.60	119.26	121.90
36	BB	16	A	C4-C5-C6	-6.60	113.70	117.00
2	AB	926	G	O4'-C1'-C2'	6.60	113.54	107.60
2	AB	974	G	C4-C5-C6	6.60	122.76	118.80
2	AB	1185	G	C8-N9-C4	-6.60	103.76	106.40
2	AB	2564	A	C4-C5-C6	-6.60	113.70	117.00
2	AB	2565	A	P-O3'-C3'	6.60	127.62	119.70
35	BA	299	G	N3-C4-C5	-6.60	125.30	128.60
35	BA	518	C	C5'-C4'-C3'	-6.60	105.44	116.00
35	BA	600	A	C5-C6-N1	6.60	121.00	117.70
35	BA	833	G	N3-C4-C5	-6.60	125.30	128.60
35	BA	1047	G	N7-C8-N9	6.60	116.40	113.10
37	BC	4	G	C5'-C4'-O4'	6.60	117.02	109.10
2	AB	392	U	C5'-C4'-O4'	6.60	117.02	109.10
2	AB	458	G	C8-N9-C4	-6.60	103.76	106.40
2	AB	518	G	N7-C8-N9	6.60	116.40	113.10
2	AB	971	G	C6-N1-C2	-6.60	121.14	125.10
2	AB	1277	G	C1'-O4'-C4'	-6.60	104.62	109.90
2	AB	1613	G	C5-N7-C8	-6.60	101.00	104.30
2	AB	1703	G	C5-N7-C8	6.60	107.60	104.30
2	AB	2084	C	O4'-C1'-N1	6.60	113.48	108.20
2	AB	2410	G	N9-C4-C5	6.60	108.04	105.40
2	AB	2568	U	C4-C5-C6	6.60	123.66	119.70
2	AB	2603	G	C5-C6-O6	-6.60	124.64	128.60
21	AU	8	ARG	NE-CZ-NH1	-6.60	117.00	120.30
35	BA	748	G	N1-C6-O6	6.60	123.86	119.90
35	BA	1155	A	C8-N9-C4	-6.60	103.16	105.80
35	BA	1265	C	C6-N1-C2	-6.60	117.66	120.30
35	BA	1388	C	C6-N1-C2	-6.60	117.66	120.30
35	BA	1417	G	C2'-C3'-O3'	6.60	124.25	113.70
35	BA	1489	G	N1-C6-O6	-6.60	115.94	119.90
48	BN	93	ARG	NE-CZ-NH2	-6.60	117.00	120.30
2	AB	1624	U	C5-C6-N1	-6.60	119.40	122.70
2	AB	1829	A	N7-C8-N9	-6.60	110.50	113.80
35	BA	18	C	O4'-C1'-N1	6.60	113.48	108.20
35	BA	68	G	N9-C4-C5	6.60	108.04	105.40
35	BA	375	U	N3-C4-O4	6.60	124.02	119.40
35	BA	584	G	C5-C6-N1	6.60	114.80	111.50
35	BA	1397	C	O5'-P-OP1	-6.60	99.76	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	35	C	N1-C1'-C2'	-6.59	104.75	112.00
2	AB	233	A	C5-C6-N6	-6.59	118.42	123.70
2	AB	340	A	C6-N1-C2	6.59	122.56	118.60
2	AB	533	G	N3-C4-C5	-6.59	125.30	128.60
2	AB	940	G	O4'-C4'-C3'	6.59	111.38	106.10
2	AB	1348	C	P-O3'-C3'	6.59	127.61	119.70
2	AB	1364	G	N1-C6-O6	6.59	123.86	119.90
2	AB	2122	U	N1-C2-O2	6.59	127.42	122.80
2	AB	2280	G	C5-C6-O6	-6.59	124.64	128.60
2	AB	2648	G	C4-C5-N7	-6.59	108.16	110.80
2	AB	2775	G	C8-N9-C4	-6.59	103.76	106.40
2	AB	2786	U	C1'-O4'-C4'	-6.59	104.62	109.90
35	BA	757	U	N1-C2-O2	6.59	127.42	122.80
35	BA	913	A	N9-C4-C5	6.59	108.44	105.80
35	BA	1022	A	C3'-C2'-C1'	6.59	106.78	101.50
35	BA	1041	G	C5-N7-C8	6.59	107.60	104.30
35	BA	1341	U	N1-C1'-C2'	-6.59	104.75	112.00
36	BB	25	U	O5'-P-OP2	-6.59	99.77	105.70
2	AB	323	C	N3-C4-C5	-6.59	119.26	121.90
2	AB	535	G	N3-C2-N2	6.59	124.52	119.90
2	AB	1609	A	C8-N9-C4	6.59	108.44	105.80
2	AB	2127	G	C5-C6-O6	6.59	132.56	128.60
2	AB	2210	U	N3-C2-O2	-6.59	117.58	122.20
2	AB	2242	G	C6-N1-C2	-6.59	121.14	125.10
2	AB	2361	G	C5-N7-C8	-6.59	101.00	104.30
35	BA	786	G	O4'-C1'-N9	6.59	113.47	108.20
35	BA	1526	G	N3-C2-N2	-6.59	115.28	119.90
2	AB	540	C	C3'-C2'-C1'	6.59	106.77	101.50
2	AB	611	C	N1-C2-O2	6.59	122.86	118.90
2	AB	614	A	O3'-P-O5'	-6.59	91.48	104.00
2	AB	2092	U	C5-C6-N1	-6.59	119.41	122.70
2	AB	2193	G	O4'-C1'-N9	6.59	113.47	108.20
2	AB	2540	C	O4'-C1'-N1	6.59	113.47	108.20
35	BA	185	U	O4'-C1'-N1	6.59	113.47	108.20
35	BA	544	G	C4-C5-N7	-6.59	108.16	110.80
35	BA	628	G	N9-C4-C5	-6.59	102.76	105.40
35	BA	1110	A	N3-C4-C5	-6.59	122.19	126.80
35	BA	1340	A	C5'-C4'-O4'	6.59	117.01	109.10
36	BB	22	G	C6-C5-N7	-6.59	126.44	130.40
36	BB	49	U	N1-C2-O2	-6.59	118.19	122.80
37	BC	39	A	N1-C6-N6	6.59	122.56	118.60
2	AB	615	U	C6-N1-C2	-6.59	117.05	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	836	G	C4-C5-N7	-6.59	108.16	110.80
2	AB	1081	U	N3-C4-O4	6.59	124.01	119.40
2	AB	2098	U	C5-C4-O4	6.59	129.85	125.90
2	AB	2163	A	C5-C6-N1	6.59	121.00	117.70
2	AB	2456	C	C5-C6-N1	-6.59	117.71	121.00
2	AB	2860	A	N1-C2-N3	-6.59	126.00	129.30
35	BA	461	A	C2-N3-C4	6.59	113.89	110.60
35	BA	1462	C	O5'-C5'-C4'	6.59	124.22	111.70
37	BC	37	U	C2-N1-C1'	-6.59	109.79	117.70
39	BE	135	ARG	NE-CZ-NH2	6.59	123.59	120.30
52	BR	44	SER	O-C-N	6.59	133.24	122.70
2	AB	2035	G	C6-N1-C2	-6.59	121.15	125.10
2	AB	2172	U	N3-C2-O2	6.59	126.81	122.20
2	AB	2215	C	C6-N1-C2	-6.59	117.67	120.30
1	AA	58	A	N9-C1'-C2'	-6.59	104.75	112.00
1	AA	112	G	P-O3'-C3'	6.59	127.60	119.70
2	AB	2149	U	N3-C2-O2	-6.59	117.59	122.20
2	AB	2654	A	C4-C5-C6	-6.59	113.71	117.00
2	AB	2767	C	N1-C2-O2	6.59	122.85	118.90
2	AB	2849	U	N1-C2-N3	6.59	118.85	114.90
35	BA	242	G	C8-N9-C1'	6.59	135.56	127.00
35	BA	511	C	O4'-C1'-N1	6.59	113.47	108.20
35	BA	691	G	O4'-C1'-C2'	6.59	113.53	107.60
35	BA	716	A	N7-C8-N9	6.59	117.09	113.80
35	BA	774	G	C6-N1-C2	-6.59	121.15	125.10
35	BA	958	A	C2-N3-C4	6.59	113.89	110.60
35	BA	1253	G	N1-C6-O6	-6.59	115.95	119.90
35	BA	1412	C	C5'-C4'-O4'	6.59	117.00	109.10
2	AB	452	G	O4'-C1'-N9	6.58	113.47	108.20
2	AB	1024	G	C6-C5-N7	6.58	134.35	130.40
2	AB	1254	A	O3'-P-O5'	6.58	116.51	104.00
2	AB	1464	G	C6-N1-C2	-6.58	121.15	125.10
2	AB	1755	A	N1-C2-N3	-6.58	126.01	129.30
35	BA	319	G	C5'-C4'-O4'	6.58	117.00	109.10
37	BC	40	C	N3-C4-C5	-6.58	119.27	121.90
40	BF	127	ARG	CD-NE-CZ	6.58	132.82	123.60
1	AA	106	G	C8-N9-C4	-6.58	103.77	106.40
2	AB	329	G	N7-C8-N9	-6.58	109.81	113.10
2	AB	1040	A	C4-C5-N7	-6.58	107.41	110.70
2	AB	1042	G	C2-N3-C4	6.58	115.19	111.90
2	AB	1157	G	C4-C5-C6	6.58	122.75	118.80
2	AB	1266	G	N3-C2-N2	-6.58	115.29	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1598	A	C8-N9-C4	-6.58	103.17	105.80
2	AB	1959	G	N9-C4-C5	6.58	108.03	105.40
16	AP	71	ARG	CD-NE-CZ	6.58	132.82	123.60
33	A6	7	ARG	NE-CZ-NH1	6.58	123.59	120.30
35	BA	20	U	C1'-O4'-C4'	6.58	115.17	109.90
35	BA	119	A	C2-N3-C4	-6.58	107.31	110.60
35	BA	585	G	C8-N9-C4	-6.58	103.77	106.40
35	BA	1011	C	O4'-C1'-N1	6.58	113.47	108.20
35	BA	1417	G	N7-C8-N9	-6.58	109.81	113.10
1	AA	71	C	C5'-C4'-O4'	6.58	117.00	109.10
2	AB	217	A	N3-C4-N9	6.58	132.66	127.40
2	AB	393	C	C2-N3-C4	-6.58	116.61	119.90
2	AB	579	G	C4-C5-N7	6.58	113.43	110.80
2	AB	794	A	N9-C4-C5	6.58	108.43	105.80
2	AB	895	U	C4'-C3'-C2'	6.58	109.18	102.60
2	AB	1964	G	N7-C8-N9	6.58	116.39	113.10
2	AB	2166	U	N3-C2-O2	-6.58	117.59	122.20
35	BA	194	C	C4-C5-C6	-6.58	114.11	117.40
35	BA	1356	G	C5-C6-O6	-6.58	124.65	128.60
37	BC	2	G	N9-C4-C5	-6.58	102.77	105.40
38	BD	161	PHE	CB-CG-CD1	6.58	125.41	120.80
2	AB	154	U	N1-C2-N3	6.58	118.85	114.90
2	AB	676	A	C4-C5-N7	-6.58	107.41	110.70
2	AB	711	G	O4'-C1'-N9	6.58	113.46	108.20
2	AB	1042	G	C5-C6-O6	-6.58	124.65	128.60
2	AB	1433	A	O4'-C1'-N9	6.58	113.46	108.20
2	AB	2070	A	O4'-C1'-C2'	-6.58	99.22	105.80
2	AB	2338	C	O4'-C1'-N1	6.58	113.46	108.20
35	BA	350	G	N3-C4-C5	-6.58	125.31	128.60
35	BA	827	U	O4'-C4'-C3'	6.58	111.36	106.10
35	BA	837	U	P-O3'-C3'	-6.58	111.80	119.70
2	AB	1010	A	N1-C6-N6	-6.58	114.65	118.60
2	AB	1465	G	C5'-C4'-O4'	-6.58	101.20	109.10
2	AB	2137	U	C2-N3-C4	-6.58	123.05	127.00
16	AP	71	ARG	NE-CZ-NH1	-6.58	117.01	120.30
35	BA	448	A	C5-N7-C8	-6.58	100.61	103.90
2	AB	154	U	C3'-C2'-C1'	6.58	106.76	101.50
2	AB	598	U	C6-N1-C2	-6.58	117.05	121.00
2	AB	1317	G	N3-C4-C5	-6.58	125.31	128.60
2	AB	2008	C	N3-C4-C5	-6.58	119.27	121.90
35	BA	1090	U	N3-C4-C5	-6.58	110.65	114.60
2	AB	60	G	C5'-C4'-O4'	6.58	116.99	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	205	G	C4-C5-N7	6.58	113.43	110.80
2	AB	389	G	N3-C2-N2	6.58	124.50	119.90
2	AB	662	G	C5-C6-N1	6.58	114.79	111.50
2	AB	812	C	C5-C6-N1	6.58	124.29	121.00
2	AB	1068	G	P-O3'-C3'	6.58	127.59	119.70
2	AB	2191	A	C2-N3-C4	6.58	113.89	110.60
2	AB	2464	G	C5-C6-N1	6.58	114.79	111.50
2	AB	2597	G	C1'-O4'-C4'	6.58	115.16	109.90
2	AB	2802	G	N7-C8-N9	6.58	116.39	113.10
35	BA	474	G	O4'-C1'-N9	6.58	113.46	108.20
35	BA	628	G	N9-C1'-C2'	-6.58	104.77	112.00
35	BA	694	A	C6-C5-N7	-6.58	127.70	132.30
35	BA	1338	G	C5-C6-O6	-6.58	124.66	128.60
35	BA	1360	A	C6-C5-N7	6.58	136.90	132.30
35	BA	1370	G	N3-C4-C5	-6.58	125.31	128.60
35	BA	1397	C	N3-C4-C5	-6.58	119.27	121.90
35	BA	1520	C	C1'-O4'-C4'	6.58	115.16	109.90
46	BL	91	ASP	CB-CG-OD1	-6.58	112.38	118.30
1	AA	102	G	C3'-C2'-C1'	6.57	106.76	101.50
2	AB	161	A	C6-C5-N7	6.57	136.90	132.30
2	AB	515	A	N3-C4-C5	-6.57	122.20	126.80
2	AB	634	C	N3-C4-N4	6.57	122.60	118.00
2	AB	649	G	N1-C2-N2	6.57	122.12	116.20
2	AB	1828	G	N9-C4-C5	6.57	108.03	105.40
2	AB	2001	C	C2-N3-C4	6.57	123.19	119.90
2	AB	2444	G	C6-C5-N7	-6.57	126.45	130.40
35	BA	131	A	C1'-O4'-C4'	-6.57	104.64	109.90
35	BA	361	G	C4'-C3'-C2'	-6.57	96.03	102.60
35	BA	1405	G	C5-C6-N1	6.57	114.79	111.50
35	BA	1486	G	N7-C8-N9	6.57	116.39	113.10
2	AB	2300	C	N3-C4-C5	-6.57	119.27	121.90
2	AB	2486	C	N3-C4-N4	6.57	122.60	118.00
35	BA	1378	C	N3-C4-N4	6.57	122.60	118.00
40	BF	50	TYR	CG-CD1-CE1	-6.57	116.04	121.30
2	AB	436	C	C2-N3-C4	6.57	123.19	119.90
2	AB	607	U	O4'-C1'-N1	6.57	113.46	108.20
2	AB	1057	A	C5-C6-N1	6.57	120.98	117.70
2	AB	1090	A	C4-C5-N7	-6.57	107.41	110.70
2	AB	1223	G	N9-C4-C5	6.57	108.03	105.40
2	AB	1471	G	C1'-O4'-C4'	6.57	115.16	109.90
2	AB	1591	A	C5-C6-N6	6.57	128.96	123.70
2	AB	1937	A	C6-C5-N7	6.57	136.90	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2049	G	N3-C4-C5	-6.57	125.31	128.60
2	AB	2295	C	C3'-C2'-C1'	6.57	106.76	101.50
2	AB	2464	G	C4-C5-N7	-6.57	108.17	110.80
2	AB	2628	C	C1'-O4'-C4'	-6.57	104.64	109.90
35	BA	346	G	O3'-P-O5'	6.57	116.48	104.00
35	BA	665	A	N1-C2-N3	6.57	132.59	129.30
35	BA	896	C	N3-C4-C5	-6.57	119.27	121.90
35	BA	978	A	O4'-C1'-N9	6.57	113.46	108.20
2	AB	1396	U	C4'-C3'-C2'	6.57	109.17	102.60
2	AB	2613	U	N1-C2-O2	-6.57	118.20	122.80
35	BA	40	C	N3-C4-N4	6.57	122.60	118.00
35	BA	234	C	C4'-C3'-C2'	6.57	109.17	102.60
35	BA	381	C	P-O3'-C3'	6.57	127.58	119.70
35	BA	1438	G	O4'-C1'-N9	6.57	113.45	108.20
1	AA	32	U	O4'-C1'-N1	6.57	113.45	108.20
2	AB	291	G	C3'-C2'-C1'	-6.57	96.25	101.50
2	AB	793	A	C6-N1-C2	6.57	122.54	118.60
2	AB	1563	U	N3-C4-O4	-6.57	114.80	119.40
2	AB	1630	A	N1-C2-N3	-6.57	126.02	129.30
2	AB	1675	C	C4-C5-C6	6.57	120.68	117.40
2	AB	1824	G	N9-C4-C5	6.57	108.03	105.40
35	BA	463	U	C5-C4-O4	-6.57	121.96	125.90
35	BA	661	G	C2-N3-C4	6.57	115.18	111.90
35	BA	1136	C	N3-C2-O2	-6.57	117.30	121.90
35	BA	1220	G	C5-C6-N1	6.57	114.78	111.50
35	BA	1472	U	N1-C2-N3	6.57	118.84	114.90
2	AB	186	G	P-O3'-C3'	6.57	127.58	119.70
2	AB	518	G	N9-C1'-C2'	-6.57	104.78	112.00
2	AB	555	G	O4'-C1'-N9	6.57	113.45	108.20
2	AB	1211	C	O4'-C1'-N1	6.57	113.45	108.20
2	AB	1377	G	C5-C6-N1	-6.57	108.22	111.50
2	AB	1807	G	P-O3'-C3'	6.57	127.58	119.70
2	AB	2048	G	P-O3'-C3'	6.57	127.58	119.70
2	AB	2104	C	O4'-C1'-N1	6.57	113.45	108.20
2	AB	2224	G	N3-C2-N2	6.57	124.50	119.90
2	AB	2241	A	C6-C5-N7	6.57	136.90	132.30
2	AB	2859	G	N1-C6-O6	-6.57	115.96	119.90
21	AU	67	ASP	CB-CG-OD2	-6.57	112.39	118.30
32	A5	4	THR	CA-CB-CG2	6.57	121.59	112.40
35	BA	345	C	N3-C2-O2	-6.57	117.30	121.90
35	BA	845	A	C5-N7-C8	6.57	107.18	103.90
35	BA	1281	C	O4'-C1'-N1	6.57	113.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1307	U	O4'-C1'-N1	6.57	113.45	108.20
35	BA	1415	G	N1-C2-N2	6.57	122.11	116.20
2	AB	97	C	C5'-C4'-O4'	6.56	116.98	109.10
2	AB	522	A	N1-C2-N3	6.56	132.58	129.30
2	AB	864	G	C5-C6-O6	6.56	132.54	128.60
2	AB	1410	G	C4-C5-C6	6.56	122.74	118.80
2	AB	2224	G	C4'-C3'-C2'	-6.56	96.04	102.60
9	AI	46	PHE	CB-CG-CD1	6.56	125.39	120.80
35	BA	1449	C	N3-C2-O2	-6.56	117.31	121.90
35	BA	1469	C	N3-C2-O2	-6.56	117.31	121.90
2	AB	102	U	O4'-C1'-C2'	-6.56	99.24	105.80
2	AB	1405	U	N1-C2-O2	-6.56	118.21	122.80
2	AB	1566	A	C4-C5-C6	-6.56	113.72	117.00
2	AB	2336	A	C2-N3-C4	6.56	113.88	110.60
2	AB	2446	G	C5'-C4'-O4'	6.56	116.97	109.10
2	AB	2651	C	N3-C4-C5	6.56	124.53	121.90
2	AB	2806	C	P-O3'-C3'	6.56	127.58	119.70
2	AB	2885	G	C6-C5-N7	-6.56	126.46	130.40
21	AU	77	ASP	CB-CG-OD1	-6.56	112.39	118.30
35	BA	54	C	C3'-C2'-C1'	6.56	106.75	101.50
35	BA	361	G	N1-C6-O6	-6.56	115.96	119.90
35	BA	505	G	N1-C2-N3	6.56	127.84	123.90
35	BA	994	A	C3'-C2'-C1'	-6.56	96.25	101.50
35	BA	1046	A	C5'-C4'-O4'	6.56	116.98	109.10
35	BA	1109	C	C6-N1-C2	-6.56	117.67	120.30
35	BA	1206	G	N3-C4-C5	-6.56	125.32	128.60
35	BA	353	A	N9-C4-C5	6.56	108.42	105.80
35	BA	858	G	N3-C4-C5	-6.56	125.32	128.60
35	BA	1027	C	N3-C4-N4	6.56	122.59	118.00
1	AA	116	G	C4-C5-N7	6.56	113.42	110.80
2	AB	188	G	C8-N9-C4	-6.56	103.78	106.40
2	AB	655	A	C3'-C2'-C1'	-6.56	96.25	101.50
2	AB	1368	G	C5-N7-C8	-6.56	101.02	104.30
2	AB	1381	G	N9-C4-C5	6.56	108.02	105.40
2	AB	1444	G	C8-N9-C4	6.56	109.02	106.40
2	AB	1681	G	N1-C2-N3	-6.56	119.96	123.90
2	AB	2286	G	N9-C4-C5	6.56	108.02	105.40
35	BA	456	A	N1-C2-N3	6.56	132.58	129.30
35	BA	1193	G	N3-C4-N9	6.56	129.94	126.00
1	AA	81	G	N3-C4-N9	-6.56	122.06	126.00
2	AB	67	U	N3-C4-C5	-6.56	110.67	114.60
2	AB	669	G	O4'-C1'-N9	6.56	113.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1491	G	C6-N1-C2	-6.56	121.17	125.10
2	AB	1863	G	N1-C6-O6	6.56	123.83	119.90
2	AB	1875	G	C6-C5-N7	-6.56	126.47	130.40
2	AB	2265	U	C4-C5-C6	6.56	123.64	119.70
2	AB	2364	C	N3-C4-C5	-6.56	119.28	121.90
35	BA	849	G	C5'-C4'-C3'	-6.56	105.51	116.00
35	BA	977	A	C8-N9-C4	-6.56	103.18	105.80
2	AB	489	G	N3-C4-N9	6.56	129.93	126.00
2	AB	529	A	C5-C6-N1	-6.56	114.42	117.70
2	AB	1053	C	C5'-C4'-O4'	6.56	116.97	109.10
2	AB	1276	A	N1-C2-N3	-6.56	126.02	129.30
2	AB	2848	G	C4-C5-N7	-6.56	108.18	110.80
35	BA	811	C	O4'-C1'-N1	6.56	113.44	108.20
2	AB	496	G	C4-C5-N7	6.55	113.42	110.80
2	AB	636	G	C8-N9-C4	-6.55	103.78	106.40
2	AB	836	G	O4'-C1'-N9	6.55	113.44	108.20
2	AB	884	U	C5-C6-N1	-6.55	119.42	122.70
2	AB	1846	G	N3-C4-N9	6.55	129.93	126.00
2	AB	1949	G	N1-C6-O6	-6.55	115.97	119.90
2	AB	2051	A	N3-C4-N9	-6.55	122.16	127.40
2	AB	2158	A	C5-N7-C8	-6.55	100.62	103.90
2	AB	2319	G	C5-C6-N1	-6.55	108.22	111.50
2	AB	2556	C	O4'-C1'-N1	6.55	113.44	108.20
35	BA	763	G	C6-N1-C2	6.55	129.03	125.10
35	BA	1167	A	OP1-P-O3'	6.55	119.62	105.20
35	BA	1201	A	N7-C8-N9	-6.55	110.52	113.80
45	BK	108	ARG	NE-CZ-NH1	6.55	123.58	120.30
2	AB	96	C	N1-C2-O2	-6.55	114.97	118.90
2	AB	424	G	C8-N9-C4	-6.55	103.78	106.40
2	AB	1172	C	N3-C4-C5	6.55	124.52	121.90
2	AB	2126	A	C5'-C4'-O4'	6.55	116.96	109.10
2	AB	82	U	N3-C4-O4	6.55	123.99	119.40
2	AB	514	A	C5-C6-N6	6.55	128.94	123.70
2	AB	651	G	C5'-C4'-O4'	6.55	116.96	109.10
2	AB	743	A	O4'-C1'-N9	6.55	113.44	108.20
2	AB	1660	G	C4'-C3'-C2'	-6.55	96.05	102.60
2	AB	1718	G	C2-N3-C4	6.55	115.17	111.90
2	AB	2093	G	N7-C8-N9	6.55	116.38	113.10
2	AB	2246	G	C5-N7-C8	-6.55	101.03	104.30
2	AB	2693	G	C2-N3-C4	6.55	115.18	111.90
35	BA	294	U	O4'-C1'-N1	6.55	113.44	108.20
35	BA	442	G	C5'-C4'-C3'	-6.55	105.52	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	746	A	C4'-C3'-C2'	-6.55	96.05	102.60
35	BA	1013	G	C3'-C2'-C1'	-6.55	96.26	101.50
35	BA	1069	C	N3-C4-C5	-6.55	119.28	121.90
1	AA	49	C	C2-N3-C4	6.55	123.17	119.90
1	AA	105	G	N3-C4-C5	-6.55	125.33	128.60
2	AB	76	C	C1'-O4'-C4'	6.55	115.14	109.90
2	AB	137	U	C4-C5-C6	-6.55	115.77	119.70
2	AB	227	A	C8-N9-C4	-6.55	103.18	105.80
2	AB	261	G	N3-C4-N9	-6.55	122.07	126.00
2	AB	785	G	C5-C6-O6	-6.55	124.67	128.60
2	AB	828	U	C4'-C3'-C2'	-6.55	96.05	102.60
2	AB	866	A	C5-N7-C8	6.55	107.17	103.90
2	AB	1115	G	C4-C5-C6	6.55	122.73	118.80
2	AB	1311	G	N3-C4-N9	6.55	129.93	126.00
2	AB	1470	A	N7-C8-N9	-6.55	110.53	113.80
2	AB	1543	G	C2-N3-C4	6.55	115.17	111.90
35	BA	74	A	C2-N3-C4	-6.55	107.33	110.60
35	BA	968	A	C5'-C4'-O4'	6.55	116.96	109.10
1	AA	98	G	C6-C5-N7	6.55	134.33	130.40
2	AB	2091	C	N1-C1'-C2'	-6.55	104.80	112.00
35	BA	76	G	N3-C2-N2	6.55	124.48	119.90
2	AB	177	G	C4-C5-C6	6.55	122.73	118.80
2	AB	923	G	N3-C2-N2	6.55	124.48	119.90
2	AB	981	A	N7-C8-N9	6.55	117.07	113.80
2	AB	1276	A	N9-C4-C5	6.55	108.42	105.80
2	AB	1327	A	C5-N7-C8	6.55	107.17	103.90
2	AB	1510	G	N9-C4-C5	6.55	108.02	105.40
2	AB	2679	A	N1-C6-N6	-6.55	114.67	118.60
2	AB	2785	C	N1-C2-N3	-6.55	114.62	119.20
15	AO	50	ARG	NE-CZ-NH1	6.55	123.57	120.30
35	BA	336	A	O4'-C1'-N9	6.55	113.44	108.20
35	BA	705	G	C6-C5-N7	6.55	134.33	130.40
35	BA	1134	G	C4-C5-N7	-6.55	108.18	110.80
35	BA	1332	A	C6-C5-N7	-6.55	127.72	132.30
35	BA	1389	C	N1-C2-O2	6.55	122.83	118.90
2	AB	416	U	N3-C4-C5	-6.54	110.67	114.60
2	AB	552	U	C3'-C2'-C1'	6.54	106.74	101.50
2	AB	561	G	C5'-C4'-O4'	6.54	116.95	109.10
2	AB	1096	A	C4-C5-C6	-6.54	113.73	117.00
2	AB	2297	A	C6-N1-C2	6.54	122.53	118.60
2	AB	2437	G	N1-C2-N3	-6.54	119.97	123.90
35	BA	7	A	C2-N3-C4	6.54	113.87	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	94	A	N1-C2-N3	-6.54	126.03	129.30
2	AB	101	A	C8-N9-C4	-6.54	103.18	105.80
2	AB	1392	A	C4-C5-C6	6.54	120.27	117.00
2	AB	2583	G	P-O3'-C3'	6.54	127.55	119.70
2	AB	2634	A	C4-C5-C6	-6.54	113.73	117.00
2	AB	2775	G	C5-C6-N1	6.54	114.77	111.50
35	BA	227	G	C6-N1-C2	6.54	129.03	125.10
35	BA	407	U	C4-C5-C6	6.54	123.63	119.70
35	BA	661	G	N1-C2-N3	-6.54	119.97	123.90
35	BA	1026	G	C6-C5-N7	-6.54	126.47	130.40
35	BA	1088	G	C4'-C3'-C2'	-6.54	96.06	102.60
55	BU	77	ARG	NE-CZ-NH1	6.54	123.57	120.30
2	AB	42	A	N3-C4-C5	-6.54	122.22	126.80
2	AB	564	C	O4'-C1'-N1	6.54	113.43	108.20
2	AB	776	G	C2-N3-C4	6.54	115.17	111.90
2	AB	1045	C	C2-N3-C4	6.54	123.17	119.90
2	AB	1111	A	C4-C5-C6	6.54	120.27	117.00
2	AB	1128	G	C6-C5-N7	-6.54	126.47	130.40
2	AB	1256	G	N3-C4-C5	-6.54	125.33	128.60
2	AB	1347	A	C4-C5-C6	-6.54	113.73	117.00
2	AB	1679	A	N1-C2-N3	-6.54	126.03	129.30
2	AB	1957	C	O4'-C1'-N1	6.54	113.43	108.20
2	AB	1978	A	N7-C8-N9	6.54	117.07	113.80
2	AB	2122	U	N1-C2-N3	6.54	118.83	114.90
2	AB	2136	G	C2-N3-C4	6.54	115.17	111.90
2	AB	2726	A	O4'-C1'-N9	6.54	113.43	108.20
2	AB	2831	G	C4-C5-N7	6.54	113.42	110.80
35	BA	461	A	N1-C2-N3	-6.54	126.03	129.30
35	BA	764	C	C5-C6-N1	6.54	124.27	121.00
35	BA	1057	G	C8-N9-C4	-6.54	103.78	106.40
2	AB	992	C	O4'-C1'-N1	6.54	113.43	108.20
2	AB	1579	A	O4'-C1'-N9	6.54	113.43	108.20
2	AB	1716	U	N3-C2-O2	-6.54	117.62	122.20
2	AB	1833	C	O4'-C1'-N1	6.54	113.43	108.20
2	AB	1901	A	C4-C5-C6	6.54	120.27	117.00
2	AB	1906	G	P-O3'-C3'	6.54	127.55	119.70
2	AB	2754	U	N1-C2-O2	-6.54	118.22	122.80
35	BA	980	C	C1'-O4'-C4'	-6.54	104.67	109.90
35	BA	1212	U	N3-C4-C5	6.54	118.52	114.60
35	BA	1270	G	C8-N9-C1'	6.54	135.50	127.00
2	AB	312	G	N1-C2-N3	-6.54	119.98	123.90
2	AB	424	G	N1-C2-N3	6.54	127.82	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1307	A	P-O3'-C3'	6.54	127.55	119.70
2	AB	1620	G	P-O3'-C3'	6.54	127.55	119.70
2	AB	2494	G	N3-C4-C5	-6.54	125.33	128.60
2	AB	2538	C	O4'-C1'-N1	6.54	113.43	108.20
35	BA	74	A	C4-C5-N7	6.54	113.97	110.70
35	BA	606	G	C3'-C2'-C1'	-6.54	96.27	101.50
35	BA	1090	U	C4-C5-C6	6.54	123.62	119.70
35	BA	1458	G	C3'-C2'-C1'	6.54	106.73	101.50
2	AB	16	C	C5-C4-N4	-6.54	115.62	120.20
2	AB	163	C	N1-C2-O2	6.54	122.82	118.90
2	AB	1000	A	C4-C5-C6	6.54	120.27	117.00
2	AB	1436	G	C5'-C4'-O4'	6.54	116.94	109.10
2	AB	1975	G	O4'-C1'-N9	6.54	113.43	108.20
2	AB	2002	G	C4-C5-N7	-6.54	108.19	110.80
35	BA	157	U	C4'-C3'-C2'	-6.54	96.06	102.60
35	BA	766	A	C6-N1-C2	-6.54	114.68	118.60
35	BA	1440	U	N1-C1'-C2'	-6.54	104.81	112.00
1	AA	12	C	N1-C1'-C2'	6.54	122.50	114.00
2	AB	625	G	C6-N1-C2	-6.54	121.18	125.10
2	AB	793	A	C8-N9-C4	-6.54	103.19	105.80
2	AB	2199	A	C5-N7-C8	-6.54	100.63	103.90
2	AB	2489	U	C5'-C4'-O4'	6.54	116.94	109.10
2	AB	2595	G	C1'-O4'-C4'	6.54	115.13	109.90
35	BA	368	U	N1-C2-O2	6.54	127.38	122.80
2	AB	191	A	N9-C1'-C2'	-6.53	104.81	112.00
2	AB	1373	A	O4'-C1'-N9	6.53	113.43	108.20
2	AB	1415	U	C6-N1-C2	6.53	124.92	121.00
2	AB	1672	A	C1'-O4'-C4'	-6.53	104.67	109.90
2	AB	1723	G	P-O3'-C3'	6.53	127.54	119.70
2	AB	2376	A	C2-N3-C4	6.53	113.87	110.60
2	AB	2448	A	O4'-C4'-C3'	6.53	111.33	106.10
2	AB	2615	U	N3-C2-O2	-6.53	117.63	122.20
2	AB	2709	G	C8-N9-C4	-6.53	103.79	106.40
6	AF	170	ARG	NH1-CZ-NH2	-6.53	112.21	119.40
35	BA	206	C	C5'-C4'-O4'	6.53	116.94	109.10
35	BA	213	G	C6-C5-N7	-6.53	126.48	130.40
35	BA	489	C	C2-N3-C4	6.53	123.17	119.90
35	BA	662	U	C2-N3-C4	-6.53	123.08	127.00
35	BA	1078	U	P-O3'-C3'	6.53	127.54	119.70
35	BA	1247	U	C5-C4-O4	-6.53	121.98	125.90
2	AB	1133	A	C1'-O4'-C4'	-6.53	104.67	109.90
2	AB	1869	G	C2-N3-C4	-6.53	108.63	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1993	U	O4'-C4'-C3'	6.53	111.33	106.10
2	AB	2534	A	N9-C1'-C2'	-6.53	104.81	112.00
2	AB	2591	C	C5'-C4'-O4'	6.53	116.94	109.10
2	AB	2693	G	N3-C4-C5	-6.53	125.33	128.60
35	BA	145	G	C5-C6-O6	6.53	132.52	128.60
35	BA	847	G	C8-N9-C1'	6.53	135.49	127.00
35	BA	1496	C	N3-C4-N4	6.53	122.57	118.00
2	AB	255	A	N1-C6-N6	-6.53	114.68	118.60
2	AB	470	A	N1-C6-N6	-6.53	114.68	118.60
2	AB	572	A	N1-C6-N6	6.53	122.52	118.60
2	AB	610	C	N3-C4-C5	6.53	124.51	121.90
2	AB	971	G	O4'-C1'-N9	6.53	113.42	108.20
2	AB	1332	G	C8-N9-C4	-6.53	103.79	106.40
2	AB	1641	A	C2-N3-C4	6.53	113.86	110.60
2	AB	1904	G	C3'-C2'-C1'	6.53	106.72	101.50
2	AB	2107	G	C5'-C4'-O4'	6.53	116.94	109.10
2	AB	2113	U	C5'-C4'-O4'	6.53	116.94	109.10
2	AB	2614	A	N3-C4-C5	-6.53	122.23	126.80
2	AB	2886	A	C6-N1-C2	-6.53	114.68	118.60
2	AB	2904	U	C5'-C4'-O4'	6.53	116.94	109.10
35	BA	418	C	O4'-C1'-N1	6.53	113.42	108.20
35	BA	424	G	C6-N1-C2	-6.53	121.18	125.10
35	BA	574	A	C4'-C3'-C2'	6.53	109.13	102.60
35	BA	969	A	O4'-C1'-C2'	-6.53	99.27	105.80
2	AB	443	A	N3-C4-C5	-6.53	122.23	126.80
2	AB	1007	C	C3'-C2'-C1'	6.53	106.72	101.50
2	AB	1450	G	C2-N3-C4	6.53	115.16	111.90
2	AB	1819	A	N1-C2-N3	-6.53	126.03	129.30
2	AB	2320	U	N3-C4-O4	6.53	123.97	119.40
36	BB	40	G	N1-C2-N2	6.53	122.08	116.20
2	AB	343	C	N3-C4-C5	-6.53	119.29	121.90
2	AB	534	U	N3-C4-C5	-6.53	110.68	114.60
2	AB	800	A	C1'-O4'-C4'	6.53	115.12	109.90
2	AB	1165	A	C5-C6-N6	6.53	128.92	123.70
2	AB	1733	G	C5-C6-N1	6.53	114.76	111.50
2	AB	2662	A	O4'-C1'-N9	-6.53	102.98	108.20
2	AB	2840	C	C6-N1-C2	6.53	122.91	120.30
2	AB	2862	G	O4'-C1'-N9	6.53	113.42	108.20
35	BA	126	G	N1-C6-O6	-6.53	115.98	119.90
35	BA	268	U	C5-C4-O4	-6.53	121.98	125.90
35	BA	299	G	P-O3'-C3'	6.53	127.53	119.70
35	BA	712	A	C4-C5-C6	6.53	120.26	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	779	C	N3-C4-N4	-6.53	113.43	118.00
35	BA	808	C	O4'-C1'-N1	6.53	113.42	108.20
36	BB	15	G	C5-C6-N1	6.53	114.76	111.50
2	AB	85	G	N1-C6-O6	6.53	123.81	119.90
2	AB	468	G	C2-N3-C4	6.53	115.16	111.90
2	AB	541	A	C5'-C4'-O4'	6.53	116.93	109.10
2	AB	582	A	C4'-C3'-C2'	-6.53	96.08	102.60
2	AB	939	G	N1-C6-O6	-6.53	115.98	119.90
2	AB	1523	U	C3'-C2'-C1'	6.53	106.72	101.50
2	AB	2215	C	O4'-C1'-N1	6.53	113.42	108.20
2	AB	2496	C	N1-C2-N3	-6.53	114.63	119.20
2	AB	2545	G	C5-C6-O6	-6.53	124.69	128.60
4	AD	12	ARG	NE-CZ-NH2	-6.53	117.04	120.30
35	BA	636	U	C4'-C3'-C2'	-6.53	96.08	102.60
35	BA	836	G	N1-C2-N3	-6.53	119.98	123.90
35	BA	1192	C	C6-N1-C2	6.53	122.91	120.30
35	BA	1216	A	C8-N9-C4	-6.53	103.19	105.80
2	AB	1002	G	N9-C1'-C2'	-6.52	104.82	112.00
35	BA	319	G	N3-C4-C5	-6.52	125.34	128.60
35	BA	1027	C	C6-N1-C2	-6.52	117.69	120.30
2	AB	46	G	C5-C6-O6	-6.52	124.69	128.60
2	AB	842	U	C5-C6-N1	-6.52	119.44	122.70
2	AB	964	C	C1'-O4'-C4'	-6.52	104.68	109.90
2	AB	1542	U	C5-C4-O4	-6.52	121.99	125.90
2	AB	1862	G	C5-C6-N1	6.52	114.76	111.50
2	AB	2340	A	C4'-C3'-C2'	-6.52	96.08	102.60
2	AB	2650	U	N3-C2-O2	6.52	126.77	122.20
2	AB	2826	A	N1-C6-N6	-6.52	114.69	118.60
35	BA	328	C	N1-C2-N3	-6.52	114.63	119.20
35	BA	439	U	N1-C1'-C2'	-6.52	104.83	112.00
35	BA	455	G	O4'-C1'-C2'	6.52	113.47	107.60
35	BA	890	G	C8-N9-C1'	6.52	135.48	127.00
35	BA	1431	A	C6-C5-N7	6.52	136.87	132.30
2	AB	1062	G	C6-N1-C2	-6.52	121.19	125.10
2	AB	1720	U	C5'-C4'-O4'	6.52	116.92	109.10
35	BA	236	A	C5-N7-C8	-6.52	100.64	103.90
35	BA	836	G	N3-C4-C5	-6.52	125.34	128.60
2	AB	200	U	C4-C5-C6	6.52	123.61	119.70
2	AB	1501	G	O4'-C1'-N9	6.52	113.42	108.20
2	AB	1846	G	N1-C2-N2	-6.52	110.33	116.20
2	AB	2289	G	C5'-C4'-O4'	6.52	116.92	109.10
2	AB	2867	G	C4-C5-C6	6.52	122.71	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	AF	79	ARG	NE-CZ-NH2	-6.52	117.04	120.30
35	BA	39	G	C4'-C3'-C2'	-6.52	96.08	102.60
35	BA	229	U	C2-N3-C4	-6.52	123.09	127.00
35	BA	309	A	C6-N1-C2	-6.52	114.69	118.60
35	BA	384	G	C5-C6-N1	6.52	114.76	111.50
35	BA	392	C	C5-C6-N1	6.52	124.26	121.00
35	BA	456	A	O4'-C1'-N9	-6.52	102.98	108.20
35	BA	542	G	C6-C5-N7	-6.52	126.49	130.40
35	BA	805	C	C5-C6-N1	-6.52	117.74	121.00
35	BA	877	G	C5-C6-O6	-6.52	124.69	128.60
35	BA	1297	G	N3-C4-C5	-6.52	125.34	128.60
2	AB	49	A	C4-C5-C6	6.52	120.26	117.00
2	AB	1447	C	N3-C4-C5	-6.52	119.29	121.90
2	AB	1975	G	C2-N3-C4	6.52	115.16	111.90
2	AB	2164	C	C5'-C4'-O4'	6.52	116.92	109.10
2	AB	2597	G	O4'-C1'-C2'	-6.52	99.28	105.80
2	AB	2725	A	C5-C6-N6	6.52	128.91	123.70
35	BA	889	A	C5'-C4'-O4'	-6.52	101.28	109.10
35	BA	891	U	C5-C4-O4	-6.52	121.99	125.90
35	BA	1206	G	C8-N9-C4	-6.52	103.79	106.40
35	BA	1364	U	C2-N3-C4	-6.52	123.09	127.00
35	BA	1446	A	P-O3'-C3'	6.52	127.52	119.70
2	AB	295	G	N7-C8-N9	-6.51	109.84	113.10
2	AB	516	C	O4'-C1'-N1	6.51	113.41	108.20
2	AB	749	A	C5-C6-N1	-6.51	114.44	117.70
2	AB	1146	C	C6-N1-C2	-6.51	117.69	120.30
2	AB	1177	G	N1-C2-N2	6.51	122.06	116.20
2	AB	1862	G	N3-C4-C5	-6.51	125.34	128.60
2	AB	2349	G	N9-C4-C5	6.51	108.01	105.40
35	BA	136	C	C5-C6-N1	-6.51	117.74	121.00
35	BA	632	U	N3-C2-O2	-6.51	117.64	122.20
35	BA	868	C	C2-N3-C4	-6.51	116.64	119.90
35	BA	1163	A	N9-C1'-C2'	-6.51	104.83	112.00
35	BA	1524	C	N1-C2-N3	-6.51	114.64	119.20
2	AB	391	A	C4'-C3'-C2'	-6.51	96.09	102.60
2	AB	1905	C	C4'-C3'-C2'	-6.51	96.09	102.60
2	AB	2447	G	C8-N9-C4	6.51	109.00	106.40
2	AB	2639	A	C4'-C3'-C2'	-6.51	96.09	102.60
35	BA	332	G	N9-C4-C5	6.51	108.00	105.40
35	BA	511	C	C6-N1-C2	6.51	122.91	120.30
35	BA	1075	U	N3-C2-O2	-6.51	117.64	122.20
35	BA	1138	G	N3-C2-N2	6.51	124.46	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1314	C	N3-C4-C5	-6.51	119.30	121.90
35	BA	1426	G	N1-C2-N2	-6.51	110.34	116.20
2	AB	186	G	N3-C4-N9	6.51	129.91	126.00
2	AB	363	G	N9-C4-C5	6.51	108.00	105.40
2	AB	1207	C	O4'-C1'-N1	-6.51	102.99	108.20
2	AB	2681	C	C4-C5-C6	6.51	120.66	117.40
35	BA	683	G	C5-C6-N1	-6.51	108.24	111.50
35	BA	885	G	N3-C4-C5	-6.51	125.34	128.60
35	BA	898	G	N3-C4-N9	6.51	129.91	126.00
35	BA	1163	A	N9-C4-C5	-6.51	103.19	105.80
35	BA	1266	G	C5-C6-O6	-6.51	124.69	128.60
35	BA	1420	U	N3-C4-C5	-6.51	110.69	114.60
1	AA	67	G	C4-C5-N7	6.51	113.40	110.80
2	AB	74	A	C8-N9-C4	6.51	108.40	105.80
2	AB	99	U	C5-C4-O4	6.51	129.81	125.90
2	AB	581	C	C2-N3-C4	6.51	123.15	119.90
2	AB	1084	A	N1-C2-N3	-6.51	126.05	129.30
2	AB	1109	C	N1-C2-O2	6.51	122.81	118.90
2	AB	1134	A	C1'-O4'-C4'	-6.51	104.69	109.90
2	AB	1210	G	O4'-C1'-N9	6.51	113.41	108.20
2	AB	1388	G	N3-C2-N2	6.51	124.46	119.90
2	AB	1799	G	C8-N9-C1'	6.51	135.46	127.00
2	AB	2128	G	N3-C2-N2	-6.51	115.34	119.90
2	AB	2208	C	N3-C4-C5	6.51	124.50	121.90
2	AB	2642	G	N7-C8-N9	6.51	116.36	113.10
35	BA	401	C	C1'-O4'-C4'	-6.51	104.69	109.90
35	BA	454	G	C4'-C3'-C2'	-6.51	96.09	102.60
35	BA	987	G	C3'-C2'-C1'	6.51	106.71	101.50
35	BA	1169	A	C5-C6-N1	-6.51	114.44	117.70
2	AB	565	C	N3-C4-N4	6.51	122.56	118.00
2	AB	571	U	N3-C4-C5	-6.51	110.69	114.60
2	AB	777	G	C5-C6-O6	-6.51	124.69	128.60
2	AB	1702	G	N1-C2-N3	-6.51	120.00	123.90
2	AB	2206	C	C4-C5-C6	-6.51	114.15	117.40
2	AB	2217	G	N1-C6-O6	-6.51	116.00	119.90
16	AP	90	ARG	NE-CZ-NH2	-6.51	117.05	120.30
35	BA	1245	C	C6-N1-C2	6.51	122.90	120.30
2	AB	778	G	N3-C4-C5	-6.51	125.35	128.60
2	AB	852	U	N3-C4-C5	-6.51	110.70	114.60
2	AB	1497	U	OP1-P-OP2	-6.51	109.84	119.60
2	AB	2029	G	N1-C2-N2	-6.51	110.34	116.20
2	AB	2114	A	C8-N9-C4	6.51	108.40	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2731	G	C5-C6-O6	-6.51	124.70	128.60
2	AB	2867	G	O4'-C1'-N9	6.51	113.41	108.20
19	AS	97	ILE	CA-CB-CG1	6.51	123.36	111.00
35	BA	339	C	C5-C6-N1	-6.51	117.75	121.00
35	BA	632	U	C2-N3-C4	-6.51	123.10	127.00
35	BA	1198	G	C4'-C3'-C2'	-6.51	96.09	102.60
35	BA	1258	G	C5-C6-N1	6.51	114.75	111.50
35	BA	1307	U	C5'-C4'-O4'	6.51	116.91	109.10
2	AB	654	A	C8-N9-C4	-6.50	103.20	105.80
2	AB	1726	C	N3-C2-O2	6.50	126.45	121.90
20	AT	68	ARG	NE-CZ-NH1	-6.50	117.05	120.30
35	BA	299	G	O4'-C1'-N9	6.50	113.40	108.20
35	BA	315	A	C8-N9-C4	-6.50	103.20	105.80
37	BC	34	U	C5'-C4'-O4'	6.50	116.91	109.10
2	AB	549	G	C8-N9-C4	-6.50	103.80	106.40
2	AB	894	U	C2-N3-C4	-6.50	123.10	127.00
2	AB	899	A	C2-N3-C4	-6.50	107.35	110.60
2	AB	989	G	C8-N9-C4	-6.50	103.80	106.40
2	AB	1333	G	N3-C4-C5	-6.50	125.35	128.60
2	AB	2482	A	C5'-C4'-O4'	6.50	116.91	109.10
2	AB	2680	U	C2-N3-C4	-6.50	123.10	127.00
4	AD	161	VAL	CA-CB-CG2	6.50	120.65	110.90
35	BA	78	A	C8-N9-C4	-6.50	103.20	105.80
35	BA	300	A	N1-C6-N6	6.50	122.50	118.60
35	BA	402	G	C6-N1-C2	-6.50	121.20	125.10
35	BA	1240	U	N3-C2-O2	-6.50	117.65	122.20
35	BA	1451	U	N3-C2-O2	-6.50	117.65	122.20
1	AA	72	G	C4'-C3'-C2'	-6.50	96.10	102.60
2	AB	194	G	N9-C1'-C2'	-6.50	104.85	112.00
2	AB	775	G	C5-C6-N1	6.50	114.75	111.50
2	AB	817	C	N3-C2-O2	-6.50	117.35	121.90
2	AB	860	U	C4'-C3'-C2'	-6.50	96.10	102.60
2	AB	1562	U	N1-C2-N3	6.50	118.80	114.90
2	AB	2481	G	C5-C6-O6	-6.50	124.70	128.60
35	BA	387	U	C5-C6-N1	-6.50	119.45	122.70
35	BA	1228	C	C6-N1-C2	-6.50	117.70	120.30
35	BA	1459	G	C3'-C2'-C1'	-6.50	96.30	101.50
49	BO	112	ARG	NE-CZ-NH2	-6.50	117.05	120.30
2	AB	739	A	C2-N3-C4	6.50	113.85	110.60
2	AB	1137	G	C4-C5-C6	6.50	122.70	118.80
2	AB	1520	U	N3-C4-C5	6.50	118.50	114.60
2	AB	1683	U	C2-N3-C4	-6.50	123.10	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1049	U	O4'-C1'-N1	6.50	113.40	108.20
36	BB	28	U	P-O3'-C3'	6.50	127.50	119.70
2	AB	792	A	N7-C8-N9	6.50	117.05	113.80
2	AB	801	G	C5-N7-C8	-6.50	101.05	104.30
2	AB	1096	A	C8-N9-C4	-6.50	103.20	105.80
2	AB	1142	A	P-O3'-C3'	6.50	127.50	119.70
2	AB	1837	C	N1-C2-N3	6.50	123.75	119.20
2	AB	2581	G	P-O3'-C3'	6.50	127.50	119.70
35	BA	232	G	C2-N3-C4	-6.50	108.65	111.90
35	BA	328	C	C5'-C4'-O4'	6.50	116.90	109.10
35	BA	383	A	C5-N7-C8	6.50	107.15	103.90
35	BA	552	U	C5-C6-N1	-6.50	119.45	122.70
35	BA	633	G	C1'-O4'-C4'	-6.50	104.70	109.90
35	BA	837	U	C4'-C3'-C2'	-6.50	96.10	102.60
2	AB	52	A	C5-N7-C8	-6.50	100.65	103.90
2	AB	577	G	P-O3'-C3'	6.50	127.50	119.70
2	AB	792	A	C6-N1-C2	-6.50	114.70	118.60
2	AB	2094	A	P-O3'-C3'	6.50	127.50	119.70
2	AB	2579	C	N1-C1'-C2'	-6.50	104.85	112.00
2	AB	2723	C	N3-C4-C5	-6.50	119.30	121.90
2	AB	2866	U	N3-C4-C5	6.50	118.50	114.60
7	AG	93	GLU	N-CA-CB	-6.50	98.91	110.60
35	BA	409	U	C5-C4-O4	6.50	129.80	125.90
35	BA	462	G	N7-C8-N9	6.50	116.35	113.10
35	BA	632	U	C5'-C4'-C3'	-6.50	105.61	116.00
35	BA	884	U	N3-C4-C5	-6.50	110.70	114.60
35	BA	1060	U	O4'-C1'-N1	6.50	113.40	108.20
35	BA	1298	U	N1-C2-N3	6.50	118.80	114.90
2	AB	456	C	C3'-C2'-C1'	-6.50	96.30	101.50
2	AB	1681	G	C5-C6-O6	-6.50	124.70	128.60
2	AB	2184	A	C5-C6-N1	6.50	120.95	117.70
2	AB	2188	U	P-O3'-C3'	6.50	127.49	119.70
2	AB	2495	G	N9-C4-C5	-6.50	102.80	105.40
8	AH	94	ARG	CD-NE-CZ	6.50	132.69	123.60
35	BA	218	U	C2-N3-C4	6.50	130.90	127.00
35	BA	615	G	C5-C6-O6	-6.50	124.70	128.60
2	AB	68	G	N3-C4-N9	-6.49	122.10	126.00
2	AB	615	U	N3-C4-C5	-6.49	110.70	114.60
2	AB	805	G	C5-N7-C8	6.49	107.55	104.30
2	AB	905	A	C5-C6-N1	6.49	120.95	117.70
2	AB	1141	U	C5-C4-O4	-6.49	122.00	125.90
2	AB	1354	A	C5'-C4'-O4'	6.49	116.89	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1858	A	C4-C5-C6	-6.49	113.75	117.00
2	AB	2183	A	C6-C5-N7	6.49	136.85	132.30
2	AB	2331	G	P-O3'-C3'	6.49	127.49	119.70
2	AB	2662	A	N9-C4-C5	6.49	108.40	105.80
35	BA	376	G	C4'-C3'-C2'	-6.49	96.11	102.60
35	BA	797	C	C5'-C4'-O4'	6.49	116.89	109.10
37	BC	62	C	C2-N3-C4	-6.49	116.65	119.90
2	AB	830	G	N3-C4-N9	6.49	129.90	126.00
2	AB	1416	G	C8-N9-C4	-6.49	103.80	106.40
2	AB	2401	U	N1-C1'-C2'	-6.49	104.86	112.00
2	AB	2819	G	N3-C4-N9	6.49	129.90	126.00
35	BA	905	U	N3-C2-O2	-6.49	117.66	122.20
35	BA	941	G	N3-C4-C5	-6.49	125.35	128.60
36	BB	28	U	N3-C4-C5	-6.49	110.70	114.60
2	AB	70	G	C1'-O4'-C4'	6.49	115.09	109.90
2	AB	320	A	N7-C8-N9	-6.49	110.55	113.80
2	AB	953	G	N7-C8-N9	6.49	116.34	113.10
2	AB	1025	G	C4-C5-C6	-6.49	114.91	118.80
2	AB	1038	G	C6-N1-C2	-6.49	121.20	125.10
2	AB	1314	C	C4'-C3'-C2'	-6.49	96.11	102.60
2	AB	1771	C	C2-N3-C4	6.49	123.14	119.90
2	AB	2006	C	N3-C4-N4	6.49	122.54	118.00
2	AB	2218	G	N7-C8-N9	6.49	116.34	113.10
2	AB	2619	C	C1'-O4'-C4'	6.49	115.09	109.90
35	BA	277	C	C2-N3-C4	-6.49	116.66	119.90
35	BA	510	A	O4'-C1'-N9	-6.49	103.01	108.20
35	BA	510	A	P-O5'-C5'	6.49	131.28	120.90
35	BA	543	U	N3-C4-O4	-6.49	114.86	119.40
35	BA	550	G	N7-C8-N9	-6.49	109.86	113.10
35	BA	760	G	C6-C5-N7	6.49	134.29	130.40
35	BA	1153	G	C5-N7-C8	-6.49	101.05	104.30
35	BA	1494	G	O4'-C1'-N9	6.49	113.39	108.20
2	AB	432	A	C6-C5-N7	6.49	136.84	132.30
2	AB	1695	G	C2-N3-C4	6.49	115.14	111.90
2	AB	1847	A	N9-C1'-C2'	-6.49	104.86	112.00
2	AB	2062	A	N7-C8-N9	6.49	117.04	113.80
2	AB	2663	G	C3'-C2'-C1'	-6.49	96.31	101.50
2	AB	2726	A	N7-C8-N9	6.49	117.04	113.80
2	AB	2738	A	C3'-C2'-C1'	-6.49	96.31	101.50
15	AO	18	ARG	NE-CZ-NH2	6.49	123.54	120.30
18	AR	71	ARG	NE-CZ-NH1	-6.49	117.06	120.30
35	BA	1102	A	N7-C8-N9	6.49	117.04	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1179	A	C2-N3-C4	6.49	113.84	110.60
35	BA	1355	G	C4-C5-N7	-6.49	108.20	110.80
35	BA	1456	A	C4-C5-C6	6.49	120.24	117.00
35	BA	1530	G	N1-C6-O6	6.49	123.79	119.90
2	AB	296	U	N1-C1'-C2'	-6.49	104.86	112.00
35	BA	167	A	N1-C6-N6	6.49	122.49	118.60
35	BA	306	A	C6-N1-C2	-6.49	114.71	118.60
35	BA	867	G	O4'-C4'-C3'	6.49	111.29	106.10
35	BA	1341	U	C6-N1-C2	6.49	124.89	121.00
35	BA	1497	G	O4'-C1'-N9	6.49	113.39	108.20
1	AA	15	A	N1-C6-N6	-6.49	114.71	118.60
2	AB	336	C	N3-C2-O2	-6.49	117.36	121.90
2	AB	586	A	C8-N9-C4	-6.49	103.21	105.80
2	AB	969	G	N3-C4-N9	6.49	129.89	126.00
2	AB	1192	G	C6-N1-C2	-6.49	121.21	125.10
2	AB	1354	A	N7-C8-N9	-6.49	110.56	113.80
2	AB	1815	A	C8-N9-C4	-6.49	103.21	105.80
2	AB	2006	C	N1-C1'-C2'	-6.49	104.86	112.00
2	AB	2158	A	C4-C5-N7	6.49	113.94	110.70
2	AB	2320	U	P-O3'-C3'	6.49	127.48	119.70
2	AB	2513	A	N1-C6-N6	6.49	122.49	118.60
35	BA	343	U	N3-C4-C5	-6.49	110.71	114.60
35	BA	381	C	C5-C6-N1	-6.49	117.76	121.00
35	BA	825	A	C5'-C4'-C3'	-6.49	105.62	116.00
2	AB	713	G	P-O3'-C3'	6.48	127.48	119.70
2	AB	1460	U	C5-C6-N1	-6.48	119.46	122.70
2	AB	2020	A	C2-N3-C4	-6.48	107.36	110.60
2	AB	2065	C	C6-N1-C2	-6.48	117.71	120.30
2	AB	2295	C	C4'-C3'-C2'	-6.48	96.12	102.60
2	AB	2382	G	N3-C4-N9	6.48	129.89	126.00
4	AD	66	PHE	CB-CA-C	6.48	123.37	110.40
35	BA	243	A	C1'-O4'-C4'	-6.48	104.71	109.90
2	AB	525	U	C3'-C2'-C1'	6.48	106.69	101.50
2	AB	1260	A	C5-N7-C8	6.48	107.14	103.90
2	AB	1493	C	N1-C2-O2	6.48	122.79	118.90
2	AB	1511	G	N3-C4-C5	-6.48	125.36	128.60
2	AB	2239	G	N3-C2-N2	-6.48	115.36	119.90
2	AB	2308	G	O5'-P-OP1	-6.48	99.87	105.70
35	BA	693	G	N1-C6-O6	-6.48	116.01	119.90
35	BA	749	A	N1-C2-N3	-6.48	126.06	129.30
35	BA	879	C	C2-N3-C4	-6.48	116.66	119.90
35	BA	1297	G	C5-C6-N1	6.48	114.74	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	8	C	C4-C5-C6	-6.48	114.16	117.40
1	AA	44	G	N1-C2-N3	-6.48	120.01	123.90
2	AB	28	A	C2-N3-C4	6.48	113.84	110.60
2	AB	1160	G	C2-N3-C4	6.48	115.14	111.90
2	AB	1683	U	C1'-O4'-C4'	6.48	115.08	109.90
2	AB	2444	G	N9-C4-C5	-6.48	102.81	105.40
2	AB	2670	A	C5-C6-N1	6.48	120.94	117.70
35	BA	30	U	C5-C6-N1	-6.48	119.46	122.70
35	BA	500	G	C5'-C4'-O4'	6.48	116.88	109.10
35	BA	993	G	C3'-C2'-C1'	6.48	106.68	101.50
36	BB	57	C	O4'-C1'-N1	6.48	113.38	108.20
37	BC	75	C	C1'-O4'-C4'	-6.48	104.72	109.90
57	BW	8	ASN	O-C-N	6.48	133.07	122.70
2	AB	643	A	N7-C8-N9	6.48	117.04	113.80
2	AB	1096	A	C5-C6-N1	6.48	120.94	117.70
2	AB	2218	G	O4'-C1'-N9	6.48	113.38	108.20
2	AB	2526	G	C8-N9-C4	-6.48	103.81	106.40
35	BA	107	G	C1'-O4'-C4'	-6.48	104.72	109.90
2	AB	44	A	N1-C2-N3	-6.48	126.06	129.30
2	AB	879	G	C5-N7-C8	-6.48	101.06	104.30
2	AB	2689	U	C5-C4-O4	-6.48	122.01	125.90
2	AB	2891	U	C1'-O4'-C4'	6.48	115.08	109.90
2	AB	2893	A	C4-C5-C6	-6.48	113.76	117.00
35	BA	174	A	C5-C6-N1	-6.48	114.46	117.70
35	BA	220	G	C5-C6-N1	6.48	114.74	111.50
35	BA	271	C	P-O3'-C3'	6.48	127.47	119.70
35	BA	783	C	N3-C2-O2	-6.48	117.37	121.90
35	BA	1243	C	C5'-C4'-C3'	6.48	126.36	116.00
36	BB	45	G	C4-C5-N7	6.48	113.39	110.80
2	AB	2093	G	O4'-C1'-N9	6.48	113.38	108.20
2	AB	2214	C	C6-N1-C2	6.48	122.89	120.30
2	AB	2779	U	N3-C4-O4	6.48	123.93	119.40
2	AB	2863	C	C1'-O4'-C4'	6.48	115.08	109.90
14	AN	78	ARG	NE-CZ-NH2	6.48	123.54	120.30
35	BA	230	G	P-O3'-C3'	-6.48	111.93	119.70
35	BA	716	A	C8-N9-C4	-6.48	103.21	105.80
35	BA	859	G	N3-C2-N2	6.48	124.43	119.90
37	BC	19	G	N3-C2-N2	6.48	124.43	119.90
2	AB	221	A	C3'-C2'-C1'	-6.47	96.32	101.50
2	AB	397	U	O4'-C1'-N1	6.47	113.38	108.20
2	AB	474	G	C5-N7-C8	-6.47	101.06	104.30
2	AB	542	C	N1-C1'-C2'	-6.47	104.88	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	751	A	C5-C6-N1	6.47	120.94	117.70
2	AB	2174	C	C4'-C3'-C2'	-6.47	96.12	102.60
2	AB	2599	G	N3-C2-N2	-6.47	115.37	119.90
2	AB	2652	C	C5'-C4'-O4'	6.47	116.87	109.10
35	BA	1067	A	N9-C4-C5	6.47	108.39	105.80
2	AB	303	G	C5-N7-C8	-6.47	101.06	104.30
2	AB	891	G	N1-C2-N3	-6.47	120.02	123.90
2	AB	1118	C	N3-C4-N4	6.47	122.53	118.00
2	AB	1214	A	C5-C6-N1	6.47	120.94	117.70
2	AB	1307	A	C8-N9-C4	-6.47	103.21	105.80
2	AB	2777	G	C6-N1-C2	-6.47	121.22	125.10
35	BA	149	A	C1'-O4'-C4'	-6.47	104.72	109.90
35	BA	198	G	O4'-C1'-N9	6.47	113.38	108.20
35	BA	246	A	C4-C5-N7	6.47	113.94	110.70
35	BA	317	U	N1-C2-N3	6.47	118.78	114.90
35	BA	351	G	N1-C2-N2	6.47	122.03	116.20
35	BA	539	A	N1-C6-N6	-6.47	114.72	118.60
35	BA	747	A	C5'-C4'-O4'	6.47	116.87	109.10
35	BA	1089	G	N9-C1'-C2'	-6.47	104.88	112.00
2	AB	181	A	N7-C8-N9	6.47	117.03	113.80
2	AB	563	A	C2-N3-C4	6.47	113.83	110.60
2	AB	1287	A	C3'-C2'-C1'	-6.47	96.32	101.50
2	AB	2632	A	N1-C2-N3	-6.47	126.06	129.30
1	AA	57	A	C5-N7-C8	-6.47	100.67	103.90
2	AB	594	U	C6-N1-C2	6.47	124.88	121.00
2	AB	699	A	N9-C1'-C2'	-6.47	104.88	112.00
2	AB	866	A	N9-C4-C5	-6.47	103.21	105.80
2	AB	1137	G	C3'-C2'-C1'	-6.47	96.32	101.50
2	AB	2031	A	C5-N7-C8	-6.47	100.67	103.90
2	AB	2047	C	C4'-C3'-C2'	-6.47	96.13	102.60
2	AB	2844	G	N3-C4-C5	-6.47	125.36	128.60
35	BA	419	C	O4'-C1'-N1	6.47	113.38	108.20
37	BC	70	C	O4'-C1'-C2'	-6.47	99.33	105.80
2	AB	1518	C	C5'-C4'-O4'	6.47	116.86	109.10
2	AB	1610	A	N9-C4-C5	-6.47	103.21	105.80
2	AB	1648	U	O4'-C1'-N1	6.47	113.38	108.20
2	AB	2249	U	N1-C2-N3	6.47	118.78	114.90
2	AB	2317	A	C5-N7-C8	6.47	107.13	103.90
35	BA	369	G	C8-N9-C4	-6.47	103.81	106.40
35	BA	757	U	C6-N1-C2	-6.47	117.12	121.00
1	AA	108	A	C5'-C4'-O4'	6.47	116.86	109.10
2	AB	382	A	C8-N9-C4	6.47	108.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1204	A	C5-C6-N6	-6.47	118.53	123.70
2	AB	1739	A	O4'-C1'-N9	6.47	113.37	108.20
2	AB	2024	G	N7-C8-N9	6.47	116.33	113.10
2	AB	2715	C	C4-C5-C6	-6.47	114.17	117.40
2	AB	2850	A	C4'-C3'-C2'	-6.47	96.13	102.60
35	BA	175	C	C1'-O4'-C4'	6.47	115.07	109.90
35	BA	580	C	O4'-C1'-N1	6.47	113.37	108.20
35	BA	841	C	N3-C4-N4	-6.47	113.47	118.00
35	BA	1006	G	N9-C1'-C2'	-6.47	104.89	112.00
35	BA	1327	C	O4'-C4'-C3'	-6.47	97.53	104.00
35	BA	1379	G	C6-C5-N7	6.47	134.28	130.40
2	AB	261	G	N7-C8-N9	6.46	116.33	113.10
2	AB	636	G	C6-C5-N7	-6.46	126.52	130.40
2	AB	1005	C	N3-C4-N4	6.46	122.53	118.00
2	AB	1144	A	C4'-C3'-C2'	-6.46	96.14	102.60
35	BA	27	G	C5'-C4'-O4'	6.46	116.86	109.10
35	BA	423	G	C8-N9-C4	-6.46	103.81	106.40
35	BA	901	A	C6-N1-C2	6.46	122.48	118.60
35	BA	1124	G	C3'-C2'-C1'	-6.46	96.33	101.50
35	BA	1268	G	N9-C4-C5	-6.46	102.81	105.40
37	BC	53	G	C8-N9-C4	-6.46	103.81	106.40
57	BW	20	ARG	NE-CZ-NH1	-6.46	117.07	120.30
2	AB	1045	C	C5-C6-N1	6.46	124.23	121.00
2	AB	1559	U	N1-C2-O2	6.46	127.32	122.80
2	AB	1650	A	C8-N9-C4	-6.46	103.22	105.80
2	AB	1844	C	O4'-C1'-N1	6.46	113.37	108.20
2	AB	2429	G	C5'-C4'-O4'	6.46	116.86	109.10
2	AB	2755	C	N3-C2-O2	-6.46	117.38	121.90
35	BA	754	C	N3-C4-N4	-6.46	113.48	118.00
35	BA	1345	U	C5-C6-N1	6.46	125.93	122.70
36	BB	42	U	O4'-C1'-N1	6.46	113.37	108.20
2	AB	175	G	P-O3'-C3'	6.46	127.45	119.70
2	AB	612	G	C2-N3-C4	6.46	115.13	111.90
2	AB	1709	U	C5-C6-N1	-6.46	119.47	122.70
2	AB	2047	C	C3'-C2'-C1'	6.46	106.67	101.50
2	AB	2176	A	N1-C2-N3	6.46	132.53	129.30
2	AB	2229	U	O5'-P-OP1	-6.46	99.89	105.70
2	AB	2290	G	C4-C5-N7	-6.46	108.22	110.80
2	AB	2415	G	C6-N1-C2	-6.46	121.22	125.10
2	AB	2556	C	N3-C4-N4	6.46	122.52	118.00
35	BA	259	G	C6-C5-N7	-6.46	126.52	130.40
35	BA	1078	U	C4-C5-C6	6.46	123.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1421	G	O4'-C1'-N9	6.46	113.37	108.20
35	BA	1435	G	C5-N7-C8	6.46	107.53	104.30
36	BB	36	U	N1-C1'-C2'	-6.46	104.89	112.00
2	AB	575	A	C5-N7-C8	-6.46	100.67	103.90
2	AB	2360	G	C5-C6-N1	6.46	114.73	111.50
2	AB	2506	U	O4'-C1'-N1	6.46	113.37	108.20
2	AB	2724	U	C3'-C2'-C1'	6.46	106.67	101.50
35	BA	568	G	C6-N1-C2	-6.46	121.22	125.10
37	BC	39	A	C8-N9-C4	6.46	108.38	105.80
2	AB	246	C	O4'-C1'-N1	6.46	113.37	108.20
2	AB	409	G	N3-C4-N9	-6.46	122.12	126.00
2	AB	875	G	N7-C8-N9	6.46	116.33	113.10
2	AB	1183	U	C4-C5-C6	6.46	123.58	119.70
2	AB	1834	U	C4'-C3'-C2'	-6.46	96.14	102.60
2	AB	2061	G	N1-C2-N3	-6.46	120.03	123.90
2	AB	2322	A	C4-C5-N7	-6.46	107.47	110.70
2	AB	2369	A	C5-C6-N1	6.46	120.93	117.70
2	AB	2508	G	C2-N3-C4	6.46	115.13	111.90
2	AB	2885	G	O4'-C1'-C2'	-6.46	99.34	105.80
35	BA	1253	G	C4-C5-N7	-6.46	108.22	110.80
35	BA	1257	A	N7-C8-N9	6.46	117.03	113.80
46	BL	9	ARG	CD-NE-CZ	6.46	132.64	123.60
2	AB	214	G	O4'-C1'-N9	6.46	113.36	108.20
2	AB	2293	G	N1-C6-O6	-6.46	116.03	119.90
8	AH	62	ALA	N-CA-CB	-6.46	101.06	110.10
40	BF	80	ARG	NE-CZ-NH1	-6.46	117.07	120.30
2	AB	619	G	N7-C8-N9	6.46	116.33	113.10
2	AB	983	A	C2-N3-C4	6.46	113.83	110.60
2	AB	1443	U	N3-C4-O4	-6.46	114.88	119.40
2	AB	2696	U	N3-C2-O2	-6.46	117.68	122.20
35	BA	1055	A	C8-N9-C4	6.46	108.38	105.80
2	AB	962	G	C2-N3-C4	6.45	115.13	111.90
2	AB	1077	A	C1'-O4'-C4'	6.45	115.06	109.90
2	AB	1102	C	C6-N1-C2	-6.45	117.72	120.30
2	AB	1852	U	O4'-C4'-C3'	6.45	111.26	106.10
2	AB	2228	G	C4-C5-C6	6.45	122.67	118.80
2	AB	2735	G	C8-N9-C4	-6.45	103.82	106.40
35	BA	324	G	C6-C5-N7	-6.45	126.53	130.40
35	BA	1026	G	O4'-C1'-N9	6.45	113.36	108.20
2	AB	209	C	C6-N1-C2	-6.45	117.72	120.30
2	AB	438	G	O4'-C1'-N9	6.45	113.36	108.20
2	AB	1325	U	C1'-O4'-C4'	-6.45	104.74	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1817	G	N3-C2-N2	6.45	124.42	119.90
2	AB	2018	G	C5-C6-N1	6.45	114.73	111.50
35	BA	529	G	O4'-C1'-N9	6.45	113.36	108.20
2	AB	373	U	C3'-C2'-C1'	-6.45	96.34	101.50
2	AB	714	U	C2-N1-C1'	6.45	125.44	117.70
2	AB	1243	C	O4'-C1'-N1	6.45	113.36	108.20
2	AB	1699	G	N9-C4-C5	-6.45	102.82	105.40
2	AB	1949	G	C6-N1-C2	-6.45	121.23	125.10
2	AB	2280	G	C6-C5-N7	6.45	134.27	130.40
2	AB	2528	U	N3-C4-O4	-6.45	114.89	119.40
2	AB	2708	G	C4-C5-C6	6.45	122.67	118.80
17	AQ	94	ARG	NE-CZ-NH2	-6.45	117.07	120.30
35	BA	211	G	C4-C5-C6	6.45	122.67	118.80
35	BA	292	G	C5'-C4'-O4'	6.45	116.84	109.10
35	BA	702	A	N9-C1'-C2'	6.45	122.38	114.00
2	AB	100	U	C4-C5-C6	6.45	123.57	119.70
2	AB	442	G	C6-N1-C2	-6.45	121.23	125.10
2	AB	499	U	O5'-C5'-C4'	6.45	123.95	111.70
2	AB	882	G	C6-N1-C2	-6.45	121.23	125.10
2	AB	885	C	N3-C2-O2	-6.45	117.39	121.90
2	AB	985	C	C2-N3-C4	6.45	123.12	119.90
2	AB	997	G	N1-C6-O6	6.45	123.77	119.90
2	AB	1707	G	C5-C6-O6	-6.45	124.73	128.60
2	AB	1784	A	N1-C2-N3	-6.45	126.08	129.30
2	AB	1876	A	C8-N9-C4	-6.45	103.22	105.80
2	AB	1892	C	C6-N1-C2	6.45	122.88	120.30
2	AB	2221	G	N1-C2-N2	-6.45	110.40	116.20
2	AB	2352	A	O4'-C4'-C3'	6.45	111.26	106.10
2	AB	2488	G	C4'-C3'-C2'	-6.45	96.15	102.60
35	BA	648	A	C5-N7-C8	-6.45	100.68	103.90
2	AB	96	C	N3-C4-N4	6.45	122.51	118.00
2	AB	581	C	C4'-C3'-C2'	-6.45	96.15	102.60
2	AB	1235	G	C4'-C3'-C2'	-6.45	96.15	102.60
2	AB	2314	A	C4-C5-N7	6.45	113.92	110.70
35	BA	827	U	C5'-C4'-O4'	6.45	116.84	109.10
35	BA	1016	A	C5-C6-N6	6.45	128.86	123.70
2	AB	2	G	C4-C5-N7	-6.45	108.22	110.80
2	AB	133	U	N3-C4-O4	6.45	123.91	119.40
2	AB	171	U	P-O3'-C3'	6.45	127.44	119.70
2	AB	1596	A	C2-N3-C4	-6.45	107.38	110.60
2	AB	1687	G	C6-C5-N7	-6.45	126.53	130.40
2	AB	1950	G	P-O5'-C5'	6.45	131.21	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	AN	64	PHE	CB-CG-CD2	-6.45	116.29	120.80
18	AR	61	ARG	NE-CZ-NH2	6.45	123.52	120.30
35	BA	408	A	C3'-C2'-C1'	6.45	106.66	101.50
35	BA	1263	C	N1-C2-O2	6.45	122.77	118.90
35	BA	1293	C	C4'-C3'-C2'	-6.45	96.16	102.60
37	BC	22	A	C2-N3-C4	6.45	113.82	110.60
41	BG	49	TYR	CB-CG-CD2	-6.45	117.13	121.00
2	AB	2249	U	C5-C6-N1	-6.44	119.48	122.70
2	AB	2329	U	C1'-O4'-C4'	6.44	115.06	109.90
2	AB	2451	A	N9-C4-C5	6.44	108.38	105.80
2	AB	249	C	N3-C4-C5	6.44	124.48	121.90
2	AB	294	A	N9-C1'-C2'	6.44	122.38	114.00
2	AB	1912	A	P-O3'-C3'	6.44	127.43	119.70
2	AB	2083	G	N1-C2-N2	6.44	122.00	116.20
2	AB	2502	G	N3-C4-C5	-6.44	125.38	128.60
2	AB	2558	C	N3-C4-N4	6.44	122.51	118.00
2	AB	2601	C	N1-C2-N3	6.44	123.71	119.20
35	BA	105	G	N3-C2-N2	6.44	124.41	119.90
35	BA	392	C	C4'-C3'-C2'	-6.44	96.16	102.60
35	BA	446	G	N7-C8-N9	6.44	116.32	113.10
35	BA	758	C	O4'-C4'-C3'	6.44	111.25	106.10
35	BA	1190	G	C3'-C2'-C1'	-6.44	96.35	101.50
35	BA	1339	A	C5-C6-N6	-6.44	118.55	123.70
40	BF	3	TYR	CD1-CE1-CZ	6.44	125.60	119.80
2	AB	509	C	C4-C5-C6	6.44	120.62	117.40
2	AB	827	U	N3-C2-O2	-6.44	117.69	122.20
2	AB	960	A	C5-N7-C8	-6.44	100.68	103.90
2	AB	1900	A	N3-C4-C5	-6.44	122.29	126.80
2	AB	1958	C	C4-C5-C6	6.44	120.62	117.40
2	AB	2189	U	O4'-C1'-N1	6.44	113.35	108.20
2	AB	2402	U	C5-C6-N1	-6.44	119.48	122.70
2	AB	2433	A	N9-C4-C5	6.44	108.38	105.80
2	AB	2731	G	C2-N3-C4	6.44	115.12	111.90
35	BA	364	A	N7-C8-N9	6.44	117.02	113.80
35	BA	568	G	C4-C5-C6	6.44	122.66	118.80
35	BA	828	U	N3-C2-O2	6.44	126.71	122.20
2	AB	917	A	O4'-C1'-N9	6.44	113.35	108.20
2	AB	960	A	N9-C4-C5	-6.44	103.22	105.80
2	AB	2642	G	C1'-O4'-C4'	6.44	115.05	109.90
2	AB	2728	U	C5-C4-O4	-6.44	122.04	125.90
35	BA	847	G	C6-N1-C2	-6.44	121.24	125.10
37	BC	63	C	N1-C2-N3	-6.44	114.69	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	75	G	C8-N9-C4	-6.44	103.83	106.40
2	AB	466	A	O4'-C1'-N9	6.44	113.35	108.20
2	AB	508	A	C4'-C3'-C2'	-6.44	96.16	102.60
2	AB	930	G	C2-N3-C4	6.44	115.12	111.90
2	AB	1257	C	O5'-C5'-C4'	-6.44	99.47	111.70
2	AB	1823	G	P-O3'-C3'	-6.44	111.97	119.70
2	AB	1852	U	C2-N3-C4	-6.44	123.14	127.00
2	AB	2051	A	C5-C6-N1	6.44	120.92	117.70
2	AB	2252	G	O3'-P-O5'	-6.44	91.77	104.00
2	AB	2269	G	N1-C2-N3	-6.44	120.04	123.90
35	BA	502	A	N3-C4-N9	-6.44	122.25	127.40
35	BA	743	A	N9-C4-C5	6.44	108.38	105.80
35	BA	1077	G	C3'-C2'-C1'	6.44	106.65	101.50
35	BA	1183	U	C3'-C2'-C1'	6.44	106.65	101.50
35	BA	1361	G	N1-C6-O6	-6.44	116.04	119.90
37	BC	22	A	C4-C5-N7	6.44	113.92	110.70
2	AB	1404	C	C2-N1-C1'	-6.44	111.72	118.80
2	AB	1465	G	C6-N1-C2	-6.44	121.24	125.10
2	AB	1487	U	O4'-C1'-N1	6.44	113.35	108.20
2	AB	1731	G	N3-C4-C5	-6.44	125.38	128.60
2	AB	1770	G	N3-C4-C5	-6.44	125.38	128.60
2	AB	2728	U	C2-N3-C4	-6.44	123.14	127.00
2	AB	1241	A	N3-C4-N9	6.43	132.55	127.40
2	AB	1698	A	N1-C6-N6	-6.43	114.74	118.60
2	AB	2525	G	N1-C6-O6	6.43	123.76	119.90
2	AB	2536	G	C5-N7-C8	-6.43	101.08	104.30
2	AB	2702	G	C5-N7-C8	6.43	107.52	104.30
35	BA	117	G	C8-N9-C4	-6.43	103.83	106.40
35	BA	171	A	C5-C6-N6	6.43	128.85	123.70
35	BA	593	U	N3-C4-O4	6.43	123.90	119.40
35	BA	889	A	N1-C6-N6	-6.43	114.74	118.60
35	BA	1117	A	N1-C6-N6	6.43	122.46	118.60
36	BB	21	U	C4-C5-C6	6.43	123.56	119.70
36	BB	34	U	C1'-O4'-C4'	-6.43	104.75	109.90
1	AA	21	G	C1'-O4'-C4'	6.43	115.05	109.90
1	AA	27	C	N3-C4-N4	6.43	122.50	118.00
2	AB	129	C	C5'-C4'-C3'	-6.43	105.71	116.00
2	AB	304	U	N1-C2-N3	6.43	118.76	114.90
2	AB	1059	G	C5-N7-C8	-6.43	101.08	104.30
2	AB	1277	G	C4'-C3'-C2'	-6.43	96.17	102.60
2	AB	1310	G	N9-C4-C5	6.43	107.97	105.40
2	AB	1314	C	C5'-C4'-O4'	6.43	116.82	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2019	A	C2'-C3'-O3'	6.43	123.99	113.70
35	BA	383	A	C4-C5-N7	-6.43	107.48	110.70
35	BA	565	U	C4'-C3'-C2'	-6.43	96.17	102.60
35	BA	705	G	C5-C6-N1	6.43	114.72	111.50
35	BA	1022	A	C4-C5-C6	6.43	120.22	117.00
35	BA	1051	C	C6-N1-C2	6.43	122.87	120.30
2	AB	84	A	N1-C2-N3	6.43	132.51	129.30
2	AB	260	G	C4-C5-N7	6.43	113.37	110.80
2	AB	304	U	C5-C4-O4	-6.43	122.04	125.90
2	AB	313	G	N3-C4-C5	-6.43	125.38	128.60
2	AB	1404	C	C1'-O4'-C4'	6.43	115.05	109.90
2	AB	2366	A	N9-C4-C5	6.43	108.37	105.80
51	BQ	88	ARG	NE-CZ-NH2	-6.43	117.08	120.30
2	AB	40	U	N3-C2-O2	-6.43	117.70	122.20
2	AB	329	G	N3-C4-N9	6.43	129.86	126.00
2	AB	882	G	N7-C8-N9	6.43	116.31	113.10
2	AB	1666	G	C4-C5-N7	-6.43	108.23	110.80
2	AB	2764	A	C4-C5-N7	-6.43	107.49	110.70
35	BA	164	G	P-O3'-C3'	6.43	127.42	119.70
35	BA	201	G	C5-N7-C8	-6.43	101.08	104.30
35	BA	1403	C	P-O3'-C3'	6.43	127.42	119.70
48	BN	35	ARG	NE-CZ-NH1	6.43	123.52	120.30
2	AB	693	A	C4'-C3'-C2'	-6.43	96.17	102.60
2	AB	1539	U	C2-N3-C4	-6.43	123.14	127.00
2	AB	2331	G	C4-C5-N7	6.43	113.37	110.80
35	BA	774	G	C5-C6-N1	6.43	114.71	111.50
35	BA	1060	U	C2-N3-C4	-6.43	123.14	127.00
35	BA	1308	U	C5-C6-N1	6.43	125.91	122.70
1	AA	96	G	N1-C2-N3	6.43	127.76	123.90
1	AA	119	A	C1'-O4'-C4'	-6.43	104.76	109.90
2	AB	38	A	N7-C8-N9	6.43	117.01	113.80
2	AB	956	G	N9-C1'-C2'	-6.43	104.93	112.00
2	AB	1117	C	N3-C2-O2	-6.43	117.40	121.90
2	AB	1328	A	C8-N9-C4	-6.43	103.23	105.80
2	AB	1529	G	C2-N3-C4	-6.43	108.69	111.90
2	AB	1650	A	C5'-C4'-C3'	-6.43	105.72	116.00
2	AB	1964	G	N1-C2-N3	-6.43	120.04	123.90
2	AB	1969	A	N9-C1'-C2'	-6.43	104.93	112.00
2	AB	2010	G	C3'-C2'-C1'	6.43	106.64	101.50
2	AB	2102	G	N9-C4-C5	-6.43	102.83	105.40
2	AB	2265	U	N1-C2-N3	6.43	118.76	114.90
22	AV	51	PHE	CB-CG-CD2	-6.43	116.30	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	95	C	C5-C4-N4	-6.43	115.70	120.20
35	BA	499	A	N7-C8-N9	6.43	117.01	113.80
35	BA	522	C	C5-C6-N1	6.43	124.21	121.00
35	BA	1337	G	C4-N9-C1'	-6.43	118.15	126.50
37	BC	71	G	C6-C5-N7	-6.43	126.54	130.40
1	AA	72	G	C5-C6-N1	6.42	114.71	111.50
1	AA	91	C	C5'-C4'-C3'	-6.42	105.72	116.00
2	AB	30	G	C4-C5-N7	6.42	113.37	110.80
2	AB	405	U	C2'-C3'-O3'	6.42	123.98	113.70
2	AB	816	C	C3'-C2'-C1'	6.42	106.64	101.50
2	AB	1322	A	N9-C4-C5	6.42	108.37	105.80
2	AB	1358	G	C6-N1-C2	-6.42	121.25	125.10
2	AB	1361	G	N3-C4-C5	-6.42	125.39	128.60
2	AB	2024	G	N3-C2-N2	6.42	124.40	119.90
2	AB	2820	A	N7-C8-N9	6.42	117.01	113.80
35	BA	143	A	C8-N9-C4	-6.42	103.23	105.80
35	BA	760	G	C4-C5-N7	-6.42	108.23	110.80
35	BA	1356	G	C5-N7-C8	-6.42	101.09	104.30
2	AB	1282	U	C2-N3-C4	-6.42	123.15	127.00
2	AB	2771	C	C5'-C4'-O4'	6.42	116.81	109.10
35	BA	114	U	C5-C6-N1	-6.42	119.49	122.70
35	BA	115	G	C4-C5-C6	6.42	122.65	118.80
35	BA	836	G	C4-C5-C6	6.42	122.65	118.80
2	AB	12	U	N3-C2-O2	-6.42	117.70	122.20
2	AB	278	A	N9-C4-C5	6.42	108.37	105.80
2	AB	340	A	N1-C6-N6	-6.42	114.75	118.60
2	AB	602	A	O4'-C1'-N9	6.42	113.34	108.20
2	AB	767	U	C4'-C3'-C2'	-6.42	96.18	102.60
2	AB	772	C	C2-N3-C4	6.42	123.11	119.90
2	AB	950	G	N3-C4-C5	-6.42	125.39	128.60
2	AB	1055	G	C5'-C4'-C3'	-6.42	105.73	116.00
2	AB	1973	G	N9-C1'-C2'	-6.42	104.94	112.00
2	AB	2028	U	C6-N1-C2	-6.42	117.15	121.00
2	AB	2077	A	C5-N7-C8	6.42	107.11	103.90
2	AB	2630	G	C3'-C2'-C1'	-6.42	96.36	101.50
18	AR	102	ARG	NE-CZ-NH1	6.42	123.51	120.30
35	BA	1015	G	O4'-C1'-N9	6.42	113.34	108.20
35	BA	1303	C	C5-C4-N4	-6.42	115.70	120.20
35	BA	1506	U	N3-C4-C5	-6.42	110.75	114.60
35	BA	1515	G	N3-C2-N2	6.42	124.40	119.90
39	BE	163	ARG	NE-CZ-NH2	6.42	123.51	120.30
2	AB	88	G	C5-C6-O6	6.42	132.45	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1054	A	C4-C5-C6	-6.42	113.79	117.00
2	AB	1126	A	C5-C6-N6	-6.42	118.56	123.70
2	AB	2544	G	C6-N1-C2	-6.42	121.25	125.10
13	AM	112	PHE	CB-CG-CD2	6.42	125.29	120.80
35	BA	218	U	C4-C5-C6	6.42	123.55	119.70
2	AB	172	A	N9-C1'-C2'	-6.42	104.94	112.00
2	AB	472	A	C6-N1-C2	6.42	122.45	118.60
2	AB	542	C	N3-C4-N4	6.42	122.49	118.00
2	AB	896	A	N1-C2-N3	-6.42	126.09	129.30
2	AB	912	C	C5'-C4'-O4'	6.42	116.80	109.10
2	AB	1202	G	C8-N9-C4	-6.42	103.83	106.40
2	AB	1347	A	N7-C8-N9	-6.42	110.59	113.80
2	AB	1910	G	C6-N1-C2	-6.42	121.25	125.10
2	AB	2073	C	O4'-C4'-C3'	6.42	111.23	106.10
2	AB	2142	A	C5-C6-N1	6.42	120.91	117.70
2	AB	2315	G	N9-C4-C5	6.42	107.97	105.40
2	AB	2335	A	C1'-O4'-C4'	-6.42	104.76	109.90
2	AB	2341	G	C4-C5-C6	6.42	122.65	118.80
2	AB	2384	U	O4'-C1'-N1	6.42	113.33	108.20
2	AB	2437	G	N1-C2-N2	6.42	121.98	116.20
2	AB	2870	C	O3'-P-O5'	6.42	116.19	104.00
27	A0	52	ARG	NE-CZ-NH2	6.42	123.51	120.30
35	BA	1225	A	N7-C8-N9	6.42	117.01	113.80
36	BB	56	G	C3'-C2'-C1'	6.42	106.63	101.50
2	AB	337	C	C5'-C4'-C3'	6.42	126.27	116.00
2	AB	487	C	N3-C2-O2	-6.42	117.41	121.90
2	AB	834	G	C5'-C4'-O4'	6.42	116.80	109.10
2	AB	860	U	N3-C2-O2	-6.42	117.71	122.20
2	AB	1027	A	C1'-O4'-C4'	6.42	115.03	109.90
2	AB	1146	C	N3-C4-C5	-6.42	119.33	121.90
2	AB	1162	G	N3-C4-N9	-6.42	122.15	126.00
2	AB	1245	G	C5'-C4'-C3'	-6.42	105.73	116.00
2	AB	1297	C	N1-C2-O2	6.42	122.75	118.90
2	AB	1313	U	C2-N3-C4	-6.42	123.15	127.00
2	AB	1630	A	C3'-C2'-C1'	-6.42	96.37	101.50
2	AB	1885	A	C4-C5-N7	6.42	113.91	110.70
2	AB	2038	G	C4-C5-N7	6.42	113.37	110.80
19	AS	104	ALA	CB-CA-C	6.42	119.72	110.10
35	BA	334	C	O4'-C1'-N1	6.42	113.33	108.20
35	BA	823	C	O4'-C1'-C2'	-6.42	99.38	105.80
35	BA	1097	C	C1'-O4'-C4'	6.42	115.03	109.90
35	BA	1138	G	C4'-C3'-C2'	-6.42	96.18	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1368	A	C5-N7-C8	6.42	107.11	103.90
38	BD	22	TRP	CA-CB-CG	6.42	125.89	113.70
40	BF	17	ASP	CB-CG-OD1	-6.42	112.53	118.30
2	AB	952	G	C4'-C3'-C2'	-6.42	96.19	102.60
35	BA	597	G	N9-C4-C5	6.42	107.97	105.40
2	AB	169	G	C8-N9-C4	-6.41	103.83	106.40
2	AB	963	U	C6-N1-C2	6.41	124.85	121.00
2	AB	1423	G	N9-C4-C5	6.41	107.97	105.40
2	AB	1450	G	C6-N1-C2	-6.41	121.25	125.10
2	AB	1455	G	O4'-C1'-N9	-6.41	103.07	108.20
2	AB	2034	U	C6-N1-C2	-6.41	117.15	121.00
2	AB	2166	U	C5-C4-O4	-6.41	122.05	125.90
2	AB	2545	G	P-O5'-C5'	6.41	131.16	120.90
35	BA	115	G	C1'-O4'-C4'	-6.41	104.77	109.90
35	BA	174	A	C4-C5-C6	6.41	120.21	117.00
35	BA	234	C	C5'-C4'-C3'	6.41	126.26	116.00
35	BA	745	G	C4-C5-N7	-6.41	108.23	110.80
35	BA	872	A	C3'-C2'-C1'	-6.41	96.37	101.50
35	BA	1389	C	O4'-C4'-C3'	6.41	111.23	106.10
35	BA	1426	G	C1'-O4'-C4'	-6.41	104.77	109.90
36	BB	29	G	C4-C5-C6	6.41	122.65	118.80
2	AB	589	U	N3-C4-O4	6.41	123.89	119.40
2	AB	1570	A	C4-C5-C6	-6.41	113.79	117.00
2	AB	2545	G	C5-N7-C8	6.41	107.51	104.30
22	AV	14	PRO	N-CA-CB	6.41	111.00	103.30
37	BC	75	C	O4'-C1'-C2'	-6.41	99.39	105.80
2	AB	1194	A	C8-N9-C4	-6.41	103.24	105.80
2	AB	1303	G	C5-C6-N1	-6.41	108.30	111.50
2	AB	1860	G	N1-C6-O6	-6.41	116.05	119.90
2	AB	2349	G	C8-N9-C4	-6.41	103.84	106.40
2	AB	2380	C	N3-C4-C5	6.41	124.47	121.90
2	AB	2541	A	C3'-C2'-C1'	-6.41	96.37	101.50
2	AB	2721	A	C5-C6-N6	-6.41	118.57	123.70
5	AE	206	ALA	C-N-CA	6.41	137.72	121.70
35	BA	302	G	C5-N7-C8	-6.41	101.09	104.30
35	BA	419	C	N3-C2-O2	-6.41	117.41	121.90
35	BA	707	U	O4'-C4'-C3'	6.41	111.23	106.10
35	BA	785	G	C5'-C4'-O4'	6.41	116.79	109.10
35	BA	863	U	N3-C4-C5	-6.41	110.75	114.60
35	BA	1149	C	O4'-C1'-N1	6.41	113.33	108.20
35	BA	1155	A	C5'-C4'-O4'	6.41	116.79	109.10
35	BA	1326	U	N3-C4-O4	6.41	123.89	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	305	C	N1-C2-O2	6.41	122.75	118.90
2	AB	413	C	C2-N3-C4	6.41	123.10	119.90
2	AB	622	G	C6-N1-C2	-6.41	121.25	125.10
2	AB	788	A	C2-N3-C4	-6.41	107.40	110.60
2	AB	847	U	C5'-C4'-O4'	6.41	116.79	109.10
2	AB	1186	G	C6-C5-N7	-6.41	126.56	130.40
2	AB	1732	C	C5-C4-N4	-6.41	115.71	120.20
2	AB	1925	C	N3-C4-N4	-6.41	113.51	118.00
2	AB	2176	A	N7-C8-N9	6.41	117.00	113.80
2	AB	2186	G	N3-C4-C5	-6.41	125.39	128.60
2	AB	2488	G	N3-C2-N2	6.41	124.39	119.90
2	AB	2518	A	N9-C1'-C2'	6.41	122.33	114.00
2	AB	2854	G	N3-C4-N9	6.41	129.85	126.00
35	BA	1029	U	C5-C4-O4	-6.41	122.06	125.90
35	BA	1281	C	C4-C5-C6	-6.41	114.20	117.40
1	AA	4	C	N3-C4-N4	6.41	122.48	118.00
2	AB	1343	G	N3-C4-C5	-6.41	125.40	128.60
1	AA	61	G	C2-N3-C4	6.41	115.10	111.90
2	AB	167	A	C6-N1-C2	6.41	122.44	118.60
2	AB	661	A	N1-C6-N6	6.41	122.44	118.60
2	AB	797	G	N1-C6-O6	6.41	123.74	119.90
2	AB	1132	U	N3-C4-O4	6.41	123.88	119.40
2	AB	1148	U	N3-C2-O2	-6.41	117.72	122.20
2	AB	1611	C	C5'-C4'-O4'	6.41	116.78	109.10
2	AB	2190	G	O4'-C1'-C2'	-6.41	99.39	105.80
2	AB	2298	A	O4'-C1'-N9	6.41	113.33	108.20
16	AP	34	ILE	CA-CB-CG1	6.41	123.17	111.00
35	BA	443	C	C5'-C4'-O4'	6.41	116.78	109.10
35	BA	644	U	C5-C4-O4	6.41	129.74	125.90
35	BA	1451	U	N1-C1'-C2'	6.41	122.33	114.00
2	AB	25	U	C5-C6-N1	-6.40	119.50	122.70
2	AB	883	G	N3-C4-C5	-6.40	125.40	128.60
2	AB	1400	U	N1-C2-N3	6.40	118.74	114.90
2	AB	1893	C	C1'-O4'-C4'	6.40	115.02	109.90
35	BA	1501	C	N3-C4-C5	-6.40	119.34	121.90
2	AB	890	C	C5-C4-N4	-6.40	115.72	120.20
2	AB	1263	U	N1-C2-N3	6.40	118.74	114.90
2	AB	1369	G	C3'-C2'-C1'	6.40	106.62	101.50
35	BA	807	A	C5-C6-N6	-6.40	118.58	123.70
40	BF	49	ASP	CB-CG-OD2	-6.40	112.54	118.30
2	AB	813	U	N3-C4-C5	6.40	118.44	114.60
2	AB	1303	G	N7-C8-N9	-6.40	109.90	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2532	G	N9-C4-C5	6.40	107.96	105.40
35	BA	48	C	O4'-C4'-C3'	6.40	111.22	106.10
35	BA	73	C	N1-C2-O2	6.40	122.74	118.90
35	BA	123	U	N3-C2-O2	-6.40	117.72	122.20
35	BA	577	G	C6-C5-N7	-6.40	126.56	130.40
35	BA	901	A	C8-N9-C4	6.40	108.36	105.80
40	BF	25	ARG	NE-CZ-NH1	6.40	123.50	120.30
1	AA	82	U	C5'-C4'-O4'	6.40	116.78	109.10
2	AB	16	C	C5'-C4'-C3'	-6.40	105.76	116.00
2	AB	270	A	O4'-C1'-N9	6.40	113.32	108.20
2	AB	334	C	N3-C4-C5	6.40	124.46	121.90
2	AB	538	A	C5'-C4'-O4'	6.40	116.78	109.10
2	AB	1743	G	C5'-C4'-O4'	6.40	116.78	109.10
2	AB	2741	A	C5-C6-N1	6.40	120.90	117.70
2	AB	369	U	N3-C4-O4	6.40	123.88	119.40
2	AB	1055	G	C8-N9-C4	-6.40	103.84	106.40
2	AB	1154	G	O4'-C1'-N9	6.40	113.32	108.20
2	AB	1946	U	N3-C4-C5	-6.40	110.76	114.60
2	AB	2272	U	C4-C5-C6	6.40	123.54	119.70
15	AO	81	ARG	NE-CZ-NH1	-6.40	117.10	120.30
35	BA	301	G	C4-C5-N7	-6.40	108.24	110.80
35	BA	613	C	C4'-C3'-C2'	-6.40	96.20	102.60
35	BA	787	A	C2-N3-C4	6.40	113.80	110.60
2	AB	666	A	N1-C6-N6	-6.40	114.76	118.60
2	AB	803	U	N3-C4-C5	-6.40	110.76	114.60
2	AB	961	C	C1'-O4'-C4'	-6.40	104.78	109.90
2	AB	1238	G	O4'-C1'-N9	6.40	113.32	108.20
2	AB	1867	G	C4-C5-C6	6.40	122.64	118.80
30	A3	30	ASP	CB-CG-OD2	6.40	124.06	118.30
35	BA	614	C	C3'-C2'-C1'	-6.40	96.38	101.50
2	AB	641	U	C3'-C2'-C1'	6.39	106.62	101.50
2	AB	1156	A	C6-C5-N7	6.39	136.78	132.30
2	AB	1728	C	N3-C4-N4	-6.39	113.52	118.00
2	AB	1902	C	C2-N3-C4	6.39	123.10	119.90
2	AB	2399	G	C4-C5-N7	-6.39	108.24	110.80
2	AB	2566	A	N9-C4-C5	6.39	108.36	105.80
2	AB	2665	A	C1'-O4'-C4'	-6.39	104.78	109.90
35	BA	159	G	N1-C2-N2	-6.39	110.44	116.20
35	BA	867	G	N3-C4-N9	6.39	129.84	126.00
2	AB	75	G	C5-C6-O6	-6.39	124.77	128.60
2	AB	371	A	O4'-C1'-C2'	-6.39	99.41	105.80
2	AB	464	U	C2-N3-C4	-6.39	123.16	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	495	G	C4'-C3'-C2'	-6.39	96.21	102.60
2	AB	780	G	C4-C5-C6	6.39	122.64	118.80
2	AB	1203	U	C1'-O4'-C4'	6.39	115.01	109.90
2	AB	1246	A	O4'-C4'-C3'	6.39	111.21	106.10
2	AB	1567	G	N7-C8-N9	6.39	116.30	113.10
2	AB	1676	A	N1-C2-N3	6.39	132.50	129.30
2	AB	1718	G	N1-C2-N3	-6.39	120.06	123.90
15	AO	130	PHE	CB-CG-CD2	-6.39	116.33	120.80
35	BA	810	C	C6-N1-C2	-6.39	117.74	120.30
2	AB	1498	C	N3-C2-O2	-6.39	117.43	121.90
2	AB	1741	C	N1-C2-O2	6.39	122.73	118.90
2	AB	1846	G	C4-C5-N7	-6.39	108.24	110.80
2	AB	2373	G	C5-C6-O6	-6.39	124.77	128.60
13	AM	119	ALA	N-CA-CB	-6.39	101.15	110.10
35	BA	320	A	C4-C5-C6	6.39	120.20	117.00
35	BA	879	C	C4-C5-C6	-6.39	114.20	117.40
35	BA	1028	C	N3-C2-O2	-6.39	117.43	121.90
35	BA	1154	G	C6-C5-N7	-6.39	126.56	130.40
35	BA	1444	U	P-O3'-C3'	6.39	127.37	119.70
35	BA	1469	C	O4'-C1'-N1	6.39	113.31	108.20
2	AB	949	G	C8-N9-C4	6.39	108.96	106.40
2	AB	1234	U	C5-C6-N1	-6.39	119.50	122.70
2	AB	1334	G	C2-N3-C4	-6.39	108.70	111.90
2	AB	1553	A	P-O3'-C3'	6.39	127.37	119.70
2	AB	1924	C	N3-C4-C5	-6.39	119.34	121.90
2	AB	2051	A	C4-C5-N7	-6.39	107.50	110.70
35	BA	6	G	C5-C6-N1	-6.39	108.31	111.50
35	BA	141	G	N1-C2-N3	-6.39	120.07	123.90
35	BA	908	A	C5'-C4'-O4'	6.39	116.77	109.10
35	BA	1080	A	N9-C4-C5	6.39	108.36	105.80
35	BA	1401	G	N9-C4-C5	6.39	107.96	105.40
2	AB	273	G	N3-C4-C5	-6.39	125.41	128.60
2	AB	275	C	N3-C4-C5	-6.39	119.34	121.90
2	AB	1685	C	C4-C5-C6	-6.39	114.21	117.40
2	AB	2488	G	N9-C4-C5	6.39	107.95	105.40
2	AB	2599	G	N1-C2-N3	6.39	127.73	123.90
35	BA	214	C	C6-N1-C2	6.39	122.86	120.30
35	BA	1163	A	C1'-O4'-C4'	6.39	115.01	109.90
2	AB	194	G	N7-C8-N9	6.39	116.29	113.10
2	AB	1328	A	O4'-C4'-C3'	6.39	111.21	106.10
2	AB	1804	C	N3-C4-C5	-6.39	119.35	121.90
2	AB	1840	G	N9-C4-C5	6.39	107.95	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2096	C	N3-C2-O2	-6.39	117.43	121.90
2	AB	2333	A	C4-C5-C6	-6.39	113.81	117.00
2	AB	2360	G	N3-C2-N2	6.39	124.37	119.90
5	AE	179	ARG	NE-CZ-NH2	-6.39	117.11	120.30
35	BA	1273	C	C1'-O4'-C4'	-6.39	104.79	109.90
1	AA	53	A	N1-C2-N3	-6.38	126.11	129.30
1	AA	92	C	N3-C4-C5	-6.38	119.35	121.90
2	AB	94	A	C4-C5-C6	-6.38	113.81	117.00
2	AB	407	G	N3-C4-C5	-6.38	125.41	128.60
2	AB	974	G	N3-C2-N2	-6.38	115.43	119.90
2	AB	1088	A	N3-C4-C5	-6.38	122.33	126.80
2	AB	1349	C	N3-C4-N4	6.38	122.47	118.00
2	AB	1501	G	N7-C8-N9	6.38	116.29	113.10
2	AB	2604	U	C5-C4-O4	-6.38	122.07	125.90
2	AB	2855	C	C1'-O4'-C4'	-6.38	104.79	109.90
35	BA	684	U	N1-C1'-C2'	-6.38	104.98	112.00
37	BC	43	G	C2-N3-C4	6.38	115.09	111.90
2	AB	484	C	C5-C6-N1	6.38	124.19	121.00
2	AB	1099	G	C6-C5-N7	-6.38	126.57	130.40
2	AB	2073	C	C4'-C3'-C2'	-6.38	96.22	102.60
2	AB	2257	U	N1-C1'-C2'	-6.38	104.98	112.00
2	AB	2892	G	O4'-C1'-N9	6.38	113.31	108.20
35	BA	107	G	N9-C1'-C2'	-6.38	104.98	112.00
35	BA	1388	C	P-O3'-C3'	6.38	127.36	119.70
2	AB	759	G	C6-N1-C2	-6.38	121.27	125.10
2	AB	1006	C	C3'-C2'-C1'	6.38	106.61	101.50
2	AB	1159	U	O4'-C1'-N1	6.38	113.31	108.20
2	AB	1211	C	C4'-C3'-C2'	-6.38	96.22	102.60
2	AB	1544	A	N1-C2-N3	-6.38	126.11	129.30
2	AB	1680	U	C3'-C2'-C1'	6.38	106.61	101.50
2	AB	2034	U	O4'-C1'-N1	6.38	113.31	108.20
2	AB	2848	G	N3-C2-N2	6.38	124.37	119.90
4	AD	155	ARG	NE-CZ-NH2	-6.38	117.11	120.30
35	BA	793	U	C4'-C3'-O3'	6.38	125.76	113.00
35	BA	797	C	P-O3'-C3'	6.38	127.36	119.70
35	BA	867	G	C4-C5-C6	6.38	122.63	118.80
35	BA	1005	A	N9-C4-C5	6.38	108.35	105.80
35	BA	1347	G	N1-C2-N2	6.38	121.94	116.20
35	BA	1489	G	N9-C4-C5	6.38	107.95	105.40
37	BC	4	G	N1-C2-N3	6.38	127.73	123.90
2	AB	415	A	C2-N3-C4	6.38	113.79	110.60
2	AB	1653	G	N3-C4-C5	6.38	131.79	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1696	G	C5-N7-C8	-6.38	101.11	104.30
2	AB	1723	G	C6-N1-C2	-6.38	121.27	125.10
2	AB	1780	A	N7-C8-N9	6.38	116.99	113.80
2	AB	2204	G	C5-N7-C8	-6.38	101.11	104.30
24	AX	18	ARG	NE-CZ-NH1	-6.38	117.11	120.30
35	BA	567	G	O4'-C1'-N9	6.38	113.30	108.20
52	BR	70	ARG	NE-CZ-NH1	6.38	123.49	120.30
2	AB	206	U	C6-N1-C2	-6.38	117.17	121.00
2	AB	291	G	N9-C4-C5	6.38	107.95	105.40
2	AB	543	G	O4'-C1'-N9	6.38	113.30	108.20
2	AB	648	G	C5-C6-O6	-6.38	124.77	128.60
2	AB	1221	C	C2-N3-C4	6.38	123.09	119.90
2	AB	1805	A	C4-C5-N7	-6.38	107.51	110.70
2	AB	1809	A	N7-C8-N9	6.38	116.99	113.80
2	AB	2127	G	N1-C2-N3	-6.38	120.07	123.90
2	AB	2648	G	C5-C6-N1	-6.38	108.31	111.50
5	AE	103	ASP	CB-CG-OD1	-6.38	112.56	118.30
35	BA	57	G	C1'-O4'-C4'	6.38	115.00	109.90
35	BA	449	G	N3-C2-N2	-6.38	115.44	119.90
35	BA	504	C	C3'-C2'-C1'	6.38	106.60	101.50
35	BA	1470	U	C4-C5-C6	6.38	123.53	119.70
2	AB	272	A	N1-C6-N6	-6.38	114.77	118.60
2	AB	588	U	N1-C2-N3	6.38	118.73	114.90
2	AB	756	A	N3-C4-N9	-6.38	122.30	127.40
2	AB	818	G	C6-N1-C2	6.38	128.93	125.10
2	AB	1293	C	O5'-C5'-C4'	-6.38	99.58	111.70
2	AB	1663	G	N9-C4-C5	-6.38	102.85	105.40
2	AB	2263	C	N3-C4-N4	6.38	122.46	118.00
35	BA	787	A	N1-C2-N3	-6.38	126.11	129.30
37	BC	20	G	O4'-C1'-N9	6.38	113.30	108.20
2	AB	42	A	N9-C4-C5	6.38	108.35	105.80
2	AB	208	C	C6-N1-C2	6.38	122.85	120.30
2	AB	1529	G	O4'-C1'-N9	6.38	113.30	108.20
2	AB	1755	A	C5-N7-C8	6.38	107.09	103.90
2	AB	2052	A	C6-N1-C2	-6.38	114.78	118.60
35	BA	159	G	N9-C4-C5	-6.38	102.85	105.40
35	BA	1419	G	N9-C4-C5	-6.38	102.85	105.40
2	AB	759	G	C4-C5-N7	6.37	113.35	110.80
2	AB	833	A	C2-N3-C4	6.37	113.79	110.60
2	AB	1160	G	N9-C4-C5	6.37	107.95	105.40
2	AB	1231	U	C4-C5-C6	6.37	123.52	119.70
2	AB	1501	G	C4-C5-C6	6.37	122.62	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1741	C	C4-C5-C6	6.37	120.59	117.40
2	AB	2154	A	C5'-C4'-O4'	6.37	116.75	109.10
2	AB	2645	G	N1-C6-O6	-6.37	116.08	119.90
35	BA	119	A	C5-C6-N1	6.37	120.89	117.70
1	AA	10	G	O4'-C1'-C2'	6.37	113.33	107.60
2	AB	300	A	C6-N1-C2	6.37	122.42	118.60
2	AB	457	A	N7-C8-N9	-6.37	110.61	113.80
2	AB	1372	U	C4-C5-C6	6.37	123.52	119.70
2	AB	1440	U	N3-C2-O2	-6.37	117.74	122.20
2	AB	1522	A	C2-N3-C4	-6.37	107.41	110.60
2	AB	2345	G	C5-C6-N1	6.37	114.69	111.50
35	BA	441	A	C8-N9-C4	-6.37	103.25	105.80
35	BA	714	G	P-O3'-C3'	6.37	127.35	119.70
35	BA	1079	G	C4-C5-C6	6.37	122.62	118.80
35	BA	1229	A	N1-C6-N6	-6.37	114.78	118.60
35	BA	1233	G	C4'-C3'-C2'	-6.37	96.23	102.60
35	BA	1236	A	N1-C2-N3	6.37	132.49	129.30
2	AB	30	G	N3-C2-N2	-6.37	115.44	119.90
35	BA	309	A	O5'-P-OP2	-6.37	99.97	105.70
35	BA	713	G	P-O5'-C5'	6.37	131.09	120.90
35	BA	860	A	C4'-C3'-C2'	-6.37	96.23	102.60
2	AB	151	C	N3-C4-C5	-6.37	119.35	121.90
2	AB	170	U	C4'-C3'-C2'	-6.37	96.23	102.60
2	AB	393	C	P-O3'-C3'	6.37	127.34	119.70
2	AB	441	U	C2-N1-C1'	-6.37	110.06	117.70
2	AB	469	G	P-O3'-C3'	6.37	127.34	119.70
2	AB	475	C	C5-C4-N4	-6.37	115.74	120.20
2	AB	916	G	C4-C5-C6	6.37	122.62	118.80
2	AB	920	A	C3'-C2'-C1'	-6.37	96.41	101.50
2	AB	1293	C	N3-C2-O2	6.37	126.36	121.90
2	AB	1770	G	P-O3'-C3'	-6.37	112.06	119.70
2	AB	1862	G	N9-C1'-C2'	-6.37	105.00	112.00
2	AB	2272	U	N3-C4-C5	-6.37	110.78	114.60
2	AB	2876	G	N9-C1'-C2'	-6.37	105.00	112.00
35	BA	86	G	C1'-O4'-C4'	6.37	115.00	109.90
35	BA	107	G	O4'-C1'-N9	6.37	113.29	108.20
35	BA	358	U	C5'-C4'-O4'	6.37	116.74	109.10
35	BA	570	G	C4-C5-N7	-6.37	108.25	110.80
35	BA	657	U	C5-C6-N1	-6.37	119.52	122.70
35	BA	1206	G	N9-C4-C5	6.37	107.95	105.40
35	BA	1389	C	C6-N1-C2	6.37	122.85	120.30
2	AB	1924	C	C4-C5-C6	6.37	120.58	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1999	C	N1-C1'-C2'	-6.37	105.00	112.00
2	AB	2628	C	O4'-C4'-C3'	6.37	111.19	106.10
35	BA	1162	C	N3-C4-C5	-6.37	119.35	121.90
1	AA	86	G	C4'-C3'-C2'	-6.37	96.23	102.60
2	AB	58	G	N9-C4-C5	6.37	107.95	105.40
2	AB	241	A	O3'-P-O5'	-6.37	91.91	104.00
2	AB	304	U	N1-C1'-C2'	-6.37	105.00	112.00
2	AB	430	A	C4-C5-C6	-6.37	113.82	117.00
2	AB	465	G	C4-C5-N7	6.37	113.35	110.80
2	AB	719	C	N3-C4-C5	6.37	124.45	121.90
2	AB	932	U	O4'-C1'-C2'	-6.37	99.44	105.80
2	AB	1079	C	C5-C6-N1	6.37	124.18	121.00
2	AB	1566	A	O4'-C4'-C3'	6.37	111.19	106.10
2	AB	2203	U	O4'-C1'-N1	6.37	113.29	108.20
35	BA	517	G	C4-C5-N7	-6.37	108.25	110.80
35	BA	631	C	C5'-C4'-C3'	-6.37	105.81	116.00
35	BA	791	G	C4-C5-C6	-6.37	114.98	118.80
35	BA	1068	G	C4-C5-C6	6.37	122.62	118.80
35	BA	1337	G	C2-N3-C4	6.37	115.08	111.90
2	AB	94	A	C5-N7-C8	-6.36	100.72	103.90
2	AB	499	U	C6-N1-C2	-6.36	117.18	121.00
2	AB	1190	G	N3-C4-N9	6.36	129.82	126.00
2	AB	1771	C	N3-C4-N4	6.36	122.45	118.00
2	AB	2305	U	O4'-C1'-N1	6.36	113.29	108.20
35	BA	242	G	O4'-C1'-N9	6.36	113.29	108.20
35	BA	307	C	C5-C4-N4	6.36	124.65	120.20
35	BA	509	A	C4-C5-N7	-6.36	107.52	110.70
2	AB	1213	A	C4-C5-N7	6.36	113.88	110.70
2	AB	1623	G	C6-N1-C2	-6.36	121.28	125.10
2	AB	1807	G	N7-C8-N9	6.36	116.28	113.10
2	AB	2345	G	O4'-C1'-N9	6.36	113.29	108.20
2	AB	2350	C	C5'-C4'-O4'	6.36	116.73	109.10
35	BA	463	U	O4'-C4'-C3'	6.36	111.19	106.10
35	BA	543	U	C5-C4-O4	6.36	129.72	125.90
35	BA	981	U	N3-C2-O2	6.36	126.65	122.20
35	BA	1053	G	C4-C5-C6	6.36	122.62	118.80
46	BL	9	ARG	NE-CZ-NH1	-6.36	117.12	120.30
2	AB	877	A	C5'-C4'-O4'	6.36	116.73	109.10
2	AB	1020	A	N1-C2-N3	-6.36	126.12	129.30
2	AB	1170	C	O4'-C1'-N1	6.36	113.29	108.20
2	AB	1453	A	C4-C5-N7	-6.36	107.52	110.70
2	AB	1560	G	N9-C4-C5	6.36	107.94	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1931	U	P-O3'-C3'	6.36	127.33	119.70
2	AB	1975	G	C6-C5-N7	6.36	134.22	130.40
2	AB	2400	G	C4'-C3'-C2'	-6.36	96.24	102.60
2	AB	2433	A	C8-N9-C4	-6.36	103.26	105.80
2	AB	2796	U	N3-C4-C5	6.36	118.42	114.60
14	AN	47	ARG	NE-CZ-NH1	6.36	123.48	120.30
35	BA	502	A	N7-C8-N9	-6.36	110.62	113.80
35	BA	519	C	O4'-C1'-C2'	6.36	113.32	107.60
35	BA	643	C	C2-N3-C4	6.36	123.08	119.90
35	BA	920	U	C2-N3-C4	-6.36	123.18	127.00
35	BA	1271	A	N1-C2-N3	-6.36	126.12	129.30
35	BA	1310	G	C4-C5-C6	6.36	122.62	118.80
35	BA	1360	A	C4-C5-N7	-6.36	107.52	110.70
2	AB	1119	U	C4'-C3'-C2'	-6.36	96.24	102.60
2	AB	2901	C	N3-C2-O2	-6.36	117.45	121.90
35	BA	115	G	N9-C4-C5	6.36	107.94	105.40
35	BA	1004	A	C5'-C4'-C3'	-6.36	105.83	116.00
35	BA	1114	C	N1-C2-O2	6.36	122.72	118.90
35	BA	1197	A	N7-C8-N9	6.36	116.98	113.80
41	BG	160	VAL	CA-CB-CG1	6.36	120.44	110.90
1	AA	57	A	C2'-C3'-O3'	6.36	123.87	113.70
2	AB	16	C	C5-C6-N1	6.36	124.18	121.00
2	AB	308	G	N3-C2-N2	6.36	124.35	119.90
2	AB	622	G	N1-C6-O6	6.36	123.71	119.90
2	AB	900	A	C5-C6-N1	6.36	120.88	117.70
2	AB	941	A	N3-C4-C5	-6.36	122.35	126.80
2	AB	1380	G	N9-C1'-C2'	-6.36	105.01	112.00
2	AB	1408	G	C6-C5-N7	6.36	134.21	130.40
2	AB	2761	A	C5'-C4'-C3'	-6.36	105.83	116.00
35	BA	357	G	N1-C2-N3	6.36	127.72	123.90
35	BA	455	G	C6-N1-C2	-6.36	121.28	125.10
35	BA	1190	G	C4-C5-N7	-6.36	108.26	110.80
2	AB	153	U	C5-C4-O4	6.36	129.71	125.90
2	AB	390	U	N1-C2-O2	6.36	127.25	122.80
2	AB	445	C	C5-C6-N1	-6.36	117.82	121.00
2	AB	799	G	N3-C4-N9	6.36	129.81	126.00
2	AB	2567	G	C5'-C4'-C3'	-6.36	105.83	116.00
2	AB	2700	A	N3-C4-C5	-6.36	122.35	126.80
2	AB	2808	G	N1-C2-N2	-6.36	110.48	116.20
35	BA	61	G	C6-C5-N7	-6.36	126.59	130.40
35	BA	404	G	N1-C6-O6	-6.36	116.09	119.90
35	BA	1117	A	C8-N9-C4	-6.36	103.26	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1153	G	N3-C2-N2	-6.36	115.45	119.90
35	BA	1394	A	C3'-C2'-C1'	6.36	106.58	101.50
1	AA	79	G	C5-C6-O6	-6.35	124.79	128.60
2	AB	585	G	C5-C6-O6	-6.35	124.79	128.60
2	AB	638	G	N3-C2-N2	6.35	124.35	119.90
2	AB	1329	U	O4'-C1'-N1	6.35	113.28	108.20
2	AB	1629	U	N3-C2-O2	-6.35	117.75	122.20
2	AB	2024	G	N9-C1'-C2'	-6.35	105.01	112.00
2	AB	2044	C	C6-N1-C2	-6.35	117.76	120.30
2	AB	2136	G	C8-N9-C4	-6.35	103.86	106.40
2	AB	2736	A	C3'-C2'-C1'	-6.35	96.42	101.50
35	BA	387	U	C4-C5-C6	6.35	123.51	119.70
35	BA	441	A	C5'-C4'-C3'	-6.35	105.83	116.00
35	BA	459	A	N9-C4-C5	-6.35	103.26	105.80
35	BA	1507	A	N9-C1'-C2'	-6.35	105.01	112.00
2	AB	630	G	N7-C8-N9	6.35	116.28	113.10
2	AB	782	A	P-O3'-C3'	6.35	127.32	119.70
2	AB	1860	G	C4'-C3'-C2'	-6.35	96.25	102.60
2	AB	1921	G	C2-N3-C4	6.35	115.08	111.90
2	AB	2814	A	C5-C6-N1	6.35	120.88	117.70
17	AQ	91	SER	N-CA-CB	6.35	120.03	110.50
35	BA	208	U	O4'-C1'-N1	6.35	113.28	108.20
35	BA	792	A	O4'-C4'-C3'	6.35	111.18	106.10
35	BA	940	C	C2-N3-C4	6.35	123.08	119.90
2	AB	768	G	C4-C5-N7	-6.35	108.26	110.80
2	AB	1144	A	C2-N3-C4	6.35	113.78	110.60
2	AB	1858	A	C4-C5-N7	6.35	113.88	110.70
2	AB	2358	A	C6-C5-N7	-6.35	127.85	132.30
2	AB	2524	G	C4'-C3'-C2'	-6.35	96.25	102.60
35	BA	825	A	O4'-C1'-N9	6.35	113.28	108.20
2	AB	835	C	N3-C4-C5	-6.35	119.36	121.90
2	AB	1131	G	C5-N7-C8	6.35	107.47	104.30
2	AB	1621	U	O4'-C1'-N1	6.35	113.28	108.20
2	AB	2215	C	N1-C2-O2	6.35	122.71	118.90
2	AB	2788	C	C5-C4-N4	-6.35	115.76	120.20
35	BA	121	U	N1-C2-N3	6.35	118.71	114.90
35	BA	301	G	N3-C4-C5	-6.35	125.42	128.60
35	BA	433	G	N3-C4-N9	6.35	129.81	126.00
35	BA	446	G	C5-N7-C8	-6.35	101.12	104.30
35	BA	1184	G	O3'-P-O5'	6.35	116.06	104.00
1	AA	29	A	C2-N3-C4	6.35	113.77	110.60
2	AB	8	C	C5-C4-N4	6.35	124.64	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	668	A	P-O3'-C3'	6.35	127.32	119.70
2	AB	870	U	N3-C4-O4	-6.35	114.96	119.40
2	AB	1039	A	C4-C5-C6	-6.35	113.83	117.00
2	AB	2041	U	C3'-C2'-C1'	6.35	106.58	101.50
2	AB	2384	U	C5-C6-N1	-6.35	119.53	122.70
2	AB	2530	A	C4'-C3'-C2'	-6.35	96.25	102.60
35	BA	140	U	O4'-C1'-N1	6.35	113.28	108.20
35	BA	207	C	N3-C2-O2	-6.35	117.46	121.90
35	BA	285	C	C5-C6-N1	6.35	124.17	121.00
2	AB	775	G	N3-C2-N2	-6.35	115.46	119.90
2	AB	989	G	N1-C2-N3	-6.35	120.09	123.90
35	BA	65	A	C4-C5-N7	6.35	113.87	110.70
35	BA	668	G	N1-C6-O6	6.35	123.71	119.90
35	BA	1219	A	N1-C2-N3	-6.35	126.13	129.30
2	AB	432	A	N1-C6-N6	-6.34	114.79	118.60
2	AB	489	G	C6-N1-C2	-6.34	121.29	125.10
2	AB	701	G	C5-C6-N1	6.34	114.67	111.50
2	AB	1084	A	N1-C6-N6	-6.34	114.79	118.60
2	AB	2635	A	C3'-C2'-C1'	-6.34	96.42	101.50
2	AB	2697	G	C6-C5-N7	-6.34	126.59	130.40
35	BA	41	G	C4'-C3'-C2'	-6.34	96.25	102.60
35	BA	193	C	N3-C2-O2	-6.34	117.46	121.90
35	BA	544	G	N9-C1'-C2'	-6.34	105.02	112.00
35	BA	748	G	C8-N9-C4	-6.34	103.86	106.40
35	BA	893	C	N1-C2-O2	6.34	122.71	118.90
35	BA	1413	A	C2-N3-C4	6.34	113.77	110.60
2	AB	34	U	C5-C6-N1	6.34	125.87	122.70
2	AB	194	G	C8-N9-C4	-6.34	103.86	106.40
2	AB	1250	G	C6-N1-C2	-6.34	121.29	125.10
2	AB	1683	U	O4'-C1'-N1	6.34	113.27	108.20
2	AB	2125	G	C5-N7-C8	-6.34	101.13	104.30
2	AB	2339	C	C6-N1-C2	-6.34	117.76	120.30
2	AB	2737	G	C4-C5-N7	-6.34	108.26	110.80
5	AE	45	TYR	CG-CD2-CE2	-6.34	116.23	121.30
35	BA	77	A	N9-C4-C5	6.34	108.34	105.80
35	BA	907	A	C5-C6-N1	6.34	120.87	117.70
2	AB	622	G	C5-C6-N1	6.34	114.67	111.50
2	AB	959	A	C5-N7-C8	-6.34	100.73	103.90
2	AB	2141	G	C8-N9-C4	-6.34	103.86	106.40
2	AB	2588	G	C4-C5-N7	6.34	113.34	110.80
35	BA	494	G	C4-C5-C6	6.34	122.61	118.80
35	BA	886	G	C5-C6-N1	6.34	114.67	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	24	C	C4'-C3'-C2'	-6.34	96.26	102.60
2	AB	58	G	N1-C6-O6	6.34	123.70	119.90
2	AB	1016	G	N7-C8-N9	-6.34	109.93	113.10
2	AB	1048	A	C5'-C4'-O4'	6.34	116.71	109.10
2	AB	1172	C	N3-C4-N4	-6.34	113.56	118.00
2	AB	1263	U	O4'-C4'-C3'	6.34	111.17	106.10
2	AB	1746	A	O4'-C1'-N9	6.34	113.27	108.20
2	AB	1996	C	P-O3'-C3'	6.34	127.31	119.70
2	AB	2168	G	C2-N3-C4	-6.34	108.73	111.90
2	AB	2207	C	N1-C2-O2	6.34	122.70	118.90
2	AB	2376	A	C5-C6-N6	6.34	128.77	123.70
2	AB	2396	G	C8-N9-C1'	6.34	135.24	127.00
2	AB	2426	A	C5-C6-N1	6.34	120.87	117.70
2	AB	2875	C	N3-C4-N4	6.34	122.44	118.00
3	AC	69	THR	CA-CB-CG2	6.34	121.28	112.40
35	BA	276	G	N3-C4-C5	-6.34	125.43	128.60
35	BA	617	G	O4'-C1'-N9	6.34	113.27	108.20
35	BA	649	A	C5-C6-N1	-6.34	114.53	117.70
35	BA	1090	U	C6-N1-C2	-6.34	117.20	121.00
1	AA	43	C	O4'-C1'-C2'	-6.34	99.46	105.80
2	AB	1303	G	C3'-C2'-C1'	-6.34	96.43	101.50
2	AB	2226	C	N3-C4-C5	-6.34	119.36	121.90
2	AB	2904	U	N1-C2-O2	6.34	127.24	122.80
35	BA	547	A	C5-N7-C8	-6.34	100.73	103.90
35	BA	853	C	C4-C5-C6	6.34	120.57	117.40
2	AB	561	G	N3-C4-N9	6.34	129.80	126.00
2	AB	871	U	C4'-C3'-C2'	-6.34	96.26	102.60
2	AB	1472	C	C5-C4-N4	-6.34	115.77	120.20
2	AB	1556	C	N3-C4-N4	6.34	122.44	118.00
2	AB	1691	C	C5'-C4'-O4'	6.34	116.70	109.10
2	AB	2221	G	C4-C5-N7	-6.34	108.27	110.80
2	AB	2389	G	N7-C8-N9	6.34	116.27	113.10
2	AB	2448	A	N3-C4-N9	6.34	132.47	127.40
35	BA	110	C	O5'-C5'-C4'	-6.34	99.66	111.70
35	BA	241	G	C5-C6-N1	6.34	114.67	111.50
35	BA	261	U	N1-C2-O2	6.34	127.23	122.80
35	BA	373	A	C5-C6-N6	-6.34	118.63	123.70
35	BA	529	G	N1-C2-N3	-6.34	120.10	123.90
35	BA	650	G	O4'-C4'-C3'	6.34	111.17	106.10
35	BA	697	U	C5'-C4'-O4'	6.34	116.70	109.10
35	BA	1374	A	C1'-O4'-C4'	-6.34	104.83	109.90
35	BA	1513	A	C5-C6-N1	6.34	120.87	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	BP	51	PRO	N-CA-CB	6.34	110.90	103.30
1	AA	109	A	N3-C4-C5	-6.33	122.37	126.80
2	AB	608	A	N9-C4-C5	-6.33	103.27	105.80
2	AB	1655	A	C5'-C4'-O4'	6.33	116.70	109.10
2	AB	2016	U	O4'-C1'-N1	6.33	113.27	108.20
2	AB	2209	G	C3'-C2'-C1'	-6.33	96.43	101.50
2	AB	2773	C	C1'-O4'-C4'	-6.33	104.83	109.90
35	BA	648	A	C4-C5-N7	6.33	113.87	110.70
35	BA	1255	G	N3-C4-C5	-6.33	125.43	128.60
2	AB	13	A	C2-N3-C4	6.33	113.77	110.60
2	AB	1032	A	C6-C5-N7	6.33	136.73	132.30
2	AB	1295	C	C5-C6-N1	-6.33	117.83	121.00
2	AB	1337	G	P-O3'-C3'	6.33	127.30	119.70
2	AB	1373	A	C3'-C2'-C1'	-6.33	96.43	101.50
2	AB	1573	G	C5'-C4'-O4'	6.33	116.70	109.10
2	AB	1676	A	C5-C6-N6	-6.33	118.63	123.70
2	AB	1906	G	C6-N1-C2	-6.33	121.30	125.10
2	AB	2095	A	C4-C5-N7	6.33	113.87	110.70
2	AB	2348	U	N1-C2-O2	-6.33	118.37	122.80
35	BA	553	A	C2-N3-C4	6.33	113.77	110.60
35	BA	627	G	C1'-O4'-C4'	-6.33	104.83	109.90
35	BA	1234	C	O4'-C1'-N1	6.33	113.27	108.20
36	BB	20	G	C6-C5-N7	-6.33	126.60	130.40
2	AB	93	G	C3'-C2'-C1'	-6.33	96.43	101.50
2	AB	385	C	O4'-C1'-N1	6.33	113.27	108.20
2	AB	683	U	N3-C4-C5	6.33	118.40	114.60
2	AB	738	G	P-O3'-C3'	6.33	127.30	119.70
2	AB	1379	U	O4'-C1'-N1	6.33	113.27	108.20
2	AB	1930	G	C4'-C3'-C2'	-6.33	96.27	102.60
2	AB	2376	A	C5-N7-C8	-6.33	100.73	103.90
2	AB	2401	U	N3-C2-O2	-6.33	117.77	122.20
5	AE	124	ARG	NE-CZ-NH2	6.33	123.47	120.30
6	AF	16	GLU	OE1-CD-OE2	6.33	130.90	123.30
35	BA	237	G	C6-C5-N7	-6.33	126.60	130.40
35	BA	429	U	N3-C4-O4	6.33	123.83	119.40
35	BA	849	G	C2-N3-C4	6.33	115.07	111.90
35	BA	1264	U	N3-C4-O4	6.33	123.83	119.40
2	AB	422	A	C5-C6-N6	-6.33	118.64	123.70
2	AB	1195	G	P-O3'-C3'	6.33	127.30	119.70
2	AB	1327	A	O4'-C1'-N9	6.33	113.26	108.20
35	BA	825	A	C8-N9-C4	6.33	108.33	105.80
35	BA	1120	C	C4-C5-C6	-6.33	114.23	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1095	A	C5-N7-C8	6.33	107.06	103.90
2	AB	1119	U	C5-C4-O4	6.33	129.70	125.90
2	AB	1706	C	O4'-C1'-C2'	-6.33	99.47	105.80
2	AB	2684	U	C5'-C4'-O4'	6.33	116.69	109.10
35	BA	537	G	P-O3'-C3'	6.33	127.30	119.70
35	BA	606	G	N9-C1'-C2'	-6.33	105.04	112.00
35	BA	724	G	N3-C4-C5	6.33	131.76	128.60
35	BA	1192	C	O4'-C1'-N1	6.33	113.26	108.20
36	BB	48	C	C5-C4-N4	-6.33	115.77	120.20
37	BC	74	A	N1-C2-N3	-6.33	126.14	129.30
2	AB	695	G	N7-C8-N9	-6.33	109.94	113.10
2	AB	1272	A	N3-C4-N9	-6.33	122.34	127.40
2	AB	1498	C	C4-C5-C6	-6.33	114.24	117.40
2	AB	1725	U	C4-C5-C6	6.33	123.50	119.70
2	AB	1816	C	P-O5'-C5'	6.33	131.02	120.90
2	AB	1978	A	C5'-C4'-O4'	6.33	116.69	109.10
2	AB	2743	U	O4'-C1'-N1	6.33	113.26	108.20
35	BA	601	G	N1-C6-O6	-6.33	116.10	119.90
35	BA	1281	C	C5-C6-N1	6.33	124.16	121.00
2	AB	935	C	C3'-C2'-C1'	6.33	106.56	101.50
2	AB	1210	G	C5-N7-C8	6.33	107.46	104.30
2	AB	1843	C	N1-C1'-C2'	-6.33	105.04	112.00
2	AB	2744	G	C8-N9-C4	6.33	108.93	106.40
2	AB	2779	U	C5-C6-N1	-6.33	119.54	122.70
2	AB	2831	G	O4'-C1'-N9	6.33	113.26	108.20
35	BA	25	C	C5'-C4'-O4'	6.33	116.69	109.10
35	BA	47	C	N1-C2-N3	-6.33	114.77	119.20
35	BA	112	G	O4'-C1'-N9	6.33	113.26	108.20
35	BA	1409	C	C5-C6-N1	6.33	124.16	121.00
2	AB	404	A	C4-C5-C6	-6.32	113.84	117.00
2	AB	519	U	C6-N1-C2	-6.32	117.21	121.00
2	AB	1191	G	C5'-C4'-O4'	6.32	116.69	109.10
2	AB	1459	G	C5-C6-O6	-6.32	124.81	128.60
2	AB	2741	A	P-O3'-C3'	6.32	127.29	119.70
35	BA	217	C	N3-C2-O2	-6.32	117.47	121.90
2	AB	2093	G	C6-C5-N7	-6.32	126.61	130.40
2	AB	2557	G	C6-N1-C2	-6.32	121.31	125.10
35	BA	942	G	N7-C8-N9	6.32	116.26	113.10
35	BA	1233	G	N9-C4-C5	6.32	107.93	105.40
35	BA	1339	A	C5'-C4'-O4'	6.32	116.69	109.10
35	BA	1527	U	C3'-C2'-C1'	6.32	106.56	101.50
37	BC	51	U	P-O5'-C5'	6.32	131.02	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	15	G	C3'-C2'-C1'	6.32	106.56	101.50
2	AB	878	A	N1-C2-N3	-6.32	126.14	129.30
2	AB	978	G	C4-C5-N7	-6.32	108.27	110.80
2	AB	1654	A	N9-C4-C5	6.32	108.33	105.80
2	AB	2583	G	C5-C6-O6	-6.32	124.81	128.60
35	BA	46	G	C2-N3-C4	6.32	115.06	111.90
35	BA	411	A	C5-N7-C8	6.32	107.06	103.90
35	BA	486	U	C2-N3-C4	-6.32	123.21	127.00
35	BA	767	A	C8-N9-C4	-6.32	103.27	105.80
35	BA	1487	G	N3-C2-N2	6.32	124.32	119.90
2	AB	636	G	C5-C6-O6	-6.32	124.81	128.60
2	AB	1297	C	N3-C4-C5	-6.32	119.37	121.90
2	AB	2281	A	N9-C4-C5	-6.32	103.27	105.80
2	AB	2470	G	N3-C2-N2	-6.32	115.48	119.90
35	BA	141	G	C2-N3-C4	6.32	115.06	111.90
35	BA	1416	G	O4'-C1'-N9	6.32	113.25	108.20
2	AB	1121	C	C2-N3-C4	6.32	123.06	119.90
2	AB	1511	G	N3-C2-N2	-6.32	115.48	119.90
2	AB	1645	G	N9-C4-C5	6.32	107.93	105.40
2	AB	1766	G	C2-N3-C4	6.32	115.06	111.90
2	AB	2071	A	N1-C6-N6	-6.32	114.81	118.60
2	AB	2664	G	N9-C4-C5	6.32	107.93	105.40
35	BA	506	G	C4-C5-C6	-6.32	115.01	118.80
35	BA	649	A	N9-C4-C5	6.32	108.33	105.80
35	BA	694	A	N3-C4-N9	6.32	132.45	127.40
35	BA	958	A	C6-C5-N7	-6.32	127.88	132.30
2	AB	15	G	C4'-C3'-C2'	-6.32	96.28	102.60
2	AB	471	A	C4-C5-N7	6.32	113.86	110.70
2	AB	583	G	N1-C2-N3	-6.32	120.11	123.90
2	AB	981	A	N3-C4-C5	-6.32	122.38	126.80
2	AB	1284	A	C4-C5-N7	-6.32	107.54	110.70
2	AB	1425	G	N1-C6-O6	-6.32	116.11	119.90
2	AB	1624	U	O4'-C1'-N1	6.32	113.25	108.20
2	AB	1772	A	N7-C8-N9	-6.32	110.64	113.80
2	AB	2205	A	C5'-C4'-C3'	-6.32	105.90	116.00
35	BA	292	G	C5-C6-N1	6.32	114.66	111.50
35	BA	606	G	C5-N7-C8	6.32	107.46	104.30
35	BA	890	G	N3-C4-C5	-6.32	125.44	128.60
35	BA	1013	G	N1-C6-O6	-6.32	116.11	119.90
35	BA	1227	A	C4-C5-N7	-6.32	107.54	110.70
2	AB	1420	A	C8-N9-C4	6.31	108.33	105.80
14	AN	58	TYR	CG-CD1-CE1	-6.31	116.25	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	587	G	C8-N9-C4	-6.31	103.88	106.40
35	BA	776	G	N3-C2-N2	6.31	124.32	119.90
35	BA	780	A	O4'-C1'-C2'	6.31	113.28	107.60
35	BA	1018	G	N9-C1'-C2'	-6.31	105.06	112.00
35	BA	1211	U	C3'-C2'-C1'	6.31	106.55	101.50
35	BA	1287	A	C8-N9-C4	-6.31	103.27	105.80
35	BA	1458	G	C5-C6-N1	6.31	114.66	111.50
2	AB	375	G	C1'-O4'-C4'	6.31	114.95	109.90
2	AB	529	A	C5-C6-N6	6.31	128.75	123.70
2	AB	1020	A	N1-C6-N6	6.31	122.39	118.60
2	AB	1465	G	C4-C5-N7	6.31	113.33	110.80
2	AB	2022	U	C5'-C4'-O4'	-6.31	101.53	109.10
2	AB	2464	G	C5-C6-O6	-6.31	124.81	128.60
2	AB	2798	U	C3'-C2'-C1'	6.31	106.55	101.50
35	BA	1210	C	N1-C2-O2	6.31	122.69	118.90
35	BA	1244	G	N1-C2-N3	6.31	127.69	123.90
2	AB	1532	A	O4'-C1'-N9	6.31	113.25	108.20
35	BA	219	U	N1-C2-N3	6.31	118.69	114.90
35	BA	285	C	C4'-C3'-C2'	-6.31	96.29	102.60
35	BA	585	G	C2-N3-C4	6.31	115.06	111.90
35	BA	687	A	O4'-C1'-N9	-6.31	103.15	108.20
35	BA	1284	C	C6-N1-C2	-6.31	117.78	120.30
1	AA	10	G	N1-C6-O6	6.31	123.69	119.90
2	AB	458	G	C5'-C4'-O4'	6.31	116.67	109.10
2	AB	1125	G	N1-C2-N3	-6.31	120.11	123.90
2	AB	1826	G	O4'-C1'-N9	6.31	113.25	108.20
2	AB	2385	C	N3-C4-C5	-6.31	119.38	121.90
2	AB	2800	A	C4'-C3'-C2'	6.31	108.91	102.60
35	BA	491	G	N9-C4-C5	6.31	107.92	105.40
35	BA	759	A	P-O3'-C3'	6.31	127.27	119.70
35	BA	930	C	C3'-C2'-C1'	-6.31	96.45	101.50
35	BA	1030	U	P-O3'-C3'	6.31	127.27	119.70
35	BA	1221	G	N9-C1'-C2'	-6.31	105.06	112.00
2	AB	1646	C	C5-C4-N4	-6.31	115.78	120.20
2	AB	1873	G	O4'-C1'-N9	6.31	113.25	108.20
2	AB	1954	G	O4'-C1'-N9	6.31	113.25	108.20
2	AB	2166	U	C5'-C4'-C3'	-6.31	105.91	116.00
2	AB	2275	C	C3'-C2'-C1'	6.31	106.55	101.50
2	AB	2551	C	O4'-C1'-N1	6.31	113.25	108.20
2	AB	2680	U	C5-C6-N1	-6.31	119.55	122.70
2	AB	2769	U	C4-C5-C6	6.31	123.48	119.70
2	AB	2800	A	C4-C5-N7	-6.31	107.55	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	101	A	C5'-C4'-O4'	6.31	116.67	109.10
35	BA	273	U	C6-N1-C2	-6.31	117.22	121.00
35	BA	1195	C	N3-C2-O2	6.31	126.31	121.90
35	BA	1293	C	C5-C6-N1	6.31	124.15	121.00
54	BT	5	ARG	NE-CZ-NH2	-6.31	117.15	120.30
2	AB	1140	C	N3-C4-N4	6.31	122.41	118.00
2	AB	1935	G	C5-C6-O6	6.31	132.38	128.60
35	BA	688	G	C6-C5-N7	-6.31	126.62	130.40
35	BA	1183	U	C4-C5-C6	-6.31	115.92	119.70
35	BA	1231	G	N1-C6-O6	6.31	123.68	119.90
35	BA	1266	G	N3-C4-N9	6.31	129.78	126.00
2	AB	298	G	N3-C4-N9	6.30	129.78	126.00
2	AB	517	C	C2-N3-C4	-6.30	116.75	119.90
2	AB	874	G	C8-N9-C1'	6.30	135.19	127.00
2	AB	990	A	N9-C4-C5	-6.30	103.28	105.80
2	AB	1252	G	N1-C6-O6	6.30	123.68	119.90
2	AB	1706	C	N1-C2-O2	6.30	122.68	118.90
2	AB	2044	C	C2-N3-C4	6.30	123.05	119.90
7	AG	101	ARG	NE-CZ-NH2	6.30	123.45	120.30
14	AN	2	ARG	NE-CZ-NH2	-6.30	117.15	120.30
35	BA	767	A	C4-C5-N7	-6.30	107.55	110.70
2	AB	806	C	O4'-C1'-N1	6.30	113.24	108.20
2	AB	1987	A	N7-C8-N9	6.30	116.95	113.80
2	AB	2180	U	C6-N1-C2	6.30	124.78	121.00
24	AX	84	PRO	CA-N-CD	-6.30	102.68	111.50
35	BA	374	A	C2-N3-C4	-6.30	107.45	110.60
35	BA	1500	A	N1-C2-N3	-6.30	126.15	129.30
1	AA	76	G	C6-C5-N7	6.30	134.18	130.40
2	AB	391	A	C5-N7-C8	6.30	107.05	103.90
2	AB	484	C	O4'-C1'-N1	6.30	113.24	108.20
2	AB	555	G	N3-C4-C5	-6.30	125.45	128.60
2	AB	1456	G	N9-C1'-C2'	-6.30	105.07	112.00
2	AB	2896	C	N3-C4-C5	6.30	124.42	121.90
6	AF	61	ARG	NE-CZ-NH2	6.30	123.45	120.30
35	BA	667	G	C6-C5-N7	-6.30	126.62	130.40
35	BA	739	C	O4'-C1'-N1	6.30	113.24	108.20
35	BA	1267	C	C2-N3-C4	6.30	123.05	119.90
37	BC	17	C	C2-N1-C1'	6.30	125.73	118.80
2	AB	708	G	N9-C1'-C2'	-6.30	105.07	112.00
2	AB	788	A	O4'-C4'-C3'	-6.30	97.70	104.00
2	AB	1127	A	C5-N7-C8	6.30	107.05	103.90
2	AB	1735	A	C4-C5-C6	-6.30	113.85	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2320	U	C2-N3-C4	6.30	130.78	127.00
2	AB	2453	A	C5-C6-N6	6.30	128.74	123.70
35	BA	217	C	C6-N1-C2	6.30	122.82	120.30
35	BA	698	G	N1-C2-N3	-6.30	120.12	123.90
35	BA	1164	G	O4'-C1'-N9	6.30	113.24	108.20
2	AB	88	G	N9-C1'-C2'	-6.30	105.07	112.00
2	AB	219	A	N1-C6-N6	6.30	122.38	118.60
2	AB	445	C	C6-N1-C2	6.30	122.82	120.30
2	AB	451	U	P-O3'-C3'	6.30	127.26	119.70
2	AB	478	A	C2-N3-C4	6.30	113.75	110.60
2	AB	1059	G	N3-C4-C5	6.30	131.75	128.60
2	AB	1453	A	O4'-C1'-N9	6.30	113.24	108.20
2	AB	1932	A	C6-N1-C2	-6.30	114.82	118.60
2	AB	2867	G	N3-C4-N9	6.30	129.78	126.00
35	BA	524	G	N3-C4-C5	-6.30	125.45	128.60
35	BA	880	C	N1-C1'-C2'	-6.30	105.07	112.00
35	BA	993	G	N7-C8-N9	6.30	116.25	113.10
35	BA	1130	A	N1-C6-N6	-6.30	114.82	118.60
1	AA	33	G	N1-C2-N3	6.30	127.68	123.90
2	AB	62	U	O4'-C4'-C3'	6.30	111.14	106.10
2	AB	907	G	N1-C2-N3	-6.30	120.12	123.90
2	AB	1735	A	O4'-C1'-N9	6.30	113.24	108.20
2	AB	1885	A	C6-C5-N7	-6.30	127.89	132.30
2	AB	1904	G	C5-C6-O6	-6.30	124.82	128.60
2	AB	1957	C	N1-C1'-C2'	-6.30	105.07	112.00
2	AB	2203	U	N3-C4-O4	6.30	123.81	119.40
2	AB	2513	A	C5'-C4'-O4'	6.30	116.66	109.10
35	BA	58	C	C4'-C3'-C2'	-6.30	96.30	102.60
35	BA	283	U	C2-N3-C4	-6.30	123.22	127.00
35	BA	700	G	C5-C6-O6	6.30	132.38	128.60
35	BA	760	G	C8-N9-C4	-6.30	103.88	106.40
35	BA	760	G	N3-C4-C5	-6.30	125.45	128.60
35	BA	962	C	N3-C4-C5	-6.30	119.38	121.90
35	BA	1305	G	C4'-C3'-C2'	-6.30	96.30	102.60
2	AB	922	C	C6-N1-C2	-6.29	117.78	120.30
2	AB	1332	G	C4-C5-N7	6.29	113.32	110.80
9	AI	47	PHE	CB-CG-CD2	-6.29	116.39	120.80
35	BA	926	G	C6-C5-N7	-6.29	126.62	130.40
1	AA	72	G	N1-C2-N2	6.29	121.86	116.20
2	AB	146	A	C4'-C3'-C2'	-6.29	96.31	102.60
2	AB	161	A	C4-C5-N7	-6.29	107.55	110.70
2	AB	614	A	C4'-C3'-C2'	-6.29	96.31	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	886	A	N1-C2-N3	6.29	132.45	129.30
2	AB	992	C	C4'-C3'-C2'	-6.29	96.31	102.60
2	AB	1246	A	N9-C1'-C2'	-6.29	105.08	112.00
2	AB	1475	G	C4-C5-N7	-6.29	108.28	110.80
2	AB	2237	G	O4'-C4'-C3'	6.29	111.14	106.10
2	AB	2635	A	C6-C5-N7	-6.29	127.89	132.30
35	BA	101	A	C4-C5-N7	-6.29	107.55	110.70
35	BA	1038	C	N3-C2-O2	-6.29	117.50	121.90
1	AA	106	G	N1-C6-O6	6.29	123.67	119.90
2	AB	264	C	N3-C4-N4	6.29	122.40	118.00
2	AB	563	A	C6-N1-C2	6.29	122.37	118.60
2	AB	798	G	C5-C6-O6	-6.29	124.83	128.60
2	AB	1641	A	N1-C6-N6	-6.29	114.83	118.60
2	AB	2027	G	C4'-C3'-C2'	-6.29	96.31	102.60
2	AB	2222	C	O4'-C1'-N1	6.29	113.23	108.20
2	AB	2883	A	N9-C4-C5	6.29	108.32	105.80
35	BA	54	C	C4-C5-C6	-6.29	114.25	117.40
35	BA	478	A	C5-N7-C8	6.29	107.05	103.90
35	BA	504	C	C6-N1-C2	-6.29	117.78	120.30
35	BA	877	G	N1-C6-O6	6.29	123.67	119.90
35	BA	1248	A	C4'-C3'-C2'	-6.29	96.31	102.60
35	BA	1316	G	C5'-C4'-O4'	6.29	116.65	109.10
1	AA	28	C	O5'-P-OP2	-6.29	100.04	105.70
2	AB	190	A	C5-N7-C8	-6.29	100.75	103.90
35	BA	50	A	C4-C5-C6	-6.29	113.86	117.00
35	BA	117	G	C5'-C4'-O4'	6.29	116.65	109.10
35	BA	401	C	N1-C2-O2	6.29	122.67	118.90
2	AB	1047	G	N3-C4-C5	-6.29	125.46	128.60
2	AB	1051	G	C4-C5-N7	-6.29	108.28	110.80
2	AB	1282	U	N3-C2-O2	-6.29	117.80	122.20
2	AB	1410	G	C6-C5-N7	-6.29	126.63	130.40
2	AB	1681	G	N3-C4-C5	-6.29	125.46	128.60
2	AB	1794	A	C6-N1-C2	-6.29	114.83	118.60
2	AB	2009	A	C8-N9-C4	-6.29	103.28	105.80
2	AB	2341	G	C4-C5-N7	-6.29	108.28	110.80
35	BA	901	A	C5'-C4'-O4'	6.29	116.64	109.10
35	BA	995	C	C6-N1-C2	-6.29	117.78	120.30
35	BA	1404	C	C2'-C3'-O3'	6.29	123.76	113.70
1	AA	46	A	C1'-O4'-C4'	-6.29	104.87	109.90
2	AB	709	U	N1-C2-N3	6.29	118.67	114.90
2	AB	752	A	N3-C4-N9	6.29	132.43	127.40
2	AB	1270	C	N1-C1'-C2'	6.29	122.17	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1435	G	N9-C4-C5	-6.29	102.89	105.40
2	AB	1905	C	C4-C5-C6	6.29	120.54	117.40
2	AB	2529	G	N1-C2-N3	-6.29	120.13	123.90
35	BA	1394	A	O4'-C1'-N9	6.29	113.23	108.20
35	BA	1505	G	N1-C2-N2	6.29	121.86	116.20
2	AB	180	G	C5'-C4'-O4'	6.29	116.64	109.10
2	AB	180	G	C5-C6-O6	-6.29	124.83	128.60
2	AB	580	U	C2-N3-C4	-6.29	123.23	127.00
2	AB	1069	A	C5-N7-C8	-6.29	100.76	103.90
2	AB	1799	G	N3-C4-C5	-6.29	125.46	128.60
2	AB	1980	G	C6-C5-N7	-6.29	126.63	130.40
35	BA	664	G	C4-C5-N7	-6.29	108.29	110.80
35	BA	702	A	C4-C5-N7	-6.29	107.56	110.70
35	BA	1270	G	N1-C2-N3	-6.29	120.13	123.90
37	BC	18	U	N1-C2-N3	-6.29	111.13	114.90
2	AB	500	G	C4-C5-C6	6.28	122.57	118.80
2	AB	914	G	C4-C5-N7	-6.28	108.29	110.80
2	AB	1854	A	N1-C6-N6	6.28	122.37	118.60
2	AB	2355	G	O5'-P-OP2	-6.28	100.04	105.70
2	AB	2435	A	N9-C4-C5	6.28	108.31	105.80
2	AB	2751	G	N1-C6-O6	-6.28	116.13	119.90
35	BA	712	A	C5-C6-N1	-6.28	114.56	117.70
2	AB	1027	A	N1-C6-N6	6.28	122.37	118.60
2	AB	2652	C	C5-C6-N1	6.28	124.14	121.00
30	A3	39	ARG	CD-NE-CZ	6.28	132.40	123.60
35	BA	555	U	C2-N3-C4	-6.28	123.23	127.00
35	BA	1263	C	O4'-C1'-N1	6.28	113.23	108.20
35	BA	1348	U	C5'-C4'-O4'	6.28	116.64	109.10
2	AB	452	G	P-O5'-C5'	6.28	130.95	120.90
2	AB	661	A	C2-N3-C4	6.28	113.74	110.60
2	AB	682	G	N3-C4-C5	-6.28	125.46	128.60
2	AB	1114	C	O4'-C4'-C3'	6.28	111.12	106.10
2	AB	1232	G	C5-N7-C8	-6.28	101.16	104.30
2	AB	1523	U	C6-N1-C2	-6.28	117.23	121.00
2	AB	1532	A	C2-N3-C4	-6.28	107.46	110.60
2	AB	2542	A	N1-C2-N3	-6.28	126.16	129.30
2	AB	2595	G	N9-C1'-C2'	-6.28	105.09	112.00
2	AB	2661	G	C5-C6-N1	6.28	114.64	111.50
7	AG	122	ASP	CB-CG-OD2	-6.28	112.65	118.30
35	BA	941	G	N9-C1'-C2'	-6.28	105.09	112.00
35	BA	1277	C	O4'-C1'-N1	6.28	113.22	108.20
2	AB	1397	U	C6-N1-C2	6.28	124.77	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1565	C	O3'-P-O5'	-6.28	92.07	104.00
2	AB	2147	A	N1-C6-N6	-6.28	114.83	118.60
2	AB	2148	G	C6-N1-C2	-6.28	121.33	125.10
35	BA	1144	G	O4'-C1'-N9	6.28	113.22	108.20
2	AB	25	U	N1-C2-N3	6.28	118.67	114.90
2	AB	41	C	O4'-C4'-C3'	-6.28	97.72	104.00
2	AB	327	G	C5-C6-O6	-6.28	124.83	128.60
2	AB	1384	A	O4'-C4'-C3'	6.28	111.12	106.10
2	AB	1590	A	C2-N3-C4	6.28	113.74	110.60
2	AB	2238	G	C5'-C4'-O4'	6.28	116.63	109.10
2	AB	2265	U	N3-C4-C5	-6.28	110.83	114.60
2	AB	2317	A	N7-C8-N9	-6.28	110.66	113.80
2	AB	2331	G	C6-N1-C2	-6.28	121.33	125.10
2	AB	2475	C	N1-C1'-C2'	6.28	122.16	114.00
2	AB	2821	A	N9-C4-C5	6.28	108.31	105.80
35	BA	286	C	N1-C2-N3	-6.28	114.81	119.20
35	BA	1016	A	N9-C1'-C2'	-6.28	105.10	112.00
35	BA	1452	C	C2-N3-C4	6.28	123.04	119.90
36	BB	46	C	N3-C2-O2	-6.28	117.51	121.90
2	AB	221	A	O4'-C1'-N9	6.28	113.22	108.20
2	AB	388	G	P-O3'-C3'	6.28	127.23	119.70
2	AB	1049	C	C5-C6-N1	6.28	124.14	121.00
2	AB	1694	C	C2-N3-C4	6.28	123.04	119.90
2	AB	1825	U	O4'-C1'-N1	6.28	113.22	108.20
2	AB	2183	A	C4'-C3'-C2'	-6.28	96.33	102.60
2	AB	2199	A	C5-C6-N1	6.28	120.84	117.70
2	AB	2374	C	C4-C5-C6	-6.28	114.26	117.40
35	BA	36	C	C4'-C3'-C2'	-6.28	96.32	102.60
35	BA	48	C	O4'-C1'-N1	6.28	113.22	108.20
35	BA	149	A	C4-C5-C6	6.28	120.14	117.00
35	BA	158	G	N7-C8-N9	6.28	116.24	113.10
35	BA	234	C	O4'-C1'-N1	6.28	113.22	108.20
35	BA	619	U	C4-C5-C6	6.28	123.47	119.70
35	BA	684	U	C2-N3-C4	-6.28	123.23	127.00
35	BA	715	A	C2-N3-C4	-6.28	107.46	110.60
35	BA	814	A	C2-N3-C4	6.28	113.74	110.60
35	BA	836	G	C2-N3-C4	6.28	115.04	111.90
35	BA	1110	A	C3'-C2'-C1'	-6.28	96.48	101.50
35	BA	1154	G	C2-N3-C4	6.28	115.04	111.90
35	BA	1404	C	C5-C4-N4	6.28	124.59	120.20
2	AB	202	U	C5'-C4'-O4'	6.27	116.63	109.10
2	AB	1273	U	C5-C4-O4	-6.27	122.14	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2839	G	C8-N9-C4	-6.27	103.89	106.40
14	AN	119	PRO	N-CA-CB	6.27	110.83	103.30
2	AB	153	U	O4'-C1'-N1	6.27	113.22	108.20
2	AB	425	G	C6-N1-C2	6.27	128.86	125.10
2	AB	1620	G	C6-N1-C2	-6.27	121.34	125.10
2	AB	2026	U	N1-C2-O2	6.27	127.19	122.80
2	AB	2230	G	C5'-C4'-O4'	6.27	116.63	109.10
35	BA	35	G	C6-N1-C2	-6.27	121.34	125.10
35	BA	400	C	N3-C4-N4	6.27	122.39	118.00
35	BA	514	C	C6-N1-C2	6.27	122.81	120.30
35	BA	535	A	C6-C5-N7	6.27	136.69	132.30
35	BA	871	U	N1-C2-O2	6.27	127.19	122.80
35	BA	885	G	C2-N3-C4	6.27	115.04	111.90
35	BA	1038	C	C4'-C3'-C2'	-6.27	96.33	102.60
1	AA	35	C	C5'-C4'-C3'	-6.27	105.97	116.00
2	AB	797	G	C4-C5-C6	6.27	122.56	118.80
2	AB	2270	A	C8-N9-C4	-6.27	103.29	105.80
35	BA	335	C	N1-C2-O2	6.27	122.66	118.90
35	BA	869	G	C5'-C4'-C3'	-6.27	105.97	116.00
2	AB	162	U	O3'-P-O5'	-6.27	92.09	104.00
2	AB	258	G	N1-C2-N3	6.27	127.66	123.90
2	AB	527	C	N3-C2-O2	-6.27	117.51	121.90
2	AB	975	A	C4-C5-C6	-6.27	113.86	117.00
2	AB	1263	U	C6-N1-C2	-6.27	117.24	121.00
2	AB	1867	G	C8-N9-C4	-6.27	103.89	106.40
2	AB	2138	G	C8-N9-C4	-6.27	103.89	106.40
2	AB	2306	C	C5-C6-N1	-6.27	117.87	121.00
2	AB	2659	G	N9-C4-C5	6.27	107.91	105.40
35	BA	216	U	O4'-C1'-N1	6.27	113.22	108.20
35	BA	237	G	C3'-C2'-C1'	-6.27	96.48	101.50
35	BA	260	G	O4'-C1'-N9	6.27	113.22	108.20
35	BA	300	A	C4'-C3'-C2'	-6.27	96.33	102.60
35	BA	783	C	C5-C6-N1	6.27	124.14	121.00
35	BA	862	C	C5-C4-N4	-6.27	115.81	120.20
35	BA	1141	C	N1-C2-N3	-6.27	114.81	119.20
36	BB	13	A	N3-C4-N9	-6.27	122.39	127.40
42	BH	44	ARG	NE-CZ-NH2	-6.27	117.17	120.30
2	AB	1708	C	N3-C2-O2	-6.27	117.51	121.90
2	AB	2211	A	O4'-C1'-N9	-6.27	103.19	108.20
2	AB	2227	A	C6-C5-N7	-6.27	127.91	132.30
2	AB	2264	C	C5-C6-N1	6.27	124.13	121.00
2	AB	2340	A	C2-N3-C4	6.27	113.73	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	85	U	C5-C6-N1	-6.27	119.57	122.70
35	BA	520	A	C5-C6-N1	6.27	120.83	117.70
35	BA	564	C	N3-C4-C5	-6.27	119.39	121.90
35	BA	906	A	N3-C4-C5	-6.27	122.41	126.80
35	BA	982	U	N3-C2-O2	-6.27	117.81	122.20
35	BA	1222	G	C5-N7-C8	6.27	107.43	104.30
37	BC	17	C	C6-N1-C1'	-6.27	113.28	120.80
37	BC	19	G	N1-C6-O6	-6.27	116.14	119.90
2	AB	411	G	N1-C2-N2	6.27	121.84	116.20
2	AB	466	A	C8-N9-C4	6.27	108.31	105.80
2	AB	859	G	C6-N1-C2	6.27	128.86	125.10
35	BA	317	U	P-O3'-C3'	6.27	127.22	119.70
35	BA	1362	A	C5-N7-C8	-6.27	100.77	103.90
2	AB	480	A	C5-N7-C8	6.26	107.03	103.90
2	AB	1033	U	N3-C4-O4	6.26	123.78	119.40
2	AB	1223	G	C4-C5-C6	6.26	122.56	118.80
2	AB	2168	G	C8-N9-C4	-6.26	103.89	106.40
2	AB	2320	U	C2'-C3'-O3'	6.26	123.72	113.70
26	AZ	19	HIS	CA-CB-CG	6.26	124.25	113.60
35	BA	327	A	C6-N1-C2	6.26	122.36	118.60
35	BA	664	G	C6-N1-C2	-6.26	121.34	125.10
35	BA	1088	G	N3-C4-C5	-6.26	125.47	128.60
35	BA	1145	A	N9-C1'-C2'	-6.26	105.11	112.00
2	AB	185	G	N3-C2-N2	-6.26	115.52	119.90
2	AB	300	A	N9-C1'-C2'	-6.26	105.11	112.00
2	AB	532	A	C8-N9-C4	-6.26	103.30	105.80
2	AB	890	C	P-O3'-C3'	6.26	127.22	119.70
2	AB	1663	G	C6-N1-C2	6.26	128.86	125.10
35	BA	442	G	C1'-O4'-C4'	-6.26	104.89	109.90
35	BA	478	A	N7-C8-N9	-6.26	110.67	113.80
35	BA	507	C	N3-C2-O2	-6.26	117.52	121.90
35	BA	540	G	C8-N9-C4	-6.26	103.89	106.40
35	BA	859	G	C5'-C4'-O4'	6.26	116.62	109.10
35	BA	1422	G	N9-C4-C5	-6.26	102.89	105.40
2	AB	76	C	O4'-C1'-N1	6.26	113.21	108.20
2	AB	324	A	C5-C6-N6	-6.26	118.69	123.70
2	AB	2134	A	N1-C2-N3	6.26	132.43	129.30
2	AB	2407	A	C4-C5-N7	6.26	113.83	110.70
10	AJ	152	ARG	NE-CZ-NH2	-6.26	117.17	120.30
35	BA	931	C	O4'-C1'-N1	6.26	113.21	108.20
35	BA	1084	G	N3-C2-N2	6.26	124.28	119.90
2	AB	1097	U	N3-C2-O2	-6.26	117.82	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2735	G	P-O3'-C3'	6.26	127.21	119.70
35	BA	132	C	N3-C4-C5	-6.26	119.40	121.90
35	BA	278	G	C2-N3-C4	6.26	115.03	111.90
35	BA	530	G	N7-C8-N9	6.26	116.23	113.10
35	BA	650	G	C5'-C4'-C3'	-6.26	105.98	116.00
35	BA	1153	G	N7-C8-N9	6.26	116.23	113.10
35	BA	1289	A	N1-C2-N3	6.26	132.43	129.30
35	BA	1350	A	C6-N1-C2	6.26	122.36	118.60
50	BP	100	TRP	CB-CG-CD2	6.26	134.74	126.60
2	AB	148	U	C5-C6-N1	-6.26	119.57	122.70
2	AB	846	U	C4-C5-C6	6.26	123.45	119.70
2	AB	1651	G	N7-C8-N9	6.26	116.23	113.10
35	BA	72	A	C4'-C3'-C2'	-6.26	96.34	102.60
35	BA	125	U	C5-C6-N1	-6.26	119.57	122.70
35	BA	1230	C	C5-C4-N4	-6.26	115.82	120.20
2	AB	180	G	C4-C5-N7	6.26	113.30	110.80
2	AB	583	G	N1-C2-N2	6.26	121.83	116.20
2	AB	1849	G	C5-C6-O6	-6.26	124.85	128.60
2	AB	2375	G	C8-N9-C4	-6.26	103.90	106.40
35	BA	139	A	C6-N1-C2	-6.26	114.85	118.60
35	BA	538	G	C6-N1-C2	-6.26	121.35	125.10
35	BA	917	G	N1-C6-O6	-6.26	116.15	119.90
35	BA	1320	C	N1-C2-O2	6.26	122.65	118.90
35	BA	1538	C	C2-N3-C4	6.26	123.03	119.90
2	AB	19	A	O4'-C1'-N9	6.25	113.20	108.20
2	AB	973	A	C4'-C3'-C2'	-6.25	96.34	102.60
2	AB	2418	A	N1-C6-N6	-6.25	114.85	118.60
26	AZ	21	LEU	CA-C-N	6.25	130.96	117.20
35	BA	44	A	C4'-C3'-C2'	-6.25	96.34	102.60
35	BA	208	U	C4'-C3'-C2'	-6.25	96.34	102.60
36	BB	14	G	O4'-C1'-N9	6.25	113.20	108.20
2	AB	448	U	N1-C1'-C2'	6.25	122.13	114.00
2	AB	1271	G	C2-N3-C4	-6.25	108.77	111.90
2	AB	2723	C	N3-C4-N4	6.25	122.38	118.00
2	AB	2827	C	C5-C6-N1	-6.25	117.87	121.00
20	AT	22	LEU	CB-CG-CD2	6.25	121.63	111.00
35	BA	1149	C	N3-C4-C5	-6.25	119.40	121.90
35	BA	1177	G	C6-C5-N7	-6.25	126.65	130.40
35	BA	1310	G	C3'-C2'-C1'	-6.25	96.50	101.50
35	BA	1385	G	C1'-O4'-C4'	6.25	114.90	109.90
35	BA	1502	A	N1-C2-N3	-6.25	126.17	129.30
37	BC	64	G	N7-C8-N9	6.25	116.23	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	65	U	O4'-C1'-N1	6.25	113.20	108.20
2	AB	112	U	C5-C4-O4	6.25	129.65	125.90
2	AB	132	G	C2-N3-C4	6.25	115.03	111.90
2	AB	161	A	C6-N1-C2	6.25	122.35	118.60
2	AB	196	A	N1-C6-N6	-6.25	114.85	118.60
2	AB	776	G	C5-N7-C8	-6.25	101.17	104.30
2	AB	1014	A	N1-C2-N3	-6.25	126.17	129.30
2	AB	1164	C	C4-C5-C6	-6.25	114.27	117.40
2	AB	1514	G	C4'-C3'-C2'	-6.25	96.35	102.60
2	AB	1603	A	C5-C6-N1	6.25	120.83	117.70
2	AB	1932	A	C4-C5-N7	6.25	113.83	110.70
2	AB	2358	A	N7-C8-N9	6.25	116.92	113.80
2	AB	2431	U	C2-N3-C4	-6.25	123.25	127.00
35	BA	1076	U	C1'-O4'-C4'	-6.25	104.90	109.90
35	BA	1251	A	N1-C6-N6	-6.25	114.85	118.60
35	BA	1461	G	C5'-C4'-O4'	6.25	116.60	109.10
2	AB	397	U	C4'-C3'-C2'	-6.25	96.35	102.60
2	AB	757	G	C3'-C2'-C1'	-6.25	96.50	101.50
2	AB	1253	A	C4-C5-N7	-6.25	107.58	110.70
2	AB	1791	A	N1-C6-N6	6.25	122.35	118.60
2	AB	2078	C	N3-C2-O2	-6.25	117.53	121.90
2	AB	2903	U	N3-C4-C5	6.25	118.35	114.60
35	BA	380	G	C5-N7-C8	6.25	107.42	104.30
35	BA	402	G	N3-C4-N9	6.25	129.75	126.00
2	AB	217	A	C5'-C4'-O4'	6.25	116.60	109.10
2	AB	474	G	C4-C5-N7	6.25	113.30	110.80
2	AB	538	A	N3-C4-N9	6.25	132.40	127.40
2	AB	667	U	C3'-C2'-C1'	6.25	106.50	101.50
2	AB	734	A	C8-N9-C4	-6.25	103.30	105.80
2	AB	858	G	N1-C2-N2	6.25	121.82	116.20
2	AB	1006	C	C5'-C4'-O4'	6.25	116.60	109.10
2	AB	1187	G	C5-C6-N1	6.25	114.62	111.50
2	AB	1217	U	C5-C6-N1	-6.25	119.58	122.70
2	AB	1291	C	N3-C4-C5	-6.25	119.40	121.90
2	AB	1733	G	C8-N9-C1'	6.25	135.12	127.00
2	AB	2540	C	C5-C6-N1	-6.25	117.88	121.00
2	AB	2598	A	C3'-C2'-C1'	6.25	106.50	101.50
2	AB	2812	G	N7-C8-N9	6.25	116.22	113.10
2	AB	2883	A	C5'-C4'-O4'	6.25	116.60	109.10
11	AK	58	ILE	CA-CB-CG1	6.25	122.87	111.00
35	BA	524	G	C6-C5-N7	-6.25	126.65	130.40
35	BA	675	A	N1-C6-N6	-6.25	114.85	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	840	C	O4'-C1'-N1	6.25	113.20	108.20
35	BA	1527	U	N3-C4-O4	6.25	123.77	119.40
1	AA	109	A	C4-C5-C6	6.25	120.12	117.00
2	AB	56	A	C2-N3-C4	6.25	113.72	110.60
2	AB	899	A	N9-C1'-C2'	-6.25	105.13	112.00
2	AB	957	C	C4-C5-C6	6.25	120.52	117.40
2	AB	1143	A	O4'-C1'-N9	6.25	113.20	108.20
2	AB	1903	G	C8-N9-C4	-6.25	103.90	106.40
2	AB	2438	U	C5-C6-N1	-6.25	119.58	122.70
2	AB	2822	G	C6-N1-C2	-6.25	121.35	125.10
35	BA	331	G	C5'-C4'-C3'	-6.25	106.01	116.00
35	BA	1328	C	N3-C4-N4	6.25	122.37	118.00
2	AB	17	G	C6-N1-C2	-6.25	121.35	125.10
2	AB	170	U	N3-C4-C5	-6.25	110.85	114.60
2	AB	450	G	C4'-C3'-C2'	-6.25	96.36	102.60
2	AB	1139	G	C4'-C3'-C2'	6.25	108.84	102.60
2	AB	1385	A	C5-N7-C8	-6.25	100.78	103.90
2	AB	1546	G	P-O3'-C3'	6.25	127.19	119.70
35	BA	390	U	C2-N3-C4	-6.25	123.25	127.00
35	BA	744	C	C5-C6-N1	6.25	124.12	121.00
35	BA	856	C	N3-C4-C5	-6.25	119.40	121.90
1	AA	44	G	C8-N9-C4	6.24	108.90	106.40
2	AB	89	A	C5-C6-N1	6.24	120.82	117.70
2	AB	183	C	C6-N1-C2	-6.24	117.80	120.30
2	AB	613	A	N9-C4-C5	6.24	108.30	105.80
2	AB	880	G	C8-N9-C4	-6.24	103.90	106.40
2	AB	1066	U	C4'-C3'-C2'	-6.24	96.36	102.60
2	AB	1195	G	C5-N7-C8	6.24	107.42	104.30
2	AB	1393	A	C6-N1-C2	6.24	122.35	118.60
2	AB	1987	A	C8-N9-C4	-6.24	103.30	105.80
2	AB	2356	U	C2-N3-C4	-6.24	123.25	127.00
2	AB	2382	G	O4'-C1'-N9	6.24	113.19	108.20
2	AB	2388	A	C5-C6-N6	6.24	128.69	123.70
2	AB	2671	G	N3-C4-N9	6.24	129.75	126.00
35	BA	180	U	O4'-C1'-C2'	6.24	113.22	107.60
35	BA	518	C	O4'-C1'-C2'	-6.24	99.56	105.80
35	BA	1454	G	N9-C4-C5	6.24	107.90	105.40
35	BA	1506	U	C5'-C4'-O4'	-6.24	101.61	109.10
40	BF	61	ARG	NE-CZ-NH1	6.24	123.42	120.30
2	AB	41	C	C1'-O4'-C4'	-6.24	104.91	109.90
2	AB	249	C	C4-C5-C6	-6.24	114.28	117.40
2	AB	686	U	C5-C6-N1	6.24	125.82	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1173	U	P-O3'-C3'	6.24	127.19	119.70
2	AB	1639	C	N1-C2-O2	6.24	122.64	118.90
2	AB	1666	G	N1-C2-N3	6.24	127.64	123.90
2	AB	2188	U	C3'-C2'-C1'	-6.24	96.51	101.50
35	BA	566	G	N3-C4-C5	-6.24	125.48	128.60
1	AA	68	C	N1-C2-N3	-6.24	114.83	119.20
2	AB	100	U	C5-C4-O4	-6.24	122.16	125.90
2	AB	107	G	C8-N9-C4	-6.24	103.90	106.40
2	AB	454	A	N1-C6-N6	-6.24	114.86	118.60
2	AB	533	G	C4'-C3'-C2'	-6.24	96.36	102.60
2	AB	575	A	C4-C5-C6	-6.24	113.88	117.00
2	AB	1296	G	P-O3'-C3'	6.24	127.19	119.70
2	AB	1641	A	C5-C6-N1	6.24	120.82	117.70
2	AB	1669	A	O4'-C4'-C3'	-6.24	97.76	104.00
35	BA	204	G	O4'-C1'-N9	6.24	113.19	108.20
35	BA	257	G	C8-N9-C4	-6.24	103.90	106.40
35	BA	1042	A	C6-N1-C2	-6.24	114.86	118.60
35	BA	1338	G	C4-C5-N7	6.24	113.30	110.80
35	BA	1489	G	N3-C2-N2	-6.24	115.53	119.90
2	AB	632	A	C1'-O4'-C4'	6.24	114.89	109.90
2	AB	703	U	C5-C4-O4	6.24	129.64	125.90
2	AB	872	U	C6-N1-C2	-6.24	117.26	121.00
2	AB	1571	A	N9-C4-C5	-6.24	103.30	105.80
2	AB	1772	A	C5'-C4'-C3'	-6.24	106.02	116.00
2	AB	1795	C	C5-C6-N1	6.24	124.12	121.00
2	AB	1916	A	O4'-C1'-C2'	6.24	113.21	107.60
2	AB	2048	G	C4-C5-N7	-6.24	108.30	110.80
2	AB	2271	G	N1-C2-N2	-6.24	110.58	116.20
2	AB	2723	C	C3'-C2'-C1'	6.24	106.49	101.50
35	BA	53	A	C3'-C2'-C1'	-6.24	96.51	101.50
35	BA	94	G	O4'-C1'-N9	-6.24	103.21	108.20
35	BA	542	G	C4-C5-N7	6.24	113.30	110.80
36	BB	13	A	C2-N3-C4	-6.24	107.48	110.60
2	AB	1066	U	N3-C2-O2	-6.24	117.83	122.20
2	AB	1372	U	O4'-C1'-N1	6.24	113.19	108.20
37	BC	66	C	P-O3'-C3'	6.24	127.18	119.70
2	AB	576	U	N1-C2-N3	6.24	118.64	114.90
2	AB	883	G	C4'-C3'-C2'	-6.24	96.36	102.60
2	AB	1437	C	N1-C2-O2	-6.24	115.16	118.90
2	AB	1577	C	P-O3'-C3'	6.24	127.18	119.70
2	AB	1865	U	C6-N1-C2	-6.24	117.26	121.00
2	AB	1896	G	C6-C5-N7	-6.24	126.66	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2470	G	N1-C2-N2	6.24	121.81	116.20
2	AB	2588	G	C5-N7-C8	-6.24	101.18	104.30
2	AB	2744	G	N3-C4-N9	6.24	129.74	126.00
8	AH	39	ALA	CB-CA-C	-6.24	100.75	110.10
35	BA	822	U	C5-C6-N1	-6.24	119.58	122.70
35	BA	855	U	C2-N3-C4	6.24	130.74	127.00
35	BA	1244	G	N1-C2-N2	-6.24	110.59	116.20
35	BA	1373	G	N9-C4-C5	-6.24	102.91	105.40
2	AB	875	G	C4-C5-C6	6.23	122.54	118.80
2	AB	2210	U	C6-N1-C2	-6.23	117.26	121.00
2	AB	2798	U	O4'-C1'-N1	6.23	113.19	108.20
35	BA	229	U	C5'-C4'-O4'	6.23	116.58	109.10
35	BA	534	U	C4'-C3'-C2'	6.23	108.83	102.60
1	AA	96	G	N9-C1'-C2'	-6.23	105.14	112.00
2	AB	42	A	C5'-C4'-O4'	6.23	116.58	109.10
2	AB	1048	A	C6-C5-N7	-6.23	127.94	132.30
2	AB	1307	A	C1'-O4'-C4'	-6.23	104.91	109.90
2	AB	1334	G	N1-C6-O6	-6.23	116.16	119.90
2	AB	1343	G	C5-C6-O6	-6.23	124.86	128.60
2	AB	1621	U	N3-C4-C5	-6.23	110.86	114.60
2	AB	1811	G	C5-C6-O6	-6.23	124.86	128.60
2	AB	1995	U	O5'-P-OP2	-6.23	100.09	105.70
2	AB	2015	A	P-O5'-C5'	6.23	130.87	120.90
2	AB	2145	C	N3-C4-C5	-6.23	119.41	121.90
2	AB	2453	A	C6-C5-N7	6.23	136.66	132.30
2	AB	2791	G	C5-C6-N1	6.23	114.62	111.50
13	AM	79	PHE	CB-CG-CD2	-6.23	116.44	120.80
35	BA	100	G	C1'-O4'-C4'	6.23	114.89	109.90
35	BA	233	C	C5-C4-N4	-6.23	115.84	120.20
35	BA	256	U	C5-C4-O4	6.23	129.64	125.90
35	BA	387	U	N3-C2-O2	-6.23	117.84	122.20
35	BA	497	G	N3-C4-C5	-6.23	125.48	128.60
35	BA	749	A	C5-N7-C8	6.23	107.02	103.90
35	BA	1311	A	N3-C4-C5	6.23	131.16	126.80
2	AB	19	A	N9-C4-C5	6.23	108.29	105.80
2	AB	601	C	C5'-C4'-O4'	6.23	116.58	109.10
2	AB	1212	G	C2-N3-C4	6.23	115.02	111.90
2	AB	1387	A	N7-C8-N9	6.23	116.92	113.80
2	AB	1830	C	O4'-C4'-C3'	6.23	111.08	106.10
2	AB	1952	A	N1-C6-N6	-6.23	114.86	118.60
2	AB	1980	G	N3-C4-C5	-6.23	125.48	128.60
2	AB	2715	C	C5-C6-N1	6.23	124.11	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2734	A	C5-C6-N6	-6.23	118.72	123.70
35	BA	73	C	N3-C2-O2	-6.23	117.54	121.90
35	BA	130	A	C4-C5-C6	6.23	120.11	117.00
35	BA	620	C	C4-C5-C6	-6.23	114.28	117.40
35	BA	810	C	O4'-C4'-C3'	-6.23	97.77	104.00
35	BA	975	A	C5-N7-C8	-6.23	100.78	103.90
35	BA	1064	G	N1-C2-N2	6.23	121.81	116.20
37	BC	72	C	C5-C4-N4	-6.23	115.84	120.20
44	BJ	111	THR	CA-CB-CG2	6.23	121.12	112.40
2	AB	204	A	C4-C5-C6	-6.23	113.89	117.00
2	AB	275	C	N3-C4-N4	6.23	122.36	118.00
2	AB	439	A	C6-N1-C2	-6.23	114.86	118.60
35	BA	760	G	N3-C2-N2	6.23	124.26	119.90
35	BA	908	A	C6-N1-C2	-6.23	114.86	118.60
35	BA	1110	A	N9-C4-C5	6.23	108.29	105.80
1	AA	15	A	N9-C4-C5	6.23	108.29	105.80
2	AB	188	G	C8-N9-C1'	6.23	135.09	127.00
2	AB	368	A	N3-C4-C5	-6.23	122.44	126.80
2	AB	560	C	N3-C4-N4	6.23	122.36	118.00
2	AB	583	G	C4-C5-N7	-6.23	108.31	110.80
2	AB	820	A	C1'-O4'-C4'	-6.23	104.92	109.90
2	AB	854	C	O4'-C1'-N1	6.23	113.18	108.20
2	AB	1017	G	C5-C6-O6	-6.23	124.86	128.60
2	AB	1552	A	O4'-C4'-C3'	-6.23	97.77	104.00
2	AB	1598	A	N9-C4-C5	6.23	108.29	105.80
2	AB	2268	A	N9-C4-C5	6.23	108.29	105.80
2	AB	2288	A	N1-C6-N6	-6.23	114.86	118.60
19	AS	35	PHE	CB-CG-CD1	-6.23	116.44	120.80
35	BA	100	G	C8-N9-C4	-6.23	103.91	106.40
35	BA	1127	G	N1-C6-O6	6.23	123.64	119.90
37	BC	41	C	N1-C2-O2	6.23	122.64	118.90
2	AB	1695	G	C5-C6-N1	6.23	114.61	111.50
2	AB	2370	G	C4-C5-N7	6.23	113.29	110.80
2	AB	2485	G	C5'-C4'-O4'	6.23	116.57	109.10
2	AB	2900	A	N1-C6-N6	6.23	122.33	118.60
35	BA	672	U	N3-C4-O4	-6.23	115.04	119.40
35	BA	937	A	N9-C4-C5	-6.23	103.31	105.80
35	BA	1162	C	C5'-C4'-O4'	6.23	116.57	109.10
35	BA	1200	C	C1'-O4'-C4'	6.23	114.88	109.90
35	BA	1300	G	N3-C2-N2	-6.23	115.54	119.90
2	AB	27	G	N1-C6-O6	-6.22	116.17	119.90
2	AB	194	G	C4'-C3'-C2'	-6.22	96.38	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1384	A	C6-N1-C2	6.22	122.33	118.60
2	AB	2267	A	P-O3'-C3'	6.22	127.17	119.70
2	AB	2812	G	C6-N1-C2	-6.22	121.36	125.10
35	BA	9	G	N3-C4-N9	-6.22	122.27	126.00
35	BA	73	C	C5-C4-N4	-6.22	115.84	120.20
35	BA	587	G	N7-C8-N9	6.22	116.21	113.10
35	BA	839	C	N3-C2-O2	-6.22	117.54	121.90
35	BA	927	G	C5-C6-N1	6.22	114.61	111.50
35	BA	1006	G	C2-N3-C4	6.22	115.01	111.90
35	BA	1541	U	N3-C2-O2	-6.22	117.84	122.20
37	BC	23	G	C5-C6-O6	-6.22	124.87	128.60
1	AA	1	U	O4'-C1'-N1	6.22	113.18	108.20
2	AB	45	G	N3-C4-C5	-6.22	125.49	128.60
2	AB	499	U	N3-C4-C5	-6.22	110.87	114.60
2	AB	511	U	O4'-C1'-N1	6.22	113.18	108.20
2	AB	619	G	C2-N3-C4	-6.22	108.79	111.90
2	AB	929	U	C6-N1-C2	6.22	124.73	121.00
2	AB	1231	U	C3'-C2'-C1'	6.22	106.48	101.50
2	AB	1818	U	C6-N1-C2	-6.22	117.27	121.00
2	AB	1818	U	N3-C4-C5	-6.22	110.87	114.60
2	AB	2070	A	C4'-C3'-C2'	-6.22	96.38	102.60
2	AB	2288	A	C6-N1-C2	-6.22	114.87	118.60
2	AB	2708	G	C3'-C2'-C1'	-6.22	96.52	101.50
2	AB	2777	G	C4-C5-N7	6.22	113.29	110.80
19	AS	60	TRP	CE2-CD2-CE3	-6.22	111.23	118.70
35	BA	129	A	C1'-O4'-C4'	-6.22	104.92	109.90
35	BA	753	A	C8-N9-C4	-6.22	103.31	105.80
35	BA	1200	C	C2-N3-C4	-6.22	116.79	119.90
35	BA	1400	C	C6-N1-C1'	-6.22	113.33	120.80
35	BA	1456	A	N9-C1'-C2'	-6.22	105.15	112.00
35	BA	1473	G	P-O5'-C5'	6.22	130.86	120.90
39	BE	180	ASP	CB-CG-OD2	-6.22	112.70	118.30
2	AB	2570	G	N9-C4-C5	6.22	107.89	105.40
35	BA	250	A	N7-C8-N9	-6.22	110.69	113.80
35	BA	798	U	N3-C4-O4	6.22	123.75	119.40
35	BA	956	U	P-O3'-C3'	6.22	127.17	119.70
2	AB	60	G	C5-N7-C8	-6.22	101.19	104.30
2	AB	2139	U	N3-C4-O4	6.22	123.75	119.40
2	AB	2352	A	C1'-O4'-C4'	-6.22	104.92	109.90
35	BA	23	C	O4'-C1'-N1	6.22	113.17	108.20
35	BA	632	U	O4'-C1'-N1	6.22	113.18	108.20
35	BA	704	A	C5-N7-C8	-6.22	100.79	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1020	A	C5'-C4'-C3'	-6.22	106.05	116.00
2	AB	1173	U	O3'-P-O5'	-6.22	92.19	104.00
35	BA	786	G	N3-C4-N9	6.22	129.73	126.00
2	AB	85	G	C1'-O4'-C4'	-6.22	104.93	109.90
2	AB	701	G	N3-C2-N2	-6.22	115.55	119.90
2	AB	970	U	N1-C2-N3	6.22	118.63	114.90
2	AB	1193	G	C2-N3-C4	6.22	115.01	111.90
2	AB	2014	A	O4'-C1'-N9	6.22	113.17	108.20
35	BA	224	U	C4'-C3'-C2'	-6.22	96.38	102.60
35	BA	229	U	C5-C6-N1	6.22	125.81	122.70
35	BA	958	A	N1-C6-N6	6.22	122.33	118.60
35	BA	1352	C	C1'-O4'-C4'	-6.22	104.93	109.90
35	BA	1482	G	C5'-C4'-O4'	6.22	116.56	109.10
2	AB	54	G	C1'-O4'-C4'	-6.21	104.93	109.90
2	AB	95	A	C1'-O4'-C4'	-6.21	104.93	109.90
2	AB	208	C	N3-C2-O2	6.21	126.25	121.90
2	AB	472	A	C4-C5-N7	-6.21	107.59	110.70
2	AB	555	G	C8-N9-C4	-6.21	103.91	106.40
2	AB	1672	A	N3-C4-N9	6.21	132.37	127.40
17	AQ	30	ARG	NE-CZ-NH2	-6.21	117.19	120.30
35	BA	984	C	O4'-C1'-N1	6.21	113.17	108.20
35	BA	1133	G	O4'-C1'-N9	-6.21	103.23	108.20
2	AB	1300	G	N7-C8-N9	6.21	116.21	113.10
2	AB	1494	A	C2-N3-C4	6.21	113.71	110.60
2	AB	1528	A	C6-C5-N7	6.21	136.65	132.30
2	AB	1903	G	N1-C6-O6	6.21	123.63	119.90
35	BA	152	A	C5'-C4'-O4'	6.21	116.56	109.10
35	BA	495	A	N1-C2-N3	-6.21	126.19	129.30
35	BA	692	U	P-O3'-C3'	6.21	127.16	119.70
35	BA	1393	U	C5-C6-N1	-6.21	119.59	122.70
35	BA	1485	U	N1-C2-N3	6.21	118.63	114.90
2	AB	149	A	N7-C8-N9	6.21	116.91	113.80
2	AB	628	G	O4'-C1'-N9	6.21	113.17	108.20
2	AB	886	A	C4-C5-C6	-6.21	113.89	117.00
2	AB	1533	C	C5-C4-N4	6.21	124.55	120.20
2	AB	1823	G	C4-C5-C6	6.21	122.53	118.80
2	AB	1871	A	C2-N3-C4	6.21	113.71	110.60
2	AB	2010	G	C4-C5-N7	6.21	113.28	110.80
2	AB	2667	C	C6-N1-C2	-6.21	117.81	120.30
35	BA	616	G	C8-N9-C4	-6.21	103.92	106.40
35	BA	1419	G	N1-C2-N3	-6.21	120.17	123.90
50	BP	12	ARG	NE-CZ-NH1	6.21	123.41	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	483	A	N3-C4-C5	-6.21	122.45	126.80
2	AB	903	C	C6-N1-C2	-6.21	117.82	120.30
2	AB	1697	G	N3-C4-N9	6.21	129.73	126.00
35	BA	916	U	C2-N3-C4	-6.21	123.27	127.00
37	BC	64	G	C5-N7-C8	-6.21	101.19	104.30
51	BQ	17	ASP	CB-CG-OD1	-6.21	112.71	118.30
2	AB	279	A	N1-C2-N3	6.21	132.40	129.30
2	AB	987	C	C2'-C3'-O3'	6.21	123.64	113.70
2	AB	1192	G	C3'-C2'-C1'	6.21	106.47	101.50
2	AB	1781	U	C5-C6-N1	-6.21	119.60	122.70
2	AB	1799	G	C1'-O4'-C4'	-6.21	104.93	109.90
2	AB	2338	C	C1'-O4'-C4'	-6.21	104.93	109.90
35	BA	170	U	C5'-C4'-O4'	6.21	116.55	109.10
35	BA	212	G	N7-C8-N9	6.21	116.20	113.10
35	BA	413	G	C5-C6-O6	-6.21	124.88	128.60
35	BA	450	G	N9-C1'-C2'	-6.21	105.17	112.00
35	BA	867	G	N3-C2-N2	-6.21	115.55	119.90
35	BA	998	C	C1'-O4'-C4'	-6.21	104.93	109.90
2	AB	672	C	N3-C4-C5	6.21	124.38	121.90
2	AB	987	C	N1-C2-O2	6.21	122.62	118.90
2	AB	1948	G	C6-C5-N7	-6.21	126.68	130.40
2	AB	2118	U	C1'-O4'-C4'	-6.21	104.94	109.90
2	AB	2126	A	N1-C6-N6	-6.21	114.88	118.60
2	AB	2458	G	C3'-C2'-C1'	-6.21	96.53	101.50
35	BA	172	A	C5'-C4'-C3'	-6.21	106.07	116.00
35	BA	374	A	O4'-C4'-C3'	6.21	111.06	106.10
35	BA	449	G	C2'-C3'-O3'	6.21	123.63	113.70
35	BA	576	C	N3-C4-N4	6.21	122.34	118.00
35	BA	765	G	N1-C6-O6	-6.21	116.18	119.90
35	BA	987	G	C6-N1-C2	-6.21	121.38	125.10
37	BC	46	G	C4-C5-C6	6.21	122.52	118.80
2	AB	424	G	C5-C6-N1	6.21	114.60	111.50
2	AB	497	A	N9-C4-C5	6.21	108.28	105.80
2	AB	1672	A	C5-C6-N6	-6.21	118.74	123.70
2	AB	2055	C	C2-N3-C4	6.21	123.00	119.90
35	BA	236	A	C8-N9-C4	-6.21	103.32	105.80
35	BA	355	C	C4'-C3'-C2'	-6.21	96.39	102.60
35	BA	622	A	C4'-C3'-C2'	-6.21	96.39	102.60
35	BA	764	C	C2-N3-C4	6.21	123.00	119.90
35	BA	793	U	C5-C6-N1	-6.21	119.60	122.70
35	BA	1375	A	N9-C4-C5	6.21	108.28	105.80
35	BA	1448	C	N1-C2-N3	6.21	123.54	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	48	U	C5'-C4'-C3'	-6.20	106.07	116.00
2	AB	843	G	C5-C6-O6	-6.20	124.88	128.60
2	AB	1326	U	N1-C2-N3	6.20	118.62	114.90
35	BA	286	C	C6-N1-C2	6.20	122.78	120.30
35	BA	361	G	N3-C4-C5	-6.20	125.50	128.60
35	BA	460	A	N7-C8-N9	6.20	116.90	113.80
35	BA	584	G	N7-C8-N9	6.20	116.20	113.10
35	BA	737	C	C5'-C4'-C3'	-6.20	106.08	116.00
35	BA	797	C	C2-N3-C4	6.20	123.00	119.90
35	BA	1086	U	O4'-C1'-N1	6.20	113.16	108.20
2	AB	108	G	N1-C2-N3	6.20	127.62	123.90
2	AB	253	C	C1'-O4'-C4'	6.20	114.86	109.90
2	AB	873	C	C4-C5-C6	6.20	120.50	117.40
2	AB	1035	U	C3'-C2'-C1'	-6.20	96.54	101.50
2	AB	1818	U	C3'-C2'-C1'	6.20	106.46	101.50
2	AB	2527	C	O4'-C1'-N1	6.20	113.16	108.20
35	BA	239	U	C5-C4-O4	-6.20	122.18	125.90
35	BA	288	A	C1'-O4'-C4'	-6.20	104.94	109.90
35	BA	677	U	O4'-C1'-N1	6.20	113.16	108.20
1	AA	45	A	O4'-C4'-C3'	-6.20	97.80	104.00
2	AB	19	A	C1'-O4'-C4'	6.20	114.86	109.90
2	AB	455	C	O4'-C1'-C2'	-6.20	99.60	105.80
2	AB	539	G	C6-C5-N7	6.20	134.12	130.40
2	AB	1302	A	C4-C5-C6	-6.20	113.90	117.00
2	AB	2059	A	C4'-C3'-C2'	-6.20	96.40	102.60
2	AB	2443	C	C5'-C4'-O4'	6.20	116.54	109.10
35	BA	6	G	N9-C4-C5	-6.20	102.92	105.40
35	BA	47	C	O4'-C1'-C2'	-6.20	99.60	105.80
35	BA	806	C	O4'-C1'-N1	6.20	113.16	108.20
35	BA	1169	A	O4'-C1'-N9	6.20	113.16	108.20
36	BB	49	U	P-O3'-C3'	6.20	127.14	119.70
2	AB	204	A	N7-C8-N9	-6.20	110.70	113.80
2	AB	219	A	C5'-C4'-C3'	-6.20	106.08	116.00
2	AB	743	A	N3-C4-C5	-6.20	122.46	126.80
2	AB	1069	A	N3-C4-N9	-6.20	122.44	127.40
2	AB	1179	G	N9-C4-C5	6.20	107.88	105.40
2	AB	1259	G	O4'-C1'-N9	6.20	113.16	108.20
2	AB	2034	U	N1-C1'-C2'	-6.20	105.18	112.00
2	AB	2408	U	C4'-C3'-C2'	-6.20	96.40	102.60
35	BA	30	U	O4'-C4'-C3'	6.20	111.06	106.10
35	BA	38	G	N9-C4-C5	6.20	107.88	105.40
35	BA	270	A	N7-C8-N9	-6.20	110.70	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	285	C	O4'-C1'-N1	6.20	113.16	108.20
35	BA	430	A	N9-C4-C5	6.20	108.28	105.80
35	BA	451	A	C6-N1-C2	-6.20	114.88	118.60
35	BA	681	A	N1-C2-N3	-6.20	126.20	129.30
35	BA	707	U	N3-C2-O2	-6.20	117.86	122.20
35	BA	763	G	O4'-C1'-N9	6.20	113.16	108.20
35	BA	845	A	C4-C5-N7	-6.20	107.60	110.70
35	BA	910	C	O4'-C1'-N1	6.20	113.16	108.20
35	BA	1444	U	O4'-C4'-C3'	6.20	111.06	106.10
35	BA	1525	G	C8-N9-C4	-6.20	103.92	106.40
2	AB	240	C	C2-N3-C4	6.20	123.00	119.90
2	AB	251	A	C6-N1-C2	-6.20	114.88	118.60
2	AB	1231	U	C2-N3-C4	-6.20	123.28	127.00
2	AB	1236	G	C4-C5-C6	6.20	122.52	118.80
35	BA	475	C	N1-C2-N3	-6.20	114.86	119.20
35	BA	836	G	C6-C5-N7	-6.20	126.68	130.40
37	BC	31	G	C4-C5-C6	6.20	122.52	118.80
2	AB	307	G	C6-N1-C2	6.20	128.82	125.10
2	AB	331	C	C2-N3-C4	6.20	123.00	119.90
2	AB	482	A	C8-N9-C4	-6.20	103.32	105.80
2	AB	863	A	C6-N1-C2	6.20	122.32	118.60
2	AB	985	C	N1-C2-O2	6.20	122.62	118.90
2	AB	1243	C	C5-C6-N1	6.20	124.10	121.00
2	AB	2343	U	N3-C4-O4	6.20	123.74	119.40
2	AB	2844	G	N3-C4-N9	6.20	129.72	126.00
2	AB	2880	C	C5'-C4'-C3'	-6.20	106.09	116.00
8	AH	57	TYR	CB-CG-CD1	6.20	124.72	121.00
35	BA	488	C	N1-C2-O2	6.20	122.62	118.90
35	BA	588	G	O4'-C1'-C2'	6.20	113.18	107.60
35	BA	1068	G	N3-C2-N2	-6.20	115.56	119.90
35	BA	1110	A	N7-C8-N9	6.20	116.90	113.80
35	BA	1122	U	C6-N1-C2	-6.20	117.28	121.00
35	BA	1442	G	N3-C4-C5	-6.20	125.50	128.60
47	BM	10	ARG	CD-NE-CZ	6.20	132.27	123.60
2	AB	119	A	O4'-C1'-N9	-6.19	103.25	108.20
2	AB	178	G	N7-C8-N9	6.19	116.20	113.10
2	AB	1284	A	C4'-C3'-C2'	-6.19	96.41	102.60
6	AF	7	ASP	CB-CG-OD2	-6.19	112.72	118.30
35	BA	17	U	C6-N1-C2	-6.19	117.28	121.00
35	BA	855	U	N3-C4-C5	-6.19	110.88	114.60
35	BA	1315	U	C5-C4-O4	-6.19	122.18	125.90
2	AB	262	A	O4'-C1'-C2'	6.19	113.17	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	911	A	C6-C5-N7	6.19	136.63	132.30
2	AB	1296	G	C3'-C2'-C1'	-6.19	96.55	101.50
2	AB	2535	G	C8-N9-C1'	6.19	135.05	127.00
2	AB	2778	A	C2-N3-C4	6.19	113.70	110.60
11	AK	122	GLU	N-CA-CB	-6.19	99.45	110.60
35	BA	562	U	C6-N1-C2	-6.19	117.28	121.00
35	BA	1175	G	N1-C2-N3	-6.19	120.18	123.90
35	BA	1287	A	N3-C4-C5	-6.19	122.47	126.80
35	BA	1435	G	O4'-C1'-N9	6.19	113.15	108.20
44	BJ	64	TYR	CB-CG-CD2	-6.19	117.28	121.00
1	AA	12	C	N1-C2-N3	-6.19	114.87	119.20
2	AB	549	G	C6-C5-N7	6.19	134.11	130.40
2	AB	1203	U	C3'-C2'-C1'	6.19	106.45	101.50
2	AB	1843	C	N1-C2-N3	-6.19	114.87	119.20
2	AB	2010	G	C1'-O4'-C4'	-6.19	104.95	109.90
2	AB	2334	U	C1'-O4'-C4'	6.19	114.85	109.90
13	AM	115	ILE	CA-CB-CG1	6.19	122.76	111.00
35	BA	74	A	C5-N7-C8	-6.19	100.80	103.90
35	BA	529	G	C5-N7-C8	-6.19	101.20	104.30
35	BA	788	U	C5'-C4'-O4'	6.19	116.53	109.10
35	BA	901	A	N1-C6-N6	6.19	122.31	118.60
35	BA	1017	U	C5'-C4'-O4'	6.19	116.53	109.10
35	BA	1118	U	C5-C6-N1	-6.19	119.61	122.70
35	BA	1291	U	C1'-O4'-C4'	6.19	114.85	109.90
2	AB	404	A	C6-C5-N7	6.19	136.63	132.30
2	AB	422	A	C4-C5-C6	-6.19	113.91	117.00
2	AB	1857	G	C2-N3-C4	6.19	114.99	111.90
2	AB	2697	G	C2-N3-C4	6.19	114.99	111.90
35	BA	456	A	C5-C6-N1	6.19	120.79	117.70
35	BA	1454	G	N7-C8-N9	-6.19	110.00	113.10
36	BB	31	U	C5-C6-N1	-6.19	119.61	122.70
37	BC	14	A	N9-C4-C5	6.19	108.28	105.80
2	AB	349	U	C4-C5-C6	6.19	123.41	119.70
2	AB	546	U	N3-C4-C5	6.19	118.31	114.60
2	AB	625	G	C1'-O4'-C4'	-6.19	104.95	109.90
2	AB	2518	A	C2-N3-C4	6.19	113.69	110.60
2	AB	2751	G	C8-N9-C4	-6.19	103.92	106.40
35	BA	14	U	C5-C4-O4	6.19	129.61	125.90
35	BA	408	A	C6-C5-N7	-6.19	127.97	132.30
35	BA	491	G	C1'-O4'-C4'	-6.19	104.95	109.90
35	BA	1475	G	C2-N3-C4	6.19	114.99	111.90
36	BB	26	U	C1'-O4'-C4'	6.19	114.85	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	938	G	N9-C1'-C2'	-6.19	105.19	112.00
2	AB	1597	A	N9-C4-C5	-6.19	103.33	105.80
35	BA	1230	C	O4'-C1'-N1	6.19	113.15	108.20
36	BB	26	U	N1-C2-N3	6.19	118.61	114.90
2	AB	127	A	N1-C6-N6	-6.18	114.89	118.60
2	AB	185	G	C4-C5-C6	6.18	122.51	118.80
2	AB	300	A	C8-N9-C4	-6.18	103.33	105.80
2	AB	802	A	C1'-O4'-C4'	6.18	114.85	109.90
2	AB	1253	A	C5-N7-C8	6.18	106.99	103.90
2	AB	1389	G	N3-C4-N9	6.18	129.71	126.00
2	AB	2320	U	N3-C4-C5	-6.18	110.89	114.60
18	AR	61	ARG	NE-CZ-NH1	-6.18	117.21	120.30
35	BA	724	G	C5'-C4'-C3'	-6.18	106.10	116.00
35	BA	1066	C	C5-C4-N4	6.18	124.53	120.20
1	AA	9	G	N1-C6-O6	6.18	123.61	119.90
1	AA	67	G	N3-C2-N2	-6.18	115.57	119.90
1	AA	74	U	O4'-C1'-N1	6.18	113.15	108.20
2	AB	54	G	N1-C2-N3	-6.18	120.19	123.90
2	AB	1137	G	N9-C1'-C2'	-6.18	105.20	112.00
2	AB	1379	U	C5'-C4'-O4'	6.18	116.52	109.10
2	AB	1398	C	N1-C2-N3	-6.18	114.87	119.20
2	AB	1651	G	C5'-C4'-C3'	-6.18	106.11	116.00
2	AB	1966	A	N1-C2-N3	-6.18	126.21	129.30
2	AB	2597	G	C4'-C3'-C2'	-6.18	96.42	102.60
2	AB	2819	G	C4-C5-N7	-6.18	108.33	110.80
35	BA	14	U	N1-C2-O2	6.18	127.13	122.80
35	BA	321	A	C4-C5-C6	-6.18	113.91	117.00
35	BA	452	A	N1-C2-N3	-6.18	126.21	129.30
35	BA	790	A	C6-N1-C2	-6.18	114.89	118.60
35	BA	1096	C	C6-N1-C2	-6.18	117.83	120.30
35	BA	1162	C	O4'-C1'-N1	6.18	113.14	108.20
35	BA	1165	U	C5-C6-N1	6.18	125.79	122.70
1	AA	90	C	N1-C1'-C2'	-6.18	105.20	112.00
2	AB	532	A	O4'-C1'-C2'	-6.18	99.62	105.80
2	AB	834	G	C6-N1-C2	-6.18	121.39	125.10
2	AB	1403	A	C5-C6-N6	-6.18	118.75	123.70
2	AB	1588	G	C4-C5-C6	6.18	122.51	118.80
2	AB	1910	G	N1-C6-O6	6.18	123.61	119.90
2	AB	2566	A	C5-C6-N1	6.18	120.79	117.70
2	AB	2596	U	C5'-C4'-O4'	6.18	116.52	109.10
2	AB	2791	G	N9-C4-C5	6.18	107.87	105.40
35	BA	406	G	C5-C6-N1	6.18	114.59	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	353	C	N3-C4-N4	6.18	122.33	118.00
2	AB	735	A	O4'-C1'-N9	6.18	113.14	108.20
2	AB	764	A	N1-C6-N6	6.18	122.31	118.60
2	AB	864	G	P-O3'-C3'	6.18	127.12	119.70
2	AB	986	C	P-O3'-C3'	6.18	127.11	119.70
2	AB	1822	C	N1-C2-N3	-6.18	114.87	119.20
2	AB	2135	A	C5-C6-N6	-6.18	118.76	123.70
2	AB	2177	C	N3-C4-N4	-6.18	113.67	118.00
2	AB	2346	A	C5-N7-C8	6.18	106.99	103.90
2	AB	2399	G	N9-C4-C5	6.18	107.87	105.40
2	AB	2717	C	N3-C4-N4	6.18	122.33	118.00
2	AB	2857	G	P-O3'-C3'	6.18	127.11	119.70
6	AF	49	ARG	NE-CZ-NH1	-6.18	117.21	120.30
35	BA	203	G	N1-C6-O6	6.18	123.61	119.90
35	BA	452	A	C4'-C3'-C2'	-6.18	96.42	102.60
35	BA	532	A	P-O3'-C3'	6.18	127.11	119.70
2	AB	442	G	N1-C6-O6	-6.18	116.19	119.90
2	AB	691	C	N3-C4-C5	-6.18	119.43	121.90
35	BA	4	U	N1-C2-O2	6.18	127.12	122.80
35	BA	739	C	O3'-P-O5'	6.18	115.74	104.00
40	BF	74	TYR	CG-CD1-CE1	-6.18	116.36	121.30
2	AB	61	C	N3-C4-C5	6.18	124.37	121.90
2	AB	724	U	O4'-C1'-N1	6.18	113.14	108.20
2	AB	1568	G	N1-C6-O6	6.18	123.61	119.90
2	AB	1839	G	C6-C5-N7	6.18	134.11	130.40
2	AB	1968	G	C5'-C4'-C3'	-6.18	106.12	116.00
2	AB	2245	U	C6-N1-C2	-6.18	117.29	121.00
2	AB	2469	A	C2-N3-C4	6.18	113.69	110.60
22	AV	11	LEU	O-C-N	-6.18	112.82	122.70
35	BA	874	G	N9-C4-C5	6.18	107.87	105.40
35	BA	1460	C	C5-C4-N4	6.18	124.52	120.20
35	BA	1506	U	N3-C2-O2	-6.18	117.88	122.20
1	AA	10	G	C1'-O4'-C4'	-6.17	104.96	109.90
2	AB	291	G	C5-C6-N1	-6.17	108.41	111.50
2	AB	459	U	C6-N1-C2	-6.17	117.30	121.00
2	AB	788	A	C5'-C4'-O4'	6.17	116.51	109.10
2	AB	810	U	N1-C2-N3	6.17	118.61	114.90
2	AB	1724	G	N3-C4-C5	-6.17	125.51	128.60
19	AS	46	TYR	CB-CG-CD2	-6.17	117.30	121.00
35	BA	730	G	C3'-C2'-C1'	6.17	106.44	101.50
35	BA	964	A	N7-C8-N9	-6.17	110.71	113.80
35	BA	1142	G	C2-N3-C4	-6.17	108.81	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1419	G	N3-C2-N2	6.17	124.22	119.90
2	AB	879	G	C4'-C3'-C2'	-6.17	96.43	102.60
2	AB	1693	U	C5-C6-N1	-6.17	119.61	122.70
35	BA	230	G	C2-N3-C4	6.17	114.99	111.90
1	AA	80	U	O4'-C1'-N1	6.17	113.14	108.20
2	AB	444	C	C6-N1-C2	-6.17	117.83	120.30
2	AB	657	U	C3'-C2'-C1'	6.17	106.44	101.50
2	AB	804	A	C4-C5-N7	6.17	113.79	110.70
2	AB	939	G	C5-C6-N1	6.17	114.59	111.50
2	AB	1477	A	N3-C4-C5	-6.17	122.48	126.80
2	AB	1689	A	N9-C4-C5	-6.17	103.33	105.80
2	AB	1903	G	N3-C4-C5	-6.17	125.51	128.60
21	AU	35	ILE	CB-CA-C	6.17	123.94	111.60
35	BA	606	G	N3-C4-N9	-6.17	122.30	126.00
35	BA	765	G	C1'-O4'-C4'	-6.17	104.96	109.90
2	AB	11	C	C4'-C3'-C2'	-6.17	96.43	102.60
2	AB	1782	U	N3-C2-O2	-6.17	117.88	122.20
35	BA	1514	G	C8-N9-C4	-6.17	103.93	106.40
37	BC	44	A	C4-C5-N7	6.17	113.78	110.70
38	BD	73	ARG	NE-CZ-NH2	-6.17	117.22	120.30
2	AB	537	G	O4'-C1'-N9	6.17	113.14	108.20
2	AB	1237	A	C1'-O4'-C4'	6.17	114.83	109.90
2	AB	1682	G	O4'-C4'-C3'	6.17	111.03	106.10
2	AB	1813	G	N3-C4-C5	-6.17	125.52	128.60
2	AB	2308	G	C4-C5-C6	6.17	122.50	118.80
35	BA	194	C	N3-C4-C5	6.17	124.37	121.90
35	BA	496	A	C8-N9-C4	-6.17	103.33	105.80
35	BA	650	G	N3-C4-C5	-6.17	125.52	128.60
35	BA	949	A	C5-C6-N1	6.17	120.78	117.70
35	BA	987	G	C5'-C4'-O4'	6.17	116.50	109.10
35	BA	1314	C	C3'-C2'-C1'	6.17	106.44	101.50
43	BI	84	TYR	CG-CD2-CE2	-6.17	116.36	121.30
45	BK	17	ARG	NE-CZ-NH2	-6.17	117.22	120.30
1	AA	41	G	O4'-C1'-C2'	-6.17	99.63	105.80
2	AB	30	G	C6-N1-C2	-6.17	121.40	125.10
2	AB	120	U	P-O3'-C3'	6.17	127.10	119.70
2	AB	512	G	O4'-C1'-N9	6.17	113.13	108.20
2	AB	574	A	C3'-C2'-C1'	6.17	106.43	101.50
2	AB	953	G	C2-N3-C4	6.17	114.98	111.90
2	AB	966	G	O4'-C1'-N9	6.17	113.13	108.20
2	AB	977	G	C5-C6-O6	-6.17	124.90	128.60
2	AB	1302	A	N1-C2-N3	-6.17	126.22	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1886	U	N1-C2-O2	-6.17	118.48	122.80
2	AB	2246	G	C6-C5-N7	-6.17	126.70	130.40
2	AB	2365	G	C4'-C3'-C2'	-6.17	96.43	102.60
2	AB	2658	C	N3-C2-O2	-6.17	117.58	121.90
35	BA	72	A	O4'-C1'-N9	6.17	113.13	108.20
35	BA	127	G	O4'-C1'-C2'	-6.17	99.63	105.80
35	BA	347	G	C5-C6-N1	6.17	114.58	111.50
35	BA	723	U	C1'-O4'-C4'	-6.17	104.97	109.90
49	BO	10	ASP	CB-CG-OD1	6.17	123.85	118.30
2	AB	771	G	C5-N7-C8	-6.17	101.22	104.30
2	AB	1196	C	C2-N3-C4	6.17	122.98	119.90
2	AB	1542	U	N3-C4-C5	6.17	118.30	114.60
2	AB	1748	C	C2-N3-C4	-6.17	116.82	119.90
35	BA	1029	U	O4'-C1'-N1	6.17	113.13	108.20
1	AA	92	C	C5'-C4'-O4'	6.16	116.50	109.10
2	AB	272	A	P-O3'-C3'	6.16	127.10	119.70
2	AB	477	A	O4'-C4'-C3'	6.16	111.03	106.10
2	AB	547	A	O4'-C1'-C2'	6.16	113.15	107.60
2	AB	629	G	N3-C4-C5	-6.16	125.52	128.60
2	AB	656	G	C8-N9-C4	-6.16	103.94	106.40
2	AB	1019	U	N1-C2-N3	6.16	118.60	114.90
2	AB	1407	G	N7-C8-N9	6.16	116.18	113.10
2	AB	1456	G	C5-C6-O6	-6.16	124.90	128.60
2	AB	2661	G	C2-N3-C4	6.16	114.98	111.90
2	AB	2729	G	C5-C6-O6	6.16	132.30	128.60
35	BA	96	U	C4-C5-C6	6.16	123.40	119.70
35	BA	126	G	C6-N1-C2	-6.16	121.40	125.10
35	BA	793	U	P-O3'-C3'	6.16	127.10	119.70
35	BA	1040	U	O4'-C1'-N1	6.16	113.13	108.20
2	AB	717	C	C4-C5-C6	6.16	120.48	117.40
2	AB	2325	G	C1'-O4'-C4'	-6.16	104.97	109.90
2	AB	2775	G	N9-C4-C5	6.16	107.86	105.40
35	BA	1104	G	N3-C4-N9	6.16	129.70	126.00
2	AB	212	G	N7-C8-N9	6.16	116.18	113.10
2	AB	789	A	C1'-O4'-C4'	6.16	114.83	109.90
2	AB	833	A	C5-N7-C8	-6.16	100.82	103.90
2	AB	1946	U	C4-C5-C6	6.16	123.40	119.70
2	AB	2094	A	N7-C8-N9	6.16	116.88	113.80
2	AB	2230	G	C5-C6-O6	-6.16	124.90	128.60
2	AB	2541	A	P-O3'-C3'	6.16	127.09	119.70
35	BA	26	A	N1-C2-N3	-6.16	126.22	129.30
37	BC	58	A	C4-C5-N7	-6.16	107.62	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	BF	172	VAL	CA-CB-CG1	6.16	120.14	110.90
43	BI	86	VAL	CA-CB-CG1	6.16	120.14	110.90
1	AA	98	G	C5-C6-N1	6.16	114.58	111.50
1	AA	107	G	C4'-C3'-C2'	6.16	108.76	102.60
2	AB	48	G	N1-C2-N3	6.16	127.59	123.90
2	AB	181	A	C2-N3-C4	-6.16	107.52	110.60
2	AB	699	A	N1-C2-N3	6.16	132.38	129.30
2	AB	1650	A	C5-N7-C8	-6.16	100.82	103.90
35	BA	948	C	C5-C6-N1	-6.16	117.92	121.00
2	AB	1122	G	N9-C1'-C2'	-6.16	105.23	112.00
2	AB	1262	A	C5-C6-N1	6.16	120.78	117.70
2	AB	2750	A	O4'-C4'-C3'	6.16	111.03	106.10
35	BA	329	A	C6-C5-N7	6.16	136.61	132.30
35	BA	513	C	C6-N1-C2	-6.16	117.84	120.30
2	AB	444	C	O4'-C1'-N1	6.16	113.12	108.20
2	AB	1374	G	N1-C6-O6	-6.16	116.21	119.90
2	AB	1801	A	N3-C4-N9	-6.16	122.47	127.40
2	AB	2238	G	C4-C5-C6	6.16	122.49	118.80
35	BA	92	U	C4-C5-C6	6.16	123.39	119.70
35	BA	610	U	C6-N1-C2	-6.16	117.31	121.00
35	BA	1066	C	C2-N3-C4	6.16	122.98	119.90
35	BA	1112	C	C5-C6-N1	6.16	124.08	121.00
2	AB	405	U	C3'-C2'-C1'	6.15	106.42	101.50
2	AB	621	A	N3-C4-N9	-6.15	122.48	127.40
2	AB	1112	G	N9-C4-C5	6.15	107.86	105.40
2	AB	1979	U	C5'-C4'-C3'	-6.15	106.15	116.00
8	AH	154	GLU	CB-CA-C	6.15	122.71	110.40
35	BA	7	A	C5-C6-N1	6.15	120.78	117.70
35	BA	63	C	C6-N1-C1'	-6.15	113.42	120.80
35	BA	817	C	N1-C2-O2	6.15	122.59	118.90
35	BA	1284	C	N3-C4-C5	6.15	124.36	121.90
35	BA	1349	A	C6-C5-N7	6.15	136.61	132.30
35	BA	1356	G	N7-C8-N9	6.15	116.18	113.10
2	AB	87	U	C5-C4-O4	-6.15	122.21	125.90
2	AB	1066	U	N3-C4-C5	6.15	118.29	114.60
2	AB	2008	C	C4'-C3'-C2'	-6.15	96.45	102.60
2	AB	2079	U	C4-C5-C6	6.15	123.39	119.70
2	AB	2091	C	C1'-O4'-C4'	-6.15	104.98	109.90
2	AB	2202	U	P-O3'-C3'	6.15	127.08	119.70
10	AJ	137	ARG	NE-CZ-NH1	6.15	123.38	120.30
35	BA	495	A	C3'-C2'-C1'	-6.15	96.58	101.50
35	BA	1106	G	O4'-C1'-N9	6.15	113.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1477	U	O4'-C1'-N1	6.15	113.12	108.20
37	BC	31	G	N9-C1'-C2'	-6.15	105.23	112.00
2	AB	7	G	O4'-C1'-N9	6.15	113.12	108.20
2	AB	533	G	C8-N9-C1'	6.15	135.00	127.00
2	AB	574	A	C5-C6-N1	-6.15	114.62	117.70
2	AB	785	G	P-O3'-C3'	6.15	127.08	119.70
2	AB	1157	G	C5-N7-C8	-6.15	101.22	104.30
2	AB	1530	G	C5-N7-C8	-6.15	101.22	104.30
2	AB	1671	U	O5'-P-OP2	-6.15	100.16	105.70
2	AB	2005	A	N3-C4-N9	6.15	132.32	127.40
2	AB	2338	C	O4'-C4'-C3'	6.15	111.02	106.10
35	BA	146	G	N3-C4-C5	-6.15	125.53	128.60
35	BA	212	G	C4'-C3'-C2'	-6.15	96.45	102.60
35	BA	494	G	O4'-C1'-N9	-6.15	103.28	108.20
35	BA	543	U	C6-N1-C2	-6.15	117.31	121.00
35	BA	1418	A	N1-C6-N6	6.15	122.29	118.60
1	AA	43	C	C3'-C2'-C1'	6.15	106.42	101.50
2	AB	723	C	N1-C2-N3	6.15	123.50	119.20
2	AB	1508	A	N3-C4-C5	-6.15	122.50	126.80
2	AB	1774	C	C6-N1-C2	-6.15	117.84	120.30
2	AB	1788	C	C5'-C4'-C3'	-6.15	106.16	116.00
2	AB	1877	A	N1-C2-N3	6.15	132.38	129.30
2	AB	2586	U	C1'-O4'-C4'	-6.15	104.98	109.90
2	AB	2718	G	O4'-C1'-N9	6.15	113.12	108.20
2	AB	2829	A	N1-C2-N3	6.15	132.38	129.30
35	BA	328	C	O4'-C1'-C2'	-6.15	99.65	105.80
35	BA	1272	G	C8-N9-C4	-6.15	103.94	106.40
35	BA	1326	U	C4-C5-C6	6.15	123.39	119.70
1	AA	97	C	C4'-C3'-C2'	-6.15	96.45	102.60
2	AB	371	A	N7-C8-N9	6.15	116.87	113.80
2	AB	1033	U	C5-C6-N1	-6.15	119.63	122.70
2	AB	1302	A	C8-N9-C4	-6.15	103.34	105.80
2	AB	1629	U	N1-C2-O2	6.15	127.10	122.80
2	AB	2087	G	C4-C5-C6	-6.15	115.11	118.80
2	AB	2136	G	N1-C2-N3	-6.15	120.21	123.90
2	AB	2325	G	N7-C8-N9	6.15	116.17	113.10
35	BA	670	G	C5'-C4'-O4'	6.15	116.48	109.10
35	BA	841	C	N3-C4-C5	6.15	124.36	121.90
35	BA	1154	G	N1-C2-N3	-6.15	120.21	123.90
35	BA	1168	U	O5'-P-OP2	-6.15	100.17	105.70
35	BA	1221	G	C6-C5-N7	6.15	134.09	130.40
35	BA	1513	A	N1-C2-N3	-6.15	126.23	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	83	G	C3'-C2'-C1'	-6.15	96.58	101.50
2	AB	258	G	C4'-C3'-C2'	-6.15	96.45	102.60
2	AB	1109	C	N3-C4-N4	6.15	122.30	118.00
2	AB	1127	A	C2-N3-C4	6.15	113.67	110.60
2	AB	2255	G	N3-C4-N9	-6.15	122.31	126.00
2	AB	2650	U	C5'-C4'-O4'	6.15	116.48	109.10
35	BA	579	A	N3-C4-C5	-6.15	122.50	126.80
35	BA	791	G	N1-C6-O6	-6.15	116.21	119.90
35	BA	1258	G	C3'-C2'-C1'	-6.15	96.58	101.50
2	AB	466	A	C4-C5-N7	-6.14	107.63	110.70
2	AB	476	G	C5'-C4'-C3'	6.14	125.83	116.00
2	AB	780	G	O4'-C1'-N9	6.14	113.12	108.20
2	AB	789	A	O4'-C1'-C2'	-6.14	99.66	105.80
2	AB	1043	C	P-O3'-C3'	6.14	127.07	119.70
2	AB	1103	A	C2-N3-C4	6.14	113.67	110.60
2	AB	1103	A	N9-C4-C5	6.14	108.26	105.80
2	AB	1134	A	C5-N7-C8	-6.14	100.83	103.90
2	AB	1439	A	N3-C4-C5	-6.14	122.50	126.80
2	AB	2280	G	C5-N7-C8	6.14	107.37	104.30
2	AB	2451	A	C8-N9-C4	-6.14	103.34	105.80
2	AB	2581	G	O4'-C1'-N9	6.14	113.12	108.20
2	AB	2731	G	N3-C4-N9	6.14	129.69	126.00
35	BA	39	G	N3-C4-N9	6.14	129.69	126.00
35	BA	275	G	C6-C5-N7	-6.14	126.71	130.40
35	BA	793	U	C6-N1-C1'	-6.14	112.60	121.20
35	BA	886	G	C1'-O4'-C4'	6.14	114.81	109.90
35	BA	1072	G	C5-C6-N1	6.14	114.57	111.50
35	BA	1292	G	O4'-C1'-N9	6.14	113.12	108.20
36	BB	57	C	C5-C6-N1	6.14	124.07	121.00
53	BS	26	ARG	NE-CZ-NH1	6.14	123.37	120.30
1	AA	22	U	N1-C1'-C2'	-6.14	105.24	112.00
2	AB	31	C	C2-N3-C4	-6.14	116.83	119.90
2	AB	94	A	N7-C8-N9	6.14	116.87	113.80
2	AB	124	G	N9-C1'-C2'	-6.14	105.24	112.00
2	AB	210	C	O4'-C1'-N1	6.14	113.11	108.20
2	AB	375	G	N1-C2-N2	6.14	121.73	116.20
2	AB	377	G	N1-C6-O6	-6.14	116.22	119.90
2	AB	738	G	N3-C4-N9	6.14	129.69	126.00
2	AB	1126	A	N3-C4-C5	-6.14	122.50	126.80
2	AB	1446	C	C1'-O4'-C4'	6.14	114.81	109.90
2	AB	1647	U	N1-C2-O2	6.14	127.10	122.80
2	AB	2368	C	C1'-O4'-C4'	6.14	114.81	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2446	G	N1-C6-O6	-6.14	116.21	119.90
2	AB	2561	U	C5'-C4'-O4'	6.14	116.47	109.10
2	AB	2887	A	O4'-C4'-C3'	-6.14	97.86	104.00
35	BA	98	A	C4'-C3'-C2'	-6.14	96.46	102.60
35	BA	476	U	N3-C2-O2	-6.14	117.90	122.20
35	BA	722	G	C5-C6-N1	6.14	114.57	111.50
35	BA	750	C	C5'-C4'-C3'	-6.14	106.17	116.00
35	BA	786	G	N1-C6-O6	-6.14	116.22	119.90
35	BA	924	C	C1'-O4'-C4'	-6.14	104.99	109.90
35	BA	1070	U	O4'-C4'-C3'	6.14	111.02	106.10
2	AB	1031	G	O4'-C1'-C2'	6.14	113.13	107.60
2	AB	1837	C	C4-C5-C6	-6.14	114.33	117.40
2	AB	235	U	C5-C4-O4	-6.14	122.22	125.90
2	AB	866	A	N7-C8-N9	-6.14	110.73	113.80
2	AB	1171	G	C5-C6-O6	6.14	132.28	128.60
2	AB	1916	A	N1-C2-N3	6.14	132.37	129.30
2	AB	2108	A	C5-C6-N1	6.14	120.77	117.70
2	AB	2191	A	C5'-C4'-O4'	6.14	116.47	109.10
2	AB	2530	A	C5-N7-C8	-6.14	100.83	103.90
35	BA	105	G	N1-C6-O6	6.14	123.58	119.90
35	BA	432	A	C5-N7-C8	6.14	106.97	103.90
35	BA	588	G	C2-N3-C4	6.14	114.97	111.90
35	BA	886	G	N3-C2-N2	6.14	124.20	119.90
35	BA	1074	G	C6-C5-N7	-6.14	126.72	130.40
37	BC	71	G	C6-N1-C2	-6.14	121.42	125.10
1	AA	46	A	N1-C6-N6	6.14	122.28	118.60
2	AB	166	U	C4-C5-C6	6.14	123.38	119.70
2	AB	960	A	C6-N1-C2	6.14	122.28	118.60
2	AB	1185	G	N9-C4-C5	6.14	107.86	105.40
2	AB	1360	G	C5-C6-O6	6.14	132.28	128.60
2	AB	1492	G	C6-N1-C2	-6.14	121.42	125.10
2	AB	1782	U	C5'-C4'-C3'	-6.14	106.18	116.00
2	AB	2530	A	N1-C2-N3	6.14	132.37	129.30
4	AD	269	ARG	N-CA-CB	-6.14	99.55	110.60
35	BA	135	C	C1'-O4'-C4'	-6.14	104.99	109.90
35	BA	414	A	C8-N9-C4	-6.14	103.34	105.80
35	BA	1480	A	C5'-C4'-C3'	6.14	125.82	116.00
2	AB	706	A	C5-N7-C8	-6.14	100.83	103.90
2	AB	734	A	C4-C5-N7	-6.14	107.63	110.70
2	AB	1099	G	C5-N7-C8	-6.14	101.23	104.30
2	AB	2059	A	C6-N1-C2	6.14	122.28	118.60
2	AB	2560	A	N9-C4-C5	6.14	108.25	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2870	C	N3-C4-N4	-6.14	113.70	118.00
24	AX	11	GLU	OE1-CD-OE2	6.14	130.66	123.30
35	BA	979	C	C4'-C3'-C2'	-6.14	96.46	102.60
35	BA	1145	A	P-O3'-C3'	6.14	127.06	119.70
35	BA	1492	A	N7-C8-N9	6.14	116.87	113.80
2	AB	48	G	C4-C5-C6	6.13	122.48	118.80
2	AB	153	U	N3-C4-O4	-6.13	115.11	119.40
2	AB	662	G	C6-C5-N7	-6.13	126.72	130.40
2	AB	798	G	C5'-C4'-C3'	-6.13	106.18	116.00
2	AB	800	A	O4'-C1'-N9	6.13	113.11	108.20
2	AB	2161	C	C2-N3-C4	-6.13	116.83	119.90
35	BA	361	G	C5-C6-N1	6.13	114.57	111.50
35	BA	789	U	O4'-C1'-C2'	6.13	113.12	107.60
35	BA	1217	C	N1-C2-N3	-6.13	114.91	119.20
35	BA	1535	C	C2-N3-C4	6.13	122.97	119.90
37	BC	69	C	C5-C4-N4	-6.13	115.91	120.20
2	AB	226	A	C5-C6-N6	-6.13	118.79	123.70
2	AB	1215	G	C4-C5-N7	-6.13	108.35	110.80
2	AB	1382	G	N3-C4-N9	6.13	129.68	126.00
2	AB	1785	A	C4-C5-N7	-6.13	107.63	110.70
2	AB	1912	A	N1-C6-N6	-6.13	114.92	118.60
35	BA	318	G	N1-C2-N3	6.13	127.58	123.90
35	BA	928	G	C4'-C3'-C2'	-6.13	96.47	102.60
36	BB	38	G	C5-C6-N1	6.13	114.57	111.50
2	AB	1563	U	C3'-C2'-C1'	6.13	106.41	101.50
2	AB	1736	U	C4'-C3'-C2'	-6.13	96.47	102.60
2	AB	1754	A	O4'-C1'-N9	6.13	113.11	108.20
2	AB	2124	G	C8-N9-C4	-6.13	103.95	106.40
2	AB	2249	U	C4-C5-C6	6.13	123.38	119.70
2	AB	2770	G	C5-C6-O6	6.13	132.28	128.60
10	AJ	118	PRO	N-CD-CG	6.13	112.40	103.20
35	BA	26	A	C4-C5-C6	-6.13	113.93	117.00
35	BA	805	C	N1-C2-O2	6.13	122.58	118.90
35	BA	1010	U	N3-C4-C5	-6.13	110.92	114.60
35	BA	1420	U	N3-C4-O4	6.13	123.69	119.40
35	BA	1435	G	C4-N9-C1'	-6.13	118.53	126.50
37	BC	32	G	N3-C4-C5	-6.13	125.53	128.60
2	AB	1438	U	C3'-C2'-C1'	6.13	106.40	101.50
2	AB	1627	G	N3-C2-N2	6.13	124.19	119.90
2	AB	2744	G	C1'-O4'-C4'	6.13	114.80	109.90
6	AF	153	LEU	CB-CG-CD1	6.13	121.42	111.00
35	BA	307	C	C5'-C4'-O4'	6.13	116.46	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1332	A	C5-C6-N6	-6.13	118.80	123.70
35	BA	1513	A	C4'-C3'-C2'	-6.13	96.47	102.60
1	AA	97	C	C5'-C4'-O4'	6.13	116.45	109.10
2	AB	89	A	C8-N9-C4	6.13	108.25	105.80
2	AB	228	C	C4-C5-C6	6.13	120.46	117.40
2	AB	1624	U	N3-C4-C5	-6.13	110.92	114.60
2	AB	2330	G	N1-C2-N3	6.13	127.58	123.90
2	AB	2425	A	N7-C8-N9	6.13	116.86	113.80
2	AB	2465	C	C3'-C2'-C1'	-6.13	96.60	101.50
35	BA	97	G	P-O3'-C3'	6.13	127.06	119.70
35	BA	1033	G	N1-C2-N3	-6.13	120.22	123.90
35	BA	1379	G	N3-C2-N2	-6.13	115.61	119.90
35	BA	1499	A	N7-C8-N9	6.13	116.86	113.80
36	BB	40	G	N9-C4-C5	-6.13	102.95	105.40
36	BB	45	G	C4'-C3'-C2'	-6.13	96.47	102.60
2	AB	670	A	C5'-C4'-O4'	6.13	116.45	109.10
2	AB	1429	G	N3-C4-C5	-6.13	125.54	128.60
2	AB	1625	C	N1-C2-O2	6.13	122.58	118.90
2	AB	1802	A	C5'-C4'-O4'	6.13	116.45	109.10
2	AB	1913	A	O4'-C4'-C3'	6.13	111.00	106.10
2	AB	2248	C	C1'-O4'-C4'	6.13	114.80	109.90
2	AB	2336	A	N1-C2-N3	-6.13	126.24	129.30
35	BA	297	G	C4-N9-C1'	-6.13	118.53	126.50
35	BA	565	U	P-O3'-C3'	6.13	127.05	119.70
36	BB	47	C	P-O3'-C3'	6.13	127.05	119.70
37	BC	4	G	N3-C2-N2	-6.13	115.61	119.90
2	AB	1460	U	N3-C4-C5	-6.12	110.92	114.60
2	AB	2008	C	O4'-C1'-C2'	-6.12	99.67	105.80
35	BA	810	C	N3-C2-O2	-6.12	117.61	121.90
35	BA	1223	C	P-O3'-C3'	6.12	127.05	119.70
1	AA	64	G	C5-C6-N1	-6.12	108.44	111.50
2	AB	445	C	O4'-C4'-C3'	6.12	111.00	106.10
2	AB	601	C	N1-C2-O2	6.12	122.57	118.90
2	AB	1059	G	N1-C2-N3	-6.12	120.22	123.90
2	AB	1357	C	C1'-O4'-C4'	6.12	114.80	109.90
2	AB	1512	C	N1-C2-O2	6.12	122.57	118.90
2	AB	1613	G	C1'-O4'-C4'	-6.12	105.00	109.90
2	AB	1691	C	C2-N3-C4	-6.12	116.84	119.90
2	AB	2618	G	C5-N7-C8	-6.12	101.24	104.30
2	AB	2643	G	P-O3'-C3'	6.12	127.05	119.70
2	AB	2685	G	C3'-C2'-C1'	-6.12	96.60	101.50
4	AD	268	ARG	NE-CZ-NH2	-6.12	117.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	AE	175	LEU	CB-CG-CD1	-6.12	100.59	111.00
35	BA	577	G	N7-C8-N9	6.12	116.16	113.10
2	AB	504	A	C5'-C4'-O4'	6.12	116.45	109.10
2	AB	914	G	C2-N3-C4	6.12	114.96	111.90
2	AB	1561	C	C5-C6-N1	6.12	124.06	121.00
2	AB	2356	U	O5'-P-OP2	-6.12	100.19	105.70
35	BA	114	U	N3-C2-O2	-6.12	117.92	122.20
35	BA	355	C	C2-N3-C4	6.12	122.96	119.90
35	BA	398	U	C1'-O4'-C4'	6.12	114.80	109.90
35	BA	517	G	N1-C6-O6	-6.12	116.23	119.90
35	BA	641	U	C5-C6-N1	-6.12	119.64	122.70
35	BA	1098	C	N3-C2-O2	-6.12	117.61	121.90
35	BA	1306	A	N9-C4-C5	-6.12	103.35	105.80
2	AB	1543	G	C8-N9-C4	-6.12	103.95	106.40
2	AB	1723	G	C5-N7-C8	6.12	107.36	104.30
2	AB	1752	C	C5-C4-N4	-6.12	115.92	120.20
12	AL	98	GLU	CA-CB-CG	6.12	126.86	113.40
24	AX	21	ARG	NE-CZ-NH1	-6.12	117.24	120.30
35	BA	179	A	O4'-C1'-N9	6.12	113.10	108.20
35	BA	690	G	P-O5'-C5'	6.12	130.69	120.90
35	BA	744	C	C5-C4-N4	-6.12	115.92	120.20
35	BA	1174	G	C8-N9-C4	6.12	108.85	106.40
35	BA	1330	U	C1'-O4'-C4'	6.12	114.80	109.90
2	AB	442	G	O4'-C1'-N9	6.12	113.09	108.20
2	AB	538	A	O4'-C1'-N9	6.12	113.09	108.20
2	AB	769	U	C4'-C3'-C2'	-6.12	96.48	102.60
2	AB	828	U	C3'-C2'-C1'	6.12	106.39	101.50
2	AB	995	C	N1-C2-O2	6.12	122.57	118.90
2	AB	1178	C	C6-N1-C2	6.12	122.75	120.30
2	AB	1807	G	C2'-C3'-O3'	6.12	123.49	113.70
2	AB	2008	C	N1-C2-N3	-6.12	114.92	119.20
2	AB	2182	U	C2-N3-C4	-6.12	123.33	127.00
2	AB	2555	U	C6-N1-C2	6.12	124.67	121.00
2	AB	2615	U	C5-C6-N1	-6.12	119.64	122.70
35	BA	92	U	C4'-C3'-C2'	-6.12	96.48	102.60
35	BA	364	A	C6-C5-N7	6.12	136.58	132.30
35	BA	560	A	C8-N9-C4	6.12	108.25	105.80
37	BC	63	C	C2-N1-C1'	-6.12	112.07	118.80
46	BL	13	PHE	CB-CG-CD2	-6.12	116.52	120.80
1	AA	17	C	C4'-C3'-C2'	6.12	108.72	102.60
2	AB	232	G	N3-C4-N9	6.12	129.67	126.00
2	AB	1148	U	N3-C4-C5	6.12	118.27	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1882	U	N3-C2-O2	6.12	126.48	122.20
2	AB	2163	A	C5'-C4'-O4'	6.12	116.44	109.10
2	AB	2734	A	N1-C6-N6	6.12	122.27	118.60
35	BA	29	U	C5-C4-O4	6.12	129.57	125.90
35	BA	51	A	O3'-P-O5'	-6.12	92.38	104.00
35	BA	921	U	N3-C4-O4	6.12	123.68	119.40
35	BA	1369	C	O4'-C1'-N1	6.12	113.09	108.20
2	AB	1295	C	C5'-C4'-O4'	6.12	116.44	109.10
2	AB	1913	A	C4-C5-N7	-6.12	107.64	110.70
35	BA	7	A	C6-N1-C2	-6.12	114.93	118.60
35	BA	944	G	C5-C6-O6	-6.12	124.93	128.60
35	BA	1347	G	N7-C8-N9	6.12	116.16	113.10
1	AA	64	G	C4-C5-C6	6.11	122.47	118.80
1	AA	81	G	N9-C4-C5	6.11	107.85	105.40
2	AB	250	G	C4-C5-N7	-6.11	108.36	110.80
2	AB	783	A	N1-C2-N3	6.11	132.36	129.30
2	AB	842	U	N3-C4-O4	6.11	123.68	119.40
2	AB	2008	C	N1-C1'-C2'	-6.11	105.27	112.00
2	AB	2387	U	N1-C2-N3	6.11	118.57	114.90
2	AB	2801	G	N7-C8-N9	6.11	116.16	113.10
35	BA	213	G	C5'-C4'-O4'	6.11	116.44	109.10
35	BA	635	A	C5-N7-C8	6.11	106.96	103.90
35	BA	1122	U	C2-N3-C4	-6.11	123.33	127.00
35	BA	1304	G	C4-C5-N7	6.11	113.25	110.80
2	AB	581	C	N3-C4-C5	-6.11	119.45	121.90
2	AB	1395	A	C5-C6-N1	6.11	120.76	117.70
2	AB	2448	A	N7-C8-N9	6.11	116.86	113.80
11	AK	37	PHE	CB-CG-CD1	-6.11	116.52	120.80
35	BA	763	G	N1-C6-O6	6.11	123.57	119.90
35	BA	798	U	O4'-C1'-N1	6.11	113.09	108.20
37	BC	63	C	C1'-O4'-C4'	6.11	114.79	109.90
1	AA	111	U	N3-C2-O2	-6.11	117.92	122.20
2	AB	561	G	C1'-O4'-C4'	6.11	114.79	109.90
2	AB	723	C	N1-C2-O2	-6.11	115.23	118.90
2	AB	1121	C	C4'-C3'-C2'	-6.11	96.49	102.60
2	AB	1176	U	C6-N1-C2	-6.11	117.33	121.00
2	AB	1380	G	C4-C5-C6	6.11	122.47	118.80
2	AB	2250	G	N3-C4-N9	6.11	129.67	126.00
2	AB	2446	G	C6-C5-N7	6.11	134.07	130.40
2	AB	2886	A	C4'-C3'-C2'	-6.11	96.49	102.60
35	BA	111	G	O4'-C1'-N9	6.11	113.09	108.20
35	BA	179	A	C5'-C4'-O4'	6.11	116.43	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	303	A	N9-C1'-C2'	-6.11	105.28	112.00
35	BA	692	U	C4'-C3'-C2'	-6.11	96.49	102.60
35	BA	1441	A	O4'-C1'-N9	6.11	113.09	108.20
37	BC	65	G	O4'-C1'-N9	6.11	113.09	108.20
2	AB	258	G	C6-N1-C2	-6.11	121.44	125.10
2	AB	489	G	C6-C5-N7	-6.11	126.73	130.40
2	AB	713	G	C6-C5-N7	-6.11	126.73	130.40
2	AB	794	A	C2-N3-C4	6.11	113.65	110.60
2	AB	2050	C	C3'-C2'-C1'	6.11	106.39	101.50
35	BA	174	A	O5'-P-OP2	6.11	118.03	110.70
35	BA	751	U	O3'-P-O5'	-6.11	92.39	104.00
35	BA	1188	A	C4-C5-C6	6.11	120.06	117.00
2	AB	57	C	O3'-P-O5'	-6.11	92.39	104.00
2	AB	323	C	C4-C5-C6	6.11	120.45	117.40
2	AB	849	A	C2-N3-C4	6.11	113.65	110.60
2	AB	1033	U	C3'-C2'-C1'	-6.11	96.61	101.50
2	AB	1221	C	C5'-C4'-O4'	6.11	116.43	109.10
2	AB	1521	G	N1-C2-N2	6.11	121.70	116.20
2	AB	1559	U	N3-C2-O2	-6.11	117.92	122.20
2	AB	2261	C	N3-C4-N4	6.11	122.28	118.00
2	AB	2396	G	C1'-O4'-C4'	6.11	114.79	109.90
2	AB	2746	U	C4'-C3'-C2'	-6.11	96.49	102.60
2	AB	2781	A	C8-N9-C4	6.11	108.24	105.80
35	BA	287	U	N1-C1'-C2'	-6.11	105.28	112.00
35	BA	723	U	O4'-C1'-N1	6.11	113.09	108.20
35	BA	1218	C	C6-N1-C2	6.11	122.74	120.30
35	BA	1377	A	P-O3'-C3'	6.11	127.03	119.70
42	BH	103	VAL	CA-CB-CG1	6.11	120.06	110.90
51	BQ	77	TYR	CB-CG-CD1	-6.11	117.34	121.00
1	AA	87	U	N3-C4-C5	-6.11	110.94	114.60
2	AB	661	A	C6-C5-N7	6.11	136.57	132.30
2	AB	1336	A	N7-C8-N9	6.11	116.85	113.80
2	AB	1511	G	C5-N7-C8	6.11	107.35	104.30
8	AH	136	ASP	CB-CG-OD2	-6.11	112.81	118.30
35	BA	513	C	C5-C4-N4	-6.11	115.93	120.20
35	BA	769	G	N7-C8-N9	6.11	116.15	113.10
35	BA	1099	G	N9-C1'-C2'	-6.11	105.28	112.00
2	AB	66	C	C5'-C4'-O4'	6.10	116.42	109.10
2	AB	222	A	N1-C6-N6	-6.10	114.94	118.60
2	AB	881	G	N1-C6-O6	6.10	123.56	119.90
2	AB	975	A	O5'-P-OP1	6.10	118.02	110.70
2	AB	1250	G	C3'-C2'-C1'	6.10	106.38	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2214	C	C5-C4-N4	6.10	124.47	120.20
5	AE	127	PHE	CB-CG-CD2	-6.10	116.53	120.80
35	BA	1378	C	N1-C2-O2	6.10	122.56	118.90
35	BA	1464	U	N3-C4-O4	6.10	123.67	119.40
44	BJ	26	MET	CA-CB-CG	6.10	123.68	113.30
2	AB	2064	C	O4'-C4'-C3'	6.10	110.98	106.10
2	AB	2522	U	C2-N3-C4	-6.10	123.34	127.00
2	AB	2654	A	O4'-C1'-N9	6.10	113.08	108.20
35	BA	491	G	O4'-C4'-C3'	6.10	110.98	106.10
35	BA	546	A	C3'-C2'-C1'	6.10	106.38	101.50
35	BA	616	G	N3-C4-C5	-6.10	125.55	128.60
35	BA	760	G	C3'-C2'-C1'	-6.10	96.62	101.50
35	BA	1180	A	N1-C2-N3	-6.10	126.25	129.30
50	BP	40	ARG	NE-CZ-NH1	6.10	123.35	120.30
2	AB	1084	A	N9-C4-C5	6.10	108.24	105.80
2	AB	1558	C	C3'-C2'-C1'	6.10	106.38	101.50
2	AB	2066	C	C5'-C4'-O4'	6.10	116.42	109.10
2	AB	2821	A	N7-C8-N9	6.10	116.85	113.80
2	AB	2871	U	O4'-C1'-N1	6.10	113.08	108.20
35	BA	830	G	C1'-O4'-C4'	6.10	114.78	109.90
35	BA	1073	U	C4'-C3'-C2'	-6.10	96.50	102.60
35	BA	1092	A	C5'-C4'-C3'	-6.10	106.24	116.00
1	AA	22	U	C6-N1-C2	-6.10	117.34	121.00
2	AB	581	C	N3-C4-N4	6.10	122.27	118.00
2	AB	789	A	C5'-C4'-O4'	6.10	116.42	109.10
2	AB	954	G	C2-N3-C4	6.10	114.95	111.90
2	AB	1691	C	P-O3'-C3'	6.10	127.02	119.70
2	AB	2461	A	P-O5'-C5'	6.10	130.66	120.90
2	AB	2578	G	N1-C6-O6	6.10	123.56	119.90
6	AF	176	ASP	CB-CG-OD1	-6.10	112.81	118.30
35	BA	451	A	O3'-P-O5'	6.10	115.59	104.00
35	BA	661	G	C1'-O4'-C4'	6.10	114.78	109.90
35	BA	889	A	C5'-C4'-C3'	6.10	125.76	116.00
35	BA	953	G	O4'-C1'-N9	6.10	113.08	108.20
35	BA	1415	G	N9-C4-C5	6.10	107.84	105.40
35	BA	1530	G	N3-C4-C5	-6.10	125.55	128.60
2	AB	696	G	C5'-C4'-O4'	6.10	116.42	109.10
2	AB	937	C	N1-C1'-C2'	-6.10	105.29	112.00
2	AB	1129	A	O4'-C1'-N9	6.10	113.08	108.20
2	AB	1544	A	N9-C4-C5	-6.10	103.36	105.80
2	AB	1816	C	N3-C2-O2	-6.10	117.63	121.90
2	AB	1976	U	C2-N3-C4	-6.10	123.34	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2101	A	C5-C6-N6	-6.10	118.82	123.70
2	AB	2143	C	O4'-C1'-N1	6.10	113.08	108.20
2	AB	2628	C	N1-C2-N3	-6.10	114.93	119.20
35	BA	497	G	C4-C5-C6	6.10	122.46	118.80
35	BA	976	G	C6-C5-N7	-6.10	126.74	130.40
35	BA	1109	C	O4'-C1'-N1	6.10	113.08	108.20
35	BA	1127	G	N3-C4-C5	-6.10	125.55	128.60
54	BT	47	ARG	NE-CZ-NH1	6.10	123.35	120.30
2	AB	1201	U	O4'-C1'-N1	6.10	113.08	108.20
2	AB	1256	G	N3-C2-N2	6.10	124.17	119.90
2	AB	2484	G	O5'-P-OP2	6.10	118.02	110.70
35	BA	1330	U	C4-C5-C6	6.10	123.36	119.70
2	AB	1122	G	C5'-C4'-C3'	6.09	125.75	116.00
2	AB	2249	U	C2-N3-C4	-6.09	123.34	127.00
2	AB	2894	G	C4-C5-C6	-6.09	115.14	118.80
35	BA	690	G	C8-N9-C1'	6.09	134.92	127.00
35	BA	704	A	O5'-P-OP2	-6.09	100.22	105.70
35	BA	1467	C	C4-C5-C6	6.09	120.45	117.40
2	AB	1305	C	C5'-C4'-O4'	6.09	116.41	109.10
2	AB	1909	C	C5'-C4'-O4'	6.09	116.41	109.10
15	AO	92	TRP	NE1-CE2-CD2	-6.09	101.21	107.30
35	BA	60	A	C2-N3-C4	6.09	113.65	110.60
35	BA	508	U	N1-C2-N3	6.09	118.56	114.90
35	BA	525	C	C2-N3-C4	6.09	122.95	119.90
35	BA	973	G	C5-C6-O6	-6.09	124.94	128.60
35	BA	1354	U	C3'-C2'-C1'	-6.09	96.62	101.50
36	BB	23	C	N1-C2-O2	6.09	122.56	118.90
37	BC	44	A	C5'-C4'-O4'	6.09	116.41	109.10
2	AB	1053	C	C2-N3-C4	6.09	122.95	119.90
2	AB	1058	U	C4'-C3'-C2'	-6.09	96.51	102.60
2	AB	2578	G	C8-N9-C4	-6.09	103.96	106.40
2	AB	2891	U	C2-N3-C4	-6.09	123.34	127.00
35	BA	19	A	C4-C5-C6	6.09	120.05	117.00
35	BA	70	U	C2-N3-C4	-6.09	123.34	127.00
35	BA	108	G	C5-C6-O6	-6.09	124.95	128.60
35	BA	195	A	N7-C8-N9	6.09	116.85	113.80
35	BA	228	A	C5'-C4'-O4'	6.09	116.41	109.10
35	BA	304	U	C4-C5-C6	6.09	123.35	119.70
35	BA	464	U	C5'-C4'-O4'	6.09	116.41	109.10
35	BA	706	A	N1-C2-N3	-6.09	126.25	129.30
35	BA	798	U	C6-N1-C2	6.09	124.66	121.00
35	BA	1073	U	N1-C1'-C2'	-6.09	105.30	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1200	C	O4'-C1'-N1	6.09	113.07	108.20
2	AB	1401	G	N3-C4-C5	-6.09	125.56	128.60
2	AB	1808	A	O4'-C1'-N9	6.09	113.07	108.20
2	AB	1817	G	C5-C6-O6	-6.09	124.95	128.60
2	AB	2322	A	N7-C8-N9	-6.09	110.75	113.80
2	AB	2487	G	N3-C2-N2	6.09	124.16	119.90
2	AB	2731	G	O4'-C1'-C2'	6.09	113.08	107.60
35	BA	1064	G	C4-C5-N7	6.09	113.24	110.80
2	AB	149	A	C5-C6-N1	-6.09	114.66	117.70
2	AB	1415	U	C1'-O4'-C4'	6.09	114.77	109.90
2	AB	1858	A	C2-N3-C4	6.09	113.64	110.60
2	AB	2205	A	N3-C4-C5	6.09	131.06	126.80
35	BA	1087	G	C4-C5-N7	-6.09	108.36	110.80
1	AA	22	U	N3-C4-O4	-6.09	115.14	119.40
1	AA	31	C	N3-C4-C5	-6.09	119.47	121.90
2	AB	438	G	O5'-P-OP1	-6.09	100.22	105.70
2	AB	635	C	C5-C6-N1	6.09	124.04	121.00
2	AB	972	A	C5-N7-C8	-6.09	100.86	103.90
2	AB	1262	A	N7-C8-N9	6.09	116.84	113.80
2	AB	1313	U	O4'-C1'-N1	-6.09	103.33	108.20
2	AB	1719	G	N1-C2-N3	-6.09	120.25	123.90
2	AB	1761	C	C4'-C3'-C2'	-6.09	96.51	102.60
2	AB	2102	G	C8-N9-C1'	6.09	134.91	127.00
2	AB	2770	G	P-O3'-C3'	6.09	127.00	119.70
2	AB	2876	G	C5-N7-C8	6.09	107.34	104.30
15	AO	6	ARG	NE-CZ-NH1	6.09	123.34	120.30
35	BA	56	U	C5-C6-N1	-6.09	119.66	122.70
35	BA	241	G	C6-N1-C2	-6.09	121.45	125.10
35	BA	308	C	C5-C4-N4	-6.09	115.94	120.20
35	BA	430	A	N1-C6-N6	6.09	122.25	118.60
35	BA	609	A	N1-C6-N6	6.09	122.25	118.60
41	BG	48	GLY	O-C-N	6.09	132.44	122.70
2	AB	1936	A	C1'-O4'-C4'	-6.08	105.03	109.90
2	AB	2292	U	O4'-C1'-N1	6.08	113.07	108.20
2	AB	2311	A	N9-C4-C5	-6.08	103.37	105.80
35	BA	87	C	N3-C2-O2	-6.08	117.64	121.90
35	BA	986	U	O5'-P-OP2	-6.08	100.22	105.70
35	BA	1217	C	C4-C5-C6	-6.08	114.36	117.40
1	AA	10	G	N3-C4-N9	6.08	129.65	126.00
1	AA	84	G	N3-C4-C5	-6.08	125.56	128.60
2	AB	308	G	O4'-C1'-N9	6.08	113.07	108.20
2	AB	769	U	N3-C2-O2	-6.08	117.94	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	770	G	C2-N3-C4	6.08	114.94	111.90
2	AB	909	A	P-O3'-C3'	6.08	127.00	119.70
2	AB	962	G	C5-C6-N1	6.08	114.54	111.50
2	AB	1180	U	C5-C4-O4	-6.08	122.25	125.90
2	AB	1644	C	N3-C2-O2	-6.08	117.64	121.90
2	AB	1999	C	N3-C4-C5	-6.08	119.47	121.90
2	AB	2293	G	C4-C5-N7	6.08	113.23	110.80
2	AB	2380	C	N1-C2-N3	-6.08	114.94	119.20
2	AB	2578	G	C4-C5-C6	6.08	122.45	118.80
35	BA	408	A	N7-C8-N9	6.08	116.84	113.80
35	BA	423	G	N3-C4-C5	-6.08	125.56	128.60
35	BA	942	G	N3-C4-N9	6.08	129.65	126.00
35	BA	1425	U	N3-C4-O4	6.08	123.66	119.40
2	AB	55	G	C4'-C3'-C2'	-6.08	96.52	102.60
2	AB	95	A	C5-C6-N6	-6.08	118.83	123.70
2	AB	413	C	O4'-C1'-N1	6.08	113.06	108.20
2	AB	627	A	C8-N9-C4	-6.08	103.37	105.80
2	AB	660	C	O4'-C4'-C3'	6.08	110.97	106.10
2	AB	1348	C	C6-N1-C2	-6.08	117.87	120.30
2	AB	1406	U	P-O3'-C3'	6.08	127.00	119.70
2	AB	1972	G	C5'-C4'-O4'	6.08	116.40	109.10
2	AB	2044	C	C5-C6-N1	6.08	124.04	121.00
2	AB	2076	U	N1-C2-N3	6.08	118.55	114.90
2	AB	2402	U	C5'-C4'-O4'	6.08	116.40	109.10
2	AB	2464	G	P-O3'-C3'	6.08	127.00	119.70
2	AB	2538	C	N1-C2-N3	6.08	123.46	119.20
35	BA	53	A	N9-C4-C5	6.08	108.23	105.80
35	BA	205	A	O4'-C1'-N9	6.08	113.06	108.20
35	BA	812	G	C5-C6-O6	-6.08	124.95	128.60
35	BA	959	A	O4'-C1'-N9	6.08	113.06	108.20
35	BA	1059	C	C5-C6-N1	6.08	124.04	121.00
35	BA	1462	C	N3-C4-C5	-6.08	119.47	121.90
2	AB	798	G	C3'-C2'-C1'	-6.08	96.64	101.50
2	AB	977	G	O4'-C1'-N9	-6.08	103.34	108.20
2	AB	1347	A	C2-N3-C4	-6.08	107.56	110.60
2	AB	1878	G	C4-C5-C6	6.08	122.45	118.80
35	BA	976	G	N9-C4-C5	-6.08	102.97	105.40
35	BA	1222	G	C5-C6-N1	-6.08	108.46	111.50
35	BA	1524	C	O4'-C1'-N1	6.08	113.06	108.20
36	BB	16	A	C5-C6-N1	6.08	120.74	117.70
1	AA	119	A	C8-N9-C4	-6.08	103.37	105.80
2	AB	939	G	C4'-C3'-C2'	-6.08	96.52	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	990	A	C2-N3-C4	6.08	113.64	110.60
2	AB	1218	G	C6-C5-N7	-6.08	126.75	130.40
2	AB	1702	G	C2-N3-C4	6.08	114.94	111.90
2	AB	1840	G	P-O3'-C3'	6.08	126.99	119.70
2	AB	1888	G	N9-C4-C5	6.08	107.83	105.40
2	AB	2400	G	O4'-C4'-C3'	6.08	110.96	106.10
2	AB	2440	C	C1'-O4'-C4'	-6.08	105.04	109.90
11	AK	53	PRO	N-CD-CG	6.08	112.32	103.20
16	AP	91	ALA	N-CA-CB	-6.08	101.59	110.10
35	BA	190	A	N7-C8-N9	6.08	116.84	113.80
35	BA	224	U	C2-N3-C4	-6.08	123.35	127.00
35	BA	373	A	N9-C4-C5	-6.08	103.37	105.80
35	BA	1019	A	C8-N9-C4	6.08	108.23	105.80
35	BA	1173	U	C5-C6-N1	-6.08	119.66	122.70
2	AB	923	G	N9-C4-C5	6.08	107.83	105.40
2	AB	1340	U	C4-C5-C6	6.08	123.35	119.70
2	AB	1810	A	P-O3'-C3'	6.08	126.99	119.70
2	AB	2097	A	O4'-C1'-N9	6.08	113.06	108.20
1	AA	80	U	N1-C2-N3	6.08	118.55	114.90
1	AA	96	G	N1-C6-O6	6.08	123.55	119.90
2	AB	212	G	N3-C4-N9	6.08	129.65	126.00
2	AB	618	G	N3-C4-C5	-6.08	125.56	128.60
2	AB	1534	U	P-O3'-C3'	6.08	126.99	119.70
2	AB	1719	G	O5'-P-OP2	-6.08	100.23	105.70
2	AB	1819	A	O4'-C1'-N9	6.08	113.06	108.20
2	AB	1846	G	N3-C2-N2	6.08	124.15	119.90
2	AB	2152	G	C5'-C4'-O4'	6.08	116.39	109.10
2	AB	2161	C	O4'-C4'-C3'	-6.08	97.92	104.00
2	AB	2482	A	C3'-C2'-C1'	-6.08	96.64	101.50
35	BA	6	G	C4-C5-C6	6.08	122.44	118.80
35	BA	168	G	N3-C4-C5	-6.08	125.56	128.60
35	BA	379	C	N1-C2-O2	6.08	122.55	118.90
35	BA	548	G	C5-C6-O6	-6.08	124.95	128.60
35	BA	594	U	C5-C6-N1	-6.08	119.66	122.70
37	BC	3	C	O4'-C1'-N1	6.08	113.06	108.20
2	AB	280	U	O4'-C1'-N1	6.07	113.06	108.20
2	AB	617	G	N9-C4-C5	-6.07	102.97	105.40
2	AB	629	G	O4'-C1'-N9	6.07	113.06	108.20
2	AB	741	U	C5-C4-O4	-6.07	122.26	125.90
2	AB	1298	C	P-O3'-C3'	6.07	126.99	119.70
2	AB	1429	G	C8-N9-C4	6.07	108.83	106.40
2	AB	2199	A	N1-C6-N6	6.07	122.24	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2642	G	O4'-C1'-C2'	-6.07	99.73	105.80
2	AB	2655	G	C8-N9-C4	-6.07	103.97	106.40
35	BA	171	A	O4'-C1'-N9	6.07	113.06	108.20
35	BA	280	C	O4'-C4'-C3'	6.07	110.96	106.10
35	BA	411	A	O4'-C1'-N9	6.07	113.06	108.20
2	AB	858	G	C5-N7-C8	-6.07	101.26	104.30
2	AB	917	A	C5'-C4'-C3'	-6.07	106.28	116.00
2	AB	2341	G	C8-N9-C1'	6.07	134.89	127.00
2	AB	2769	U	P-O3'-C3'	6.07	126.99	119.70
35	BA	196	A	C4'-C3'-C2'	-6.07	96.53	102.60
35	BA	590	U	C5'-C4'-C3'	-6.07	106.28	116.00
35	BA	942	G	N1-C6-O6	-6.07	116.26	119.90
35	BA	1034	G	O4'-C1'-N9	6.07	113.06	108.20
45	BK	6	TYR	CB-CG-CD1	6.07	124.64	121.00
2	AB	258	G	C5-N7-C8	-6.07	101.26	104.30
2	AB	470	A	C4'-C3'-C2'	-6.07	96.53	102.60
2	AB	632	A	N3-C4-C5	-6.07	122.55	126.80
2	AB	879	G	N9-C4-C5	6.07	107.83	105.40
2	AB	974	G	C5-C6-O6	6.07	132.24	128.60
2	AB	1555	G	N1-C2-N2	6.07	121.66	116.20
2	AB	1788	C	N3-C2-O2	-6.07	117.65	121.90
2	AB	1812	U	C5-C4-O4	6.07	129.54	125.90
2	AB	2688	G	N1-C6-O6	-6.07	116.26	119.90
35	BA	717	U	O4'-C1'-N1	6.07	113.06	108.20
35	BA	1006	G	C5-N7-C8	6.07	107.33	104.30
35	BA	1275	A	C4-C5-C6	6.07	120.03	117.00
37	BC	75	C	C4'-C3'-C2'	-6.07	96.53	102.60
1	AA	57	A	C5-C6-N6	6.07	128.56	123.70
2	AB	1126	A	C1'-O4'-C4'	6.07	114.75	109.90
2	AB	1420	A	N1-C6-N6	6.07	122.24	118.60
2	AB	2738	A	C2-N3-C4	6.07	113.63	110.60
35	BA	15	G	C6-N1-C2	6.07	128.74	125.10
1	AA	104	A	C6-N1-C2	-6.07	114.96	118.60
2	AB	760	G	C2-N3-C4	6.07	114.93	111.90
2	AB	1230	A	C8-N9-C4	-6.07	103.37	105.80
2	AB	2891	U	N1-C2-N3	6.07	118.54	114.90
35	BA	163	C	C1'-O4'-C4'	6.07	114.75	109.90
35	BA	186	C	C4-C5-C6	6.07	120.43	117.40
35	BA	569	C	C5'-C4'-C3'	-6.07	106.29	116.00
35	BA	586	C	O4'-C1'-N1	-6.07	103.35	108.20
35	BA	606	G	C4-C5-C6	6.07	122.44	118.80
35	BA	1184	G	N9-C1'-C2'	-6.07	105.33	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1440	U	C5'-C4'-O4'	6.07	116.38	109.10
35	BA	1495	U	O5'-P-OP2	-6.07	100.24	105.70
50	BP	52	ARG	NE-CZ-NH2	-6.07	117.27	120.30
2	AB	158	U	N1-C2-O2	-6.07	118.55	122.80
2	AB	548	G	N1-C2-N3	-6.07	120.26	123.90
2	AB	712	G	C4'-C3'-C2'	-6.07	96.53	102.60
2	AB	1866	A	N9-C1'-C2'	-6.07	105.33	112.00
2	AB	2628	C	C6-N1-C1'	-6.07	113.52	120.80
26	AZ	39	VAL	CA-CB-CG2	6.07	120.00	110.90
35	BA	199	A	C4-C5-C6	-6.07	113.97	117.00
35	BA	319	G	C5'-C4'-C3'	-6.07	106.30	116.00
35	BA	416	G	C4-C5-N7	-6.07	108.37	110.80
35	BA	687	A	C6-C5-N7	6.07	136.55	132.30
35	BA	801	U	O4'-C1'-N1	6.07	113.05	108.20
35	BA	926	G	N3-C4-N9	6.07	129.64	126.00
35	BA	950	U	C6-N1-C2	-6.07	117.36	121.00
35	BA	952	U	C5-C6-N1	-6.07	119.67	122.70
35	BA	1178	G	O4'-C1'-N9	-6.07	103.35	108.20
2	AB	559	G	C3'-C2'-C1'	-6.06	96.65	101.50
2	AB	1215	G	C5'-C4'-O4'	6.06	116.38	109.10
2	AB	1233	C	N1-C1'-C2'	-6.06	105.33	112.00
2	AB	2862	G	C4'-C3'-C2'	-6.06	96.54	102.60
35	BA	1187	G	N9-C4-C5	6.06	107.83	105.40
35	BA	1259	C	C5'-C4'-C3'	-6.06	106.30	116.00
35	BA	1487	G	N3-C4-N9	6.06	129.64	126.00
2	AB	363	G	N3-C2-N2	6.06	124.14	119.90
2	AB	701	G	N3-C4-C5	-6.06	125.57	128.60
2	AB	1097	U	C2-N1-C1'	6.06	124.97	117.70
2	AB	1639	C	N3-C4-C5	-6.06	119.47	121.90
2	AB	1719	G	N1-C6-O6	6.06	123.54	119.90
2	AB	1875	G	N7-C8-N9	6.06	116.13	113.10
2	AB	2606	C	N3-C4-N4	-6.06	113.76	118.00
2	AB	2867	G	P-O3'-C3'	6.06	126.97	119.70
35	BA	492	C	C3'-C2'-C1'	6.06	106.35	101.50
35	BA	890	G	C6-N1-C2	-6.06	121.46	125.10
1	AA	101	A	N3-C4-N9	6.06	132.25	127.40
2	AB	1033	U	C4-C5-C6	6.06	123.34	119.70
2	AB	1241	A	C3'-C2'-C1'	6.06	106.35	101.50
1	AA	27	C	C5'-C4'-O4'	6.06	116.37	109.10
2	AB	55	G	N3-C4-C5	-6.06	125.57	128.60
2	AB	368	A	O4'-C1'-C2'	-6.06	99.74	105.80
2	AB	526	A	O3'-P-O5'	-6.06	92.49	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1118	C	N3-C2-O2	-6.06	117.66	121.90
2	AB	1230	A	C6-N1-C2	6.06	122.24	118.60
2	AB	1266	G	C4-C5-N7	6.06	113.22	110.80
2	AB	1768	C	N3-C4-N4	-6.06	113.76	118.00
2	AB	1980	G	O4'-C1'-C2'	-6.06	99.74	105.80
2	AB	2436	G	C5-C6-O6	-6.06	124.97	128.60
24	AX	43	ASP	CB-CG-OD2	6.06	123.75	118.30
35	BA	436	C	C4'-C3'-C2'	-6.06	96.54	102.60
35	BA	583	A	C2-N3-C4	-6.06	107.57	110.60
35	BA	818	G	N1-C6-O6	-6.06	116.26	119.90
35	BA	924	C	O4'-C1'-N1	6.06	113.05	108.20
35	BA	1486	G	N3-C2-N2	6.06	124.14	119.90
2	AB	1422	G	C3'-C2'-C1'	-6.06	96.65	101.50
2	AB	1889	A	N9-C4-C5	6.06	108.22	105.80
2	AB	2363	G	O4'-C1'-N9	6.06	113.05	108.20
2	AB	2728	U	C5'-C4'-O4'	6.06	116.37	109.10
2	AB	2759	G	N3-C4-C5	-6.06	125.57	128.60
35	BA	194	C	C6-N1-C2	-6.06	117.88	120.30
35	BA	523	A	N1-C6-N6	-6.06	114.97	118.60
35	BA	539	A	C3'-C2'-C1'	6.06	106.34	101.50
2	AB	1431	A	C2-N3-C4	6.06	113.63	110.60
2	AB	2087	G	C6-N1-C2	-6.06	121.47	125.10
2	AB	2238	G	C5-C6-N1	6.06	114.53	111.50
35	BA	177	G	C4-C5-N7	-6.06	108.38	110.80
35	BA	1421	G	N3-C2-N2	6.06	124.14	119.90
2	AB	94	A	C5-C6-N6	-6.05	118.86	123.70
2	AB	318	C	C1'-O4'-C4'	-6.05	105.06	109.90
2	AB	1090	A	N7-C8-N9	6.05	116.83	113.80
2	AB	1095	A	N1-C6-N6	6.05	122.23	118.60
2	AB	1118	C	O4'-C1'-N1	6.05	113.04	108.20
2	AB	1183	U	C3'-C2'-C1'	6.05	106.34	101.50
2	AB	1246	A	C2-N3-C4	6.05	113.63	110.60
2	AB	1791	A	C5-C6-N6	-6.05	118.86	123.70
2	AB	2809	A	C4-C5-C6	-6.05	113.97	117.00
35	BA	213	G	N9-C4-C5	6.05	107.82	105.40
35	BA	323	U	N3-C4-C5	-6.05	110.97	114.60
35	BA	635	A	P-O3'-C3'	6.05	126.97	119.70
35	BA	728	A	O4'-C1'-N9	6.05	113.04	108.20
35	BA	929	G	N9-C4-C5	6.05	107.82	105.40
35	BA	1009	U	N1-C1'-C2'	-6.05	105.34	112.00
35	BA	1099	G	C5-C6-N1	6.05	114.53	111.50
35	BA	1362	A	O4'-C1'-N9	6.05	113.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1405	G	N9-C4-C5	6.05	107.82	105.40
2	AB	283	G	N7-C8-N9	-6.05	110.07	113.10
2	AB	385	C	C5-C6-N1	6.05	124.03	121.00
2	AB	2454	G	C3'-C2'-C1'	6.05	106.34	101.50
35	BA	501	C	C6-N1-C2	-6.05	117.88	120.30
35	BA	709	U	O4'-C1'-N1	6.05	113.04	108.20
35	BA	981	U	N1-C2-O2	-6.05	118.56	122.80
35	BA	1185	G	N9-C4-C5	6.05	107.82	105.40
36	BB	14	G	C5-C6-N1	-6.05	108.47	111.50
2	AB	19	A	C3'-C2'-C1'	6.05	106.34	101.50
2	AB	406	G	C4'-C3'-C2'	-6.05	96.55	102.60
2	AB	1784	A	C5-C6-N1	-6.05	114.67	117.70
2	AB	1839	G	O3'-P-O5'	-6.05	92.50	104.00
2	AB	2448	A	N1-C6-N6	-6.05	114.97	118.60
2	AB	2613	U	C4'-C3'-C2'	-6.05	96.55	102.60
2	AB	2741	A	C6-N1-C2	-6.05	114.97	118.60
35	BA	142	G	C4'-C3'-C2'	-6.05	96.55	102.60
35	BA	151	A	C1'-O4'-C4'	6.05	114.74	109.90
35	BA	627	G	N9-C1'-C2'	-6.05	105.34	112.00
35	BA	819	A	C6-N1-C2	-6.05	114.97	118.60
35	BA	835	U	N1-C2-O2	-6.05	118.56	122.80
35	BA	1109	C	C4-C5-C6	-6.05	114.38	117.40
35	BA	1141	C	C4'-C3'-C2'	-6.05	96.55	102.60
35	BA	1463	U	C5'-C4'-C3'	-6.05	106.32	116.00
35	BA	1487	G	P-O3'-C3'	6.05	126.96	119.70
37	BC	6	G	C4-C5-C6	-6.05	115.17	118.80
2	AB	513	A	C5-N7-C8	6.05	106.92	103.90
2	AB	1178	C	N1-C2-O2	6.05	122.53	118.90
2	AB	1197	G	N1-C6-O6	-6.05	116.27	119.90
2	AB	1215	G	C2-N3-C4	6.05	114.92	111.90
2	AB	1441	G	N1-C2-N2	6.05	121.64	116.20
2	AB	2282	G	N1-C2-N3	-6.05	120.27	123.90
2	AB	2507	C	N3-C4-C5	6.05	124.32	121.90
2	AB	2843	G	N3-C2-N2	-6.05	115.67	119.90
35	BA	88	U	N3-C2-O2	-6.05	117.97	122.20
35	BA	99	C	N3-C4-C5	-6.05	119.48	121.90
35	BA	145	G	C5'-C4'-O4'	6.05	116.36	109.10
35	BA	585	G	C4-C5-C6	6.05	122.43	118.80
35	BA	1386	G	C4-C5-C6	6.05	122.43	118.80
35	BA	1398	A	C5-N7-C8	6.05	106.92	103.90
2	AB	2349	G	C4'-C3'-C2'	-6.05	96.55	102.60
15	AO	59	ARG	N-CA-CB	-6.05	99.71	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	182	A	C5-C6-N6	6.05	128.54	123.70
35	BA	232	G	N9-C4-C5	6.05	107.82	105.40
35	BA	1125	U	C6-N1-C2	-6.05	117.37	121.00
2	AB	654	A	C4-C5-N7	-6.05	107.68	110.70
2	AB	1074	G	C5-C6-N1	6.05	114.52	111.50
2	AB	1288	G	C6-N1-C2	-6.05	121.47	125.10
2	AB	1587	G	C2-N3-C4	-6.05	108.88	111.90
2	AB	1891	G	O4'-C1'-N9	6.05	113.04	108.20
2	AB	2156	G	P-O3'-C3'	6.05	126.95	119.70
2	AB	2396	G	N1-C2-N2	-6.05	110.76	116.20
2	AB	2695	U	C1'-O4'-C4'	-6.05	105.06	109.90
35	BA	300	A	C4-C5-N7	-6.05	107.68	110.70
35	BA	1335	U	C5-C6-N1	-6.05	119.68	122.70
35	BA	1397	C	C1'-O4'-C4'	6.05	114.74	109.90
35	BA	1410	A	C8-N9-C4	6.05	108.22	105.80
35	BA	1455	G	N9-C4-C5	6.05	107.82	105.40
35	BA	1488	G	N3-C4-C5	-6.05	125.58	128.60
2	AB	1679	A	N1-C6-N6	6.04	122.23	118.60
35	BA	7	A	C5'-C4'-O4'	6.04	116.35	109.10
35	BA	292	G	C3'-C2'-C1'	-6.04	96.66	101.50
35	BA	586	C	C2-N3-C4	-6.04	116.88	119.90
35	BA	604	G	C5-N7-C8	-6.04	101.28	104.30
2	AB	585	G	N9-C1'-C2'	-6.04	105.35	112.00
2	AB	1023	U	C4-C5-C6	6.04	123.33	119.70
2	AB	1028	A	N7-C8-N9	6.04	116.82	113.80
2	AB	1048	A	N3-C4-C5	-6.04	122.57	126.80
2	AB	1240	U	N1-C1'-C2'	-6.04	105.35	112.00
2	AB	1401	G	C5'-C4'-O4'	6.04	116.35	109.10
2	AB	1959	G	N3-C4-N9	-6.04	122.37	126.00
2	AB	2023	C	C4-C5-C6	6.04	120.42	117.40
5	AE	83	ARG	NE-CZ-NH1	-6.04	117.28	120.30
15	AO	114	ARG	NE-CZ-NH2	6.04	123.32	120.30
35	BA	38	G	N3-C4-C5	-6.04	125.58	128.60
35	BA	1473	G	C5'-C4'-O4'	6.04	116.35	109.10
55	BU	61	VAL	CG1-CB-CG2	-6.04	101.23	110.90
2	AB	42	A	N7-C8-N9	6.04	116.82	113.80
2	AB	224	U	C2-N3-C4	-6.04	123.38	127.00
2	AB	1275	A	C5'-C4'-O4'	6.04	116.35	109.10
2	AB	2404	U	C1'-O4'-C4'	6.04	114.73	109.90
2	AB	2473	U	N1-C2-O2	6.04	127.03	122.80
2	AB	2857	G	N9-C1'-C2'	-6.04	105.36	112.00
16	AP	12	ARG	NE-CZ-NH1	-6.04	117.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	397	A	N9-C4-C5	-6.04	103.38	105.80
35	BA	412	A	C3'-C2'-C1'	6.04	106.33	101.50
35	BA	748	G	C4-C5-N7	-6.04	108.38	110.80
35	BA	1154	G	C5-C6-O6	-6.04	124.97	128.60
35	BA	1485	U	O4'-C1'-N1	6.04	113.03	108.20
40	BF	43	ARG	NE-CZ-NH1	-6.04	117.28	120.30
2	AB	704	G	N1-C6-O6	-6.04	116.28	119.90
2	AB	810	U	P-O3'-C3'	6.04	126.95	119.70
2	AB	1355	G	C6-N1-C2	-6.04	121.48	125.10
2	AB	1471	G	C5'-C4'-O4'	6.04	116.35	109.10
2	AB	2380	C	C5-C4-N4	-6.04	115.97	120.20
28	A1	39	ASP	CB-CG-OD1	-6.04	112.86	118.30
35	BA	1368	A	N1-C6-N6	-6.04	114.98	118.60
35	BA	1520	C	C3'-C2'-C1'	6.04	106.33	101.50
2	AB	222	A	O4'-C4'-C3'	6.04	110.93	106.10
2	AB	333	G	O4'-C1'-N9	6.04	113.03	108.20
2	AB	401	A	C5-C6-N6	-6.04	118.87	123.70
2	AB	479	A	C5'-C4'-O4'	6.04	116.34	109.10
2	AB	842	U	C2-N3-C4	-6.04	123.38	127.00
2	AB	1984	G	O4'-C1'-N9	6.04	113.03	108.20
2	AB	2279	G	C8-N9-C1'	6.04	134.85	127.00
35	BA	251	G	C2-N3-C4	6.04	114.92	111.90
35	BA	434	U	C4'-C3'-C2'	-6.04	96.56	102.60
35	BA	953	G	C5-C6-N1	6.04	114.52	111.50
35	BA	1300	G	C5-N7-C8	-6.04	101.28	104.30
47	BM	8	ARG	CD-NE-CZ	6.04	132.05	123.60
2	AB	149	A	C8-N9-C4	-6.04	103.39	105.80
2	AB	692	C	C4'-C3'-C2'	-6.04	96.56	102.60
2	AB	2723	C	O4'-C1'-C2'	-6.04	99.76	105.80
35	BA	127	G	C4-N9-C1'	-6.04	118.65	126.50
35	BA	659	U	N3-C4-O4	6.04	123.63	119.40
39	BE	39	ARG	NE-CZ-NH2	-6.04	117.28	120.30
2	AB	48	G	C6-N1-C2	-6.04	121.48	125.10
2	AB	240	C	N3-C4-N4	6.04	122.22	118.00
2	AB	1034	G	C6-C5-N7	-6.04	126.78	130.40
2	AB	1413	A	C6-C5-N7	6.04	136.53	132.30
2	AB	1583	A	N9-C1'-C2'	-6.04	105.36	112.00
2	AB	1772	A	C5'-C4'-O4'	6.04	116.34	109.10
2	AB	2093	G	C5-C6-O6	6.04	132.22	128.60
2	AB	2292	U	N3-C4-O4	6.04	123.62	119.40
2	AB	2479	U	C2-N3-C4	-6.04	123.38	127.00
2	AB	2719	G	C4-C5-N7	-6.04	108.39	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2852	G	C1'-O4'-C4'	-6.04	105.07	109.90
35	BA	253	A	C3'-C2'-C1'	-6.04	96.67	101.50
35	BA	622	A	N7-C8-N9	-6.04	110.78	113.80
35	BA	747	A	C4-C5-C6	6.04	120.02	117.00
35	BA	1024	G	C8-N9-C4	6.04	108.81	106.40
35	BA	1329	A	C5'-C4'-O4'	6.04	116.34	109.10
2	AB	1341	G	C6-C5-N7	-6.03	126.78	130.40
2	AB	1758	U	C2-N1-C1'	6.03	124.94	117.70
2	AB	2818	U	C4-C5-C6	-6.03	116.08	119.70
5	AE	25	THR	CA-CB-CG2	-6.03	103.95	112.40
35	BA	487	A	N9-C4-C5	6.03	108.21	105.80
35	BA	563	A	N1-C6-N6	6.03	122.22	118.60
35	BA	846	G	C6-C5-N7	-6.03	126.78	130.40
35	BA	884	U	C4'-C3'-C2'	-6.03	96.57	102.60
35	BA	1203	C	C1'-O4'-C4'	6.03	114.73	109.90
1	AA	51	G	N3-C4-C5	-6.03	125.58	128.60
2	AB	191	A	N1-C6-N6	-6.03	114.98	118.60
2	AB	342	A	C2-N3-C4	-6.03	107.58	110.60
2	AB	2598	A	C4'-C3'-C2'	-6.03	96.57	102.60
2	AB	2722	G	O4'-C4'-C3'	6.03	110.92	106.10
5	AE	15	PHE	CB-CG-CD2	-6.03	116.58	120.80
35	BA	217	C	N1-C2-O2	6.03	122.52	118.90
35	BA	1209	C	C5-C6-N1	6.03	124.02	121.00
43	BI	91	ARG	NE-CZ-NH1	6.03	123.32	120.30
1	AA	93	C	C4-C5-C6	6.03	120.42	117.40
2	AB	1655	A	N1-C2-N3	-6.03	126.28	129.30
2	AB	2767	C	C5-C6-N1	6.03	124.02	121.00
2	AB	2775	G	N1-C6-O6	-6.03	116.28	119.90
35	BA	109	A	C5-N7-C8	-6.03	100.89	103.90
35	BA	148	G	O4'-C1'-N9	6.03	113.02	108.20
35	BA	196	A	C6-C5-N7	6.03	136.52	132.30
35	BA	497	G	C5-C6-N1	-6.03	108.48	111.50
35	BA	819	A	C4-C5-C6	6.03	120.02	117.00
35	BA	1426	G	O4'-C4'-C3'	6.03	110.92	106.10
2	AB	523	C	N1-C1'-C2'	-6.03	105.37	112.00
2	AB	1247	A	N7-C8-N9	6.03	116.81	113.80
2	AB	1538	G	N9-C4-C5	6.03	107.81	105.40
2	AB	2751	G	C6-N1-C2	-6.03	121.48	125.10
35	BA	222	C	N3-C4-N4	6.03	122.22	118.00
35	BA	1217	C	C5-C6-N1	6.03	124.02	121.00
2	AB	82	U	N1-C2-N3	6.03	118.52	114.90
2	AB	159	G	C1'-O4'-C4'	-6.03	105.08	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	439	A	C2-N3-C4	6.03	113.61	110.60
2	AB	1284	A	C3'-C2'-C1'	6.03	106.32	101.50
2	AB	1336	A	C8-N9-C4	-6.03	103.39	105.80
2	AB	1337	G	C5'-C4'-O4'	6.03	116.33	109.10
2	AB	1403	A	C5'-C4'-O4'	6.03	116.33	109.10
2	AB	1660	G	N9-C4-C5	6.03	107.81	105.40
2	AB	1737	G	C1'-O4'-C4'	6.03	114.72	109.90
2	AB	2641	G	C2-N3-C4	6.03	114.91	111.90
2	AB	2904	U	C1'-O4'-C4'	6.03	114.72	109.90
35	BA	10	A	C6-N1-C2	-6.03	114.98	118.60
35	BA	539	A	C4'-C3'-C2'	-6.03	96.57	102.60
35	BA	576	C	N3-C4-C5	-6.03	119.49	121.90
35	BA	591	U	C5-C4-O4	6.03	129.52	125.90
35	BA	628	G	C5-C6-N1	6.03	114.51	111.50
35	BA	646	G	O4'-C1'-N9	6.03	113.02	108.20
35	BA	762	U	C2-N3-C4	-6.03	123.38	127.00
35	BA	1181	G	C4'-C3'-C2'	-6.03	96.57	102.60
37	BC	75	C	C3'-C2'-C1'	-6.03	96.68	101.50
40	BF	186	GLU	OE1-CD-OE2	6.03	130.53	123.30
2	AB	256	A	O4'-C1'-N9	6.03	113.02	108.20
2	AB	803	U	N3-C4-O4	6.03	123.62	119.40
2	AB	1571	A	C1'-O4'-C4'	6.03	114.72	109.90
2	AB	2088	A	N7-C8-N9	-6.03	110.79	113.80
2	AB	2532	G	C4'-C3'-C2'	6.03	108.62	102.60
13	AM	80	ASP	CB-CG-OD2	-6.03	112.88	118.30
35	BA	1	A	C4-C5-N7	6.03	113.71	110.70
35	BA	41	G	C8-N9-C4	-6.03	103.99	106.40
35	BA	284	C	C5'-C4'-C3'	-6.03	106.36	116.00
35	BA	301	G	C4-C5-C6	6.03	122.42	118.80
35	BA	446	G	O4'-C1'-N9	6.03	113.02	108.20
35	BA	1152	A	C5-C6-N1	6.03	120.71	117.70
35	BA	1185	G	C4-C5-C6	6.03	122.42	118.80
37	BC	73	A	C6-C5-N7	6.03	136.52	132.30
51	BQ	86	LEU	CB-CG-CD1	-6.03	100.76	111.00
2	AB	1538	G	N7-C8-N9	6.02	116.11	113.10
2	AB	2022	U	O4'-C1'-N1	6.02	113.02	108.20
2	AB	2362	C	N3-C4-C5	-6.02	119.49	121.90
35	BA	67	C	O4'-C1'-N1	6.02	113.02	108.20
35	BA	240	G	N1-C2-N2	-6.02	110.78	116.20
35	BA	1389	C	N3-C4-N4	6.02	122.22	118.00
2	AB	467	G	C5-C6-O6	-6.02	124.99	128.60
2	AB	957	C	N1-C2-O2	6.02	122.51	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1070	A	P-O3'-C3'	6.02	126.93	119.70
2	AB	1343	G	C5-N7-C8	-6.02	101.29	104.30
2	AB	1534	U	C5-C6-N1	-6.02	119.69	122.70
2	AB	2636	C	N1-C1'-C2'	-6.02	105.37	112.00
2	AB	2697	G	C5-N7-C8	6.02	107.31	104.30
2	AB	2839	G	C3'-C2'-C1'	-6.02	96.68	101.50
35	BA	201	G	N1-C2-N3	-6.02	120.29	123.90
35	BA	244	U	P-O3'-C3'	6.02	126.93	119.70
35	BA	274	A	C5-N7-C8	6.02	106.91	103.90
35	BA	432	A	N3-C4-N9	6.02	132.22	127.40
35	BA	876	C	C6-N1-C2	6.02	122.71	120.30
2	AB	613	A	C4-C5-N7	-6.02	107.69	110.70
2	AB	1124	G	C3'-C2'-C1'	6.02	106.32	101.50
2	AB	1433	A	C5'-C4'-O4'	6.02	116.33	109.10
2	AB	1914	C	C5-C4-N4	6.02	124.42	120.20
2	AB	2520	C	N3-C4-C5	-6.02	119.49	121.90
36	BB	31	U	N3-C4-C5	-6.02	110.99	114.60
2	AB	377	G	P-O5'-C5'	6.02	130.53	120.90
2	AB	952	G	N1-C2-N2	-6.02	110.78	116.20
2	AB	1053	C	C1'-O4'-C4'	-6.02	105.08	109.90
2	AB	1364	G	C6-C5-N7	6.02	134.01	130.40
2	AB	1488	C	P-O3'-C3'	6.02	126.92	119.70
2	AB	1498	C	N3-C4-C5	6.02	124.31	121.90
2	AB	1904	G	C8-N9-C4	6.02	108.81	106.40
5	AE	168	GLU	OE1-CD-OE2	6.02	130.53	123.30
35	BA	140	U	C2-N3-C4	-6.02	123.39	127.00
35	BA	145	G	C6-C5-N7	-6.02	126.79	130.40
35	BA	607	A	P-O3'-C3'	6.02	126.92	119.70
35	BA	951	G	N1-C2-N3	6.02	127.51	123.90
35	BA	1094	G	N9-C4-C5	6.02	107.81	105.40
35	BA	1202	U	O4'-C1'-N1	6.02	113.02	108.20
2	AB	259	G	C3'-C2'-C1'	6.02	106.31	101.50
2	AB	1208	C	O4'-C1'-N1	6.02	113.01	108.20
2	AB	1565	C	O4'-C1'-N1	6.02	113.01	108.20
2	AB	1630	A	C1'-O4'-C4'	-6.02	105.09	109.90
2	AB	1750	G	N1-C6-O6	6.02	123.51	119.90
2	AB	2447	G	N7-C8-N9	-6.02	110.09	113.10
2	AB	2485	G	N7-C8-N9	6.02	116.11	113.10
2	AB	2659	G	N3-C2-N2	-6.02	115.69	119.90
2	AB	2887	A	O4'-C1'-N9	6.02	113.02	108.20
35	BA	356	A	C2-N3-C4	-6.02	107.59	110.60
35	BA	481	G	O4'-C4'-C3'	6.02	110.92	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	546	A	C6-N1-C2	-6.02	114.99	118.60
35	BA	620	C	N1-C2-N3	-6.02	114.99	119.20
35	BA	659	U	C5'-C4'-O4'	6.02	116.32	109.10
35	BA	838	G	N7-C8-N9	6.02	116.11	113.10
35	BA	867	G	C6-N1-C2	-6.02	121.49	125.10
37	BC	71	G	C2-N3-C4	6.02	114.91	111.90
2	AB	526	A	P-O5'-C5'	6.02	130.53	120.90
2	AB	727	A	C6-N1-C2	6.02	122.21	118.60
2	AB	1410	G	C6-N1-C2	-6.02	121.49	125.10
2	AB	2434	A	O4'-C1'-N9	-6.02	103.39	108.20
21	AU	82	MET	CA-CB-CG	-6.02	103.07	113.30
35	BA	18	C	C4-C5-C6	-6.02	114.39	117.40
35	BA	1162	C	C4-C5-C6	6.02	120.41	117.40
35	BA	1295	U	C5-C6-N1	6.02	125.71	122.70
2	AB	100	U	O4'-C4'-C3'	6.01	110.91	106.10
2	AB	762	U	O4'-C1'-N1	6.01	113.01	108.20
2	AB	797	G	C2-N3-C4	6.01	114.91	111.90
2	AB	1068	G	C6-N1-C2	6.01	128.71	125.10
2	AB	2026	U	C2-N3-C4	-6.01	123.39	127.00
2	AB	2037	A	N9-C4-C5	6.01	108.20	105.80
2	AB	2354	C	C5'-C4'-O4'	6.01	116.32	109.10
2	AB	2435	A	N3-C4-N9	-6.01	122.59	127.40
2	AB	2574	G	C4-C5-N7	6.01	113.20	110.80
2	AB	2623	G	C5-C6-N1	-6.01	108.49	111.50
35	BA	166	U	C5'-C4'-O4'	6.01	116.32	109.10
35	BA	417	G	N7-C8-N9	6.01	116.11	113.10
35	BA	466	A	C6-C5-N7	6.01	136.51	132.30
35	BA	653	U	C5-C4-O4	-6.01	122.29	125.90
35	BA	914	A	N1-C6-N6	-6.01	114.99	118.60
35	BA	1053	G	P-O3'-C3'	6.01	126.92	119.70
35	BA	1359	C	N1-C2-O2	6.01	122.51	118.90
2	AB	327	G	N3-C2-N2	6.01	124.11	119.90
2	AB	556	A	N9-C1'-C2'	-6.01	105.39	112.00
2	AB	1506	U	C4'-C3'-C2'	-6.01	96.59	102.60
2	AB	1651	G	C8-N9-C1'	6.01	134.82	127.00
2	AB	1687	G	N1-C2-N2	-6.01	110.79	116.20
2	AB	1815	A	P-O3'-C3'	6.01	126.92	119.70
2	AB	2544	G	C5'-C4'-O4'	6.01	116.31	109.10
13	AM	100	PHE	CB-CG-CD2	6.01	125.01	120.80
35	BA	282	A	N3-C4-N9	-6.01	122.59	127.40
35	BA	293	G	C5'-C4'-C3'	-6.01	106.38	116.00
35	BA	928	G	C3'-C2'-C1'	6.01	106.31	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1186	G	C6-C5-N7	-6.01	126.79	130.40
35	BA	1214	C	C6-N1-C2	-6.01	117.89	120.30
35	BA	1525	G	N3-C4-N9	6.01	129.61	126.00
2	AB	347	A	C4-C5-N7	-6.01	107.69	110.70
2	AB	742	A	C5'-C4'-O4'	6.01	116.31	109.10
2	AB	930	G	N3-C2-N2	6.01	124.11	119.90
2	AB	1378	A	O4'-C4'-C3'	6.01	110.91	106.10
2	AB	1634	A	C1'-O4'-C4'	-6.01	105.09	109.90
2	AB	2712	C	O4'-C1'-N1	6.01	113.01	108.20
14	AN	123	ARG	NE-CZ-NH2	6.01	123.31	120.30
35	BA	303	A	C2-N3-C4	6.01	113.61	110.60
35	BA	416	G	C8-N9-C4	-6.01	104.00	106.40
35	BA	522	C	N3-C4-C5	-6.01	119.50	121.90
35	BA	592	G	C5-N7-C8	-6.01	101.29	104.30
35	BA	1053	G	O4'-C1'-N9	-6.01	103.39	108.20
35	BA	1239	A	C5-C6-N1	-6.01	114.69	117.70
35	BA	1326	U	N1-C2-O2	-6.01	118.59	122.80
36	BB	59	A	C5'-C4'-C3'	-6.01	106.38	116.00
37	BC	37	U	N1-C2-N3	6.01	118.51	114.90
40	BF	3	TYR	CG-CD1-CE1	-6.01	116.49	121.30
2	AB	100	U	C5'-C4'-C3'	-6.01	106.39	116.00
2	AB	199	A	N1-C6-N6	6.01	122.21	118.60
2	AB	501	A	N1-C6-N6	6.01	122.21	118.60
2	AB	849	A	C5'-C4'-C3'	-6.01	106.38	116.00
2	AB	1106	G	N9-C1'-C2'	-6.01	105.39	112.00
2	AB	1143	A	O3'-P-O5'	-6.01	92.58	104.00
2	AB	1260	A	N9-C4-C5	6.01	108.20	105.80
2	AB	1523	U	O5'-P-OP1	-6.01	100.29	105.70
2	AB	1558	C	C1'-O4'-C4'	6.01	114.71	109.90
2	AB	1568	G	C4-C5-C6	6.01	122.41	118.80
2	AB	1661	G	C2-N3-C4	6.01	114.91	111.90
2	AB	1828	G	P-O3'-C3'	6.01	126.91	119.70
2	AB	1838	C	N3-C2-O2	-6.01	117.69	121.90
2	AB	2443	C	C5'-C4'-C3'	-6.01	106.38	116.00
2	AB	2753	A	C4-C5-C6	6.01	120.00	117.00
35	BA	682	G	N3-C4-C5	-6.01	125.59	128.60
2	AB	341	C	C1'-O4'-C4'	6.01	114.71	109.90
2	AB	469	G	C3'-C2'-C1'	-6.01	96.69	101.50
2	AB	684	G	C6-N1-C2	-6.01	121.50	125.10
2	AB	959	A	N7-C8-N9	6.01	116.80	113.80
2	AB	1921	G	N1-C6-O6	6.01	123.50	119.90
2	AB	2209	G	O4'-C1'-N9	6.01	113.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2461	A	O4'-C4'-C3'	6.01	110.91	106.10
2	AB	2600	A	O4'-C1'-N9	6.01	113.01	108.20
2	AB	181	A	C6-N1-C2	6.01	122.20	118.60
2	AB	911	A	N9-C4-C5	6.01	108.20	105.80
2	AB	1239	G	C5'-C4'-O4'	6.01	116.31	109.10
2	AB	1833	C	C2-N3-C4	6.01	122.90	119.90
2	AB	1969	A	C4-C5-C6	-6.01	114.00	117.00
2	AB	2173	A	N9-C4-C5	6.01	108.20	105.80
2	AB	2231	U	N3-C4-O4	6.01	123.61	119.40
2	AB	2468	A	O3'-P-O5'	-6.01	92.59	104.00
2	AB	2892	G	C4-C5-N7	-6.01	108.40	110.80
35	BA	405	U	C5'-C4'-C3'	-6.01	106.39	116.00
35	BA	585	G	C6-C5-N7	-6.01	126.80	130.40
35	BA	600	A	C3'-C2'-C1'	6.01	106.31	101.50
35	BA	1041	G	C4-C5-C6	6.01	122.40	118.80
2	AB	19	A	O4'-C1'-C2'	-6.00	99.80	105.80
2	AB	1601	G	N3-C4-N9	6.00	129.60	126.00
2	AB	1719	G	C5'-C4'-O4'	6.00	116.31	109.10
2	AB	2032	G	C5'-C4'-O4'	6.00	116.31	109.10
2	AB	2455	G	N7-C8-N9	6.00	116.10	113.10
35	BA	448	A	C6-C5-N7	-6.00	128.10	132.30
35	BA	859	G	C2-N3-C4	6.00	114.90	111.90
36	BB	36	U	C6-N1-C2	6.00	124.60	121.00
2	AB	702	U	O4'-C1'-N1	6.00	113.00	108.20
2	AB	1243	C	C5-C4-N4	-6.00	116.00	120.20
2	AB	1388	G	C5-C6-O6	-6.00	125.00	128.60
2	AB	1447	C	C6-N1-C2	-6.00	117.90	120.30
2	AB	1601	G	C2'-C3'-O3'	6.00	123.31	113.70
2	AB	1667	G	N9-C4-C5	6.00	107.80	105.40
2	AB	1684	G	N3-C4-C5	-6.00	125.60	128.60
2	AB	1914	C	C4-C5-C6	6.00	120.40	117.40
2	AB	2217	G	C6-N1-C2	-6.00	121.50	125.10
2	AB	2643	G	C2-N3-C4	-6.00	108.90	111.90
2	AB	2813	A	C6-N1-C2	6.00	122.20	118.60
35	BA	44	A	C1'-O4'-C4'	-6.00	105.10	109.90
35	BA	360	G	C5'-C4'-O4'	6.00	116.31	109.10
35	BA	606	G	O5'-C5'-C4'	-6.00	100.29	111.70
35	BA	1236	A	C8-N9-C4	-6.00	103.40	105.80
35	BA	1419	G	C4-N9-C1'	-6.00	118.69	126.50
37	BC	4	G	C5-N7-C8	-6.00	101.30	104.30
37	BC	77	A	N9-C4-C5	6.00	108.20	105.80
2	AB	89	A	C2-N3-C4	-6.00	107.60	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	321	U	O4'-C1'-C2'	-6.00	99.80	105.80
2	AB	462	C	C5-C6-N1	6.00	124.00	121.00
2	AB	840	C	N1-C2-N3	-6.00	115.00	119.20
2	AB	1522	A	O4'-C4'-C3'	6.00	110.90	106.10
2	AB	2125	G	N3-C4-C5	-6.00	125.60	128.60
2	AB	2514	U	C5'-C4'-C3'	-6.00	106.40	116.00
8	AH	108	PHE	CG-CD1-CE1	-6.00	114.20	120.80
35	BA	128	G	C2'-C3'-O3'	6.00	123.30	113.70
35	BA	553	A	O4'-C1'-N9	6.00	113.00	108.20
35	BA	571	U	N3-C4-C5	6.00	118.20	114.60
35	BA	726	C	C5-C4-N4	-6.00	116.00	120.20
35	BA	1145	A	C5-N7-C8	-6.00	100.90	103.90
35	BA	1430	A	C5-C6-N6	6.00	128.50	123.70
35	BA	1527	U	C2-N3-C4	-6.00	123.40	127.00
36	BB	24	A	O4'-C1'-N9	6.00	113.00	108.20
2	AB	568	U	N3-C2-O2	-6.00	118.00	122.20
2	AB	648	G	O4'-C1'-N9	6.00	113.00	108.20
2	AB	856	G	C5-C6-N1	6.00	114.50	111.50
2	AB	2482	A	C5-N7-C8	6.00	106.90	103.90
35	BA	448	A	O4'-C1'-N9	6.00	113.00	108.20
35	BA	594	U	O4'-C1'-N1	6.00	113.00	108.20
35	BA	627	G	N3-C4-N9	6.00	129.60	126.00
35	BA	1094	G	C5-N7-C8	-6.00	101.30	104.30
2	AB	765	C	C4-C5-C6	6.00	120.40	117.40
2	AB	1369	G	C6-C5-N7	-6.00	126.80	130.40
2	AB	1900	A	P-O3'-C3'	6.00	126.90	119.70
2	AB	2244	U	C5'-C4'-O4'	6.00	116.30	109.10
15	AO	28	PHE	N-CA-CB	-6.00	99.80	110.60
35	BA	265	G	N1-C2-N3	-6.00	120.30	123.90
35	BA	571	U	N3-C4-O4	-6.00	115.20	119.40
2	AB	1404	C	C6-N1-C1'	6.00	128.00	120.80
2	AB	2214	C	N3-C4-N4	-6.00	113.80	118.00
2	AB	2337	G	C1'-O4'-C4'	6.00	114.70	109.90
2	AB	2437	G	N9-C4-C5	6.00	107.80	105.40
2	AB	2752	C	C5-C6-N1	6.00	124.00	121.00
2	AB	2776	A	O4'-C1'-N9	-6.00	103.40	108.20
35	BA	232	G	N3-C4-N9	-6.00	122.40	126.00
35	BA	350	G	C6-C5-N7	-6.00	126.80	130.40
35	BA	1215	G	C2-N3-C4	6.00	114.90	111.90
35	BA	1287	A	N1-C6-N6	-6.00	115.00	118.60
35	BA	1496	C	C6-N1-C2	6.00	122.70	120.30
36	BB	35	G	C2-N3-C4	6.00	114.90	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	175	G	N3-C4-N9	6.00	129.60	126.00
2	AB	710	U	C6-N1-C2	-6.00	117.40	121.00
2	AB	1342	A	C8-N9-C4	-6.00	103.40	105.80
2	AB	1739	A	C2-N3-C4	6.00	113.60	110.60
2	AB	1869	G	N1-C2-N2	-6.00	110.81	116.20
2	AB	2227	A	C4'-C3'-C2'	-6.00	96.61	102.60
2	AB	2461	A	N9-C4-C5	-6.00	103.40	105.80
7	AG	166	ARG	NE-CZ-NH1	6.00	123.30	120.30
35	BA	9	G	N9-C1'-C2'	-6.00	105.41	112.00
35	BA	1267	C	C5-C4-N4	6.00	124.40	120.20
35	BA	1324	A	C5-C6-N1	-6.00	114.70	117.70
36	BB	57	C	C5-C4-N4	6.00	124.40	120.20
2	AB	409	G	C3'-C2'-C1'	5.99	106.30	101.50
2	AB	597	G	C4-C5-C6	-5.99	115.20	118.80
2	AB	1243	C	N1-C2-N3	5.99	123.39	119.20
2	AB	1364	G	C5-C6-N1	-5.99	108.50	111.50
2	AB	2166	U	N1-C2-O2	5.99	127.00	122.80
35	BA	126	G	C4-C5-N7	5.99	113.20	110.80
35	BA	197	A	C5'-C4'-O4'	5.99	116.29	109.10
35	BA	558	G	N1-C2-N3	-5.99	120.30	123.90
35	BA	849	G	C4'-C3'-C2'	-5.99	96.61	102.60
35	BA	907	A	C6-C5-N7	5.99	136.50	132.30
35	BA	1082	A	C4-C5-N7	-5.99	107.70	110.70
35	BA	1302	C	O4'-C1'-N1	5.99	113.00	108.20
2	AB	140	C	C2-N1-C1'	5.99	125.39	118.80
2	AB	529	A	C4-C5-N7	-5.99	107.70	110.70
2	AB	1138	G	C5'-C4'-O4'	5.99	116.29	109.10
2	AB	1186	G	O5'-C5'-C4'	-5.99	100.32	111.70
35	BA	78	A	C1'-O4'-C4'	5.99	114.69	109.90
35	BA	688	G	O4'-C1'-N9	5.99	112.99	108.20
35	BA	851	G	C5-N7-C8	5.99	107.30	104.30
35	BA	1076	U	N3-C4-O4	5.99	123.59	119.40
2	AB	221	A	C5-N7-C8	-5.99	100.91	103.90
2	AB	717	C	C3'-C2'-C1'	5.99	106.29	101.50
2	AB	787	C	C4-C5-C6	5.99	120.40	117.40
2	AB	875	G	C5'-C4'-O4'	-5.99	101.91	109.10
2	AB	879	G	N1-C2-N3	5.99	127.49	123.90
2	AB	1296	G	C2-N3-C4	5.99	114.89	111.90
2	AB	1388	G	N9-C4-C5	5.99	107.80	105.40
2	AB	2336	A	N7-C8-N9	5.99	116.80	113.80
2	AB	2419	U	C4-C5-C6	5.99	123.29	119.70
2	AB	2517	C	N3-C2-O2	-5.99	117.71	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AH	46	ASP	CB-CG-OD2	-5.99	112.91	118.30
1	AA	1	U	C1'-O4'-C4'	5.99	114.69	109.90
2	AB	81	G	C5-C6-N1	5.99	114.50	111.50
2	AB	314	C	O3'-P-O5'	-5.99	92.62	104.00
2	AB	597	G	C8-N9-C4	-5.99	104.00	106.40
2	AB	892	A	C6-N1-C2	5.99	122.19	118.60
2	AB	1150	C	C5-C4-N4	-5.99	116.01	120.20
2	AB	1158	C	N3-C2-O2	-5.99	117.71	121.90
2	AB	1158	C	N3-C4-N4	5.99	122.19	118.00
2	AB	1387	A	N9-C4-C5	-5.99	103.40	105.80
2	AB	1669	A	C5-C6-N6	-5.99	118.91	123.70
2	AB	2032	G	C5'-C4'-C3'	-5.99	106.42	116.00
2	AB	2062	A	N3-C4-N9	-5.99	122.61	127.40
2	AB	2252	G	P-O3'-C3'	5.99	126.89	119.70
35	BA	82	G	C5-N7-C8	-5.99	101.31	104.30
35	BA	103	U	N1-C2-N3	5.99	118.49	114.90
35	BA	547	A	C2-N3-C4	5.99	113.59	110.60
35	BA	566	G	C4'-C3'-C2'	-5.99	96.61	102.60
35	BA	759	A	N1-C6-N6	5.99	122.19	118.60
35	BA	1221	G	O4'-C1'-N9	5.99	112.99	108.20
35	BA	1247	U	N3-C4-O4	5.99	123.59	119.40
54	BT	69	TYR	CB-CG-CD2	-5.99	117.41	121.00
2	AB	187	G	O5'-P-OP1	-5.99	100.31	105.70
2	AB	631	A	C4'-C3'-O3'	5.99	124.97	113.00
2	AB	934	U	C2-N3-C4	-5.99	123.41	127.00
2	AB	1319	C	C3'-C2'-C1'	5.99	106.29	101.50
2	AB	1602	U	O4'-C4'-C3'	5.99	110.89	106.10
2	AB	1630	A	N7-C8-N9	-5.99	110.81	113.80
2	AB	2265	U	C1'-O4'-C4'	5.99	114.69	109.90
2	AB	2648	G	N7-C8-N9	5.99	116.09	113.10
35	BA	711	G	C4-C5-N7	-5.99	108.41	110.80
35	BA	1213	A	P-O3'-C3'	5.99	126.89	119.70
35	BA	1499	A	N1-C6-N6	5.99	122.19	118.60
2	AB	169	G	O4'-C1'-N9	5.99	112.99	108.20
2	AB	239	C	C6-N1-C2	-5.99	117.91	120.30
2	AB	574	A	C2-N3-C4	5.99	113.59	110.60
2	AB	603	A	C4'-C3'-O3'	5.99	124.97	113.00
2	AB	1580	A	C8-N9-C4	-5.99	103.41	105.80
2	AB	1927	A	N3-C4-C5	-5.99	122.61	126.80
2	AB	1964	G	N1-C6-O6	-5.99	116.31	119.90
35	BA	127	G	C3'-C2'-C1'	5.99	106.29	101.50
35	BA	592	G	C2-N3-C4	5.99	114.89	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	665	A	N7-C8-N9	5.99	116.79	113.80
35	BA	680	C	C4'-C3'-C2'	-5.99	96.61	102.60
2	AB	571	U	N1-C2-N3	5.98	118.49	114.90
2	AB	1299	G	C6-N1-C2	-5.98	121.51	125.10
2	AB	1405	U	N3-C4-O4	-5.98	115.21	119.40
2	AB	1415	U	C5'-C4'-O4'	5.98	116.28	109.10
2	AB	2357	G	C4-C5-N7	-5.98	108.41	110.80
2	AB	2600	A	C5-N7-C8	-5.98	100.91	103.90
2	AB	2634	A	C5-C6-N6	-5.98	118.91	123.70
35	BA	6	G	C5-N7-C8	-5.98	101.31	104.30
2	AB	882	G	P-O3'-C3'	5.98	126.88	119.70
2	AB	1031	G	C3'-C2'-C1'	-5.98	96.71	101.50
2	AB	1138	G	N1-C2-N3	-5.98	120.31	123.90
2	AB	1472	C	C2-N1-C1'	-5.98	112.22	118.80
2	AB	1530	G	C5'-C4'-O4'	5.98	116.28	109.10
2	AB	1704	C	C4-C5-C6	5.98	120.39	117.40
2	AB	1913	A	N3-C4-C5	-5.98	122.61	126.80
2	AB	2120	G	N9-C4-C5	-5.98	103.01	105.40
2	AB	2708	G	C5-N7-C8	5.98	107.29	104.30
2	AB	2885	G	N3-C4-N9	5.98	129.59	126.00
35	BA	773	G	C6-C5-N7	-5.98	126.81	130.40
1	AA	50	A	O4'-C1'-C2'	5.98	112.98	107.60
2	AB	114	U	P-O3'-C3'	5.98	126.88	119.70
2	AB	524	G	N3-C4-C5	-5.98	125.61	128.60
2	AB	730	A	N1-C6-N6	5.98	122.19	118.60
2	AB	1300	G	C4-C5-C6	5.98	122.39	118.80
2	AB	1353	A	C5'-C4'-O4'	5.98	116.28	109.10
2	AB	2001	C	O4'-C1'-N1	5.98	112.98	108.20
2	AB	2070	A	C1'-O4'-C4'	5.98	114.68	109.90
2	AB	2357	G	C8-N9-C1'	5.98	134.78	127.00
2	AB	2371	G	C5'-C4'-O4'	5.98	116.28	109.10
35	BA	976	G	C5'-C4'-O4'	-5.98	101.92	109.10
35	BA	1198	G	O4'-C4'-C3'	5.98	110.88	106.10
35	BA	1316	G	C6-N1-C2	5.98	128.69	125.10
35	BA	1412	C	C5-C4-N4	-5.98	116.01	120.20
53	BS	2	ASP	CB-CG-OD1	-5.98	112.92	118.30
2	AB	32	C	C6-N1-C2	5.98	122.69	120.30
2	AB	554	U	C6-N1-C2	-5.98	117.41	121.00
2	AB	1629	U	O4'-C1'-N1	5.98	112.98	108.20
2	AB	1800	C	C4-C5-C6	-5.98	114.41	117.40
2	AB	2536	G	C5-C6-N1	5.98	114.49	111.50
2	AB	2546	U	P-O3'-C3'	5.98	126.88	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	399	G	C2-N3-C4	5.98	114.89	111.90
35	BA	844	G	C3'-C2'-C1'	5.98	106.28	101.50
35	BA	1300	G	N1-C2-N3	5.98	127.49	123.90
35	BA	1526	G	N3-C4-N9	5.98	129.59	126.00
44	BJ	128	VAL	CG1-CB-CG2	-5.98	101.33	110.90
2	AB	36	G	N1-C2-N3	-5.98	120.31	123.90
2	AB	1564	C	O4'-C4'-C3'	5.98	110.88	106.10
2	AB	1921	G	C4-C5-N7	5.98	113.19	110.80
2	AB	2647	U	N1-C2-N3	5.98	118.49	114.90
15	AO	78	LEU	CB-CG-CD1	5.98	121.16	111.00
35	BA	155	A	C2-N3-C4	5.98	113.59	110.60
35	BA	694	A	N3-C4-C5	-5.98	122.62	126.80
35	BA	787	A	O4'-C1'-C2'	5.98	112.98	107.60
35	BA	1165	U	C3'-C2'-C1'	5.98	106.28	101.50
1	AA	78	A	C2-N3-C4	5.98	113.59	110.60
2	AB	750	A	C4-C5-N7	5.98	113.69	110.70
2	AB	1510	G	C5'-C4'-O4'	5.98	116.27	109.10
2	AB	2563	U	N1-C2-N3	-5.98	111.31	114.90
35	BA	854	U	N1-C2-O2	-5.98	118.62	122.80
45	BK	126	PHE	CB-CG-CD1	-5.98	116.62	120.80
1	AA	71	C	C5-C6-N1	5.97	123.99	121.00
2	AB	50	U	C3'-C2'-C1'	5.97	106.28	101.50
2	AB	334	C	C5-C6-N1	5.97	123.99	121.00
2	AB	425	G	N9-C1'-C2'	-5.97	105.43	112.00
2	AB	855	G	C4-C5-C6	5.97	122.39	118.80
2	AB	1243	C	N3-C4-C5	5.97	124.29	121.90
2	AB	1251	C	N1-C2-N3	-5.97	115.02	119.20
2	AB	1354	A	C5-C6-N6	-5.97	118.92	123.70
2	AB	1474	U	C3'-C2'-C1'	5.97	106.28	101.50
2	AB	1608	A	C5-N7-C8	5.97	106.89	103.90
6	AF	120	VAL	CB-CA-C	5.97	122.75	111.40
35	BA	238	A	C8-N9-C4	-5.97	103.41	105.80
35	BA	240	G	C4'-C3'-C2'	-5.97	96.62	102.60
35	BA	358	U	C4-C5-C6	5.97	123.28	119.70
35	BA	579	A	C8-N9-C4	-5.97	103.41	105.80
35	BA	601	G	N1-C2-N3	5.97	127.48	123.90
35	BA	712	A	O4'-C1'-N9	5.97	112.98	108.20
35	BA	778	G	C1'-O4'-C4'	-5.97	105.12	109.90
35	BA	931	C	C1'-O4'-C4'	-5.97	105.12	109.90
35	BA	947	G	C8-N9-C4	-5.97	104.01	106.40
48	BN	60	PHE	CB-CG-CD2	-5.97	116.62	120.80
1	AA	5	U	C2-N3-C4	-5.97	123.42	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	244	A	C4-C5-C6	-5.97	114.01	117.00
2	AB	752	A	C4-C5-C6	5.97	119.99	117.00
2	AB	1066	U	C5-C4-O4	-5.97	122.32	125.90
2	AB	2007	U	C3'-C2'-C1'	5.97	106.28	101.50
2	AB	2095	A	O4'-C4'-C3'	5.97	110.88	106.10
2	AB	2595	G	N1-C6-O6	-5.97	116.32	119.90
2	AB	2615	U	N3-C4-O4	5.97	123.58	119.40
5	AE	156	PHE	CB-CG-CD1	-5.97	116.62	120.80
35	BA	166	U	P-O5'-C5'	5.97	130.46	120.90
35	BA	491	G	O4'-C1'-N9	5.97	112.98	108.20
35	BA	520	A	O4'-C1'-N9	5.97	112.98	108.20
35	BA	724	G	C5-C6-N1	5.97	114.49	111.50
35	BA	832	G	C5'-C4'-O4'	5.97	116.27	109.10
35	BA	874	G	C4-C5-C6	5.97	122.38	118.80
35	BA	1000	A	N3-C4-N9	-5.97	122.62	127.40
35	BA	1063	C	N1-C2-N3	-5.97	115.02	119.20
35	BA	1146	A	C4-C5-N7	-5.97	107.71	110.70
35	BA	1526	G	N9-C1'-C2'	-5.97	105.43	112.00
2	AB	1591	A	C3'-C2'-C1'	5.97	106.28	101.50
2	AB	1720	U	C5-C6-N1	-5.97	119.72	122.70
2	AB	2544	G	N1-C6-O6	5.97	123.48	119.90
7	AG	19	PHE	CB-CG-CD2	5.97	124.98	120.80
8	AH	57	TYR	CG-CD2-CE2	-5.97	116.52	121.30
35	BA	262	A	C3'-C2'-C1'	5.97	106.28	101.50
35	BA	541	G	N9-C4-C5	5.97	107.79	105.40
2	AB	415	A	N3-C4-C5	-5.97	122.62	126.80
2	AB	840	C	N3-C2-O2	-5.97	117.72	121.90
2	AB	939	G	C5'-C4'-O4'	5.97	116.26	109.10
2	AB	1092	C	C2-N3-C4	-5.97	116.92	119.90
2	AB	1216	G	N7-C8-N9	5.97	116.08	113.10
2	AB	1261	C	O4'-C1'-N1	5.97	112.97	108.20
2	AB	1435	G	C5-C6-N1	5.97	114.48	111.50
2	AB	1458	U	C3'-C2'-C1'	5.97	106.28	101.50
2	AB	1558	C	N3-C4-N4	-5.97	113.82	118.00
2	AB	1636	U	C5'-C4'-O4'	5.97	116.26	109.10
2	AB	1849	G	C6-C5-N7	-5.97	126.82	130.40
35	BA	269	C	C6-N1-C2	-5.97	117.91	120.30
35	BA	310	G	C2-N3-C4	-5.97	108.92	111.90
35	BA	312	C	N1-C2-O2	5.97	122.48	118.90
35	BA	398	U	C6-N1-C2	5.97	124.58	121.00
35	BA	439	U	O4'-C4'-C3'	5.97	110.88	106.10
35	BA	459	A	C6-C5-N7	5.97	136.48	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	546	A	C2-N3-C4	5.97	113.58	110.60
35	BA	1240	U	N1-C1'-C2'	5.97	121.76	114.00
35	BA	1304	G	C4'-C3'-O3'	5.97	124.94	113.00
35	BA	1360	A	N3-C4-N9	-5.97	122.62	127.40
2	AB	169	G	C5'-C4'-O4'	5.97	116.26	109.10
2	AB	1343	G	C5-C6-N1	5.97	114.48	111.50
2	AB	1407	G	C5-C6-N1	5.97	114.48	111.50
2	AB	1507	C	O4'-C1'-N1	5.97	112.97	108.20
2	AB	2120	G	N1-C2-N2	5.97	121.57	116.20
2	AB	2355	G	O4'-C4'-C3'	5.97	110.87	106.10
2	AB	2557	G	N1-C2-N2	-5.97	110.83	116.20
2	AB	2560	A	C2-N3-C4	5.97	113.58	110.60
2	AB	2825	G	N7-C8-N9	5.97	116.08	113.10
35	BA	789	U	C5-C4-O4	-5.97	122.32	125.90
37	BC	65	G	C5-N7-C8	-5.97	101.32	104.30
2	AB	106	C	C5-C6-N1	5.97	123.98	121.00
2	AB	229	C	N1-C1'-C2'	-5.97	105.44	112.00
2	AB	252	G	C6-N1-C2	-5.97	121.52	125.10
2	AB	452	G	P-O3'-C3'	5.97	126.86	119.70
2	AB	564	C	N3-C2-O2	-5.97	117.72	121.90
2	AB	673	C	C5'-C4'-O4'	5.97	116.26	109.10
2	AB	709	U	N1-C2-O2	-5.97	118.62	122.80
2	AB	1309	G	N3-C4-N9	5.97	129.58	126.00
2	AB	1761	C	N3-C4-N4	-5.97	113.82	118.00
17	AQ	36	TYR	CB-CG-CD2	-5.97	117.42	121.00
35	BA	16	A	C3'-C2'-C1'	-5.97	96.73	101.50
35	BA	975	A	C4-C5-C6	5.97	119.98	117.00
35	BA	1191	A	N1-C2-N3	-5.97	126.32	129.30
35	BA	1242	G	C4'-C3'-C2'	-5.97	96.63	102.60
2	AB	263	G	O4'-C1'-N9	5.96	112.97	108.20
2	AB	308	G	N3-C4-N9	-5.96	122.42	126.00
2	AB	574	A	O4'-C1'-C2'	-5.96	99.83	105.80
2	AB	793	A	N1-C6-N6	5.96	122.18	118.60
2	AB	1121	C	N1-C2-O2	5.96	122.48	118.90
2	AB	1836	C	O4'-C1'-N1	5.96	112.97	108.20
2	AB	1978	A	C4'-C3'-C2'	-5.96	96.64	102.60
2	AB	2473	U	C1'-O4'-C4'	-5.96	105.13	109.90
2	AB	2538	C	C5'-C4'-O4'	5.96	116.26	109.10
2	AB	2885	G	N1-C2-N2	-5.96	110.83	116.20
3	AC	16	ASP	CB-CG-OD2	-5.96	112.93	118.30
35	BA	95	C	C5-C6-N1	5.96	123.98	121.00
35	BA	330	C	C1'-O4'-C4'	-5.96	105.13	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	52	U	C5-C4-O4	5.96	129.48	125.90
49	BO	94	LEU	CB-CG-CD1	-5.96	100.86	111.00
2	AB	141	G	C4-C5-C6	5.96	122.38	118.80
2	AB	1896	G	C4-C5-N7	5.96	113.19	110.80
2	AB	2746	U	C1'-O4'-C4'	-5.96	105.13	109.90
17	AQ	111	ARG	NE-CZ-NH1	5.96	123.28	120.30
35	BA	125	U	C4'-C3'-C2'	-5.96	96.64	102.60
1	AA	103	U	C5-C6-N1	5.96	125.68	122.70
1	AA	115	A	C5-C6-N1	5.96	120.68	117.70
2	AB	902	C	C5-C4-N4	-5.96	116.03	120.20
2	AB	2168	G	N7-C8-N9	5.96	116.08	113.10
2	AB	2635	A	C4-C5-N7	5.96	113.68	110.70
2	AB	2718	G	C6-N1-C2	-5.96	121.52	125.10
2	AB	2839	G	N1-C2-N3	-5.96	120.32	123.90
2	AB	2865	U	O4'-C1'-N1	5.96	112.97	108.20
2	AB	2872	A	C6-C5-N7	5.96	136.47	132.30
35	BA	242	G	C4-C5-N7	-5.96	108.42	110.80
35	BA	416	G	O5'-C5'-C4'	-5.96	100.37	111.70
35	BA	643	C	C6-N1-C2	5.96	122.69	120.30
35	BA	750	C	N3-C2-O2	-5.96	117.73	121.90
35	BA	782	A	C5-C6-N1	-5.96	114.72	117.70
35	BA	1043	G	C8-N9-C4	-5.96	104.02	106.40
35	BA	1303	C	N3-C4-N4	5.96	122.17	118.00
35	BA	1537	U	C3'-C2'-C1'	5.96	106.27	101.50
50	BP	62	ARG	NH1-CZ-NH2	5.96	125.96	119.40
2	AB	555	G	C2-N3-C4	5.96	114.88	111.90
2	AB	783	A	C4-C5-C6	5.96	119.98	117.00
2	AB	1852	U	N1-C2-O2	5.96	126.97	122.80
2	AB	2212	A	N9-C4-C5	-5.96	103.42	105.80
2	AB	2326	C	C2-N3-C4	-5.96	116.92	119.90
2	AB	2713	U	C3'-C2'-C1'	5.96	106.27	101.50
35	BA	80	A	N9-C1'-C2'	5.96	121.75	114.00
35	BA	698	G	O4'-C1'-N9	-5.96	103.43	108.20
35	BA	1048	G	C1'-O4'-C4'	-5.96	105.13	109.90
1	AA	106	G	C6-C5-N7	-5.96	126.83	130.40
2	AB	179	C	O4'-C1'-C2'	-5.96	99.84	105.80
2	AB	257	C	C4-C5-C6	5.96	120.38	117.40
2	AB	486	C	N1-C1'-C2'	-5.96	105.44	112.00
2	AB	1019	U	O3'-P-O5'	-5.96	92.68	104.00
2	AB	1019	U	N3-C2-O2	-5.96	118.03	122.20
2	AB	1141	U	P-O3'-C3'	5.96	126.85	119.70
2	AB	1601	G	C1'-O4'-C4'	-5.96	105.13	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2055	C	C4'-C3'-C2'	-5.96	96.64	102.60
2	AB	2080	A	C6-N1-C2	5.96	122.17	118.60
2	AB	2135	A	C4'-C3'-C2'	-5.96	96.64	102.60
2	AB	2154	A	C5-N7-C8	-5.96	100.92	103.90
2	AB	2237	G	C5-N7-C8	-5.96	101.32	104.30
35	BA	897	C	C6-N1-C2	-5.96	117.92	120.30
35	BA	1283	U	N3-C2-O2	-5.96	118.03	122.20
35	BA	1507	A	C8-N9-C4	-5.96	103.42	105.80
2	AB	562	U	N1-C2-N3	5.96	118.47	114.90
2	AB	944	C	N1-C2-N3	-5.96	115.03	119.20
2	AB	1275	A	O4'-C4'-C3'	-5.96	98.04	104.00
2	AB	1373	A	C4-C5-C6	-5.96	114.02	117.00
2	AB	1527	G	N3-C4-C5	-5.96	125.62	128.60
2	AB	1830	C	N1-C2-O2	5.96	122.47	118.90
2	AB	1870	C	C5-C4-N4	5.96	124.37	120.20
2	AB	1967	C	C4-C5-C6	5.96	120.38	117.40
2	AB	2534	A	N1-C6-N6	5.96	122.17	118.60
2	AB	2674	G	C4'-C3'-C2'	-5.96	96.64	102.60
32	A5	41	ARG	CD-NE-CZ	5.96	131.94	123.60
35	BA	121	U	C5'-C4'-O4'	5.96	116.25	109.10
35	BA	242	G	N9-C4-C5	5.96	107.78	105.40
35	BA	246	A	N9-C4-C5	-5.96	103.42	105.80
35	BA	714	G	C1'-O4'-C4'	-5.96	105.14	109.90
35	BA	908	A	C8-N9-C4	-5.96	103.42	105.80
35	BA	1424	U	N3-C4-O4	5.96	123.57	119.40
37	BC	67	C	C5'-C4'-O4'	5.96	116.25	109.10
2	AB	19	A	C5-N7-C8	5.96	106.88	103.90
2	AB	884	U	C5'-C4'-O4'	5.96	116.25	109.10
2	AB	1026	G	N3-C4-N9	5.96	129.57	126.00
2	AB	1033	U	N1-C2-N3	5.96	118.47	114.90
2	AB	1968	G	N3-C2-N2	-5.96	115.73	119.90
2	AB	2542	A	C4-C5-C6	-5.96	114.02	117.00
35	BA	525	C	O4'-C1'-N1	5.96	112.96	108.20
35	BA	1347	G	N3-C4-N9	-5.96	122.43	126.00
37	BC	6	G	C5-C6-O6	-5.96	125.03	128.60
43	BI	91	ARG	CD-NE-CZ	5.96	131.94	123.60
1	AA	44	G	O4'-C1'-N9	-5.95	103.44	108.20
2	AB	78	U	C5-C4-O4	-5.95	122.33	125.90
2	AB	134	G	O4'-C1'-N9	5.95	112.96	108.20
2	AB	315	G	C4-C5-C6	5.95	122.37	118.80
2	AB	936	A	C4'-C3'-C2'	-5.95	96.65	102.60
2	AB	1329	U	C4'-C3'-C2'	5.95	108.55	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1361	G	C8-N9-C4	5.95	108.78	106.40
2	AB	1465	G	C4'-C3'-C2'	-5.95	96.65	102.60
2	AB	1490	A	C5-N7-C8	-5.95	100.92	103.90
2	AB	1649	G	C4-N9-C1'	-5.95	118.76	126.50
2	AB	1935	G	C5'-C4'-O4'	5.95	116.24	109.10
2	AB	1987	A	N9-C1'-C2'	-5.95	105.45	112.00
2	AB	1999	C	N1-C2-O2	5.95	122.47	118.90
2	AB	2683	C	N1-C2-O2	5.95	122.47	118.90
2	AB	2825	G	C5'-C4'-O4'	5.95	116.24	109.10
2	AB	2839	G	C6-N1-C2	-5.95	121.53	125.10
35	BA	436	C	C5-C6-N1	5.95	123.98	121.00
35	BA	716	A	C4'-C3'-C2'	-5.95	96.65	102.60
35	BA	718	A	C4'-C3'-C2'	5.95	108.55	102.60
35	BA	830	G	P-O3'-C3'	5.95	126.84	119.70
37	BC	48	U	P-O3'-C3'	5.95	126.84	119.70
2	AB	140	C	C3'-C2'-C1'	5.95	106.26	101.50
2	AB	651	G	C6-C5-N7	-5.95	126.83	130.40
2	AB	1013	C	C5'-C4'-O4'	5.95	116.24	109.10
2	AB	1286	A	C5'-C4'-C3'	-5.95	106.48	116.00
2	AB	2842	G	C6-N1-C2	-5.95	121.53	125.10
35	BA	152	A	P-O3'-C3'	5.95	126.84	119.70
35	BA	283	U	P-O3'-C3'	5.95	126.84	119.70
35	BA	487	A	O4'-C1'-N9	5.95	112.96	108.20
35	BA	793	U	C5-C4-O4	-5.95	122.33	125.90
1	AA	112	G	C2-N3-C4	5.95	114.88	111.90
2	AB	28	A	C8-N9-C4	-5.95	103.42	105.80
2	AB	170	U	O4'-C1'-N1	5.95	112.96	108.20
2	AB	706	A	O4'-C1'-N9	5.95	112.96	108.20
2	AB	1227	G	C4-C5-N7	5.95	113.18	110.80
2	AB	1570	A	O4'-C1'-N9	5.95	112.96	108.20
2	AB	1651	G	N3-C4-C5	-5.95	125.62	128.60
2	AB	1678	A	C6-N1-C2	-5.95	115.03	118.60
2	AB	1797	G	C6-N1-C2	-5.95	121.53	125.10
2	AB	1848	A	C5-N7-C8	-5.95	100.92	103.90
2	AB	2175	C	O3'-P-O5'	-5.95	92.69	104.00
2	AB	2833	U	O4'-C1'-N1	5.95	112.96	108.20
3	AC	10	VAL	CG1-CB-CG2	-5.95	101.38	110.90
35	BA	236	A	N9-C4-C5	5.95	108.18	105.80
35	BA	414	A	C4'-C3'-C2'	-5.95	96.65	102.60
35	BA	957	U	N3-C4-O4	5.95	123.56	119.40
37	BC	18	U	N3-C4-C5	-5.95	111.03	114.60
2	AB	11	C	N1-C2-O2	5.95	122.47	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	15	G	C8-N9-C4	-5.95	104.02	106.40
2	AB	717	C	C2-N3-C4	-5.95	116.93	119.90
2	AB	1337	G	O4'-C1'-N9	5.95	112.96	108.20
2	AB	1369	G	N1-C2-N2	5.95	121.56	116.20
2	AB	1477	A	N3-C4-N9	5.95	132.16	127.40
2	AB	2714	G	C5-C6-N1	5.95	114.47	111.50
35	BA	224	U	N3-C4-C5	5.95	118.17	114.60
35	BA	634	C	N3-C4-C5	-5.95	119.52	121.90
35	BA	802	A	C5-C6-N1	-5.95	114.73	117.70
35	BA	812	G	O4'-C1'-N9	5.95	112.96	108.20
35	BA	921	U	O4'-C4'-C3'	5.95	110.86	106.10
38	BD	122	ASP	CB-CG-OD1	5.95	123.65	118.30
2	AB	336	C	C5-C6-N1	-5.95	118.03	121.00
2	AB	354	A	C5-C6-N6	-5.95	118.94	123.70
2	AB	471	A	P-O3'-C3'	5.95	126.84	119.70
2	AB	524	G	C3'-C2'-C1'	-5.95	96.74	101.50
2	AB	686	U	C2-N1-C1'	5.95	124.84	117.70
2	AB	1003	G	N9-C4-C5	5.95	107.78	105.40
2	AB	1734	G	C8-N9-C4	-5.95	104.02	106.40
2	AB	1916	A	N1-C6-N6	-5.95	115.03	118.60
35	BA	670	G	N1-C2-N3	5.95	127.47	123.90
35	BA	1398	A	C6-N1-C2	-5.95	115.03	118.60
2	AB	1627	G	N7-C8-N9	-5.95	110.13	113.10
2	AB	1779	U	N3-C2-O2	-5.95	118.04	122.20
2	AB	1981	A	C5-C6-N6	5.95	128.46	123.70
2	AB	2190	G	C4'-C3'-C2'	-5.95	96.65	102.60
2	AB	2267	A	C6-N1-C2	-5.95	115.03	118.60
2	AB	2443	C	N3-C4-C5	-5.95	119.52	121.90
2	AB	2705	A	N1-C2-N3	-5.95	126.33	129.30
10	AJ	75	PHE	CB-CG-CD2	-5.95	116.64	120.80
35	BA	411	A	C5'-C4'-O4'	5.95	116.23	109.10
35	BA	442	G	N3-C2-N2	-5.95	115.74	119.90
45	BK	48	ARG	NE-CZ-NH2	-5.95	117.33	120.30
35	BA	168	G	C8-N9-C1'	5.94	134.73	127.00
35	BA	445	G	N3-C4-C5	-5.94	125.63	128.60
35	BA	536	C	C5-C6-N1	5.94	123.97	121.00
35	BA	1199	U	C6-N1-C2	-5.94	117.43	121.00
35	BA	1222	G	N3-C4-N9	5.94	129.57	126.00
35	BA	1532	U	O4'-C4'-C3'	5.94	110.86	106.10
39	BE	17	TRP	CG-CD2-CE3	5.94	139.25	133.90
1	AA	71	C	C1'-O4'-C4'	5.94	114.65	109.90
2	AB	63	A	O4'-C4'-C3'	5.94	110.85	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	406	G	C6-C5-N7	5.94	133.97	130.40
2	AB	439	A	C3'-C2'-C1'	-5.94	96.75	101.50
2	AB	669	G	P-O3'-C3'	5.94	126.83	119.70
2	AB	1596	A	N1-C6-N6	-5.94	115.03	118.60
2	AB	2142	A	C6-N1-C2	-5.94	115.03	118.60
2	AB	2576	G	C5'-C4'-O4'	5.94	116.23	109.10
2	AB	2855	C	N1-C1'-C2'	-5.94	105.46	112.00
20	AT	21	ARG	NE-CZ-NH1	-5.94	117.33	120.30
35	BA	40	C	O4'-C1'-N1	5.94	112.95	108.20
35	BA	248	C	C4'-C3'-C2'	-5.94	96.66	102.60
35	BA	364	A	N3-C4-C5	5.94	130.96	126.80
35	BA	412	A	C4-C5-N7	5.94	113.67	110.70
35	BA	495	A	C6-C5-N7	-5.94	128.14	132.30
35	BA	824	G	N1-C2-N3	-5.94	120.33	123.90
35	BA	1077	G	C8-N9-C1'	5.94	134.73	127.00
35	BA	1150	A	C5'-C4'-C3'	-5.94	106.49	116.00
35	BA	1323	G	C4-C5-N7	-5.94	108.42	110.80
35	BA	1341	U	C5'-C4'-C3'	-5.94	106.49	116.00
35	BA	1500	A	C5'-C4'-O4'	5.94	116.23	109.10
1	AA	22	U	C3'-C2'-C1'	5.94	106.25	101.50
2	AB	1331	G	N7-C8-N9	5.94	116.07	113.10
2	AB	1332	G	C6-N1-C2	-5.94	121.54	125.10
2	AB	1354	A	O4'-C1'-N9	5.94	112.95	108.20
2	AB	1878	G	C3'-C2'-C1'	5.94	106.25	101.50
2	AB	1890	A	N1-C6-N6	5.94	122.16	118.60
2	AB	2097	A	C4-C5-N7	-5.94	107.73	110.70
2	AB	2116	G	O4'-C4'-C3'	5.94	110.85	106.10
2	AB	2558	C	P-O5'-C5'	5.94	130.40	120.90
2	AB	2611	C	C5-C4-N4	-5.94	116.04	120.20
2	AB	2689	U	N3-C4-O4	5.94	123.56	119.40
35	BA	286	C	O4'-C4'-C3'	5.94	110.85	106.10
35	BA	765	G	N3-C4-N9	5.94	129.56	126.00
35	BA	1294	G	P-O3'-C3'	5.94	126.83	119.70
35	BA	1300	G	C4'-C3'-C2'	-5.94	96.66	102.60
2	AB	729	G	C4-C5-N7	-5.94	108.42	110.80
2	AB	820	A	N3-C4-N9	5.94	132.15	127.40
2	AB	1483	G	C4-C5-C6	5.94	122.36	118.80
2	AB	2275	C	O4'-C1'-N1	5.94	112.95	108.20
2	AB	2294	G	O4'-C1'-N9	5.94	112.95	108.20
2	AB	2627	G	N1-C2-N3	-5.94	120.34	123.90
2	AB	2659	G	N1-C2-N3	5.94	127.46	123.90
2	AB	2776	A	C3'-C2'-C1'	-5.94	96.75	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	978	A	N1-C6-N6	5.94	122.16	118.60
37	BC	24	C	N1-C1'-C2'	-5.94	105.47	112.00
2	AB	327	G	C8-N9-C1'	5.94	134.72	127.00
2	AB	766	U	C5-C4-O4	-5.94	122.34	125.90
2	AB	1261	C	N3-C4-N4	5.94	122.16	118.00
2	AB	1290	C	O4'-C1'-N1	5.94	112.95	108.20
2	AB	1623	G	N3-C2-N2	-5.94	115.74	119.90
2	AB	1682	G	C5-C6-N1	-5.94	108.53	111.50
2	AB	2705	A	P-O3'-C3'	5.94	126.82	119.70
35	BA	452	A	N1-C6-N6	5.94	122.16	118.60
35	BA	482	A	C5-C6-N1	5.94	120.67	117.70
35	BA	676	A	N3-C4-C5	-5.94	122.64	126.80
35	BA	1038	C	C1'-O4'-C4'	-5.94	105.15	109.90
35	BA	1215	G	N1-C2-N3	-5.94	120.34	123.90
35	BA	1298	U	C5'-C4'-O4'	-5.94	101.98	109.10
35	BA	1300	G	C4-C5-N7	5.94	113.17	110.80
35	BA	1513	A	N1-C6-N6	-5.94	115.04	118.60
2	AB	389	G	N3-C4-C5	-5.94	125.63	128.60
2	AB	788	A	C5-C6-N1	-5.94	114.73	117.70
2	AB	905	A	N3-C4-C5	-5.94	122.64	126.80
2	AB	1162	G	N9-C4-C5	5.94	107.78	105.40
2	AB	2086	U	C1'-O4'-C4'	-5.94	105.15	109.90
2	AB	2135	A	N9-C4-C5	5.94	108.17	105.80
35	BA	102	G	N1-C2-N2	5.94	121.54	116.20
35	BA	148	G	C3'-C2'-C1'	-5.94	96.75	101.50
35	BA	177	G	C5-C6-N1	5.94	114.47	111.50
35	BA	619	U	N3-C4-C5	-5.94	111.04	114.60
35	BA	852	G	O4'-C1'-C2'	-5.94	99.86	105.80
35	BA	963	G	N7-C8-N9	5.94	116.07	113.10
2	AB	160	A	N9-C4-C5	5.93	108.17	105.80
2	AB	538	A	C4-C5-N7	5.93	113.67	110.70
2	AB	1141	U	N1-C2-N3	5.93	118.46	114.90
2	AB	1322	A	O4'-C1'-N9	5.93	112.95	108.20
2	AB	1329	U	C5-C6-N1	-5.93	119.73	122.70
2	AB	1343	G	O4'-C4'-C3'	5.93	110.85	106.10
2	AB	1572	A	C4'-C3'-C2'	-5.93	96.67	102.60
2	AB	1597	A	C5'-C4'-C3'	-5.93	106.50	116.00
2	AB	2565	A	N9-C1'-C2'	-5.93	105.47	112.00
2	AB	2645	G	N9-C1'-C2'	-5.93	105.47	112.00
35	BA	26	A	C3'-C2'-C1'	5.93	106.25	101.50
35	BA	836	G	C5'-C4'-C3'	-5.93	106.50	116.00
35	BA	1266	G	C5-C6-N1	5.93	114.47	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1312	G	N1-C6-O6	-5.93	116.34	119.90
35	BA	1415	G	C2-N3-C4	5.93	114.87	111.90
37	BC	33	OMC	P-O3'-C3'	5.93	126.82	119.70
2	AB	1460	U	P-O3'-C3'	5.93	126.82	119.70
2	AB	1486	U	N3-C2-O2	-5.93	118.05	122.20
2	AB	1861	G	C6-N1-C2	-5.93	121.54	125.10
2	AB	2261	C	C2-N3-C4	-5.93	116.93	119.90
2	AB	2517	C	C5-C4-N4	-5.93	116.05	120.20
2	AB	2577	A	C3'-C2'-C1'	5.93	106.25	101.50
2	AB	2590	A	C6-C5-N7	-5.93	128.15	132.30
2	AB	2686	G	N1-C2-N3	-5.93	120.34	123.90
35	BA	255	G	N1-C6-O6	5.93	123.46	119.90
35	BA	604	G	C4-C5-N7	5.93	113.17	110.80
37	BC	2	G	N3-C2-N2	-5.93	115.75	119.90
2	AB	438	G	C8-N9-C4	-5.93	104.03	106.40
2	AB	733	G	N3-C4-C5	-5.93	125.63	128.60
2	AB	961	C	N3-C4-C5	-5.93	119.53	121.90
35	BA	845	A	C1'-O4'-C4'	5.93	114.64	109.90
35	BA	1026	G	C5'-C4'-O4'	5.93	116.22	109.10
36	BB	19	A	C5-N7-C8	5.93	106.86	103.90
2	AB	579	G	N1-C6-O6	5.93	123.46	119.90
2	AB	711	G	N3-C2-N2	-5.93	115.75	119.90
2	AB	908	C	N3-C4-C5	-5.93	119.53	121.90
2	AB	1242	U	N1-C2-N3	5.93	118.46	114.90
2	AB	1468	U	C4-C5-C6	5.93	123.26	119.70
2	AB	1603	A	C5-N7-C8	5.93	106.86	103.90
2	AB	1647	U	C5'-C4'-O4'	-5.93	101.98	109.10
2	AB	2038	G	C5-C6-O6	-5.93	125.04	128.60
2	AB	2179	C	O4'-C1'-N1	5.93	112.94	108.20
2	AB	2799	A	C5-C6-N1	5.93	120.67	117.70
2	AB	2900	A	C1'-O4'-C4'	-5.93	105.16	109.90
4	AD	110	LYS	N-CA-CB	-5.93	99.93	110.60
24	AX	2	PHE	CB-CG-CD1	5.93	124.95	120.80
35	BA	493	A	N1-C6-N6	5.93	122.16	118.60
35	BA	557	G	C5-C6-O6	-5.93	125.04	128.60
35	BA	978	A	C5-C6-N1	-5.93	114.73	117.70
35	BA	1172	C	O4'-C1'-N1	5.93	112.94	108.20
35	BA	1187	G	N3-C4-C5	-5.93	125.64	128.60
35	BA	1395	C	P-O3'-C3'	5.93	126.82	119.70
35	BA	1439	G	C8-N9-C4	-5.93	104.03	106.40
37	BC	12	G	N3-C4-N9	5.93	129.56	126.00
1	AA	3	C	C4-C5-C6	-5.93	114.44	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	309	A	C4-C5-C6	5.93	119.96	117.00
2	AB	1477	A	C6-C5-N7	-5.93	128.15	132.30
2	AB	1479	G	C2-N3-C4	5.93	114.86	111.90
2	AB	1868	C	C6-N1-C2	-5.93	117.93	120.30
2	AB	2625	G	O4'-C4'-C3'	5.93	110.84	106.10
35	BA	524	G	N9-C4-C5	5.93	107.77	105.40
35	BA	1014	A	N9-C4-C5	5.93	108.17	105.80
2	AB	445	C	C2-N3-C4	5.93	122.86	119.90
2	AB	592	A	C6-N1-C2	5.93	122.16	118.60
2	AB	676	A	C4-C5-C6	5.93	119.96	117.00
2	AB	1014	A	C4'-C3'-C2'	-5.93	96.67	102.60
2	AB	1081	U	C5-C6-N1	-5.93	119.74	122.70
2	AB	1728	C	C5-C6-N1	5.93	123.96	121.00
2	AB	2159	G	C6-N1-C2	-5.93	121.54	125.10
2	AB	2653	U	N1-C2-N3	5.93	118.46	114.90
5	AE	172	VAL	CG1-CB-CG2	-5.93	101.42	110.90
35	BA	196	A	N3-C4-N9	-5.93	122.66	127.40
35	BA	507	C	C4'-C3'-C2'	-5.93	96.67	102.60
35	BA	654	G	N1-C6-O6	-5.93	116.34	119.90
35	BA	996	A	N9-C4-C5	5.93	108.17	105.80
35	BA	1378	C	C3'-C2'-C1'	-5.93	96.76	101.50
2	AB	939	G	N9-C4-C5	5.92	107.77	105.40
2	AB	1054	A	N9-C4-C5	-5.92	103.43	105.80
2	AB	1382	G	N9-C4-C5	-5.92	103.03	105.40
2	AB	1560	G	P-O3'-C3'	5.92	126.81	119.70
2	AB	1643	G	O4'-C1'-N9	5.92	112.94	108.20
2	AB	1884	G	N1-C2-N2	-5.92	110.87	116.20
2	AB	2134	A	C5-C6-N6	-5.92	118.96	123.70
2	AB	2520	C	C6-N1-C2	5.92	122.67	120.30
15	AO	114	ARG	NE-CZ-NH1	-5.92	117.34	120.30
35	BA	105	G	O4'-C1'-N9	5.92	112.94	108.20
35	BA	126	G	C4'-C3'-C2'	-5.92	96.67	102.60
35	BA	365	U	C4'-C3'-C2'	-5.92	96.68	102.60
35	BA	552	U	C1'-O4'-C4'	5.92	114.64	109.90
35	BA	758	C	C4-C5-C6	-5.92	114.44	117.40
48	BN	53	ARG	NE-CZ-NH1	5.92	123.26	120.30
2	AB	330	A	O4'-C1'-N9	5.92	112.94	108.20
2	AB	553	G	N3-C4-C5	-5.92	125.64	128.60
2	AB	904	G	N3-C4-N9	5.92	129.55	126.00
2	AB	980	A	C4-C5-N7	5.92	113.66	110.70
2	AB	1476	U	C5'-C4'-O4'	5.92	116.21	109.10
2	AB	1543	G	C4-C5-C6	-5.92	115.25	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	537	G	N1-C2-N3	-5.92	120.35	123.90
35	BA	1247	U	N1-C2-O2	-5.92	118.65	122.80
35	BA	1535	C	N3-C4-N4	5.92	122.15	118.00
2	AB	14	A	C4-C5-N7	-5.92	107.74	110.70
2	AB	260	G	O4'-C1'-C2'	5.92	112.93	107.60
2	AB	900	A	C2-N3-C4	5.92	113.56	110.60
2	AB	1125	G	N9-C1'-C2'	-5.92	105.49	112.00
2	AB	1616	A	N1-C2-N3	5.92	132.26	129.30
2	AB	2363	G	C5'-C4'-O4'	5.92	116.20	109.10
2	AB	2472	G	C8-N9-C4	-5.92	104.03	106.40
2	AB	2608	G	N3-C2-N2	-5.92	115.75	119.90
2	AB	2865	U	C3'-C2'-C1'	5.92	106.24	101.50
35	BA	521	G	O4'-C1'-N9	5.92	112.94	108.20
35	BA	775	G	C3'-C2'-C1'	-5.92	96.76	101.50
35	BA	1187	G	N3-C2-N2	-5.92	115.75	119.90
36	BB	15	G	P-O3'-C3'	5.92	126.81	119.70
2	AB	1195	G	C4-C5-N7	-5.92	108.43	110.80
2	AB	1654	A	O5'-C5'-C4'	-5.92	100.45	111.70
2	AB	2047	C	N1-C2-O2	5.92	122.45	118.90
5	AE	101	PHE	CB-CG-CD2	-5.92	116.66	120.80
35	BA	1323	G	C6-C5-N7	5.92	133.95	130.40
2	AB	356	G	N9-C4-C5	5.92	107.77	105.40
2	AB	359	G	N1-C6-O6	-5.92	116.35	119.90
2	AB	641	U	N3-C4-O4	5.92	123.54	119.40
2	AB	698	C	C6-N1-C2	-5.92	117.93	120.30
2	AB	916	G	N1-C2-N3	-5.92	120.35	123.90
2	AB	1833	C	C4'-C3'-C2'	-5.92	96.68	102.60
2	AB	1891	G	C6-N1-C2	5.92	128.65	125.10
2	AB	2227	A	C5-N7-C8	-5.92	100.94	103.90
35	BA	354	G	N1-C6-O6	-5.92	116.35	119.90
35	BA	366	A	P-O3'-C3'	5.92	126.80	119.70
35	BA	561	U	C5-C4-O4	-5.92	122.35	125.90
35	BA	833	G	C4-C5-N7	-5.92	108.43	110.80
35	BA	942	G	N1-C2-N3	-5.92	120.35	123.90
35	BA	1453	G	C5'-C4'-O4'	5.92	116.20	109.10
35	BA	1479	C	P-O5'-C5'	5.92	130.37	120.90
43	BI	110	ARG	NH1-CZ-NH2	-5.92	112.89	119.40
2	AB	14	A	C6-C5-N7	5.92	136.44	132.30
2	AB	329	G	C8-N9-C4	5.92	108.77	106.40
2	AB	480	A	C4-C5-C6	-5.92	114.04	117.00
2	AB	707	G	C6-N1-C2	-5.92	121.55	125.10
2	AB	891	G	P-O3'-C3'	5.92	126.80	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1034	G	C3'-C2'-C1'	5.92	106.23	101.50
2	AB	1092	C	N3-C4-C5	5.92	124.27	121.90
2	AB	2168	G	C5-C6-O6	-5.92	125.05	128.60
2	AB	2493	U	C5-C4-O4	-5.92	122.35	125.90
2	AB	2811	G	C3'-C2'-C1'	5.92	106.23	101.50
35	BA	32	A	C5-C6-N1	5.92	120.66	117.70
36	BB	50	U	O4'-C1'-N1	-5.92	103.47	108.20
2	AB	72	U	C5'-C4'-O4'	-5.92	102.00	109.10
2	AB	330	A	N9-C4-C5	-5.92	103.43	105.80
2	AB	1051	G	C3'-C2'-C1'	5.92	106.23	101.50
2	AB	1627	G	N1-C6-O6	5.92	123.45	119.90
2	AB	2393	U	N3-C2-O2	-5.92	118.06	122.20
2	AB	2676	C	N3-C4-C5	-5.92	119.53	121.90
2	AB	2866	U	C2-N3-C4	-5.92	123.45	127.00
35	BA	173	U	O3'-P-O5'	-5.92	92.76	104.00
35	BA	554	A	C8-N9-C4	-5.92	103.43	105.80
35	BA	1258	G	C4-C5-C6	-5.92	115.25	118.80
2	AB	713	G	C2-N3-C4	5.91	114.86	111.90
2	AB	932	U	N1-C1'-C2'	5.91	121.69	114.00
2	AB	1807	G	N3-C2-N2	-5.91	115.76	119.90
2	AB	1947	C	C2-N3-C4	5.91	122.86	119.90
2	AB	2138	G	C5-C6-O6	-5.91	125.05	128.60
2	AB	2558	C	C5'-C4'-O4'	5.91	116.20	109.10
35	BA	334	C	C6-N1-C2	-5.91	117.93	120.30
35	BA	460	A	C4-C5-N7	5.91	113.66	110.70
35	BA	732	C	O4'-C1'-N1	5.91	112.93	108.20
35	BA	1176	A	C5-N7-C8	-5.91	100.94	103.90
35	BA	1214	C	P-O3'-C3'	5.91	126.80	119.70
36	BB	43	U	O5'-C5'-C4'	-5.91	100.46	111.70
37	BC	60	A	C2-N3-C4	-5.91	107.64	110.60
2	AB	799	G	O4'-C1'-N9	-5.91	103.47	108.20
2	AB	1190	G	O4'-C4'-C3'	5.91	110.83	106.10
2	AB	1829	A	N3-C4-N9	5.91	132.13	127.40
2	AB	2250	G	N7-C8-N9	5.91	116.06	113.10
35	BA	208	U	P-O3'-C3'	5.91	126.79	119.70
35	BA	577	G	C3'-C2'-C1'	5.91	106.23	101.50
35	BA	888	G	N1-C2-N3	-5.91	120.35	123.90
44	BJ	82	LEU	N-CA-C	-5.91	95.04	111.00
2	AB	241	A	C4-C5-N7	5.91	113.66	110.70
2	AB	616	A	C8-N9-C4	-5.91	103.44	105.80
2	AB	740	C	C4-C5-C6	-5.91	114.44	117.40
2	AB	1124	G	C8-N9-C4	-5.91	104.04	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1141	U	C2-N3-C4	-5.91	123.45	127.00
2	AB	1185	G	O4'-C1'-N9	5.91	112.93	108.20
2	AB	1667	G	C5-C6-O6	-5.91	125.05	128.60
2	AB	1695	G	N1-C6-O6	-5.91	116.35	119.90
2	AB	2272	U	C5'-C4'-O4'	5.91	116.19	109.10
2	AB	2755	C	C4-C5-C6	5.91	120.36	117.40
7	AG	172	PHE	CB-CG-CD2	5.91	124.94	120.80
23	AW	72	PHE	CB-CG-CD1	-5.91	116.66	120.80
35	BA	114	U	C5-C4-O4	-5.91	122.35	125.90
35	BA	189	A	C4-C5-N7	-5.91	107.75	110.70
35	BA	221	C	O5'-C5'-C4'	5.91	122.93	111.70
35	BA	260	G	N3-C2-N2	-5.91	115.76	119.90
35	BA	333	U	C5-C6-N1	5.91	125.66	122.70
35	BA	880	C	O4'-C4'-C3'	-5.91	98.09	104.00
35	BA	902	G	C5'-C4'-O4'	5.91	116.19	109.10
35	BA	1540	U	O4'-C1'-N1	5.91	112.93	108.20
1	AA	86	G	C4-C5-C6	5.91	122.34	118.80
2	AB	115	C	C4'-C3'-C2'	-5.91	96.69	102.60
2	AB	325	G	C8-N9-C4	-5.91	104.04	106.40
2	AB	748	G	N7-C8-N9	5.91	116.06	113.10
2	AB	893	C	C2'-C3'-O3'	5.91	123.15	113.70
2	AB	1002	G	C5-C6-O6	5.91	132.15	128.60
2	AB	1060	U	N1-C2-O2	5.91	126.94	122.80
2	AB	1465	G	N9-C4-C5	-5.91	103.04	105.40
2	AB	1572	A	C3'-C2'-C1'	5.91	106.23	101.50
2	AB	1621	U	C1'-O4'-C4'	-5.91	105.17	109.90
2	AB	1811	G	P-O3'-C3'	5.91	126.79	119.70
2	AB	2143	C	C5-C4-N4	5.91	124.34	120.20
2	AB	2188	U	C4-C5-C6	5.91	123.25	119.70
2	AB	2353	G	N3-C4-N9	-5.91	122.45	126.00
8	AH	34	ARG	NH1-CZ-NH2	-5.91	112.90	119.40
35	BA	295	C	N1-C2-O2	5.91	122.44	118.90
35	BA	1082	A	O4'-C1'-N9	5.91	112.93	108.20
35	BA	1231	G	C5-C6-O6	-5.91	125.06	128.60
37	BC	19	G	C6-C5-N7	-5.91	126.86	130.40
2	AB	3	U	O4'-C1'-N1	5.91	112.93	108.20
2	AB	1646	C	N3-C4-N4	5.91	122.14	118.00
35	BA	838	G	C5-N7-C8	-5.91	101.35	104.30
1	AA	52	A	N3-C4-N9	-5.91	122.68	127.40
2	AB	441	U	C5-C6-N1	-5.91	119.75	122.70
2	AB	506	G	O4'-C1'-N9	5.91	112.92	108.20
2	AB	613	A	C4'-C3'-C2'	-5.91	96.69	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1335	C	N3-C2-O2	5.91	126.03	121.90
2	AB	1720	U	P-O3'-C3'	5.91	126.79	119.70
2	AB	1990	C	C5'-C4'-O4'	5.91	116.19	109.10
2	AB	2076	U	C4-C5-C6	5.91	123.24	119.70
2	AB	2539	C	C5-C6-N1	5.91	123.95	121.00
35	BA	6	G	C8-N9-C4	5.91	108.76	106.40
35	BA	514	C	C5-C4-N4	-5.91	116.07	120.20
35	BA	851	G	N1-C6-O6	-5.91	116.36	119.90
35	BA	1022	A	C5-C6-N1	-5.91	114.75	117.70
35	BA	1050	G	C6-C5-N7	-5.91	126.86	130.40
2	AB	7	G	N1-C2-N2	5.90	121.51	116.20
2	AB	142	A	C2-N3-C4	5.90	113.55	110.60
2	AB	270	A	N1-C2-N3	5.90	132.25	129.30
2	AB	743	A	C5-C6-N6	5.90	128.42	123.70
2	AB	1497	U	C2-N3-C4	-5.90	123.46	127.00
2	AB	1978	A	C5-N7-C8	-5.90	100.95	103.90
35	BA	620	C	C6-N1-C2	5.90	122.66	120.30
40	BF	145	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	AA	58	A	C5-C6-N1	5.90	120.65	117.70
2	AB	313	G	N3-C4-N9	5.90	129.54	126.00
2	AB	967	U	C5-C4-O4	5.90	129.44	125.90
2	AB	1080	A	C6-C5-N7	5.90	136.43	132.30
2	AB	1097	U	C6-N1-C1'	-5.90	112.94	121.20
2	AB	1368	G	N3-C2-N2	5.90	124.03	119.90
2	AB	2040	G	C8-N9-C4	-5.90	104.04	106.40
2	AB	2076	U	N3-C4-O4	5.90	123.53	119.40
2	AB	2318	G	C2-N3-C4	-5.90	108.95	111.90
2	AB	2505	G	P-O3'-C3'	5.90	126.78	119.70
2	AB	2516	A	O4'-C1'-N9	5.90	112.92	108.20
2	AB	2632	A	C5-N7-C8	5.90	106.85	103.90
2	AB	2718	G	C5-C6-O6	-5.90	125.06	128.60
35	BA	444	G	O4'-C1'-N9	5.90	112.92	108.20
35	BA	450	G	N9-C4-C5	5.90	107.76	105.40
35	BA	480	U	C4-C5-C6	5.90	123.24	119.70
35	BA	1085	U	P-O3'-C3'	5.90	126.78	119.70
35	BA	1121	U	N3-C4-O4	5.90	123.53	119.40
35	BA	1461	G	N9-C4-C5	5.90	107.76	105.40
2	AB	318	C	P-O3'-C3'	5.90	126.78	119.70
2	AB	466	A	C5-C6-N6	5.90	128.42	123.70
2	AB	682	G	C5-C6-N1	5.90	114.45	111.50
2	AB	1145	C	N3-C2-O2	-5.90	117.77	121.90
2	AB	1224	U	O4'-C1'-N1	5.90	112.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1269	A	C6-N1-C2	5.90	122.14	118.60
2	AB	1544	A	C6-N1-C2	5.90	122.14	118.60
2	AB	1677	A	C5'-C4'-O4'	5.90	116.18	109.10
2	AB	1936	A	O4'-C1'-N9	5.90	112.92	108.20
2	AB	2002	G	N9-C4-C5	-5.90	103.04	105.40
2	AB	2015	A	N7-C8-N9	5.90	116.75	113.80
2	AB	2212	A	C5-N7-C8	5.90	106.85	103.90
2	AB	2224	G	O3'-P-O5'	5.90	115.21	104.00
2	AB	2718	G	N7-C8-N9	-5.90	110.15	113.10
35	BA	479	U	N3-C4-O4	5.90	123.53	119.40
35	BA	932	C	N1-C2-O2	5.90	122.44	118.90
35	BA	1150	A	C5-N7-C8	5.90	106.85	103.90
35	BA	1186	G	C4-C5-C6	5.90	122.34	118.80
37	BC	11	A	N9-C4-C5	-5.90	103.44	105.80
48	BN	116	TYR	CG-CD2-CE2	-5.90	116.58	121.30
35	BA	575	G	C5-C6-O6	-5.90	125.06	128.60
1	AA	15	A	C4-C5-N7	-5.90	107.75	110.70
1	AA	98	G	O4'-C1'-N9	5.90	112.92	108.20
2	AB	626	A	N1-C2-N3	-5.90	126.35	129.30
2	AB	749	A	C5-N7-C8	5.90	106.85	103.90
2	AB	969	G	C3'-C2'-C1'	-5.90	96.78	101.50
2	AB	1026	G	N3-C4-C5	-5.90	125.65	128.60
2	AB	1744	A	C1'-O4'-C4'	-5.90	105.18	109.90
2	AB	2083	G	N1-C6-O6	5.90	123.44	119.90
2	AB	2264	C	C2-N3-C4	5.90	122.85	119.90
35	BA	72	A	C4-C5-N7	-5.90	107.75	110.70
35	BA	234	C	N3-C4-C5	-5.90	119.54	121.90
35	BA	413	G	C6-N1-C2	5.90	128.64	125.10
35	BA	786	G	C5-N7-C8	-5.90	101.35	104.30
35	BA	1101	A	C6-C5-N7	-5.90	128.17	132.30
35	BA	1252	A	N1-C6-N6	5.90	122.14	118.60
35	BA	1350	A	C5'-C4'-C3'	-5.90	106.56	116.00
35	BA	1404	C	O4'-C1'-N1	5.90	112.92	108.20
36	BB	46	C	N1-C2-O2	5.90	122.44	118.90
49	BO	56	ARG	NE-CZ-NH1	-5.90	117.35	120.30
1	AA	13	G	O4'-C4'-C3'	5.90	110.82	106.10
2	AB	1373	A	C6-C5-N7	5.89	136.43	132.30
2	AB	1423	G	P-O3'-C3'	5.89	126.77	119.70
2	AB	1579	A	N7-C8-N9	5.89	116.75	113.80
2	AB	2200	C	N3-C2-O2	-5.89	117.77	121.90
2	AB	2254	C	N1-C2-O2	5.89	122.44	118.90
2	AB	2256	G	C5-C6-N1	5.89	114.45	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2438	U	N3-C2-O2	-5.89	118.07	122.20
2	AB	2574	G	C4'-C3'-O3'	-5.89	97.02	109.40
2	AB	2657	A	C8-N9-C4	-5.89	103.44	105.80
7	AG	91	ARG	NE-CZ-NH2	-5.89	117.35	120.30
35	BA	433	G	N1-C2-N2	-5.89	110.89	116.20
35	BA	511	C	N1-C1'-C2'	5.89	121.66	114.00
36	BB	25	U	C4'-C3'-C2'	-5.89	96.70	102.60
47	BM	127	ARG	CA-CB-CG	5.89	126.37	113.40
1	AA	66	A	N3-C4-N9	-5.89	122.69	127.40
2	AB	76	C	C5'-C4'-O4'	5.89	116.17	109.10
2	AB	806	C	N3-C4-C5	5.89	124.26	121.90
2	AB	882	G	O4'-C1'-N9	5.89	112.91	108.20
2	AB	966	G	N1-C6-O6	-5.89	116.36	119.90
2	AB	1026	G	C6-N1-C2	-5.89	121.56	125.10
2	AB	1061	U	C2-N1-C1'	5.89	124.77	117.70
2	AB	1214	A	C6-N1-C2	-5.89	115.06	118.60
2	AB	1498	C	N3-C4-N4	5.89	122.12	118.00
2	AB	1655	A	O4'-C1'-N9	5.89	112.91	108.20
2	AB	2800	A	C6-C5-N7	5.89	136.43	132.30
35	BA	66	A	C4-C5-N7	-5.89	107.75	110.70
35	BA	167	A	C5'-C4'-O4'	5.89	116.17	109.10
35	BA	344	A	C4-C5-N7	-5.89	107.75	110.70
35	BA	1087	G	C2-N3-C4	5.89	114.85	111.90
35	BA	1290	G	C5-C6-O6	-5.89	125.06	128.60
2	AB	127	A	C5-C6-N1	5.89	120.64	117.70
2	AB	379	G	C2-N3-C4	5.89	114.85	111.90
2	AB	874	G	C3'-C2'-C1'	-5.89	96.79	101.50
2	AB	1291	C	O4'-C1'-N1	5.89	112.91	108.20
2	AB	1684	G	N3-C4-N9	5.89	129.53	126.00
35	BA	187	G	C5-C6-N1	5.89	114.44	111.50
2	AB	1376	C	N1-C2-O2	5.89	122.43	118.90
2	AB	1564	C	C5'-C4'-O4'	5.89	116.17	109.10
2	AB	1708	C	O4'-C1'-N1	5.89	112.91	108.20
2	AB	2029	G	N9-C1'-C2'	-5.89	105.52	112.00
2	AB	2548	U	N1-C1'-C2'	-5.89	105.52	112.00
2	AB	2660	A	C3'-C2'-C1'	5.89	106.21	101.50
2	AB	2787	C	C1'-O4'-C4'	5.89	114.61	109.90
35	BA	643	C	N1-C2-N3	-5.89	115.08	119.20
35	BA	963	G	C8-N9-C4	-5.89	104.04	106.40
35	BA	1002	G	C3'-C2'-C1'	5.89	106.21	101.50
35	BA	1110	A	C5-C6-N6	5.89	128.41	123.70
35	BA	1233	G	C8-N9-C1'	5.89	134.66	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1290	G	C5'-C4'-O4'	5.89	116.17	109.10
2	AB	1877	A	C3'-C2'-C1'	5.89	106.21	101.50
2	AB	2118	U	O4'-C1'-C2'	-5.89	99.91	105.80
16	AP	69	ARG	NE-CZ-NH1	5.89	123.24	120.30
22	AV	68	LYS	CB-CA-C	5.89	122.18	110.40
35	BA	213	G	N3-C4-C5	-5.89	125.66	128.60
35	BA	973	G	N9-C4-C5	5.89	107.75	105.40
1	AA	104	A	C2-N3-C4	-5.89	107.66	110.60
2	AB	430	A	C5-C6-N6	-5.89	118.99	123.70
2	AB	520	G	O4'-C1'-N9	5.89	112.91	108.20
2	AB	788	A	C4-C5-C6	5.89	119.94	117.00
2	AB	907	G	N3-C2-N2	5.89	124.02	119.90
2	AB	1027	A	C2-N3-C4	5.89	113.54	110.60
2	AB	1764	C	C3'-C2'-C1'	5.89	106.21	101.50
2	AB	2082	A	N1-C2-N3	-5.89	126.36	129.30
2	AB	2394	C	C5-C4-N4	-5.89	116.08	120.20
2	AB	2801	G	C2-N3-C4	5.89	114.84	111.90
2	AB	2886	A	C2-N3-C4	5.89	113.54	110.60
4	AD	132	ARG	CD-NE-CZ	5.89	131.84	123.60
9	AI	116	ARG	NE-CZ-NH2	-5.89	117.36	120.30
13	AM	17	ARG	CB-CA-C	5.89	122.17	110.40
29	A2	31	ASP	CB-CG-OD2	-5.89	113.00	118.30
35	BA	372	C	C5-C6-N1	-5.89	118.06	121.00
35	BA	543	U	C3'-C2'-C1'	-5.89	96.79	101.50
35	BA	840	C	C5-C6-N1	5.89	123.94	121.00
35	BA	885	G	C3'-C2'-C1'	-5.89	96.79	101.50
2	AB	75	G	C6-C5-N7	-5.88	126.87	130.40
2	AB	418	C	N1-C2-N3	-5.88	115.08	119.20
2	AB	738	G	O5'-P-OP2	-5.88	100.40	105.70
2	AB	845	A	N9-C4-C5	5.88	108.15	105.80
2	AB	941	A	C8-N9-C4	-5.88	103.45	105.80
2	AB	987	C	P-O3'-C3'	5.88	126.76	119.70
2	AB	1185	G	C4'-C3'-C2'	-5.88	96.72	102.60
2	AB	1277	G	O4'-C4'-C3'	5.88	110.81	106.10
2	AB	1490	A	N7-C8-N9	5.88	116.74	113.80
2	AB	1975	G	C4-C5-C6	-5.88	115.27	118.80
2	AB	2168	G	C6-N1-C2	-5.88	121.57	125.10
2	AB	2376	A	O4'-C1'-N9	5.88	112.91	108.20
2	AB	2408	U	C4-C5-C6	5.88	123.23	119.70
2	AB	2547	A	O4'-C4'-C3'	5.88	110.81	106.10
2	AB	2721	A	N1-C6-N6	5.88	122.13	118.60
2	AB	2903	U	C3'-C2'-C1'	5.88	106.21	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	AR	61	ARG	CB-CA-C	5.88	122.17	110.40
18	AR	81	ASP	CB-CG-OD1	-5.88	113.00	118.30
35	BA	86	G	C8-N9-C4	-5.88	104.05	106.40
35	BA	93	U	N3-C4-C5	-5.88	111.07	114.60
35	BA	288	A	O5'-P-OP2	5.88	117.76	110.70
35	BA	537	G	N9-C4-C5	-5.88	103.05	105.40
35	BA	791	G	N9-C4-C5	-5.88	103.05	105.40
35	BA	800	G	C4-C5-N7	5.88	113.15	110.80
35	BA	857	C	O4'-C1'-C2'	-5.88	99.92	105.80
35	BA	1057	G	N3-C4-C5	-5.88	125.66	128.60
35	BA	1340	A	N3-C4-C5	-5.88	122.68	126.80
35	BA	1343	G	N1-C2-N3	-5.88	120.37	123.90
1	AA	24	G	C5'-C4'-C3'	-5.88	106.59	116.00
2	AB	498	G	C5'-C4'-O4'	5.88	116.16	109.10
2	AB	511	U	C5-C6-N1	5.88	125.64	122.70
2	AB	2297	A	O4'-C1'-N9	5.88	112.91	108.20
2	AB	2378	A	C4-C5-C6	-5.88	114.06	117.00
2	AB	2396	G	O4'-C1'-C2'	-5.88	99.92	105.80
35	BA	42	G	C1'-O4'-C4'	5.88	114.61	109.90
35	BA	547	A	C5'-C4'-C3'	-5.88	106.59	116.00
35	BA	590	U	N1-C2-O2	-5.88	118.68	122.80
35	BA	590	U	O5'-P-OP2	-5.88	100.41	105.70
35	BA	764	C	N3-C4-N4	5.88	122.12	118.00
2	AB	10	A	C5-C6-N1	5.88	120.64	117.70
2	AB	612	G	C5-C6-O6	5.88	132.13	128.60
2	AB	1009	A	O4'-C1'-N9	5.88	112.91	108.20
2	AB	1464	G	O5'-P-OP1	-5.88	100.41	105.70
2	AB	1941	C	C5'-C4'-C3'	-5.88	106.59	116.00
2	AB	1999	C	C4'-C3'-C2'	-5.88	96.72	102.60
2	AB	2131	U	C2-N1-C1'	5.88	124.76	117.70
2	AB	2644	G	C2-N3-C4	5.88	114.84	111.90
10	AJ	25	VAL	CG1-CB-CG2	-5.88	101.49	110.90
35	BA	300	A	C2-N3-C4	5.88	113.54	110.60
35	BA	743	A	C3'-C2'-C1'	5.88	106.21	101.50
35	BA	1164	G	N1-C2-N3	-5.88	120.37	123.90
35	BA	1348	U	N3-C4-C5	-5.88	111.07	114.60
2	AB	497	A	N1-C6-N6	5.88	122.13	118.60
2	AB	964	C	N3-C2-O2	-5.88	117.78	121.90
2	AB	7	G	C5'-C4'-O4'	5.88	116.15	109.10
2	AB	930	G	C5-N7-C8	5.88	107.24	104.30
2	AB	1195	G	N1-C2-N2	-5.88	110.91	116.20
2	AB	1507	C	O3'-P-O5'	5.88	115.17	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2111	U	N3-C4-O4	5.88	123.51	119.40
2	AB	2263	C	C5-C6-N1	-5.88	118.06	121.00
2	AB	2744	G	N3-C2-N2	-5.88	115.78	119.90
35	BA	18	C	O4'-C1'-C2'	5.88	112.89	107.60
35	BA	222	C	C5'-C4'-O4'	5.88	116.15	109.10
35	BA	511	C	C2-N3-C4	5.88	122.84	119.90
35	BA	668	G	C5-C6-O6	-5.88	125.07	128.60
35	BA	704	A	N9-C4-C5	5.88	108.15	105.80
35	BA	1458	G	N3-C4-C5	-5.88	125.66	128.60
2	AB	616	A	C2-N3-C4	5.88	113.54	110.60
2	AB	995	C	N3-C4-C5	-5.88	119.55	121.90
2	AB	1381	G	C4-C5-N7	-5.88	108.45	110.80
2	AB	1513	U	C5-C4-O4	5.88	129.43	125.90
2	AB	1675	C	O4'-C1'-C2'	-5.88	99.92	105.80
2	AB	1739	A	C5-C6-N1	-5.88	114.76	117.70
2	AB	2800	A	N3-C4-N9	-5.88	122.70	127.40
2	AB	2808	G	C8-N9-C4	-5.88	104.05	106.40
35	BA	529	G	C2-N3-C4	5.88	114.84	111.90
35	BA	707	U	C3'-C2'-C1'	5.88	106.20	101.50
35	BA	736	C	C1'-O4'-C4'	-5.88	105.20	109.90
35	BA	817	C	C4'-C3'-C2'	5.88	108.48	102.60
2	AB	191	A	C4-C5-N7	5.88	113.64	110.70
2	AB	1002	G	C5'-C4'-O4'	5.88	116.15	109.10
2	AB	1275	A	N1-C2-N3	-5.88	126.36	129.30
2	AB	1502	A	N1-C6-N6	-5.88	115.08	118.60
2	AB	2036	C	N3-C4-C5	-5.88	119.55	121.90
2	AB	2071	A	C4-C5-N7	-5.88	107.76	110.70
2	AB	2211	A	N7-C8-N9	-5.88	110.86	113.80
2	AB	2524	G	N1-C2-N3	-5.88	120.38	123.90
2	AB	2576	G	C2-N3-C4	5.88	114.84	111.90
2	AB	2704	C	N1-C2-O2	-5.88	115.38	118.90
35	BA	799	G	N3-C4-N9	5.88	129.53	126.00
35	BA	1338	G	C3'-C2'-C1'	5.88	106.20	101.50
35	BA	1426	G	N1-C2-N3	5.88	127.42	123.90
2	AB	849	A	C1'-O4'-C4'	5.87	114.60	109.90
2	AB	1459	G	C6-N1-C2	-5.87	121.58	125.10
2	AB	1798	U	P-O3'-C3'	5.87	126.75	119.70
2	AB	2161	C	C4'-C3'-C2'	-5.87	96.73	102.60
2	AB	2227	A	C5-C6-N6	-5.87	119.00	123.70
2	AB	2372	U	N3-C4-O4	5.87	123.51	119.40
2	AB	2464	G	C2-N3-C4	5.87	114.84	111.90
21	AU	88	ARG	NE-CZ-NH2	5.87	123.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	356	A	C8-N9-C4	-5.87	103.45	105.80
2	AB	141	G	O4'-C1'-N9	5.87	112.90	108.20
2	AB	512	G	C6-C5-N7	-5.87	126.88	130.40
2	AB	1517	G	N1-C6-O6	-5.87	116.38	119.90
2	AB	1890	A	C8-N9-C4	-5.87	103.45	105.80
2	AB	2119	A	C8-N9-C4	-5.87	103.45	105.80
2	AB	2467	C	C5-C4-N4	5.87	124.31	120.20
2	AB	2540	C	N3-C4-N4	5.87	122.11	118.00
2	AB	2545	G	N3-C2-N2	5.87	124.01	119.90
2	AB	2737	G	N1-C2-N2	-5.87	110.92	116.20
35	BA	158	G	O4'-C1'-N9	5.87	112.90	108.20
35	BA	321	A	N9-C1'-C2'	-5.87	105.54	112.00
35	BA	436	C	N3-C2-O2	-5.87	117.79	121.90
35	BA	729	A	N9-C4-C5	5.87	108.15	105.80
35	BA	1024	G	N3-C2-N2	-5.87	115.79	119.90
2	AB	2321	U	O4'-C1'-C2'	5.87	112.88	107.60
2	AB	2440	C	C2-N3-C4	-5.87	116.97	119.90
35	BA	533	A	C2-N3-C4	5.87	113.53	110.60
35	BA	1155	A	C5-C6-N1	-5.87	114.77	117.70
35	BA	1169	A	C3'-C2'-C1'	5.87	106.20	101.50
1	AA	59	A	C5-C6-N1	5.87	120.64	117.70
2	AB	85	G	C6-N1-C2	-5.87	121.58	125.10
2	AB	304	U	P-O3'-C3'	5.87	126.74	119.70
2	AB	1002	G	N9-C4-C5	-5.87	103.05	105.40
2	AB	1004	U	N1-C2-O2	5.87	126.91	122.80
2	AB	1086	A	N1-C6-N6	5.87	122.12	118.60
2	AB	1370	C	C1'-O4'-C4'	5.87	114.59	109.90
2	AB	2221	G	N9-C4-C5	5.87	107.75	105.40
2	AB	2851	A	C5-N7-C8	5.87	106.83	103.90
7	AG	49	LEU	CB-CG-CD2	5.87	120.98	111.00
35	BA	195	A	N9-C1'-C2'	5.87	121.63	114.00
35	BA	923	A	P-O3'-C3'	5.87	126.74	119.70
35	BA	1045	C	N3-C4-C5	-5.87	119.55	121.90
2	AB	1453	A	C8-N9-C4	-5.87	103.45	105.80
2	AB	1634	A	C4-C5-N7	5.87	113.63	110.70
2	AB	1702	G	N1-C2-N2	5.87	121.48	116.20
2	AB	1712	U	C4'-C3'-C2'	-5.87	96.73	102.60
2	AB	1940	U	C3'-C2'-C1'	5.87	106.19	101.50
2	AB	2045	C	C2-N3-C4	-5.87	116.97	119.90
2	AB	2244	U	N1-C2-N3	-5.87	111.38	114.90
2	AB	2451	A	C4'-C3'-C2'	-5.87	96.73	102.60
2	AB	2646	C	C1'-O4'-C4'	5.87	114.59	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2651	C	C6-N1-C2	-5.87	117.95	120.30
35	BA	45	G	N3-C2-N2	-5.87	115.79	119.90
35	BA	367	U	N3-C4-O4	5.87	123.51	119.40
35	BA	1035	A	N1-C6-N6	-5.87	115.08	118.60
35	BA	1381	U	N1-C2-O2	-5.87	118.69	122.80
2	AB	522	A	C5-C6-N6	5.87	128.39	123.70
2	AB	848	C	C5-C6-N1	5.87	123.93	121.00
2	AB	1343	G	C6-N1-C2	-5.87	121.58	125.10
2	AB	2184	A	C6-N1-C2	-5.87	115.08	118.60
2	AB	2454	G	C6-C5-N7	-5.87	126.88	130.40
2	AB	2588	G	N9-C4-C5	-5.87	103.05	105.40
2	AB	2675	A	C4-C5-C6	5.87	119.93	117.00
2	AB	2741	A	O4'-C1'-N9	5.87	112.89	108.20
2	AB	2882	A	C2-N3-C4	-5.87	107.67	110.60
16	AP	8	ARG	NE-CZ-NH1	-5.87	117.37	120.30
35	BA	25	C	C4'-C3'-C2'	5.87	108.47	102.60
35	BA	147	G	N1-C6-O6	-5.87	116.38	119.90
35	BA	456	A	C5-C6-N6	-5.87	119.01	123.70
35	BA	466	A	C5'-C4'-C3'	-5.87	106.62	116.00
35	BA	594	U	P-O3'-C3'	5.87	126.74	119.70
35	BA	1388	C	N3-C2-O2	-5.87	117.80	121.90
2	AB	213	A	C4-C5-N7	-5.86	107.77	110.70
2	AB	267	C	N3-C2-O2	-5.86	117.80	121.90
2	AB	474	G	C8-N9-C4	-5.86	104.05	106.40
2	AB	669	G	C4-C5-N7	-5.86	108.45	110.80
2	AB	852	U	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	1509	A	C4-C5-C6	5.86	119.93	117.00
2	AB	1956	U	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	2219	U	C5-C4-O4	-5.86	122.38	125.90
2	AB	2309	A	C3'-C2'-C1'	5.86	106.19	101.50
2	AB	2332	C	C4-C5-C6	-5.86	114.47	117.40
2	AB	2561	U	N3-C4-C5	-5.86	111.08	114.60
2	AB	2617	U	C5-C4-O4	5.86	129.42	125.90
35	BA	438	U	C2-N3-C4	-5.86	123.48	127.00
35	BA	573	A	C8-N9-C4	5.86	108.14	105.80
35	BA	974	A	N3-C4-N9	-5.86	122.71	127.40
36	BB	31	U	C5'-C4'-O4'	5.86	116.14	109.10
2	AB	1541	C	N3-C4-C5	-5.86	119.56	121.90
2	AB	1712	U	C4-C5-C6	5.86	123.22	119.70
2	AB	2073	C	P-O3'-C3'	5.86	126.73	119.70
2	AB	2695	U	C5-C6-N1	-5.86	119.77	122.70
35	BA	1330	U	C5-C4-O4	5.86	129.42	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	157	C	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	208	C	C2-N3-C4	5.86	122.83	119.90
2	AB	261	G	C5-C6-N1	5.86	114.43	111.50
2	AB	409	G	N7-C8-N9	5.86	116.03	113.10
2	AB	971	G	N1-C6-O6	-5.86	116.38	119.90
2	AB	1287	A	C5-C6-N6	5.86	128.39	123.70
2	AB	1770	G	C4-C5-N7	-5.86	108.46	110.80
2	AB	2096	C	C4-C5-C6	-5.86	114.47	117.40
19	AS	12	ARG	CD-NE-CZ	5.86	131.80	123.60
21	AU	38	TYR	CB-CG-CD1	-5.86	117.48	121.00
35	BA	195	A	C4-C5-C6	5.86	119.93	117.00
35	BA	318	G	N3-C2-N2	-5.86	115.80	119.90
35	BA	657	U	C2-N3-C4	-5.86	123.48	127.00
35	BA	703	G	C6-N1-C2	-5.86	121.58	125.10
35	BA	747	A	N1-C6-N6	5.86	122.12	118.60
35	BA	807	A	C8-N9-C4	-5.86	103.46	105.80
35	BA	993	G	C2'-C3'-O3'	5.86	123.08	113.70
35	BA	1291	U	C4-C5-C6	5.86	123.22	119.70
35	BA	1431	A	P-O3'-C3'	5.86	126.73	119.70
35	BA	1461	G	C5'-C4'-C3'	-5.86	106.62	116.00
2	AB	715	A	C6-N1-C2	-5.86	115.08	118.60
2	AB	911	A	N3-C4-C5	-5.86	122.70	126.80
2	AB	1343	G	N9-C4-C5	5.86	107.74	105.40
2	AB	1344	U	C2-N3-C4	-5.86	123.48	127.00
2	AB	2058	A	O4'-C1'-N9	5.86	112.89	108.20
35	BA	782	A	O4'-C1'-C2'	-5.86	99.94	105.80
37	BC	48	U	O4'-C1'-C2'	5.86	112.87	107.60
2	AB	101	A	O4'-C4'-C3'	-5.86	98.14	104.00
2	AB	208	C	O4'-C4'-C3'	-5.86	98.14	104.00
2	AB	232	G	O4'-C1'-N9	5.86	112.89	108.20
2	AB	1624	U	C5'-C4'-O4'	5.86	116.13	109.10
2	AB	1842	G	C6-C5-N7	-5.86	126.89	130.40
2	AB	1873	G	C2-N3-C4	-5.86	108.97	111.90
2	AB	2459	A	P-O3'-C3'	5.86	126.73	119.70
35	BA	528	C	O4'-C1'-N1	-5.86	103.51	108.20
35	BA	1277	C	N3-C4-N4	-5.86	113.90	118.00
1	AA	69	G	C2-N3-C4	-5.86	108.97	111.90
2	AB	192	C	N1-C2-N3	5.86	123.30	119.20
2	AB	1126	A	C3'-C2'-C1'	5.86	106.19	101.50
2	AB	1378	A	C4'-C3'-C2'	-5.86	96.74	102.60
2	AB	1878	G	C4'-C3'-C2'	-5.86	96.75	102.60
2	AB	2048	G	C4-C5-C6	5.86	122.31	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2171	A	O4'-C1'-C2'	-5.86	99.94	105.80
2	AB	2598	A	C2-N3-C4	5.86	113.53	110.60
23	AW	73	ASN	C-N-CA	5.86	136.34	121.70
35	BA	1200	C	C4-C5-C6	5.86	120.33	117.40
35	BA	1486	G	N1-C6-O6	-5.86	116.39	119.90
2	AB	159	G	C4'-C3'-C2'	-5.85	96.75	102.60
2	AB	697	G	C4-C5-C6	5.85	122.31	118.80
2	AB	1036	G	O4'-C1'-N9	5.85	112.88	108.20
2	AB	1672	A	C6-N1-C2	-5.85	115.09	118.60
2	AB	2125	G	N7-C8-N9	5.85	116.03	113.10
2	AB	2766	A	P-O3'-C3'	-5.85	112.67	119.70
27	A0	48	ARG	NE-CZ-NH2	-5.85	117.37	120.30
35	BA	52	C	C4-C5-C6	5.85	120.33	117.40
36	BB	46	C	O4'-C1'-N1	5.85	112.88	108.20
1	AA	110	C	C4'-C3'-C2'	5.85	108.45	102.60
2	AB	59	U	O4'-C1'-N1	5.85	112.88	108.20
2	AB	237	C	N3-C4-N4	-5.85	113.90	118.00
2	AB	314	C	N1-C2-O2	5.85	122.41	118.90
2	AB	411	G	C6-C5-N7	-5.85	126.89	130.40
2	AB	505	A	N1-C6-N6	5.85	122.11	118.60
2	AB	565	C	O4'-C1'-N1	5.85	112.88	108.20
2	AB	575	A	C5'-C4'-O4'	5.85	116.12	109.10
2	AB	598	U	C5-C4-O4	5.85	129.41	125.90
2	AB	832	U	C2'-C3'-O3'	5.85	123.06	113.70
2	AB	1032	A	C3'-C2'-C1'	5.85	106.18	101.50
2	AB	1116	G	C4-C5-C6	5.85	122.31	118.80
2	AB	1137	G	O4'-C1'-C2'	5.85	112.87	107.60
2	AB	1789	A	N9-C4-C5	5.85	108.14	105.80
2	AB	1809	A	C4-C5-C6	-5.85	114.07	117.00
2	AB	1887	C	O4'-C1'-N1	5.85	112.88	108.20
2	AB	2031	A	C4-C5-N7	5.85	113.63	110.70
2	AB	2136	G	N9-C1'-C2'	-5.85	105.56	112.00
2	AB	2160	C	C6-N1-C2	-5.85	117.96	120.30
2	AB	2339	C	C4-C5-C6	5.85	120.33	117.40
2	AB	2862	G	N1-C6-O6	-5.85	116.39	119.90
35	BA	331	G	C8-N9-C4	-5.85	104.06	106.40
35	BA	1158	C	C4'-C3'-C2'	-5.85	96.75	102.60
35	BA	1188	A	N3-C4-C5	-5.85	122.70	126.80
35	BA	1473	G	C6-N1-C2	-5.85	121.59	125.10
2	AB	1663	G	C2-N3-C4	5.85	114.83	111.90
35	BA	266	G	C4-C5-C6	5.85	122.31	118.80
35	BA	571	U	C5-C6-N1	-5.85	119.77	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	562	U	N3-C4-C5	5.85	118.11	114.60
2	AB	772	C	N3-C4-N4	5.85	122.09	118.00
2	AB	1103	A	C1'-O4'-C4'	-5.85	105.22	109.90
2	AB	1996	C	C2-N3-C4	5.85	122.83	119.90
2	AB	2082	A	N9-C4-C5	5.85	108.14	105.80
2	AB	2184	A	C5-C6-N6	-5.85	119.02	123.70
2	AB	2355	G	N3-C2-N2	5.85	124.00	119.90
35	BA	342	C	N3-C4-C5	5.85	124.24	121.90
35	BA	351	G	C5-N7-C8	-5.85	101.38	104.30
35	BA	554	A	N7-C8-N9	5.85	116.72	113.80
35	BA	603	U	O5'-P-OP1	-5.85	100.44	105.70
35	BA	616	G	N3-C2-N2	-5.85	115.81	119.90
35	BA	743	A	C4-C5-C6	5.85	119.92	117.00
35	BA	1228	C	C3'-C2'-C1'	-5.85	96.82	101.50
1	AA	69	G	C5-C6-O6	5.85	132.11	128.60
1	AA	116	G	C5-C6-N1	5.85	114.42	111.50
2	AB	61	C	C5-C6-N1	5.85	123.92	121.00
2	AB	119	A	N1-C6-N6	-5.85	115.09	118.60
2	AB	260	G	C5'-C4'-O4'	5.85	116.12	109.10
2	AB	389	G	O3'-P-O5'	-5.85	92.89	104.00
2	AB	472	A	N3-C4-C5	-5.85	122.71	126.80
2	AB	1378	A	C3'-C2'-C1'	5.85	106.18	101.50
2	AB	1415	U	C4-C5-C6	5.85	123.21	119.70
2	AB	1496	A	N9-C4-C5	5.85	108.14	105.80
2	AB	1548	A	C3'-C2'-C1'	-5.85	96.82	101.50
2	AB	1558	C	N1-C2-O2	5.85	122.41	118.90
2	AB	2211	A	C5-N7-C8	5.85	106.82	103.90
2	AB	2587	A	C5-C6-N1	5.85	120.62	117.70
35	BA	13	U	C5-C6-N1	-5.85	119.78	122.70
35	BA	702	A	C5'-C4'-O4'	5.85	116.12	109.10
35	BA	783	C	C4-C5-C6	-5.85	114.48	117.40
35	BA	795	C	P-O3'-C3'	5.85	126.72	119.70
35	BA	1221	G	C6-N1-C2	5.85	128.61	125.10
35	BA	1502	A	N7-C8-N9	-5.85	110.88	113.80
43	BI	84	TYR	CD1-CE1-CZ	5.85	125.06	119.80
2	AB	628	G	C2-N3-C4	5.85	114.82	111.90
2	AB	1162	G	O4'-C4'-C3'	-5.85	98.15	104.00
2	AB	2174	C	N3-C2-O2	-5.85	117.81	121.90
2	AB	2231	U	O5'-C5'-C4'	5.85	122.81	111.70
2	AB	2334	U	O4'-C4'-C3'	-5.85	98.15	104.00
35	BA	181	A	N9-C1'-C2'	5.85	121.60	114.00
2	AB	938	G	O4'-C1'-N9	5.84	112.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1241	A	N3-C4-C5	-5.84	122.71	126.80
2	AB	1317	G	C2'-C3'-O3'	5.84	123.05	113.70
2	AB	1360	G	C4-C5-C6	5.84	122.31	118.80
2	AB	1878	G	C8-N9-C4	-5.84	104.06	106.40
2	AB	1979	U	C5-C6-N1	-5.84	119.78	122.70
35	BA	221	C	C6-N1-C2	-5.84	117.96	120.30
35	BA	349	A	N9-C4-C5	-5.84	103.46	105.80
35	BA	852	G	C4'-C3'-C2'	-5.84	96.75	102.60
35	BA	1287	A	N9-C4-C5	5.84	108.14	105.80
35	BA	1404	C	N1-C2-O2	5.84	122.41	118.90
35	BA	1446	A	C1'-O4'-C4'	-5.84	105.22	109.90
2	AB	103	A	N7-C8-N9	5.84	116.72	113.80
2	AB	1753	G	C6-N1-C2	-5.84	121.59	125.10
2	AB	1813	G	N9-C4-C5	5.84	107.74	105.40
2	AB	2746	U	C5-C4-O4	-5.84	122.39	125.90
17	AQ	10	ARG	NE-CZ-NH2	5.84	123.22	120.30
35	BA	726	C	O4'-C1'-N1	5.84	112.87	108.20
35	BA	1120	C	C5-C6-N1	5.84	123.92	121.00
2	AB	470	A	C4-C5-C6	-5.84	114.08	117.00
2	AB	493	G	C6-C5-N7	-5.84	126.89	130.40
2	AB	914	G	C5'-C4'-C3'	-5.84	106.65	116.00
2	AB	1069	A	C4-C5-C6	-5.84	114.08	117.00
2	AB	1323	C	N1-C1'-C2'	-5.84	105.58	112.00
2	AB	1936	A	C4'-C3'-C2'	-5.84	96.76	102.60
2	AB	2351	G	O4'-C4'-C3'	5.84	110.77	106.10
2	AB	2725	A	O4'-C1'-N9	5.84	112.87	108.20
2	AB	2802	G	O3'-P-O5'	-5.84	92.90	104.00
2	AB	2901	C	C5-C4-N4	-5.84	116.11	120.20
15	AO	51	ARG	NH1-CZ-NH2	-5.84	112.97	119.40
35	BA	44	A	C4-C5-C6	-5.84	114.08	117.00
35	BA	72	A	O3'-P-O5'	5.84	115.10	104.00
35	BA	377	G	N1-C6-O6	-5.84	116.39	119.90
35	BA	388	G	O4'-C1'-C2'	-5.84	99.96	105.80
35	BA	504	C	N3-C4-C5	-5.84	119.56	121.90
35	BA	703	G	C5'-C4'-C3'	-5.84	106.65	116.00
35	BA	932	C	C4-C5-C6	5.84	120.32	117.40
35	BA	963	G	N1-C2-N3	-5.84	120.39	123.90
1	AA	90	C	C4'-C3'-C2'	-5.84	96.76	102.60
2	AB	372	G	C5-C6-N1	-5.84	108.58	111.50
2	AB	434	U	O4'-C1'-N1	-5.84	103.53	108.20
2	AB	599	A	C4-C5-C6	-5.84	114.08	117.00
2	AB	609	A	C8-N9-C4	-5.84	103.46	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	916	G	C4'-C3'-C2'	-5.84	96.76	102.60
2	AB	1287	A	C5-C6-N1	-5.84	114.78	117.70
2	AB	2391	G	C8-N9-C1'	5.84	134.59	127.00
35	BA	287	U	N3-C4-C5	5.84	118.10	114.60
35	BA	416	G	N9-C4-C5	5.84	107.74	105.40
35	BA	638	U	C5-C4-O4	-5.84	122.40	125.90
35	BA	895	G	N1-C2-N2	-5.84	110.94	116.20
35	BA	995	C	N1-C2-O2	5.84	122.40	118.90
35	BA	1531	A	N3-C4-N9	-5.84	122.73	127.40
36	BB	58	C	N1-C2-O2	5.84	122.40	118.90
2	AB	346	A	C4-C5-C6	-5.84	114.08	117.00
2	AB	2759	G	N3-C4-N9	5.84	129.50	126.00
35	BA	45	G	C8-N9-C4	5.84	108.73	106.40
35	BA	576	C	C2-N3-C4	5.84	122.82	119.90
35	BA	1347	G	N1-C2-N3	-5.84	120.40	123.90
1	AA	102	G	N9-C4-C5	5.84	107.73	105.40
2	AB	172	A	C6-C5-N7	5.84	136.39	132.30
2	AB	494	G	N9-C1'-C2'	-5.84	105.58	112.00
2	AB	1283	G	C5-C6-N1	5.84	114.42	111.50
2	AB	1625	C	N3-C4-C5	5.84	124.23	121.90
2	AB	2187	U	N3-C4-C5	-5.84	111.10	114.60
2	AB	2658	C	N1-C2-O2	5.84	122.40	118.90
2	AB	2677	G	C4-C5-N7	-5.84	108.47	110.80
35	BA	975	A	C8-N9-C4	-5.84	103.47	105.80
35	BA	1086	U	N3-C2-O2	-5.84	118.11	122.20
35	BA	1236	A	C1'-O4'-C4'	-5.84	105.23	109.90
35	BA	1378	C	C5'-C4'-C3'	-5.84	106.66	116.00
36	BB	42	U	N3-C2-O2	-5.84	118.11	122.20
37	BC	27	G	N9-C1'-C2'	-5.84	105.58	112.00
37	BC	28	U	C5-C4-O4	5.84	129.40	125.90
41	BG	109	ALA	CB-CA-C	5.84	118.86	110.10
2	AB	1340	U	C5'-C4'-O4'	5.83	116.10	109.10
2	AB	1359	A	N1-C6-N6	-5.83	115.10	118.60
2	AB	1890	A	C5-N7-C8	-5.83	100.98	103.90
2	AB	2057	G	C5-C6-N1	5.83	114.42	111.50
2	AB	2228	G	N7-C8-N9	5.83	116.02	113.10
2	AB	2670	A	N7-C8-N9	5.83	116.72	113.80
7	AG	3	LEU	CB-CG-CD1	5.83	120.92	111.00
35	BA	151	A	C5-C6-N1	5.83	120.62	117.70
35	BA	723	U	C5-C4-O4	-5.83	122.40	125.90
35	BA	1311	A	O4'-C1'-N9	5.83	112.87	108.20
35	BA	1417	G	C5-C6-N1	5.83	114.42	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	35	C	C5'-C4'-O4'	5.83	116.10	109.10
2	AB	91	A	P-O3'-C3'	5.83	126.70	119.70
2	AB	312	G	N3-C4-C5	-5.83	125.68	128.60
2	AB	470	A	O4'-C1'-C2'	-5.83	99.97	105.80
2	AB	1135	C	OP1-P-OP2	5.83	128.35	119.60
2	AB	1193	G	C5-N7-C8	-5.83	101.38	104.30
2	AB	1279	G	C4'-C3'-C2'	-5.83	96.77	102.60
2	AB	1279	G	C4-C5-N7	5.83	113.13	110.80
2	AB	1325	U	N3-C2-O2	-5.83	118.12	122.20
2	AB	1487	U	C1'-O4'-C4'	5.83	114.57	109.90
2	AB	1756	G	C6-N1-C2	-5.83	121.60	125.10
2	AB	2063	C	N1-C2-N3	-5.83	115.12	119.20
2	AB	2091	C	N3-C2-O2	-5.83	117.82	121.90
2	AB	2150	C	C6-N1-C2	-5.83	117.97	120.30
2	AB	2234	G	C4-C5-N7	-5.83	108.47	110.80
2	AB	2775	G	O4'-C4'-C3'	5.83	110.77	106.10
2	AB	2791	G	C4-C5-N7	-5.83	108.47	110.80
2	AB	2797	U	N1-C1'-C2'	5.83	121.58	114.00
35	BA	270	A	O5'-P-OP1	5.83	117.70	110.70
35	BA	439	U	C5-C4-O4	-5.83	122.40	125.90
35	BA	605	U	N3-C2-O2	-5.83	118.12	122.20
35	BA	628	G	N1-C2-N2	5.83	121.45	116.20
35	BA	1414	U	O4'-C1'-C2'	-5.83	99.97	105.80
35	BA	1419	G	C3'-C2'-C1'	5.83	106.17	101.50
35	BA	1452	C	C5'-C4'-O4'	-5.83	102.10	109.10
35	BA	1462	C	C3'-C2'-C1'	5.83	106.17	101.50
37	BC	6	G	C5-N7-C8	-5.83	101.38	104.30
46	BL	1	MET	O-C-N	5.83	132.03	122.70
2	AB	538	A	N7-C8-N9	-5.83	110.89	113.80
2	AB	758	C	N3-C2-O2	-5.83	117.82	121.90
2	AB	775	G	N3-C4-N9	5.83	129.50	126.00
2	AB	1174	U	C1'-O4'-C4'	5.83	114.56	109.90
2	AB	2720	U	N3-C2-O2	-5.83	118.12	122.20
35	BA	132	C	N1-C1'-C2'	-5.83	105.58	112.00
35	BA	264	C	C1'-O4'-C4'	-5.83	105.23	109.90
35	BA	372	C	C3'-C2'-C1'	5.83	106.17	101.50
35	BA	544	G	C8-N9-C1'	5.83	134.58	127.00
35	BA	669	G	C5-C6-N1	5.83	114.42	111.50
35	BA	1273	C	N1-C2-N3	-5.83	115.12	119.20
42	BH	80	PHE	CB-CG-CD2	5.83	124.88	120.80
2	AB	1433	A	N9-C1'-C2'	-5.83	105.59	112.00
35	BA	792	A	C8-N9-C4	-5.83	103.47	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1533	C	C1'-O4'-C4'	-5.83	105.24	109.90
36	BB	38	G	N3-C4-C5	-5.83	125.69	128.60
1	AA	17	C	N3-C2-O2	-5.83	117.82	121.90
1	AA	18	G	C5-C6-O6	5.83	132.10	128.60
1	AA	25	U	N3-C4-C5	-5.83	111.10	114.60
2	AB	65	U	N3-C4-C5	-5.83	111.10	114.60
2	AB	226	A	C8-N9-C4	-5.83	103.47	105.80
2	AB	412	A	N1-C2-N3	-5.83	126.39	129.30
2	AB	602	A	N7-C8-N9	-5.83	110.89	113.80
2	AB	609	A	C6-C5-N7	-5.83	128.22	132.30
2	AB	688	U	N3-C2-O2	-5.83	118.12	122.20
2	AB	1005	C	C5-C4-N4	-5.83	116.12	120.20
2	AB	1445	G	C5'-C4'-C3'	5.83	125.33	116.00
2	AB	2133	G	N1-C6-O6	5.83	123.40	119.90
2	AB	2293	G	C4'-C3'-C2'	-5.83	96.77	102.60
35	BA	95	C	O4'-C4'-C3'	5.83	110.76	106.10
35	BA	126	G	N7-C8-N9	5.83	116.02	113.10
35	BA	222	C	C1'-O4'-C4'	5.83	114.56	109.90
35	BA	343	U	C4-C5-C6	5.83	123.20	119.70
35	BA	831	A	C6-C5-N7	5.83	136.38	132.30
35	BA	1114	C	C1'-O4'-C4'	-5.83	105.24	109.90
35	BA	1183	U	N3-C4-C5	5.83	118.10	114.60
35	BA	1305	G	P-O3'-C3'	5.83	126.69	119.70
35	BA	1347	G	O4'-C1'-N9	5.83	112.86	108.20
54	BT	60	ARG	NH1-CZ-NH2	-5.83	112.99	119.40
2	AB	77	G	C2-N3-C4	5.83	114.81	111.90
2	AB	336	C	N3-C4-C5	5.83	124.23	121.90
2	AB	430	A	P-O3'-C3'	5.83	126.69	119.70
2	AB	904	G	N1-C2-N2	5.83	121.44	116.20
2	AB	1155	A	C2-N3-C4	5.83	113.51	110.60
2	AB	2297	A	O4'-C4'-C3'	5.83	110.76	106.10
2	AB	2719	G	C5'-C4'-O4'	5.83	116.09	109.10
35	BA	901	A	C5-C6-N6	-5.83	119.04	123.70
35	BA	1218	C	P-O3'-C3'	5.83	126.69	119.70
35	BA	1288	A	N3-C4-N9	-5.83	122.74	127.40
35	BA	1409	C	P-O5'-C5'	5.83	130.22	120.90
41	BG	132	PRO	N-CA-CB	5.83	110.29	103.30
2	AB	118	A	O4'-C1'-N9	5.83	112.86	108.20
2	AB	335	C	C4'-C3'-C2'	-5.83	96.78	102.60
2	AB	406	G	O4'-C1'-N9	5.83	112.86	108.20
2	AB	1632	A	N7-C8-N9	-5.83	110.89	113.80
2	AB	2389	G	C6-C5-N7	-5.83	126.90	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2389	G	C6-N1-C2	-5.83	121.60	125.10
2	AB	2407	A	C5'-C4'-O4'	5.83	116.09	109.10
2	AB	2583	G	C6-N1-C2	-5.83	121.61	125.10
2	AB	2612	C	N3-C4-C5	5.83	124.23	121.90
6	AF	183	PHE	CB-CG-CD1	-5.83	116.72	120.80
10	AJ	75	PHE	CB-CG-CD1	5.83	124.88	120.80
35	BA	328	C	N3-C4-N4	5.83	122.08	118.00
35	BA	611	C	O4'-C1'-N1	5.83	112.86	108.20
35	BA	669	G	N3-C2-N2	5.83	123.98	119.90
35	BA	1099	G	N3-C2-N2	5.83	123.98	119.90
2	AB	108	G	C5-C6-N1	5.82	114.41	111.50
2	AB	258	G	O4'-C1'-N9	-5.82	103.54	108.20
2	AB	275	C	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	484	C	N1-C2-N3	-5.82	115.12	119.20
2	AB	1450	G	C4-C5-N7	-5.82	108.47	110.80
2	AB	1506	U	C3'-C2'-C1'	5.82	106.16	101.50
2	AB	2557	G	C5'-C4'-C3'	-5.82	106.68	116.00
22	AV	96	VAL	CA-CB-CG1	5.82	119.63	110.90
35	BA	811	C	N3-C4-C5	-5.82	119.57	121.90
35	BA	1296	C	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	711	G	N1-C2-N3	-5.82	120.41	123.90
2	AB	2682	A	N3-C4-N9	5.82	132.06	127.40
35	BA	482	A	C2-N3-C4	5.82	113.51	110.60
35	BA	615	G	C5-C6-N1	5.82	114.41	111.50
35	BA	1151	A	C4-C5-N7	-5.82	107.79	110.70
36	BB	31	U	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	490	C	P-O3'-C3'	5.82	126.68	119.70
2	AB	610	C	C4-C5-C6	-5.82	114.49	117.40
2	AB	766	U	N3-C4-O4	5.82	123.47	119.40
2	AB	987	C	C6-N1-C2	5.82	122.63	120.30
2	AB	1656	C	C6-N1-C2	5.82	122.63	120.30
2	AB	1665	A	N9-C4-C5	5.82	108.13	105.80
2	AB	1750	G	C5-C6-O6	-5.82	125.11	128.60
2	AB	1884	G	N3-C4-N9	-5.82	122.51	126.00
2	AB	2176	A	C8-N9-C4	-5.82	103.47	105.80
35	BA	66	A	N9-C4-C5	5.82	108.13	105.80
35	BA	239	U	O4'-C4'-C3'	5.82	110.76	106.10
35	BA	251	G	N9-C4-C5	-5.82	103.07	105.40
35	BA	648	A	N9-C1'-C2'	-5.82	105.60	112.00
35	BA	971	G	N1-C2-N2	5.82	121.44	116.20
35	BA	1124	G	C4-C5-N7	5.82	113.13	110.80
35	BA	1192	C	C2-N3-C4	5.82	122.81	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	65	U	C3'-C2'-C1'	-5.82	96.84	101.50
2	AB	2043	C	O4'-C4'-C3'	5.82	110.75	106.10
4	AD	12	ARG	NE-CZ-NH1	5.82	123.21	120.30
19	AS	12	ARG	NE-CZ-NH1	-5.82	117.39	120.30
35	BA	56	U	N1-C2-N3	5.82	118.39	114.90
35	BA	187	G	C2'-C3'-O3'	5.82	123.01	113.70
39	BE	97	PRO	N-CA-CB	5.82	110.28	103.30
1	AA	20	G	C1'-O4'-C4'	5.82	114.55	109.90
2	AB	201	C	C6-N1-C2	-5.82	117.97	120.30
2	AB	236	C	N3-C4-C5	-5.82	119.57	121.90
2	AB	1225	G	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	1284	A	C2-N3-C4	5.82	113.51	110.60
2	AB	1403	A	C1'-O4'-C4'	5.82	114.55	109.90
2	AB	1407	G	N9-C4-C5	5.82	107.73	105.40
2	AB	1631	G	C4'-C3'-C2'	-5.82	96.78	102.60
2	AB	2038	G	C8-N9-C4	5.82	108.73	106.40
2	AB	2565	A	N1-C2-N3	-5.82	126.39	129.30
2	AB	2868	A	N3-C4-N9	5.82	132.05	127.40
25	AY	62	ALA	CB-CA-C	5.82	118.83	110.10
35	BA	138	G	C2-N3-C4	5.82	114.81	111.90
35	BA	505	G	O4'-C1'-N9	5.82	112.85	108.20
35	BA	597	G	N1-C2-N3	-5.82	120.41	123.90
35	BA	750	C	C4-C5-C6	5.82	120.31	117.40
35	BA	1248	A	C4-C5-N7	-5.82	107.79	110.70
35	BA	1461	G	O4'-C1'-C2'	-5.82	99.98	105.80
35	BA	1533	C	C4-C5-C6	-5.82	114.49	117.40
39	BE	192	TYR	CG-CD2-CE2	5.82	125.95	121.30
40	BF	101	VAL	CA-CB-CG2	5.82	119.63	110.90
44	BJ	69	ALA	N-CA-CB	-5.82	101.96	110.10
45	BK	90	ASP	CB-CG-OD1	5.82	123.54	118.30
2	AB	38	A	O4'-C1'-N9	5.82	112.85	108.20
2	AB	473	G	C3'-C2'-C1'	-5.82	96.85	101.50
2	AB	856	G	C2-N3-C4	-5.82	108.99	111.90
2	AB	1139	G	C5-C6-O6	-5.82	125.11	128.60
2	AB	1242	U	O4'-C1'-N1	5.82	112.85	108.20
2	AB	1445	G	C1'-O4'-C4'	5.82	114.55	109.90
2	AB	1589	U	N3-C2-O2	-5.82	118.13	122.20
2	AB	2090	A	O4'-C4'-C3'	5.82	110.75	106.10
2	AB	2203	U	C1'-O4'-C4'	-5.82	105.25	109.90
2	AB	2204	G	N9-C4-C5	-5.82	103.07	105.40
2	AB	2493	U	N3-C4-O4	5.82	123.47	119.40
35	BA	858	G	C4'-C3'-C2'	-5.82	96.78	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	537	G	N1-C2-N3	-5.81	120.41	123.90
2	AB	610	C	C6-N1-C2	5.81	122.63	120.30
2	AB	1269	A	C5-N7-C8	5.81	106.81	103.90
2	AB	1916	A	C2-N3-C4	-5.81	107.69	110.60
2	AB	1960	A	O4'-C1'-N9	5.81	112.85	108.20
2	AB	2126	A	P-O3'-C3'	5.81	126.68	119.70
2	AB	2795	C	N3-C4-C5	-5.81	119.57	121.90
35	BA	380	G	N7-C8-N9	-5.81	110.19	113.10
35	BA	755	G	C4'-C3'-C2'	-5.81	96.79	102.60
35	BA	1448	C	O4'-C1'-N1	5.81	112.85	108.20
40	BF	140	ASP	CB-CG-OD2	5.81	123.53	118.30
2	AB	688	U	N1-C2-N3	5.81	118.39	114.90
2	AB	805	G	N3-C2-N2	-5.81	115.83	119.90
2	AB	1078	U	O4'-C1'-N1	5.81	112.85	108.20
2	AB	1171	G	O4'-C1'-N9	5.81	112.85	108.20
2	AB	1897	G	N9-C1'-C2'	-5.81	105.61	112.00
2	AB	2003	A	C2-N3-C4	5.81	113.51	110.60
2	AB	2057	G	C4-N9-C1'	-5.81	118.94	126.50
2	AB	2148	G	N9-C4-C5	5.81	107.72	105.40
2	AB	2559	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	2630	G	C2'-C3'-O3'	5.81	123.00	113.70
35	BA	201	G	C8-N9-C4	-5.81	104.08	106.40
35	BA	337	G	C2-N3-C4	-5.81	108.99	111.90
35	BA	635	A	C4-C5-C6	5.81	119.91	117.00
35	BA	758	C	C6-N1-C2	-5.81	117.97	120.30
35	BA	823	C	C2-N3-C4	-5.81	116.99	119.90
35	BA	834	U	C5-C4-O4	-5.81	122.41	125.90
2	AB	7	G	C5-C6-O6	-5.81	125.11	128.60
2	AB	977	G	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	1015	U	C5'-C4'-O4'	5.81	116.07	109.10
2	AB	1386	C	C6-N1-C2	5.81	122.62	120.30
2	AB	1411	U	C4'-C3'-C2'	5.81	108.41	102.60
2	AB	1642	G	N9-C1'-C2'	-5.81	105.61	112.00
2	AB	1981	A	P-O3'-C3'	5.81	126.67	119.70
2	AB	2000	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	AB	2406	A	C5-N7-C8	-5.81	100.99	103.90
35	BA	240	G	C4-C5-C6	5.81	122.29	118.80
35	BA	490	C	C5'-C4'-C3'	-5.81	106.70	116.00
35	BA	1033	G	C6-C5-N7	-5.81	126.91	130.40
36	BB	37	G	N1-C2-N3	-5.81	120.41	123.90
2	AB	1	G	N3-C2-N2	-5.81	115.83	119.90
2	AB	33	C	C6-N1-C2	5.81	122.62	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	115	C	O4'-C1'-N1	5.81	112.85	108.20
2	AB	404	A	O4'-C4'-C3'	5.81	110.75	106.10
2	AB	427	U	C5-C6-N1	-5.81	119.80	122.70
2	AB	504	A	N1-C6-N6	5.81	122.08	118.60
2	AB	584	C	C2-N3-C4	5.81	122.80	119.90
2	AB	815	C	N3-C4-C5	-5.81	119.58	121.90
2	AB	841	G	C5-C6-N1	5.81	114.41	111.50
2	AB	987	C	N3-C4-C5	5.81	124.22	121.90
2	AB	1335	C	O4'-C1'-N1	5.81	112.85	108.20
2	AB	1585	C	C4-C5-C6	5.81	120.30	117.40
2	AB	1593	A	C5-C6-N1	5.81	120.61	117.70
2	AB	1697	G	C8-N9-C4	-5.81	104.08	106.40
2	AB	2128	G	C6-N1-C2	-5.81	121.61	125.10
2	AB	2157	G	C5-N7-C8	5.81	107.20	104.30
2	AB	2451	A	C3'-C2'-C1'	5.81	106.15	101.50
2	AB	2536	G	N3-C2-N2	-5.81	115.83	119.90
35	BA	384	G	C5-N7-C8	-5.81	101.40	104.30
35	BA	1119	C	N3-C4-N4	-5.81	113.93	118.00
35	BA	1141	C	O4'-C4'-C3'	5.81	110.75	106.10
2	AB	416	U	O4'-C1'-N1	5.81	112.85	108.20
2	AB	669	G	N7-C8-N9	5.81	116.00	113.10
2	AB	1147	A	N1-C6-N6	-5.81	115.11	118.60
2	AB	1288	G	O4'-C1'-C2'	-5.81	99.99	105.80
2	AB	1379	U	C3'-C2'-C1'	5.81	106.15	101.50
2	AB	1945	G	O4'-C1'-N9	5.81	112.85	108.20
2	AB	2876	G	C6-C5-N7	-5.81	126.92	130.40
10	AJ	158	ARG	NE-CZ-NH2	-5.81	117.40	120.30
35	BA	163	C	N3-C2-O2	-5.81	117.83	121.90
35	BA	914	A	C5-N7-C8	-5.81	101.00	103.90
35	BA	1405	G	C1'-O4'-C4'	-5.81	105.25	109.90
37	BC	24	C	C3'-C2'-C1'	5.81	106.15	101.50
39	BE	155	ARG	O-C-N	-5.81	113.41	122.70
57	BW	35	GLU	OE1-CD-OE2	5.81	130.27	123.30
2	AB	439	A	C5-C6-N6	-5.81	119.06	123.70
2	AB	1538	G	N1-C6-O6	-5.81	116.42	119.90
2	AB	1780	A	C6-C5-N7	5.81	136.36	132.30
2	AB	1975	G	C5'-C4'-O4'	5.81	116.07	109.10
35	BA	44	A	C4-C5-N7	-5.81	107.80	110.70
35	BA	207	C	C2-N3-C4	-5.81	117.00	119.90
35	BA	950	U	N3-C2-O2	-5.81	118.14	122.20
35	BA	1361	G	C5-N7-C8	-5.81	101.40	104.30
36	BB	46	C	C5'-C4'-O4'	5.81	116.07	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	90	C	C4-C5-C6	-5.80	114.50	117.40
2	AB	42	A	P-O3'-C3'	5.80	126.67	119.70
2	AB	153	U	C3'-C2'-C1'	5.80	106.14	101.50
2	AB	750	A	N1-C6-N6	-5.80	115.12	118.60
2	AB	1068	G	C6-C5-N7	5.80	133.88	130.40
2	AB	1075	C	N1-C2-O2	5.80	122.38	118.90
2	AB	1332	G	C6-C5-N7	-5.80	126.92	130.40
2	AB	1504	A	C8-N9-C4	-5.80	103.48	105.80
2	AB	1533	C	P-O3'-C3'	5.80	126.67	119.70
2	AB	2226	C	N1-C1'-C2'	-5.80	105.61	112.00
2	AB	2780	G	C6-N1-C2	-5.80	121.62	125.10
2	AB	2801	G	N3-C2-N2	5.80	123.96	119.90
3	AC	178	VAL	CA-CB-CG2	5.80	119.61	110.90
15	AO	55	ARG	NE-CZ-NH2	5.80	123.20	120.30
35	BA	36	C	C4-C5-C6	5.80	120.30	117.40
35	BA	111	G	C3'-C2'-C1'	5.80	106.14	101.50
2	AB	1588	G	C5'-C4'-O4'	-5.80	102.14	109.10
2	AB	2509	G	N9-C4-C5	5.80	107.72	105.40
37	BC	66	C	N3-C4-C5	-5.80	119.58	121.90
2	AB	324	A	C5'-C4'-O4'	5.80	116.06	109.10
2	AB	690	G	O4'-C1'-N9	5.80	112.84	108.20
2	AB	767	U	O4'-C1'-N1	5.80	112.84	108.20
2	AB	815	C	N1-C2-O2	5.80	122.38	118.90
2	AB	889	C	N3-C4-C5	-5.80	119.58	121.90
2	AB	917	A	P-O3'-C3'	5.80	126.66	119.70
2	AB	946	C	C4'-C3'-C2'	-5.80	96.80	102.60
2	AB	1529	G	C5-N7-C8	-5.80	101.40	104.30
2	AB	2404	U	C4'-C3'-C2'	5.80	108.40	102.60
2	AB	2722	G	N9-C4-C5	5.80	107.72	105.40
2	AB	2756	U	C3'-C2'-C1'	5.80	106.14	101.50
2	AB	2846	G	C5-N7-C8	-5.80	101.40	104.30
11	AK	61	TYR	CD1-CE1-CZ	5.80	125.02	119.80
35	BA	71	A	N9-C1'-C2'	-5.80	105.62	112.00
35	BA	356	A	C5'-C4'-O4'	5.80	116.06	109.10
35	BA	490	C	C5'-C4'-O4'	5.80	116.06	109.10
35	BA	970	C	C5-C6-N1	-5.80	118.10	121.00
35	BA	1011	C	C4'-C3'-C2'	-5.80	96.80	102.60
35	BA	1264	U	C5-C4-O4	-5.80	122.42	125.90
39	BE	82	ASP	CB-CG-OD1	5.80	123.52	118.30
2	AB	500	G	C5'-C4'-O4'	5.80	116.06	109.10
2	AB	1324	G	N9-C4-C5	-5.80	103.08	105.40
2	AB	1346	G	C8-N9-C4	-5.80	104.08	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1392	A	C5'-C4'-O4'	5.80	116.06	109.10
2	AB	1682	G	C4-C5-C6	5.80	122.28	118.80
2	AB	2151	U	C5-C6-N1	-5.80	119.80	122.70
2	AB	2557	G	C4-C5-C6	5.80	122.28	118.80
2	AB	2687	U	C4-C5-C6	5.80	123.18	119.70
25	AY	73	PRO	N-CD-CG	5.80	111.90	103.20
35	BA	31	G	C2-N3-C4	-5.80	109.00	111.90
35	BA	1318	A	C5'-C4'-C3'	-5.80	106.72	116.00
49	BO	91	ARG	NH1-CZ-NH2	5.80	125.78	119.40
2	AB	61	C	N1-C2-N3	5.80	123.26	119.20
2	AB	309	A	N9-C4-C5	5.80	108.12	105.80
2	AB	371	A	C4'-C3'-C2'	-5.80	96.80	102.60
2	AB	738	G	O4'-C1'-N9	5.80	112.84	108.20
2	AB	1260	A	C5'-C4'-O4'	5.80	116.06	109.10
2	AB	2759	G	C5-N7-C8	-5.80	101.40	104.30
35	BA	94	G	C8-N9-C4	5.80	108.72	106.40
35	BA	706	A	N7-C8-N9	5.80	116.70	113.80
35	BA	712	A	P-O5'-C5'	5.80	130.18	120.90
35	BA	923	A	N9-C1'-C2'	-5.80	105.62	112.00
2	AB	209	C	C5'-C4'-O4'	5.80	116.06	109.10
2	AB	789	A	N3-C4-C5	-5.80	122.74	126.80
2	AB	1386	C	O4'-C1'-N1	5.80	112.84	108.20
2	AB	1997	C	N3-C2-O2	-5.80	117.84	121.90
2	AB	2353	G	N3-C2-N2	-5.80	115.84	119.90
2	AB	2448	A	N3-C4-C5	-5.80	122.74	126.80
2	AB	2577	A	C5-C6-N6	5.80	128.34	123.70
2	AB	2586	U	C3'-C2'-C1'	5.80	106.14	101.50
2	AB	2671	G	N7-C8-N9	5.80	116.00	113.10
35	BA	422	C	O4'-C1'-N1	5.80	112.84	108.20
35	BA	449	G	N1-C6-O6	5.80	123.38	119.90
35	BA	790	A	C4-C5-C6	5.80	119.90	117.00
35	BA	1183	U	C5'-C4'-C3'	-5.80	106.73	116.00
37	BC	31	G	N1-C2-N3	-5.80	120.42	123.90
2	AB	478	A	C3'-C2'-C1'	5.79	106.14	101.50
2	AB	697	G	N3-C2-N2	-5.79	115.84	119.90
2	AB	762	U	C3'-C2'-C1'	5.79	106.14	101.50
2	AB	905	A	O4'-C1'-N9	5.79	112.84	108.20
2	AB	2111	U	C3'-C2'-C1'	-5.79	96.86	101.50
2	AB	2553	G	C3'-C2'-C1'	5.79	106.14	101.50
25	AY	9	THR	CA-CB-CG2	5.79	120.51	112.40
35	BA	73	C	N3-C4-C5	5.79	124.22	121.90
35	BA	141	G	C8-N9-C4	-5.79	104.08	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	446	G	N3-C4-C5	-5.79	125.70	128.60
35	BA	505	G	P-O3'-C3'	5.79	126.65	119.70
35	BA	663	A	C4-C5-N7	5.79	113.60	110.70
35	BA	807	A	C5'-C4'-O4'	5.79	116.05	109.10
35	BA	963	G	C5'-C4'-O4'	5.79	116.05	109.10
35	BA	1033	G	C8-N9-C4	-5.79	104.08	106.40
35	BA	1196	A	N9-C4-C5	-5.79	103.48	105.80
35	BA	1208	C	C4-C5-C6	-5.79	114.50	117.40
1	AA	105	G	C5-C6-O6	5.79	132.08	128.60
2	AB	56	A	C5-C6-N1	5.79	120.60	117.70
2	AB	97	C	C4-C5-C6	-5.79	114.50	117.40
2	AB	370	G	O4'-C1'-C2'	-5.79	100.01	105.80
2	AB	415	A	C4-C5-C6	5.79	119.90	117.00
2	AB	841	G	N1-C2-N3	-5.79	120.42	123.90
2	AB	862	G	C5'-C4'-O4'	5.79	116.05	109.10
2	AB	1131	G	C5'-C4'-C3'	-5.79	106.73	116.00
2	AB	1184	U	C5'-C4'-O4'	5.79	116.05	109.10
2	AB	2294	G	C4-C5-N7	-5.79	108.48	110.80
2	AB	2829	A	C4'-C3'-C2'	-5.79	96.81	102.60
2	AB	2834	G	N3-C4-C5	-5.79	125.70	128.60
2	AB	2874	C	O4'-C1'-N1	5.79	112.83	108.20
35	BA	126	G	C1'-O4'-C4'	-5.79	105.27	109.90
35	BA	223	A	C1'-O4'-C4'	-5.79	105.27	109.90
35	BA	670	G	N3-C4-N9	5.79	129.48	126.00
35	BA	894	G	C5'-C4'-O4'	5.79	116.05	109.10
35	BA	949	A	N7-C8-N9	5.79	116.70	113.80
35	BA	1157	A	C6-N1-C2	5.79	122.08	118.60
35	BA	1182	G	C5-C6-N1	5.79	114.40	111.50
35	BA	1220	G	C5-N7-C8	-5.79	101.40	104.30
35	BA	1224	U	C6-N1-C1'	-5.79	113.09	121.20
2	AB	68	G	C4-C5-C6	-5.79	115.33	118.80
2	AB	247	G	N3-C2-N2	-5.79	115.85	119.90
2	AB	375	G	C5-C6-N1	-5.79	108.60	111.50
2	AB	638	G	C5-C6-N1	5.79	114.40	111.50
2	AB	1829	A	C4-C5-C6	-5.79	114.11	117.00
2	AB	1921	G	C5-N7-C8	-5.79	101.40	104.30
2	AB	2017	U	N1-C2-O2	5.79	126.85	122.80
2	AB	2516	A	C6-N1-C2	-5.79	115.12	118.60
3	AC	111	PHE	CG-CD2-CE2	-5.79	114.43	120.80
35	BA	407	U	N1-C2-N3	5.79	118.38	114.90
35	BA	1176	A	O4'-C1'-N9	5.79	112.83	108.20
53	BS	49	ASN	O-C-N	5.79	131.97	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2	G	C6-C5-N7	5.79	133.87	130.40
2	AB	1571	A	C8-N9-C4	-5.79	103.48	105.80
2	AB	1929	G	N3-C4-C5	-5.79	125.70	128.60
2	AB	2099	U	C5'-C4'-O4'	5.79	116.05	109.10
2	AB	2657	A	C4-C5-C6	-5.79	114.11	117.00
2	AB	2715	C	C6-N1-C2	-5.79	117.98	120.30
35	BA	1253	G	C2-N3-C4	5.79	114.80	111.90
2	AB	440	C	O4'-C1'-N1	5.79	112.83	108.20
2	AB	1406	U	C5-C6-N1	-5.79	119.81	122.70
2	AB	1990	C	C4-C5-C6	-5.79	114.51	117.40
2	AB	2061	G	C5-C6-O6	5.79	132.07	128.60
2	AB	2110	G	N7-C8-N9	5.79	115.99	113.10
2	AB	2578	G	C5'-C4'-C3'	-5.79	106.74	116.00
2	AB	2788	C	C5'-C4'-C3'	-5.79	106.74	116.00
35	BA	615	G	C1'-O4'-C4'	-5.79	105.27	109.90
35	BA	1072	G	C4'-C3'-C2'	-5.79	96.81	102.60
35	BA	1307	U	N3-C2-O2	5.79	126.25	122.20
35	BA	1357	A	P-O5'-C5'	5.79	130.16	120.90
36	BB	55	A	C6-C5-N7	-5.79	128.25	132.30
2	AB	1518	C	N1-C2-O2	5.79	122.37	118.90
2	AB	2875	C	C5-C4-N4	-5.79	116.15	120.20
35	BA	109	A	O4'-C1'-C2'	-5.79	100.01	105.80
35	BA	837	U	C3'-C2'-C1'	5.79	106.13	101.50
2	AB	378	C	C4-C5-C6	5.79	120.29	117.40
2	AB	1033	U	N3-C4-C5	-5.79	111.13	114.60
2	AB	1161	C	C6-N1-C2	-5.79	117.99	120.30
2	AB	1317	G	C5-N7-C8	5.79	107.19	104.30
2	AB	1440	U	O4'-C1'-N1	5.79	112.83	108.20
6	AF	88	ARG	NE-CZ-NH1	-5.79	117.41	120.30
35	BA	522	C	O4'-C4'-C3'	5.79	110.73	106.10
35	BA	553	A	N7-C8-N9	5.79	116.69	113.80
35	BA	653	U	C5-C6-N1	-5.79	119.81	122.70
35	BA	1121	U	N3-C2-O2	-5.79	118.15	122.20
2	AB	17	G	C4'-C3'-C2'	-5.78	96.82	102.60
2	AB	46	G	N1-C2-N3	-5.78	120.43	123.90
2	AB	235	U	N3-C2-O2	-5.78	118.15	122.20
2	AB	378	C	N3-C4-C5	-5.78	119.59	121.90
2	AB	581	C	C5-C4-N4	-5.78	116.15	120.20
2	AB	740	C	O4'-C1'-C2'	-5.78	100.02	105.80
2	AB	942	G	N1-C2-N3	5.78	127.37	123.90
2	AB	1479	G	C5'-C4'-C3'	-5.78	106.75	116.00
2	AB	1658	C	O4'-C1'-N1	5.78	112.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2401	U	N1-C2-N3	5.78	118.37	114.90
2	AB	2828	G	N1-C6-O6	-5.78	116.43	119.90
22	AV	18	GLU	CB-CA-C	5.78	121.97	110.40
35	BA	5	U	C5-C4-O4	-5.78	122.43	125.90
35	BA	653	U	C2-N3-C4	-5.78	123.53	127.00
35	BA	741	G	C2-N3-C4	-5.78	109.01	111.90
35	BA	1289	A	C5-C6-N6	5.78	128.33	123.70
35	BA	1318	A	O3'-P-O5'	-5.78	93.01	104.00
35	BA	1447	A	C3'-C2'-C1'	5.78	106.13	101.50
2	AB	2725	A	C5'-C4'-C3'	-5.78	106.75	116.00
35	BA	648	A	N3-C4-N9	-5.78	122.77	127.40
35	BA	800	G	O5'-C5'-C4'	-5.78	100.72	111.70
35	BA	1359	C	C2-N3-C4	5.78	122.79	119.90
35	BA	1506	U	C4'-C3'-C2'	-5.78	96.82	102.60
2	AB	185	G	C5-C6-N1	5.78	114.39	111.50
2	AB	325	G	N7-C8-N9	5.78	115.99	113.10
2	AB	424	G	N1-C2-N2	-5.78	111.00	116.20
2	AB	1162	G	C6-N1-C2	-5.78	121.63	125.10
2	AB	1526	C	C2-N3-C4	-5.78	117.01	119.90
2	AB	1715	G	C4'-C3'-C2'	-5.78	96.82	102.60
2	AB	1727	C	C4'-C3'-C2'	-5.78	96.82	102.60
2	AB	1874	C	C2-N3-C4	5.78	122.79	119.90
2	AB	1932	A	C4-C5-C6	-5.78	114.11	117.00
2	AB	2216	G	P-O3'-C3'	5.78	126.64	119.70
2	AB	2295	C	N3-C4-C5	-5.78	119.59	121.90
2	AB	2424	C	O4'-C4'-C3'	5.78	110.72	106.10
2	AB	2455	G	O4'-C1'-N9	5.78	112.82	108.20
2	AB	2582	G	N1-C6-O6	-5.78	116.43	119.90
2	AB	2747	G	C4-N9-C1'	-5.78	118.99	126.50
2	AB	2874	C	C2-N3-C4	5.78	122.79	119.90
35	BA	259	G	C4-C5-C6	5.78	122.27	118.80
35	BA	676	A	C4-C5-N7	-5.78	107.81	110.70
35	BA	1244	G	N3-C4-C5	-5.78	125.71	128.60
50	BP	37	ASP	CB-CG-OD1	5.78	123.50	118.30
2	AB	130	C	N1-C2-O2	5.78	122.37	118.90
2	AB	348	A	C4-C5-N7	5.78	113.59	110.70
2	AB	742	A	N7-C8-N9	5.78	116.69	113.80
2	AB	1639	C	C2-N1-C1'	-5.78	112.44	118.80
2	AB	2637	U	C1'-O4'-C4'	-5.78	105.28	109.90
12	AL	124	VAL	CG1-CB-CG2	-5.78	101.65	110.90
2	AB	188	G	C4-N9-C1'	-5.78	118.99	126.50
2	AB	381	G	C8-N9-C4	-5.78	104.09	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	445	C	C4'-C3'-C2'	-5.78	96.82	102.60
2	AB	1653	G	C6-N1-C2	-5.78	121.63	125.10
2	AB	2132	U	O4'-C1'-N1	5.78	112.82	108.20
2	AB	2774	C	C5'-C4'-O4'	5.78	116.03	109.10
35	BA	522	C	C5'-C4'-C3'	-5.78	106.76	116.00
35	BA	667	G	C8-N9-C4	-5.78	104.09	106.40
35	BA	668	G	O4'-C1'-N9	5.78	112.82	108.20
35	BA	745	G	N9-C1'-C2'	-5.78	105.65	112.00
35	BA	790	A	N3-C4-C5	-5.78	122.75	126.80
35	BA	941	G	C4-C5-N7	-5.78	108.49	110.80
35	BA	1012	A	C8-N9-C4	-5.78	103.49	105.80
35	BA	1072	G	C4-C5-N7	-5.78	108.49	110.80
35	BA	1492	A	N1-C6-N6	5.78	122.07	118.60
37	BC	63	C	N1-C2-O2	5.78	122.37	118.90
2	AB	163	C	C5-C6-N1	-5.78	118.11	121.00
2	AB	165	A	O4'-C1'-N9	5.78	112.82	108.20
2	AB	210	C	C1'-O4'-C4'	5.78	114.52	109.90
2	AB	314	C	P-O3'-C3'	5.78	126.63	119.70
2	AB	874	G	C4-N9-C1'	-5.78	118.99	126.50
2	AB	1319	C	C5-C4-N4	5.78	124.24	120.20
2	AB	1452	G	C5-N7-C8	5.78	107.19	104.30
2	AB	1755	A	C5-C6-N1	5.78	120.59	117.70
2	AB	1899	A	C5-C6-N6	5.78	128.32	123.70
2	AB	2392	A	C3'-C2'-C1'	-5.78	96.88	101.50
2	AB	2490	G	C1'-O4'-C4'	5.78	114.52	109.90
2	AB	2887	A	C5-N7-C8	-5.78	101.01	103.90
3	AC	208	TYR	CB-CG-CD1	-5.78	117.53	121.00
20	AT	27	ILE	CA-CB-CG1	5.78	121.97	111.00
35	BA	44	A	C6-N1-C2	5.78	122.06	118.60
35	BA	282	A	C2-N3-C4	-5.78	107.71	110.60
35	BA	1172	C	C1'-O4'-C4'	-5.78	105.28	109.90
38	BD	126	ASP	CB-CG-OD2	5.78	123.50	118.30
43	BI	95	ARG	NE-CZ-NH2	-5.78	117.41	120.30
55	BU	9	PHE	CD1-CE1-CZ	5.78	127.03	120.10
1	AA	87	U	C5-C6-N1	-5.77	119.81	122.70
2	AB	1006	C	C6-N1-C2	5.77	122.61	120.30
2	AB	1973	G	P-O3'-C3'	5.77	126.63	119.70
2	AB	2539	C	N1-C1'-C2'	-5.77	105.65	112.00
2	AB	2679	A	C5'-C4'-O4'	5.77	116.03	109.10
35	BA	506	G	C5'-C4'-O4'	5.77	116.03	109.10
35	BA	608	A	C5-C6-N1	5.77	120.59	117.70
36	BB	33	A	O4'-C1'-C2'	-5.77	100.03	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	558	U	O4'-C1'-N1	5.77	112.82	108.20
2	AB	738	G	C5-C6-N1	5.77	114.39	111.50
2	AB	1217	U	C4'-C3'-C2'	-5.77	96.83	102.60
2	AB	1367	A	C4-C5-C6	-5.77	114.11	117.00
2	AB	1464	G	N9-C1'-C2'	-5.77	105.65	112.00
2	AB	1625	C	C6-N1-C2	5.77	122.61	120.30
2	AB	2736	A	C5-C6-N6	-5.77	119.08	123.70
35	BA	90	C	N3-C4-C5	-5.77	119.59	121.90
35	BA	341	C	N1-C2-O2	-5.77	115.44	118.90
35	BA	345	C	O4'-C4'-C3'	5.77	110.72	106.10
35	BA	492	C	C4'-C3'-C2'	-5.77	96.83	102.60
35	BA	505	G	C6-C5-N7	-5.77	126.94	130.40
35	BA	595	A	C8-N9-C4	-5.77	103.49	105.80
35	BA	969	A	C5-C6-N1	-5.77	114.81	117.70
42	BH	103	VAL	CG1-CB-CG2	-5.77	101.67	110.90
2	AB	1	G	N9-C4-C5	5.77	107.71	105.40
2	AB	1218	G	C4-C5-C6	5.77	122.26	118.80
20	AT	60	LYS	CG-CD-CE	-5.77	94.59	111.90
35	BA	169	C	C1'-O4'-C4'	-5.77	105.28	109.90
35	BA	185	U	C2-N3-C4	-5.77	123.54	127.00
35	BA	522	C	N3-C4-N4	5.77	122.04	118.00
35	BA	875	U	O4'-C1'-N1	5.77	112.82	108.20
35	BA	960	U	C3'-C2'-C1'	5.77	106.12	101.50
35	BA	964	A	N1-C6-N6	-5.77	115.14	118.60
35	BA	1454	G	C6-C5-N7	5.77	133.86	130.40
35	BA	1498	UR3	P-O3'-C3'	5.77	126.62	119.70
2	AB	233	A	O4'-C1'-N9	5.77	112.82	108.20
2	AB	289	G	O4'-C1'-N9	5.77	112.82	108.20
2	AB	348	A	N9-C4-C5	-5.77	103.49	105.80
2	AB	698	C	C3'-C2'-C1'	-5.77	96.88	101.50
2	AB	1268	A	C5-C6-N1	5.77	120.58	117.70
2	AB	1562	U	N3-C2-O2	-5.77	118.16	122.20
2	AB	2567	G	C5'-C4'-O4'	5.77	116.02	109.10
2	AB	2771	C	C2-N3-C4	-5.77	117.02	119.90
5	AE	9	VAL	C-N-CA	5.77	134.41	122.30
35	BA	376	G	N9-C4-C5	5.77	107.71	105.40
35	BA	394	G	C5-C6-O6	-5.77	125.14	128.60
35	BA	1182	G	N3-C4-N9	5.77	129.46	126.00
35	BA	1433	A	C4'-C3'-C2'	-5.77	96.83	102.60
1	AA	96	G	N3-C4-N9	5.77	129.46	126.00
2	AB	1854	A	C5'-C4'-O4'	5.77	116.02	109.10
2	AB	1989	G	N3-C4-C5	-5.77	125.72	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1992	G	C4-C5-C6	5.77	122.26	118.80
2	AB	2561	U	C4'-C3'-C2'	-5.77	96.83	102.60
2	AB	2585	U	N3-C4-C5	-5.77	111.14	114.60
35	BA	260	G	C4-C5-N7	-5.77	108.49	110.80
35	BA	964	A	C4-C5-N7	-5.77	107.82	110.70
2	AB	362	A	N3-C4-N9	5.77	132.01	127.40
2	AB	2255	G	N9-C1'-C2'	-5.77	105.66	112.00
2	AB	2488	G	C2-N3-C4	5.77	114.78	111.90
35	BA	132	C	O4'-C1'-N1	5.77	112.81	108.20
35	BA	1529	G	N7-C8-N9	5.77	115.98	113.10
36	BB	48	C	C3'-C2'-C1'	5.77	106.11	101.50
1	AA	73	A	N7-C8-N9	-5.76	110.92	113.80
2	AB	282	A	N1-C2-N3	-5.76	126.42	129.30
2	AB	356	G	C4-C5-C6	5.76	122.26	118.80
2	AB	372	G	C4-C5-N7	-5.76	108.49	110.80
2	AB	870	U	C4'-C3'-C2'	-5.76	96.84	102.60
2	AB	904	G	C1'-O4'-C4'	-5.76	105.29	109.90
2	AB	1248	G	O4'-C1'-C2'	-5.76	100.04	105.80
2	AB	1405	U	C5-C6-N1	5.76	125.58	122.70
2	AB	1513	U	C5-C6-N1	5.76	125.58	122.70
2	AB	2092	U	C1'-O4'-C4'	-5.76	105.29	109.90
2	AB	2326	C	C4-C5-C6	-5.76	114.52	117.40
2	AB	2489	U	C5-C6-N1	-5.76	119.82	122.70
35	BA	64	G	C5'-C4'-C3'	-5.76	106.78	116.00
35	BA	168	G	C6-N1-C2	-5.76	121.64	125.10
35	BA	251	G	N3-C4-C5	-5.76	125.72	128.60
35	BA	362	G	C6-C5-N7	5.76	133.86	130.40
35	BA	548	G	N3-C4-C5	-5.76	125.72	128.60
35	BA	660	C	C5'-C4'-O4'	5.76	116.02	109.10
35	BA	1181	G	C2-N3-C4	5.76	114.78	111.90
35	BA	1297	G	C5-C6-O6	-5.76	125.14	128.60
35	BA	1414	U	C2-N3-C4	-5.76	123.54	127.00
35	BA	1494	G	N1-C2-N2	5.76	121.39	116.20
37	BC	54	G	O4'-C1'-N9	5.76	112.81	108.20
2	AB	274	C	N3-C2-O2	-5.76	117.87	121.90
2	AB	1773	A	C5'-C4'-C3'	-5.76	106.78	116.00
35	BA	718	A	C1'-O4'-C4'	5.76	114.51	109.90
35	BA	1234	C	C5-C6-N1	5.76	123.88	121.00
2	AB	84	A	C5-N7-C8	-5.76	101.02	103.90
2	AB	214	G	O4'-C4'-C3'	-5.76	98.24	104.00
2	AB	318	C	C4'-C3'-C2'	-5.76	96.84	102.60
2	AB	329	G	O4'-C1'-N9	-5.76	103.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	428	A	N9-C4-C5	-5.76	103.50	105.80
2	AB	1051	G	O4'-C1'-N9	5.76	112.81	108.20
2	AB	1151	A	C5'-C4'-O4'	5.76	116.01	109.10
2	AB	1182	G	N9-C1'-C2'	-5.76	105.66	112.00
2	AB	1191	G	C5-C6-N1	-5.76	108.62	111.50
2	AB	2158	A	C2-N3-C4	5.76	113.48	110.60
2	AB	2432	A	C2'-C3'-O3'	5.76	122.92	113.70
35	BA	426	U	C1'-O4'-C4'	5.76	114.51	109.90
35	BA	574	A	C1'-O4'-C4'	5.76	114.51	109.90
35	BA	759	A	N1-C2-N3	-5.76	126.42	129.30
35	BA	814	A	C4-C5-N7	-5.76	107.82	110.70
35	BA	818	G	N3-C4-N9	5.76	129.46	126.00
2	AB	47	C	C6-N1-C2	5.76	122.60	120.30
2	AB	126	A	C5'-C4'-O4'	5.76	116.01	109.10
2	AB	490	C	C6-N1-C1'	5.76	127.71	120.80
2	AB	1144	A	N7-C8-N9	5.76	116.68	113.80
2	AB	1657	U	C4-C5-C6	5.76	123.16	119.70
2	AB	1689	A	O4'-C1'-N9	5.76	112.81	108.20
2	AB	2399	G	C5'-C4'-O4'	5.76	116.01	109.10
29	A2	52	ALA	CB-CA-C	5.76	118.74	110.10
35	BA	462	G	C6-C5-N7	5.76	133.86	130.40
35	BA	1264	U	C4-C5-C6	5.76	123.16	119.70
35	BA	1309	G	N9-C4-C5	5.76	107.70	105.40
1	AA	39	A	C4-C5-C6	5.76	119.88	117.00
2	AB	396	G	C8-N9-C4	5.76	108.70	106.40
2	AB	574	A	N1-C2-N3	-5.76	126.42	129.30
2	AB	990	A	C5-C6-N1	5.76	120.58	117.70
2	AB	1476	U	N1-C2-O2	5.76	126.83	122.80
2	AB	2039	U	C5-C4-O4	-5.76	122.44	125.90
2	AB	2780	G	N3-C2-N2	5.76	123.93	119.90
35	BA	231	U	C5'-C4'-C3'	-5.76	106.79	116.00
35	BA	343	U	C5-C4-O4	-5.76	122.44	125.90
35	BA	452	A	N7-C8-N9	5.76	116.68	113.80
35	BA	807	A	N9-C4-C5	5.76	108.10	105.80
35	BA	1209	C	C1'-O4'-C4'	5.76	114.51	109.90
2	AB	585	G	C6-C5-N7	5.76	133.85	130.40
2	AB	834	G	O4'-C1'-N9	5.76	112.81	108.20
2	AB	919	U	N3-C4-O4	5.76	123.43	119.40
2	AB	1370	C	N3-C4-N4	-5.76	113.97	118.00
2	AB	1623	G	C5-N7-C8	-5.76	101.42	104.30
2	AB	1842	G	C8-N9-C4	-5.76	104.10	106.40
2	AB	2121	G	O4'-C1'-N9	5.76	112.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2140	G	C4-C5-N7	-5.76	108.50	110.80
2	AB	2140	G	N9-C4-C5	5.76	107.70	105.40
2	AB	2207	C	C5'-C4'-C3'	-5.76	106.79	116.00
2	AB	2247	A	C6-C5-N7	5.76	136.33	132.30
2	AB	2666	C	C5-C6-N1	5.76	123.88	121.00
2	AB	2813	A	C5-N7-C8	-5.76	101.02	103.90
35	BA	1241	G	N7-C8-N9	5.76	115.98	113.10
35	BA	1341	U	O4'-C1'-N1	5.76	112.81	108.20
35	BA	1374	A	C4-C5-C6	-5.76	114.12	117.00
38	BD	103	TRP	CD1-CG-CD2	5.76	110.91	106.30
2	AB	4	U	N1-C2-N3	5.75	118.35	114.90
2	AB	1378	A	N7-C8-N9	5.75	116.68	113.80
2	AB	2603	G	N1-C2-N3	-5.75	120.45	123.90
4	AD	62	ARG	NE-CZ-NH2	-5.75	117.42	120.30
35	BA	378	G	C4-C5-N7	5.75	113.10	110.80
35	BA	413	G	C6-C5-N7	5.75	133.85	130.40
35	BA	1036	A	C6-N1-C2	5.75	122.05	118.60
35	BA	1502	A	C4'-C3'-C2'	-5.75	96.84	102.60
1	AA	102	G	N9-C1'-C2'	-5.75	105.67	112.00
2	AB	35	G	C5'-C4'-O4'	5.75	116.00	109.10
2	AB	173	A	C6-C5-N7	5.75	136.33	132.30
2	AB	182	A	N1-C2-N3	-5.75	126.42	129.30
2	AB	284	U	C4-C5-C6	5.75	123.15	119.70
2	AB	323	C	O4'-C1'-C2'	-5.75	100.05	105.80
2	AB	596	U	N1-C2-O2	5.75	126.83	122.80
2	AB	1019	U	O4'-C1'-N1	5.75	112.80	108.20
2	AB	1088	A	C2-N3-C4	5.75	113.48	110.60
2	AB	1753	G	N9-C4-C5	-5.75	103.10	105.40
2	AB	1951	U	C5-C6-N1	5.75	125.58	122.70
2	AB	2016	U	C6-N1-C2	-5.75	117.55	121.00
35	BA	200	G	C5'-C4'-O4'	5.75	116.00	109.10
35	BA	444	G	N1-C2-N3	-5.75	120.45	123.90
35	BA	698	G	N9-C4-C5	5.75	107.70	105.40
35	BA	742	G	C5-N7-C8	-5.75	101.42	104.30
35	BA	1414	U	P-O3'-C3'	5.75	126.61	119.70
2	AB	402	A	N3-C4-N9	-5.75	122.80	127.40
2	AB	556	A	O4'-C1'-N9	5.75	112.80	108.20
2	AB	820	A	N9-C1'-C2'	-5.75	105.67	112.00
2	AB	867	C	O4'-C4'-C3'	-5.75	98.25	104.00
2	AB	1485	U	C5-C6-N1	-5.75	119.82	122.70
35	BA	77	A	C4-C5-N7	-5.75	107.82	110.70
35	BA	92	U	C3'-C2'-C1'	5.75	106.10	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	473	U	N3-C2-O2	-5.75	118.17	122.20
35	BA	604	G	N3-C4-C5	-5.75	125.72	128.60
35	BA	641	U	N1-C2-N3	5.75	118.35	114.90
35	BA	664	G	N3-C4-N9	-5.75	122.55	126.00
35	BA	846	G	C8-N9-C4	-5.75	104.10	106.40
35	BA	849	G	C1'-O4'-C4'	-5.75	105.30	109.90
35	BA	1099	G	O4'-C1'-N9	5.75	112.80	108.20
35	BA	1244	G	C4'-C3'-O3'	5.75	124.50	113.00
35	BA	1495	U	C4-C5-C6	-5.75	116.25	119.70
37	BC	30	G	N3-C4-N9	5.75	129.45	126.00
2	AB	363	G	N1-C2-N3	-5.75	120.45	123.90
2	AB	1948	G	C5-N7-C8	5.75	107.17	104.30
2	AB	28	A	O3'-P-O5'	-5.75	93.08	104.00
2	AB	323	C	C2-N1-C1'	5.75	125.12	118.80
2	AB	411	G	C5'-C4'-O4'	5.75	116.00	109.10
2	AB	473	G	C8-N9-C4	-5.75	104.10	106.40
2	AB	475	C	N3-C2-O2	-5.75	117.88	121.90
2	AB	581	C	C2-N1-C1'	5.75	125.12	118.80
2	AB	727	A	O5'-P-OP2	5.75	117.60	110.70
2	AB	984	A	N1-C2-N3	5.75	132.17	129.30
2	AB	1391	U	N1-C1'-C2'	5.75	121.47	114.00
2	AB	1966	A	P-O3'-C3'	5.75	126.60	119.70
2	AB	1981	A	N9-C1'-C2'	5.75	121.47	114.00
2	AB	2011	U	N3-C2-O2	-5.75	118.18	122.20
2	AB	2311	A	C2-N3-C4	-5.75	107.73	110.60
2	AB	2410	G	N3-C4-N9	5.75	129.45	126.00
2	AB	2440	C	C2'-C3'-O3'	5.75	122.90	113.70
2	AB	2542	A	C4-C5-N7	-5.75	107.83	110.70
2	AB	2638	G	C6-N1-C2	-5.75	121.65	125.10
2	AB	2688	G	C5'-C4'-C3'	-5.75	106.80	116.00
2	AB	2869	G	C4-C5-N7	5.75	113.10	110.80
26	AZ	21	LEU	O-C-N	-5.75	113.50	122.70
35	BA	1062	U	O4'-C1'-N1	5.75	112.80	108.20
35	BA	1132	C	O4'-C4'-C3'	5.75	110.70	106.10
35	BA	1536	C	C5'-C4'-O4'	-5.75	102.20	109.10
1	AA	96	G	N9-C4-C5	-5.75	103.10	105.40
2	AB	237	C	C5-C6-N1	-5.75	118.13	121.00
2	AB	245	G	N9-C4-C5	5.75	107.70	105.40
2	AB	654	A	C2-N3-C4	5.75	113.47	110.60
2	AB	896	A	C5-N7-C8	-5.75	101.03	103.90
2	AB	2377	A	C2-N3-C4	5.75	113.47	110.60
2	AB	2542	A	C5-C6-N1	5.75	120.57	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2548	U	C4-C5-C6	5.75	123.15	119.70
35	BA	59	A	O4'-C1'-C2'	5.75	112.77	107.60
35	BA	530	G	N1-C2-N3	5.75	127.35	123.90
35	BA	547	A	N9-C4-C5	-5.75	103.50	105.80
35	BA	1143	G	C5'-C4'-O4'	5.75	116.00	109.10
35	BA	1206	G	C5-N7-C8	-5.75	101.43	104.30
2	AB	30	G	C6-C5-N7	-5.75	126.95	130.40
2	AB	492	A	C5-N7-C8	5.75	106.77	103.90
2	AB	970	U	C5-C6-N1	5.75	125.57	122.70
2	AB	1499	C	C5'-C4'-O4'	5.75	116.00	109.10
2	AB	1728	C	C4'-C3'-C2'	-5.75	96.86	102.60
2	AB	1757	A	N7-C8-N9	5.75	116.67	113.80
2	AB	1879	C	N1-C1'-C2'	-5.75	105.68	112.00
2	AB	1980	G	C4-C5-C6	5.75	122.25	118.80
35	BA	223	A	C6-N1-C2	-5.75	115.15	118.60
35	BA	503	C	C4'-C3'-C2'	-5.75	96.86	102.60
35	BA	628	G	C5-C6-O6	-5.75	125.15	128.60
35	BA	693	G	N3-C4-C5	-5.75	125.73	128.60
35	BA	1131	G	N3-C4-N9	5.75	129.45	126.00
35	BA	1272	G	C5-C6-N1	5.75	114.37	111.50
35	BA	1480	A	C5-C6-N6	-5.75	119.10	123.70
1	AA	96	G	C5-N7-C8	-5.74	101.43	104.30
2	AB	308	G	C2-N3-C4	5.74	114.77	111.90
2	AB	518	G	N9-C4-C5	5.74	107.70	105.40
2	AB	613	A	C6-N1-C2	5.74	122.05	118.60
2	AB	1560	G	O4'-C1'-C2'	-5.74	100.06	105.80
2	AB	2188	U	C5-C4-O4	5.74	129.35	125.90
2	AB	2638	G	C4-C5-N7	5.74	113.10	110.80
2	AB	2693	G	C5-N7-C8	5.74	107.17	104.30
2	AB	2775	G	P-O3'-C3'	5.74	126.59	119.70
33	A6	7	ARG	NE-CZ-NH2	-5.74	117.43	120.30
35	BA	617	G	C4-C5-N7	-5.74	108.50	110.80
35	BA	733	G	C5-C6-N1	5.74	114.37	111.50
35	BA	984	C	O4'-C4'-C3'	5.74	110.69	106.10
35	BA	1176	A	N1-C6-N6	5.74	122.05	118.60
35	BA	1299	A	C2-N3-C4	-5.74	107.73	110.60
35	BA	1347	G	P-O3'-C3'	5.74	126.59	119.70
2	AB	539	G	O4'-C1'-C2'	5.74	112.77	107.60
2	AB	675	A	O4'-C1'-N9	-5.74	103.61	108.20
2	AB	1192	G	N1-C6-O6	-5.74	116.45	119.90
2	AB	2532	G	N3-C2-N2	5.74	123.92	119.90
2	AB	2815	C	C5-C6-N1	5.74	123.87	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	63	C	N1-C2-O2	5.74	122.34	118.90
35	BA	543	U	N1-C2-O2	-5.74	118.78	122.80
48	BN	65	TYR	CD1-CG-CD2	5.74	124.22	117.90
1	AA	46	A	N9-C4-C5	5.74	108.10	105.80
2	AB	491	G	N1-C6-O6	-5.74	116.46	119.90
2	AB	541	A	C4-C5-N7	5.74	113.57	110.70
2	AB	989	G	C2-N3-C4	5.74	114.77	111.90
2	AB	1283	G	N7-C8-N9	5.74	115.97	113.10
2	AB	1308	A	C8-N9-C4	-5.74	103.50	105.80
2	AB	2363	G	C4-N9-C1'	-5.74	119.04	126.50
2	AB	2607	G	N7-C8-N9	5.74	115.97	113.10
2	AB	2782	G	N9-C1'-C2'	-5.74	105.69	112.00
15	AO	6	ARG	NH1-CZ-NH2	-5.74	113.09	119.40
35	BA	67	C	N1-C2-O2	-5.74	115.46	118.90
35	BA	540	G	C8-N9-C1'	5.74	134.46	127.00
35	BA	808	C	C4-C5-C6	-5.74	114.53	117.40
35	BA	840	C	C6-N1-C2	-5.74	118.00	120.30
35	BA	841	C	C3'-C2'-C1'	5.74	106.09	101.50
35	BA	954	G	O4'-C1'-N9	5.74	112.79	108.20
35	BA	1087	G	C5-C6-O6	5.74	132.04	128.60
35	BA	1138	G	C8-N9-C4	-5.74	104.10	106.40
35	BA	1387	G	C5-N7-C8	-5.74	101.43	104.30
35	BA	1448	C	C3'-C2'-C1'	5.74	106.09	101.50
35	BA	1510	C	N3-C4-N4	-5.74	113.98	118.00
1	AA	69	G	O4'-C1'-N9	-5.74	103.61	108.20
2	AB	154	U	N3-C4-C5	5.74	118.04	114.60
2	AB	453	A	C8-N9-C4	-5.74	103.50	105.80
2	AB	570	G	C4-C5-N7	5.74	113.09	110.80
2	AB	574	A	C6-N1-C2	5.74	122.04	118.60
2	AB	1557	C	C1'-O4'-C4'	-5.74	105.31	109.90
10	AJ	43	ALA	CB-CA-C	5.74	118.71	110.10
32	A5	3	ARG	NE-CZ-NH2	5.74	123.17	120.30
35	BA	25	C	N1-C2-O2	5.74	122.34	118.90
35	BA	552	U	N1-C1'-C2'	5.74	121.46	114.00
35	BA	721	G	C6-C5-N7	-5.74	126.96	130.40
35	BA	734	G	N9-C4-C5	-5.74	103.11	105.40
35	BA	946	A	C5-N7-C8	-5.74	101.03	103.90
35	BA	1093	A	N3-C4-N9	5.74	131.99	127.40
35	BA	1194	U	N3-C4-O4	5.74	123.42	119.40
35	BA	1327	C	O4'-C1'-N1	5.74	112.79	108.20
38	BD	34	ARG	NE-CZ-NH1	5.74	123.17	120.30
2	AB	283	G	C1'-O4'-C4'	5.74	114.49	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	765	C	C2-N3-C4	5.74	122.77	119.90
2	AB	784	G	C2-N3-C4	5.74	114.77	111.90
2	AB	1366	A	O4'-C1'-N9	5.74	112.79	108.20
2	AB	1602	U	C6-N1-C2	5.74	124.44	121.00
35	BA	500	G	C2-N3-C4	-5.74	109.03	111.90
35	BA	645	G	C5'-C4'-O4'	5.74	115.98	109.10
1	AA	22	U	C4'-C3'-C2'	-5.74	96.86	102.60
2	AB	295	G	N1-C2-N3	-5.74	120.46	123.90
2	AB	373	U	C5'-C4'-O4'	5.74	115.98	109.10
2	AB	408	G	C6-C5-N7	-5.74	126.96	130.40
2	AB	731	C	C5'-C4'-O4'	5.74	115.98	109.10
2	AB	1352	U	N3-C2-O2	-5.74	118.18	122.20
2	AB	2206	C	C3'-C2'-C1'	-5.74	96.91	101.50
35	BA	28	A	C4'-C3'-C2'	-5.74	96.86	102.60
35	BA	94	G	N1-C6-O6	5.74	123.34	119.90
35	BA	175	C	C6-N1-C2	5.74	122.59	120.30
35	BA	691	G	N1-C2-N2	5.74	121.36	116.20
35	BA	1408	A	N7-C8-N9	-5.74	110.93	113.80
35	BA	1432	G	C4-C5-N7	-5.74	108.51	110.80
2	AB	57	C	C5'-C4'-O4'	5.73	115.98	109.10
2	AB	2579	C	N3-C2-O2	-5.73	117.89	121.90
35	BA	1111	A	N1-C6-N6	-5.73	115.16	118.60
1	AA	96	G	C6-C5-N7	-5.73	126.96	130.40
1	AA	101	A	N1-C6-N6	-5.73	115.16	118.60
2	AB	554	U	C5-C6-N1	-5.73	119.83	122.70
2	AB	848	C	N3-C4-N4	-5.73	113.99	118.00
2	AB	1720	U	C5-C4-O4	5.73	129.34	125.90
2	AB	2156	G	O4'-C1'-N9	5.73	112.79	108.20
2	AB	2459	A	C1'-O4'-C4'	-5.73	105.31	109.90
35	BA	118	U	O4'-C1'-N1	-5.73	103.61	108.20
35	BA	162	A	N9-C1'-C2'	-5.73	105.69	112.00
35	BA	374	A	C5-N7-C8	-5.73	101.03	103.90
35	BA	389	A	C5-N7-C8	5.73	106.77	103.90
35	BA	718	A	N3-C4-N9	-5.73	122.81	127.40
35	BA	945	G	C6-N1-C2	-5.73	121.66	125.10
1	AA	34	A	C6-N1-C2	5.73	122.04	118.60
2	AB	821	A	C3'-C2'-C1'	-5.73	96.92	101.50
2	AB	835	C	O5'-C5'-C4'	5.73	122.59	111.70
2	AB	1075	C	N3-C4-N4	5.73	122.01	118.00
2	AB	1146	C	C5'-C4'-O4'	5.73	115.98	109.10
2	AB	1540	G	C5-N7-C8	-5.73	101.43	104.30
2	AB	1721	G	N1-C2-N2	5.73	121.36	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	AY	10	ARG	NE-CZ-NH1	-5.73	117.43	120.30
35	BA	302	G	C6-C5-N7	-5.73	126.96	130.40
35	BA	518	C	N3-C4-C5	-5.73	119.61	121.90
36	BB	24	A	C5-C6-N1	-5.73	114.83	117.70
52	BR	31	ARG	NE-CZ-NH2	-5.73	117.44	120.30
2	AB	110	G	C8-N9-C4	-5.73	104.11	106.40
2	AB	962	G	O4'-C1'-N9	5.73	112.78	108.20
2	AB	1043	C	C1'-O4'-C4'	-5.73	105.32	109.90
2	AB	1133	A	N1-C2-N3	5.73	132.16	129.30
2	AB	1823	G	C4-C5-N7	5.73	113.09	110.80
2	AB	2586	U	C5'-C4'-O4'	-5.73	102.22	109.10
35	BA	1356	G	N9-C4-C5	-5.73	103.11	105.40
1	AA	23	G	N1-C6-O6	5.73	123.34	119.90
2	AB	10	A	N1-C6-N6	-5.73	115.16	118.60
2	AB	19	A	N3-C4-C5	-5.73	122.79	126.80
2	AB	285	G	C4-C5-C6	5.73	122.24	118.80
2	AB	622	G	N7-C8-N9	5.73	115.96	113.10
2	AB	748	G	C2-N3-C4	5.73	114.76	111.90
2	AB	1534	U	O4'-C1'-N1	5.73	112.78	108.20
2	AB	1734	G	C5'-C4'-O4'	5.73	115.97	109.10
2	AB	2117	A	C4-C5-N7	-5.73	107.84	110.70
2	AB	2354	C	N1-C2-O2	5.73	122.34	118.90
2	AB	2555	U	C1'-O4'-C4'	-5.73	105.32	109.90
2	AB	2646	C	N3-C2-O2	-5.73	117.89	121.90
35	BA	390	U	C4'-C3'-C2'	-5.73	96.87	102.60
35	BA	480	U	C4'-C3'-C2'	-5.73	96.87	102.60
35	BA	1317	C	C4-C5-C6	-5.73	114.54	117.40
35	BA	1365	G	C2-N3-C4	5.73	114.76	111.90
36	BB	26	U	N3-C4-O4	5.73	123.41	119.40
2	AB	1645	G	C6-N1-C2	-5.73	121.67	125.10
2	AB	2036	C	N1-C2-N3	5.73	123.21	119.20
2	AB	2469	A	N3-C4-C5	-5.73	122.79	126.80
32	A5	18	PHE	CB-CG-CD1	-5.73	116.79	120.80
35	BA	38	G	N1-C2-N3	-5.73	120.46	123.90
35	BA	45	G	C5-C6-O6	-5.73	125.16	128.60
35	BA	499	A	C1'-O4'-C4'	-5.73	105.32	109.90
35	BA	1142	G	N1-C2-N3	5.73	127.34	123.90
2	AB	184	C	N1-C1'-C2'	-5.72	105.70	112.00
2	AB	212	G	C5-C6-O6	5.72	132.03	128.60
2	AB	1236	G	N3-C4-N9	5.72	129.43	126.00
2	AB	1405	U	C2-N3-C4	-5.72	123.56	127.00
2	AB	1506	U	P-O5'-C5'	5.72	130.06	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1749	A	C6-C5-N7	5.72	136.31	132.30
2	AB	1782	U	C2-N3-C4	-5.72	123.57	127.00
2	AB	1975	G	N7-C8-N9	5.72	115.96	113.10
2	AB	2005	A	C3'-C2'-C1'	5.72	106.08	101.50
2	AB	2105	U	O3'-P-O5'	-5.72	93.12	104.00
2	AB	2363	G	C6-C5-N7	-5.72	126.97	130.40
2	AB	2849	U	N3-C4-C5	5.72	118.03	114.60
2	AB	2850	A	C5'-C4'-C3'	-5.72	106.84	116.00
35	BA	274	A	C4-C5-C6	5.72	119.86	117.00
35	BA	392	C	C3'-C2'-C1'	5.72	106.08	101.50
35	BA	524	G	N7-C8-N9	5.72	115.96	113.10
35	BA	877	G	N3-C4-N9	-5.72	122.56	126.00
35	BA	1370	G	N7-C8-N9	-5.72	110.24	113.10
35	BA	1429	A	P-O3'-C3'	5.72	126.57	119.70
37	BC	67	C	C3'-C2'-C1'	-5.72	96.92	101.50
2	AB	78	U	N1-C2-O2	5.72	126.81	122.80
2	AB	294	A	P-O3'-C3'	5.72	126.57	119.70
2	AB	756	A	C1'-O4'-C4'	-5.72	105.32	109.90
2	AB	760	G	N1-C2-N3	-5.72	120.47	123.90
2	AB	796	C	N3-C4-N4	-5.72	113.99	118.00
2	AB	1003	G	C1'-O4'-C4'	5.72	114.48	109.90
2	AB	1104	C	N3-C4-C5	5.72	124.19	121.90
2	AB	1126	A	N1-C6-N6	5.72	122.03	118.60
2	AB	1344	U	C4-C5-C6	5.72	123.13	119.70
2	AB	2100	G	C4-C5-C6	5.72	122.23	118.80
2	AB	2614	A	N7-C8-N9	5.72	116.66	113.80
2	AB	2811	G	C4'-C3'-C2'	-5.72	96.88	102.60
35	BA	281	G	C5'-C4'-C3'	-5.72	106.84	116.00
35	BA	548	G	N1-C2-N2	5.72	121.35	116.20
35	BA	569	C	N1-C1'-C2'	-5.72	105.70	112.00
35	BA	767	A	O3'-P-O5'	5.72	114.87	104.00
35	BA	817	C	O3'-P-O5'	-5.72	93.13	104.00
35	BA	1529	G	C5'-C4'-O4'	5.72	115.97	109.10
56	BV	28	ARG	NE-CZ-NH2	-5.72	117.44	120.30
1	AA	91	C	C4'-C3'-C2'	-5.72	96.88	102.60
2	AB	2217	G	C4-C5-C6	5.72	122.23	118.80
2	AB	2701	U	O4'-C1'-N1	5.72	112.78	108.20
35	BA	691	G	O4'-C1'-N9	5.72	112.78	108.20
35	BA	858	G	O4'-C1'-N9	5.72	112.78	108.20
43	BI	110	ARG	NE-CZ-NH2	5.72	123.16	120.30
2	AB	46	G	N3-C2-N2	5.72	123.90	119.90
2	AB	91	A	N9-C4-C5	5.72	108.09	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	338	G	N1-C6-O6	-5.72	116.47	119.90
2	AB	2339	C	C4'-C3'-C2'	-5.72	96.88	102.60
35	BA	656	G	C8-N9-C4	-5.72	104.11	106.40
35	BA	1061	G	N7-C8-N9	5.72	115.96	113.10
35	BA	1193	G	P-O3'-C3'	5.72	126.56	119.70
37	BC	54	G	C8-N9-C4	5.72	108.69	106.40
2	AB	1913	A	C5-C6-N6	5.72	128.27	123.70
2	AB	2863	C	C3'-C2'-C1'	5.72	106.07	101.50
28	A1	29	ARG	NE-CZ-NH1	5.72	123.16	120.30
35	BA	165	G	C5-C6-N1	5.72	114.36	111.50
36	BB	40	G	C4'-C3'-C2'	-5.72	96.88	102.60
2	AB	263	G	C8-N9-C4	-5.72	104.11	106.40
2	AB	282	A	C5'-C4'-O4'	5.72	115.96	109.10
2	AB	318	C	N1-C2-N3	5.72	123.20	119.20
2	AB	467	G	C6-N1-C2	-5.72	121.67	125.10
2	AB	1920	C	N3-C4-N4	5.72	122.00	118.00
2	AB	2035	G	C5-C6-N1	5.72	114.36	111.50
2	AB	2278	A	C6-N1-C2	-5.72	115.17	118.60
2	AB	2545	G	N3-C4-C5	-5.72	125.74	128.60
2	AB	2667	C	C5'-C4'-O4'	5.72	115.96	109.10
10	AJ	124	ARG	NE-CZ-NH1	5.72	123.16	120.30
35	BA	195	A	C8-N9-C4	-5.72	103.51	105.80
35	BA	231	U	C4'-C3'-C2'	-5.72	96.88	102.60
35	BA	375	U	C5-C6-N1	-5.72	119.84	122.70
35	BA	721	G	C5-C6-O6	5.72	132.03	128.60
35	BA	748	G	N9-C4-C5	5.72	107.69	105.40
35	BA	1346	A	O3'-P-O5'	-5.72	93.14	104.00
49	BO	59	VAL	CA-CB-CG2	5.72	119.48	110.90
1	AA	93	C	N3-C2-O2	-5.71	117.90	121.90
2	AB	883	G	O4'-C4'-C3'	5.71	110.67	106.10
2	AB	1361	G	N1-C6-O6	5.71	123.33	119.90
2	AB	2004	G	C3'-C2'-C1'	5.71	106.07	101.50
2	AB	2183	A	C3'-C2'-C1'	-5.71	96.93	101.50
2	AB	2290	G	C5'-C4'-O4'	5.71	115.96	109.10
2	AB	2347	C	N1-C2-N3	-5.71	115.20	119.20
2	AB	2592	G	N9-C1'-C2'	-5.71	105.71	112.00
2	AB	2752	C	N1-C2-N3	-5.71	115.20	119.20
2	AB	2877	G	C6-C5-N7	-5.71	126.97	130.40
19	AS	101	ASP	CB-CG-OD1	-5.71	113.16	118.30
35	BA	32	A	P-O3'-C3'	5.71	126.56	119.70
35	BA	198	G	C4-C5-N7	-5.71	108.51	110.80
35	BA	360	G	N3-C2-N2	-5.71	115.90	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1450	U	N3-C4-C5	5.71	118.03	114.60
37	BC	48	U	C3'-C2'-C1'	-5.71	96.93	101.50
2	AB	723	C	C5-C4-N4	5.71	124.20	120.20
2	AB	762	U	O4'-C1'-C2'	-5.71	100.09	105.80
35	BA	544	G	N7-C8-N9	5.71	115.96	113.10
39	BE	42	LEU	O-C-N	5.71	131.84	122.70
2	AB	237	C	N1-C2-N3	5.71	123.20	119.20
2	AB	330	A	C5'-C4'-C3'	-5.71	106.86	116.00
2	AB	391	A	C8-N9-C4	-5.71	103.52	105.80
2	AB	495	G	O4'-C1'-C2'	-5.71	100.09	105.80
2	AB	700	G	C4'-C3'-C2'	-5.71	96.89	102.60
2	AB	1597	A	C2-N3-C4	5.71	113.45	110.60
2	AB	1780	A	N3-C4-N9	-5.71	122.83	127.40
2	AB	2357	G	N3-C2-N2	-5.71	115.90	119.90
2	AB	2499	C	N3-C4-C5	5.71	124.19	121.90
2	AB	2620	C	C1'-O4'-C4'	-5.71	105.33	109.90
2	AB	2753	A	O4'-C4'-C3'	5.71	110.67	106.10
2	AB	2759	G	C2-N3-C4	5.71	114.76	111.90
2	AB	2805	C	C2-N3-C4	5.71	122.76	119.90
8	AH	150	TYR	CB-CG-CD1	-5.71	117.57	121.00
16	AP	71	ARG	NE-CZ-NH2	-5.71	117.44	120.30
35	BA	549	C	C5-C4-N4	-5.71	116.20	120.20
35	BA	892	A	N1-C2-N3	5.71	132.16	129.30
35	BA	976	G	C4'-C3'-C2'	-5.71	96.89	102.60
35	BA	1043	G	N3-C4-N9	5.71	129.43	126.00
47	BM	106	ILE	CB-CA-C	5.71	123.02	111.60
1	AA	21	G	C5'-C4'-O4'	5.71	115.95	109.10
1	AA	73	A	P-O3'-C3'	5.71	126.55	119.70
2	AB	888	C	C5-C6-N1	5.71	123.86	121.00
35	BA	952	U	N3-C2-O2	-5.71	118.20	122.20
2	AB	105	C	C3'-C2'-C1'	5.71	106.07	101.50
2	AB	184	C	N1-C2-N3	5.71	123.20	119.20
2	AB	210	C	N3-C4-C5	-5.71	119.62	121.90
2	AB	711	G	C2-N3-C4	5.71	114.75	111.90
2	AB	1395	A	N9-C4-C5	5.71	108.08	105.80
2	AB	2082	A	C3'-C2'-C1'	-5.71	96.93	101.50
2	AB	2342	C	O4'-C1'-N1	5.71	112.77	108.20
2	AB	2357	G	C4-C5-C6	5.71	122.22	118.80
35	BA	624	C	C6-N1-C2	5.71	122.58	120.30
35	BA	780	A	O4'-C1'-N9	-5.71	103.63	108.20
35	BA	1168	U	O4'-C1'-N1	5.71	112.77	108.20
35	BA	1272	G	C2-N3-C4	5.71	114.75	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1327	C	C6-N1-C2	-5.71	118.02	120.30
36	BB	53	G	C2-N3-C4	5.71	114.75	111.90
37	BC	48	U	C4'-C3'-C2'	5.71	108.31	102.60
42	BH	24	ARG	NH1-CZ-NH2	-5.71	113.12	119.40
48	BN	55	ARG	O-C-N	5.71	131.83	122.70
2	AB	158	U	N3-C4-C5	-5.71	111.18	114.60
2	AB	332	A	C8-N9-C4	-5.71	103.52	105.80
2	AB	494	G	C1'-O4'-C4'	-5.71	105.33	109.90
2	AB	956	G	C4-C5-C6	5.71	122.22	118.80
2	AB	1433	A	C2-N3-C4	5.71	113.45	110.60
2	AB	1519	G	N9-C4-C5	5.71	107.68	105.40
2	AB	1581	G	C6-N1-C2	-5.71	121.68	125.10
2	AB	1858	A	N9-C1'-C2'	-5.71	105.72	112.00
2	AB	2112	G	N1-C2-N3	-5.71	120.48	123.90
2	AB	2511	U	C4-C5-C6	5.71	123.12	119.70
2	AB	2694	G	N9-C4-C5	-5.71	103.12	105.40
35	BA	465	A	C3'-C2'-C1'	-5.71	96.93	101.50
37	BC	9	G	C6-C5-N7	-5.71	126.98	130.40
37	BC	62	C	C5-C6-N1	-5.71	118.15	121.00
2	AB	182	A	C2-N3-C4	5.71	113.45	110.60
2	AB	182	A	C6-N1-C2	5.71	122.02	118.60
2	AB	960	A	C5-C6-N6	5.71	128.26	123.70
2	AB	992	C	C5-C4-N4	-5.71	116.21	120.20
2	AB	1978	A	N9-C4-C5	-5.71	103.52	105.80
2	AB	2110	G	C5-N7-C8	-5.71	101.45	104.30
2	AB	2484	G	C6-C5-N7	-5.71	126.98	130.40
24	AX	24	ASN	CB-CA-C	5.71	121.81	110.40
35	BA	12	U	C5-C6-N1	-5.71	119.85	122.70
35	BA	1170	A	N1-C2-N3	-5.71	126.45	129.30
1	AA	76	G	OP1-P-OP2	5.70	128.16	119.60
2	AB	1981	A	N3-C4-N9	-5.70	122.84	127.40
2	AB	2056	G	O4'-C1'-N9	5.70	112.76	108.20
2	AB	2087	G	C5-C6-O6	-5.70	125.18	128.60
2	AB	2235	G	C1'-O4'-C4'	5.70	114.46	109.90
2	AB	2742	G	C3'-C2'-C1'	5.70	106.06	101.50
35	BA	174	A	N9-C4-C5	5.70	108.08	105.80
35	BA	236	A	C6-C5-N7	-5.70	128.31	132.30
35	BA	534	U	N1-C2-O2	5.70	126.79	122.80
35	BA	811	C	N3-C4-N4	5.70	121.99	118.00
35	BA	880	C	O4'-C1'-C2'	5.70	112.73	107.60
43	BI	159	ARG	NE-CZ-NH2	-5.70	117.45	120.30
2	AB	161	A	C8-N9-C4	-5.70	103.52	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1129	A	C5-N7-C8	-5.70	101.05	103.90
2	AB	1450	G	C5-C6-O6	-5.70	125.18	128.60
2	AB	2340	A	N3-C4-C5	-5.70	122.81	126.80
2	AB	2641	G	C8-N9-C4	-5.70	104.12	106.40
35	BA	848	C	N3-C4-C5	-5.70	119.62	121.90
2	AB	100	U	C1'-O4'-C4'	-5.70	105.34	109.90
2	AB	370	G	N7-C8-N9	5.70	115.95	113.10
2	AB	433	C	N1-C2-O2	5.70	122.32	118.90
2	AB	1349	C	C5-C6-N1	-5.70	118.15	121.00
2	AB	1391	U	C1'-O4'-C4'	-5.70	105.34	109.90
2	AB	1415	U	O4'-C1'-C2'	-5.70	100.10	105.80
2	AB	1449	G	C5-N7-C8	-5.70	101.45	104.30
2	AB	1523	U	C2-N3-C4	-5.70	123.58	127.00
2	AB	1585	C	C5'-C4'-O4'	5.70	115.94	109.10
2	AB	1624	U	C5-C4-O4	5.70	129.32	125.90
2	AB	1718	G	N3-C4-C5	-5.70	125.75	128.60
2	AB	1733	G	C2-N3-C4	5.70	114.75	111.90
2	AB	1776	G	N7-C8-N9	5.70	115.95	113.10
2	AB	2151	U	C4'-C3'-C2'	-5.70	96.90	102.60
2	AB	2181	U	N1-C2-N3	5.70	118.32	114.90
2	AB	2221	G	N3-C2-N2	5.70	123.89	119.90
2	AB	2315	G	N3-C4-C5	-5.70	125.75	128.60
2	AB	2487	G	N3-C4-C5	-5.70	125.75	128.60
14	AN	58	TYR	CB-CG-CD1	-5.70	117.58	121.00
35	BA	295	C	C5-C4-N4	-5.70	116.21	120.20
35	BA	1075	U	C6-N1-C2	-5.70	117.58	121.00
42	BH	116	PHE	CB-CG-CD1	-5.70	116.81	120.80
2	AB	951	C	C2-N3-C4	-5.70	117.05	119.90
2	AB	1711	A	C4-C5-N7	5.70	113.55	110.70
2	AB	1800	C	N3-C4-C5	5.70	124.18	121.90
2	AB	1872	A	N3-C4-N9	-5.70	122.84	127.40
2	AB	1905	C	O4'-C4'-C3'	5.70	110.66	106.10
2	AB	1909	C	N3-C2-O2	-5.70	117.91	121.90
2	AB	2112	G	N3-C4-N9	5.70	129.42	126.00
2	AB	2645	G	C6-N1-C2	-5.70	121.68	125.10
12	AL	8	PRO	N-CA-CB	5.70	110.14	103.30
35	BA	1	A	C4-C5-C6	-5.70	114.15	117.00
35	BA	319	G	N7-C8-N9	-5.70	110.25	113.10
35	BA	1255	G	C5-C6-O6	-5.70	125.18	128.60
35	BA	1316	G	O4'-C1'-N9	5.70	112.76	108.20
2	AB	88	G	N1-C2-N3	-5.70	120.48	123.90
2	AB	309	A	C5-C6-N6	5.70	128.26	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	1486	U	C5'-C4'-C3'	-5.70	106.88	116.00
2	AB	2373	G	N9-C4-C5	5.70	107.68	105.40
2	AB	2774	C	C5'-C4'-C3'	-5.70	106.89	116.00
35	BA	106	C	N3-C2-O2	-5.70	117.91	121.90
35	BA	263	A	C5'-C4'-O4'	5.70	115.94	109.10
35	BA	610	U	P-O3'-C3'	5.70	126.54	119.70
35	BA	1429	A	C3'-C2'-C1'	-5.70	96.94	101.50
2	AB	932	U	C2-N3-C4	5.70	130.42	127.00
2	AB	1088	A	C4-C5-C6	5.70	119.85	117.00
2	AB	1159	U	C5-C4-O4	-5.70	122.48	125.90
2	AB	1349	C	C1'-O4'-C4'	5.70	114.46	109.90
2	AB	1619	G	C5-C6-O6	-5.70	125.18	128.60
2	AB	1674	G	C4-C5-N7	-5.70	108.52	110.80
2	AB	1783	A	C5-C6-N6	-5.70	119.14	123.70
2	AB	1919	A	N9-C4-C5	-5.70	103.52	105.80
2	AB	2681	C	O5'-P-OP2	-5.70	100.57	105.70
13	AM	64	ARG	NE-CZ-NH1	5.70	123.15	120.30
34	A7	4	ARG	CD-NE-CZ	5.70	131.57	123.60
35	BA	238	A	N1-C2-N3	-5.70	126.45	129.30
35	BA	462	G	C4-C5-N7	-5.70	108.52	110.80
35	BA	579	A	N1-C6-N6	5.70	122.02	118.60
35	BA	1004	A	N1-C6-N6	5.70	122.02	118.60
41	BG	53	ARG	NE-CZ-NH2	-5.70	117.45	120.30
2	AB	8	C	N1-C2-O2	5.69	122.32	118.90
2	AB	1770	G	N1-C2-N3	-5.69	120.48	123.90
2	AB	2000	C	C5'-C4'-C3'	-5.69	106.89	116.00
2	AB	2101	A	O4'-C1'-N9	5.69	112.75	108.20
2	AB	2443	C	C4'-C3'-C2'	-5.69	96.91	102.60
35	BA	8	A	C1'-O4'-C4'	5.69	114.45	109.90
35	BA	245	U	N1-C2-O2	-5.69	118.81	122.80
35	BA	560	A	C5'-C4'-O4'	5.69	115.93	109.10
35	BA	592	G	C6-N1-C2	-5.69	121.68	125.10
35	BA	925	G	N7-C8-N9	5.69	115.95	113.10
35	BA	1038	C	C5'-C4'-C3'	-5.69	106.89	116.00
35	BA	1357	A	C5-C6-N1	5.69	120.55	117.70
2	AB	148	U	O4'-C1'-N1	5.69	112.75	108.20
2	AB	506	G	C6-N1-C2	-5.69	121.68	125.10
2	AB	670	A	O4'-C1'-C2'	-5.69	100.11	105.80
2	AB	760	G	C6-C5-N7	-5.69	126.98	130.40
2	AB	823	C	N3-C4-C5	-5.69	119.62	121.90
2	AB	1573	G	C5'-C4'-C3'	-5.69	106.89	116.00
2	AB	2708	G	N1-C6-O6	5.69	123.31	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2836	U	N3-C4-O4	5.69	123.38	119.40
35	BA	421	U	C1'-O4'-C4'	5.69	114.45	109.90
35	BA	526	C	C2-N1-C1'	-5.69	112.54	118.80
35	BA	1097	C	N3-C4-N4	-5.69	114.02	118.00
35	BA	1340	A	N1-C6-N6	5.69	122.02	118.60
35	BA	1477	U	C5-C6-N1	-5.69	119.85	122.70
35	BA	1508	A	N9-C4-C5	5.69	108.08	105.80
1	AA	76	G	N3-C4-N9	5.69	129.41	126.00
1	AA	109	A	C8-N9-C4	-5.69	103.52	105.80
2	AB	32	C	P-O3'-C3'	5.69	126.53	119.70
2	AB	46	G	C8-N9-C4	-5.69	104.12	106.40
2	AB	400	G	C3'-C2'-C1'	5.69	106.05	101.50
2	AB	445	C	O5'-P-OP2	-5.69	100.58	105.70
2	AB	1222	U	C1'-O4'-C4'	5.69	114.45	109.90
2	AB	1262	A	C1'-O4'-C4'	-5.69	105.35	109.90
2	AB	2468	A	C4-C5-N7	5.69	113.55	110.70
2	AB	2531	A	P-O3'-C3'	5.69	126.53	119.70
2	AB	2723	C	O4'-C1'-N1	5.69	112.75	108.20
2	AB	2764	A	C5-C6-N1	-5.69	114.85	117.70
35	BA	42	G	C3'-C2'-C1'	-5.69	96.95	101.50
35	BA	69	G	N1-C2-N3	-5.69	120.49	123.90
35	BA	572	A	O4'-C1'-N9	-5.69	103.65	108.20
35	BA	788	U	N3-C2-O2	-5.69	118.22	122.20
35	BA	1100	C	C2-N3-C4	5.69	122.75	119.90
35	BA	1203	C	N3-C4-N4	5.69	121.98	118.00
35	BA	1395	C	N1-C1'-C2'	-5.69	105.74	112.00
38	BD	165	ALA	CB-CA-C	5.69	118.64	110.10
2	AB	121	G	N3-C4-C5	-5.69	125.76	128.60
2	AB	294	A	C5'-C4'-O4'	5.69	115.93	109.10
2	AB	397	U	N1-C2-N3	5.69	118.31	114.90
2	AB	1578	U	N3-C4-O4	5.69	123.38	119.40
2	AB	1616	A	C5-C6-N1	-5.69	114.86	117.70
2	AB	2560	A	N3-C4-C5	-5.69	122.82	126.80
2	AB	2748	A	C5-C6-N1	5.69	120.55	117.70
35	BA	472	U	C3'-C2'-C1'	5.69	106.05	101.50
1	AA	36	C	P-O3'-C3'	5.69	126.53	119.70
1	AA	118	C	C5-C4-N4	-5.69	116.22	120.20
2	AB	70	G	N3-C4-C5	-5.69	125.76	128.60
2	AB	184	C	N3-C4-N4	5.69	121.98	118.00
2	AB	534	U	O4'-C4'-C3'	-5.69	98.31	104.00
2	AB	1159	U	N1-C2-O2	5.69	126.78	122.80
2	AB	1274	A	C5-C6-N1	-5.69	114.86	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2018	G	N1-C6-O6	-5.69	116.49	119.90
2	AB	2081	U	N1-C2-N3	5.69	118.31	114.90
2	AB	2492	U	C1'-O4'-C4'	5.69	114.45	109.90
2	AB	2780	G	C2-N3-C4	5.69	114.74	111.90
2	AB	2782	G	C6-C5-N7	-5.69	126.99	130.40
26	AZ	30	PRO	N-CA-CB	5.69	110.12	103.30
35	BA	53	A	C5-C6-N6	-5.69	119.15	123.70
35	BA	96	U	N1-C2-O2	-5.69	118.82	122.80
35	BA	179	A	C4-C5-N7	-5.69	107.86	110.70
35	BA	338	A	C4-C5-N7	-5.69	107.86	110.70
35	BA	1005	A	N9-C1'-C2'	-5.69	105.74	112.00
35	BA	1208	C	N3-C2-O2	-5.69	117.92	121.90
35	BA	1278	G	N3-C4-N9	-5.69	122.59	126.00
35	BA	1455	G	P-O5'-C5'	5.69	130.00	120.90
2	AB	1076	C	O4'-C1'-C2'	-5.69	100.11	105.80
2	AB	1231	U	C1'-O4'-C4'	-5.69	105.35	109.90
2	AB	1967	C	C5'-C4'-C3'	-5.69	106.90	116.00
2	AB	1968	G	C3'-C2'-C1'	5.69	106.05	101.50
2	AB	2824	C	O4'-C1'-N1	5.69	112.75	108.20
35	BA	331	G	N7-C8-N9	5.69	115.94	113.10
35	BA	739	C	C4'-C3'-C2'	-5.69	96.91	102.60
35	BA	1117	A	C6-N1-C2	5.69	122.01	118.60
2	AB	80	G	C2-N3-C4	5.68	114.74	111.90
2	AB	236	C	O4'-C1'-N1	5.68	112.75	108.20
2	AB	1350	C	C2-N3-C4	5.68	122.74	119.90
2	AB	1593	A	N1-C2-N3	-5.68	126.46	129.30
2	AB	1978	A	N9-C1'-C2'	-5.68	105.75	112.00
35	BA	115	G	N1-C2-N2	5.68	121.32	116.20
35	BA	217	C	C5-C4-N4	-5.68	116.22	120.20
35	BA	1033	G	C5-N7-C8	-5.68	101.46	104.30
1	AA	117	G	O4'-C4'-C3'	5.68	110.65	106.10
2	AB	598	U	C1'-O4'-C4'	5.68	114.44	109.90
2	AB	1256	G	C6-C5-N7	-5.68	126.99	130.40
2	AB	1620	G	N3-C4-N9	5.68	129.41	126.00
2	AB	1680	U	C4-C5-C6	5.68	123.11	119.70
2	AB	2448	A	C6-N1-C2	-5.68	115.19	118.60
2	AB	2621	G	N3-C4-N9	5.68	129.41	126.00
2	AB	2803	G	N3-C4-N9	-5.68	122.59	126.00
26	AZ	57	VAL	CA-CB-CG2	5.68	119.42	110.90
35	BA	90	C	C5'-C4'-O4'	5.68	115.92	109.10
35	BA	1140	C	C5-C6-N1	5.68	123.84	121.00
35	BA	1213	A	C2'-C3'-O3'	5.68	122.79	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1336	C	C1'-O4'-C4'	5.68	114.44	109.90
36	BB	53	G	N3-C2-N2	-5.68	115.92	119.90
48	BN	1	ALA	CB-CA-C	5.68	118.62	110.10
2	AB	27	G	O4'-C1'-C2'	-5.68	100.12	105.80
2	AB	608	A	N3-C4-N9	5.68	131.94	127.40
2	AB	772	C	N1-C1'-C2'	-5.68	105.75	112.00
2	AB	1153	C	C4-C5-C6	-5.68	114.56	117.40
2	AB	1253	A	C2-N3-C4	5.68	113.44	110.60
2	AB	1403	A	C6-N1-C2	-5.68	115.19	118.60
2	AB	2660	A	O4'-C4'-C3'	5.68	110.64	106.10
36	BB	29	G	O4'-C1'-N9	-5.68	103.66	108.20
2	AB	160	A	P-O3'-C3'	-5.68	112.89	119.70
2	AB	696	G	N3-C4-C5	-5.68	125.76	128.60
2	AB	709	U	N3-C4-C5	-5.68	111.19	114.60
2	AB	906	U	C5'-C4'-O4'	5.68	115.92	109.10
2	AB	1156	A	O4'-C1'-N9	-5.68	103.66	108.20
2	AB	1821	A	C8-N9-C4	-5.68	103.53	105.80
16	AP	86	ARG	CD-NE-CZ	5.68	131.55	123.60
35	BA	33	A	C5'-C4'-C3'	-5.68	106.91	116.00
35	BA	168	G	N3-C2-N2	5.68	123.88	119.90
35	BA	262	A	C5-C6-N1	5.68	120.54	117.70
35	BA	354	G	C4'-C3'-C2'	-5.68	96.92	102.60
35	BA	423	G	C5-C6-N1	5.68	114.34	111.50
35	BA	463	U	N1-C2-O2	-5.68	118.83	122.80
35	BA	1040	U	C5-C6-N1	-5.68	119.86	122.70
35	BA	1309	G	C6-C5-N7	-5.68	126.99	130.40
35	BA	1497	G	C4'-C3'-C2'	-5.68	96.92	102.60
2	AB	583	G	O4'-C1'-N9	5.68	112.74	108.20
2	AB	1918	A	N9-C4-C5	5.68	108.07	105.80
2	AB	2342	C	C5-C4-N4	-5.68	116.23	120.20
2	AB	2809	A	C5-C6-N6	-5.68	119.16	123.70
35	BA	1058	G	O4'-C1'-N9	5.68	112.74	108.20
35	BA	1187	G	C5-N7-C8	5.68	107.14	104.30
35	BA	1435	G	P-O3'-C3'	5.68	126.51	119.70
2	AB	48	G	C5-N7-C8	5.68	107.14	104.30
2	AB	346	A	C5-C6-N1	5.68	120.54	117.70
2	AB	753	A	C5'-C4'-O4'	5.68	115.91	109.10
2	AB	796	C	C5-C4-N4	5.68	124.17	120.20
2	AB	1265	A	C5-C6-N1	5.68	120.54	117.70
2	AB	1342	A	C5-C6-N1	5.68	120.54	117.70
2	AB	1398	C	C5-C4-N4	-5.68	116.23	120.20
2	AB	1454	C	O4'-C4'-C3'	5.68	110.64	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1757	A	N1-C6-N6	5.68	122.01	118.60
2	AB	2380	C	C2-N1-C1'	-5.68	112.56	118.80
2	AB	2844	G	N3-C2-N2	5.68	123.87	119.90
4	AD	47	ARG	NE-CZ-NH2	5.68	123.14	120.30
35	BA	647	C	N3-C4-C5	5.68	124.17	121.90
35	BA	932	C	N3-C2-O2	-5.68	117.93	121.90
35	BA	949	A	C6-C5-N7	5.68	136.27	132.30
35	BA	1460	C	N3-C4-C5	-5.68	119.63	121.90
35	BA	1464	U	C2-N3-C4	-5.68	123.59	127.00
35	BA	1501	C	C3'-C2'-C1'	5.68	106.04	101.50
2	AB	1171	G	C4-C5-N7	-5.67	108.53	110.80
2	AB	1493	C	C3'-C2'-C1'	-5.67	96.96	101.50
2	AB	1609	A	C5-C6-N1	-5.67	114.86	117.70
2	AB	2828	G	N9-C4-C5	-5.67	103.13	105.40
5	AE	60	VAL	O-C-N	5.67	131.78	122.70
35	BA	619	U	N3-C4-O4	5.67	123.37	119.40
35	BA	1077	G	C6-C5-N7	-5.67	127.00	130.40
35	BA	1118	U	O4'-C1'-C2'	5.67	112.71	107.60
35	BA	1443	C	C6-N1-C2	-5.67	118.03	120.30
35	BA	1507	A	C3'-C2'-C1'	-5.67	96.96	101.50
2	AB	1858	A	P-O3'-C3'	5.67	126.51	119.70
2	AB	2863	C	N3-C2-O2	-5.67	117.93	121.90
4	AD	7	PRO	N-CD-CG	5.67	111.71	103.20
35	BA	673	A	C3'-C2'-C1'	5.67	106.04	101.50
35	BA	1304	G	N3-C4-C5	-5.67	125.76	128.60
37	BC	32	G	C3'-C2'-C1'	5.67	106.04	101.50
2	AB	85	G	C2-N3-C4	-5.67	109.06	111.90
2	AB	244	A	C6-C5-N7	5.67	136.27	132.30
2	AB	710	U	N1-C2-N3	5.67	118.30	114.90
2	AB	1137	G	N9-C4-C5	5.67	107.67	105.40
2	AB	1237	A	C5-C6-N6	5.67	128.24	123.70
2	AB	1340	U	O4'-C1'-N1	5.67	112.74	108.20
2	AB	1361	G	N3-C2-N2	5.67	123.87	119.90
2	AB	1762	A	C8-N9-C4	5.67	108.07	105.80
2	AB	2169	A	P-O3'-C3'	5.67	126.51	119.70
2	AB	2854	G	C2-N3-C4	5.67	114.74	111.90
5	AE	125	TRP	CD1-NE1-CE2	5.67	114.10	109.00
35	BA	102	G	C8-N9-C4	-5.67	104.13	106.40
35	BA	554	A	C4-C5-C6	-5.67	114.16	117.00
35	BA	593	U	C4-C5-C6	5.67	123.10	119.70
35	BA	713	G	N3-C4-C5	-5.67	125.77	128.60
35	BA	791	G	C2-N3-C4	5.67	114.74	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	813	U	C4'-C3'-C2'	5.67	108.27	102.60
35	BA	894	G	P-O3'-C3'	5.67	126.50	119.70
35	BA	1090	U	O4'-C1'-N1	5.67	112.74	108.20
35	BA	1420	U	O4'-C1'-N1	5.67	112.74	108.20
1	AA	35	C	N3-C2-O2	-5.67	117.93	121.90
2	AB	251	A	N7-C8-N9	-5.67	110.97	113.80
2	AB	1136	G	N3-C4-N9	-5.67	122.60	126.00
2	AB	1197	G	P-O3'-C3'	5.67	126.50	119.70
35	BA	79	G	N7-C8-N9	5.67	115.94	113.10
35	BA	171	A	C5-C6-N1	-5.67	114.86	117.70
35	BA	661	G	P-O3'-C3'	5.67	126.50	119.70
35	BA	855	U	C4'-C3'-C2'	-5.67	96.93	102.60
35	BA	934	C	P-O3'-C3'	5.67	126.50	119.70
35	BA	1222	G	O5'-C5'-C4'	5.67	122.47	111.70
35	BA	1511	G	C5'-C4'-O4'	5.67	115.91	109.10
1	AA	48	U	C2-N3-C4	-5.67	123.60	127.00
2	AB	92	U	O4'-C1'-N1	5.67	112.73	108.20
2	AB	107	G	C4'-C3'-C2'	-5.67	96.93	102.60
2	AB	793	A	C5-C6-N1	-5.67	114.87	117.70
2	AB	953	G	N1-C2-N3	-5.67	120.50	123.90
2	AB	1620	G	N1-C2-N3	-5.67	120.50	123.90
2	AB	1763	G	C6-C5-N7	-5.67	127.00	130.40
2	AB	1768	C	C5-C4-N4	5.67	124.17	120.20
2	AB	2344	U	C5'-C4'-O4'	5.67	115.90	109.10
35	BA	44	A	C5-N7-C8	5.67	106.73	103.90
35	BA	289	G	C4'-C3'-C2'	-5.67	96.93	102.60
35	BA	359	G	C5'-C4'-C3'	-5.67	106.93	116.00
35	BA	540	G	N7-C8-N9	5.67	115.94	113.10
35	BA	714	G	N3-C4-C5	-5.67	125.77	128.60
35	BA	1106	G	C5'-C4'-C3'	5.67	125.07	116.00
35	BA	1457	G	C2-N3-C4	5.67	114.73	111.90
36	BB	18	A	C5-N7-C8	-5.67	101.06	103.90
54	BT	74	GLN	CB-CA-C	5.67	121.74	110.40
2	AB	8	C	O4'-C1'-C2'	-5.67	100.13	105.80
2	AB	376	G	N1-C6-O6	-5.67	116.50	119.90
2	AB	1089	A	C4'-C3'-C2'	-5.67	96.93	102.60
2	AB	1357	C	C5'-C4'-O4'	5.67	115.90	109.10
2	AB	1580	A	N1-C6-N6	-5.67	115.20	118.60
2	AB	2128	G	C2-N3-C4	-5.67	109.07	111.90
2	AB	2702	G	N3-C4-N9	5.67	129.40	126.00
3	AC	90	ALA	N-CA-CB	-5.67	102.17	110.10
35	BA	171	A	N1-C6-N6	-5.67	115.20	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	373	A	C4-C5-C6	-5.67	114.17	117.00
35	BA	886	G	C6-C5-N7	5.67	133.80	130.40
39	BE	229	LYS	C-N-CA	5.67	134.20	122.30
2	AB	120	U	C1'-O4'-C4'	5.67	114.43	109.90
2	AB	468	G	C4-N9-C1'	-5.67	119.14	126.50
2	AB	1729	U	O4'-C4'-C3'	5.67	110.63	106.10
2	AB	1972	G	C3'-C2'-C1'	-5.67	96.97	101.50
2	AB	2572	A	N1-C6-N6	5.67	122.00	118.60
2	AB	2879	A	C5-N7-C8	-5.67	101.07	103.90
2	AB	2893	A	N3-C4-N9	5.67	131.93	127.40
35	BA	319	G	O4'-C1'-C2'	-5.67	100.14	105.80
35	BA	570	G	N3-C2-N2	5.67	123.86	119.90
35	BA	896	C	O4'-C1'-N1	5.67	112.73	108.20
35	BA	1449	C	C4-C5-C6	-5.67	114.57	117.40
2	AB	27	G	N9-C4-C5	5.66	107.67	105.40
2	AB	536	G	C6-C5-N7	-5.66	127.00	130.40
2	AB	907	G	C1'-O4'-C4'	-5.66	105.37	109.90
2	AB	935	C	C6-N1-C2	5.66	122.57	120.30
2	AB	1074	G	C3'-C2'-C1'	-5.66	96.97	101.50
2	AB	1397	U	N3-C4-O4	-5.66	115.44	119.40
2	AB	1544	A	C4'-C3'-O3'	5.66	124.33	113.00
2	AB	1558	C	C4-C5-C6	5.66	120.23	117.40
2	AB	1678	A	N7-C8-N9	5.66	116.63	113.80
2	AB	2242	G	C5-C6-O6	-5.66	125.20	128.60
2	AB	2320	U	C3'-C2'-C1'	-5.66	96.97	101.50
2	AB	2713	U	N1-C2-N3	5.66	118.30	114.90
15	AO	18	ARG	NH1-CZ-NH2	-5.66	113.17	119.40
35	BA	116	A	N1-C6-N6	-5.66	115.20	118.60
35	BA	203	G	C1'-O4'-C4'	-5.66	105.37	109.90
35	BA	533	A	N1-C2-N3	-5.66	126.47	129.30
35	BA	630	A	C6-C5-N7	-5.66	128.34	132.30
35	BA	650	G	C8-N9-C4	-5.66	104.13	106.40
43	BI	176	TYR	CB-CG-CD2	5.66	124.40	121.00
49	BO	89	ARG	NE-CZ-NH1	5.66	123.13	120.30
2	AB	280	U	C5-C6-N1	-5.66	119.87	122.70
2	AB	538	A	C5-C6-N6	-5.66	119.17	123.70
2	AB	2676	C	O4'-C1'-C2'	-5.66	100.14	105.80
35	BA	284	C	O4'-C1'-N1	5.66	112.73	108.20
35	BA	325	A	N9-C4-C5	5.66	108.06	105.80
35	BA	710	G	N3-C4-N9	-5.66	122.60	126.00
35	BA	1254	A	O4'-C1'-N9	5.66	112.73	108.20
35	BA	1304	G	N7-C8-N9	5.66	115.93	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	BJ	109	VAL	O-C-N	5.66	131.76	122.70
2	AB	20	C	N1-C1'-C2'	-5.66	105.77	112.00
2	AB	282	A	N7-C8-N9	-5.66	110.97	113.80
2	AB	322	A	C5-C6-N1	5.66	120.53	117.70
2	AB	355	U	C4-C5-C6	5.66	123.10	119.70
2	AB	443	A	C5-C6-N6	-5.66	119.17	123.70
2	AB	461	C	N1-C2-O2	5.66	122.30	118.90
2	AB	885	C	N1-C2-O2	5.66	122.30	118.90
2	AB	960	A	C4-C5-N7	5.66	113.53	110.70
2	AB	1842	G	C2-N3-C4	5.66	114.73	111.90
2	AB	2389	G	N3-C4-N9	5.66	129.40	126.00
2	AB	2848	G	N1-C2-N2	-5.66	111.11	116.20
35	BA	263	A	O4'-C1'-N9	5.66	112.73	108.20
37	BC	77	A	C4'-C3'-C2'	5.66	108.26	102.60
2	AB	570	G	C5-C6-O6	-5.66	125.20	128.60
2	AB	663	G	N3-C2-N2	5.66	123.86	119.90
2	AB	942	G	N3-C4-C5	-5.66	125.77	128.60
2	AB	1295	C	N1-C2-O2	5.66	122.30	118.90
2	AB	1398	C	C5'-C4'-O4'	5.66	115.89	109.10
2	AB	1482	G	C6-N1-C2	5.66	128.50	125.10
2	AB	1753	G	N3-C4-C5	-5.66	125.77	128.60
2	AB	2318	G	C4-C5-N7	5.66	113.06	110.80
2	AB	2557	G	N3-C2-N2	5.66	123.86	119.90
35	BA	97	G	C5-N7-C8	-5.66	101.47	104.30
35	BA	246	A	C2-N3-C4	5.66	113.43	110.60
35	BA	429	U	C6-N1-C2	-5.66	117.61	121.00
35	BA	458	U	C5'-C4'-O4'	5.66	115.89	109.10
35	BA	685	G	C2-N3-C4	5.66	114.73	111.90
35	BA	1234	C	C6-N1-C2	-5.66	118.04	120.30
35	BA	1289	A	P-O3'-C3'	5.66	126.49	119.70
2	AB	2284	A	P-O3'-C3'	5.66	126.49	119.70
2	AB	2574	G	C8-N9-C4	-5.66	104.14	106.40
35	BA	406	G	N3-C2-N2	-5.66	115.94	119.90
35	BA	570	G	C8-N9-C4	-5.66	104.14	106.40
35	BA	1312	G	C6-C5-N7	5.66	133.79	130.40
35	BA	1418	A	N9-C4-C5	5.66	108.06	105.80
2	AB	8	C	N3-C4-C5	-5.66	119.64	121.90
2	AB	356	G	C6-C5-N7	-5.66	127.01	130.40
2	AB	564	C	N1-C2-O2	5.66	122.29	118.90
2	AB	636	G	N1-C2-N3	5.66	127.29	123.90
2	AB	1261	C	N3-C4-C5	-5.66	119.64	121.90
2	AB	1687	G	C5-N7-C8	-5.66	101.47	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2592	G	C6-N1-C2	-5.66	121.71	125.10
31	A4	27	ARG	CD-NE-CZ	5.66	131.52	123.60
35	BA	162	A	P-O3'-C3'	5.66	126.49	119.70
35	BA	185	U	C5'-C4'-O4'	5.66	115.89	109.10
35	BA	229	U	C4'-C3'-C2'	-5.66	96.94	102.60
35	BA	407	U	C2-N3-C4	-5.66	123.61	127.00
35	BA	741	G	C8-N9-C1'	5.66	134.35	127.00
35	BA	921	U	N1-C1'-C2'	-5.66	105.78	112.00
35	BA	1033	G	N3-C4-N9	5.66	129.39	126.00
35	BA	1180	A	P-O3'-C3'	5.66	126.49	119.70
37	BC	68	C	O4'-C1'-C2'	-5.66	100.14	105.80
2	AB	161	A	N1-C2-N3	-5.65	126.47	129.30
2	AB	776	G	N3-C4-C5	-5.65	125.77	128.60
2	AB	981	A	N1-C2-N3	-5.65	126.47	129.30
2	AB	2310	C	N3-C2-O2	-5.65	117.94	121.90
2	AB	2510	C	N1-C2-O2	-5.65	115.51	118.90
2	AB	2841	C	C4-C5-C6	-5.65	114.57	117.40
2	AB	2852	G	C6-C5-N7	-5.65	127.01	130.40
35	BA	562	U	C4'-C3'-C2'	-5.65	96.95	102.60
35	BA	1356	G	N1-C2-N3	-5.65	120.51	123.90
35	BA	1430	A	C1'-O4'-C4'	5.65	114.42	109.90
2	AB	172	A	N1-C6-N6	-5.65	115.21	118.60
2	AB	463	G	C3'-C2'-C1'	-5.65	96.98	101.50
2	AB	636	G	C4-C5-N7	5.65	113.06	110.80
2	AB	845	A	C6-N1-C2	5.65	121.99	118.60
2	AB	1170	C	N3-C4-N4	5.65	121.96	118.00
2	AB	1906	G	N3-C4-C5	-5.65	125.77	128.60
2	AB	1956	U	C2-N1-C1'	-5.65	110.92	117.70
2	AB	2329	U	N3-C4-O4	5.65	123.36	119.40
2	AB	2331	G	N7-C8-N9	5.65	115.93	113.10
2	AB	2589	A	N1-C2-N3	5.65	132.13	129.30
2	AB	2594	C	N1-C1'-C2'	-5.65	105.78	112.00
2	AB	2669	G	O4'-C1'-N9	-5.65	103.68	108.20
19	AS	46	TYR	CZ-CE2-CD2	5.65	124.89	119.80
35	BA	1106	G	C5-C6-O6	-5.65	125.21	128.60
35	BA	1148	U	N1-C2-O2	-5.65	118.84	122.80
35	BA	1180	A	N9-C4-C5	5.65	108.06	105.80
2	AB	372	G	C8-N9-C4	-5.65	104.14	106.40
2	AB	506	G	C5-N7-C8	-5.65	101.47	104.30
2	AB	579	G	O4'-C4'-C3'	5.65	110.62	106.10
2	AB	929	U	C5-C4-O4	-5.65	122.51	125.90
2	AB	1159	U	N1-C2-N3	-5.65	111.51	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1272	A	N1-C6-N6	5.65	121.99	118.60
2	AB	1598	A	C5-N7-C8	5.65	106.73	103.90
2	AB	2072	C	N1-C2-N3	-5.65	115.25	119.20
2	AB	2224	G	C5-C6-N1	5.65	114.33	111.50
2	AB	2676	C	C4-C5-C6	5.65	120.22	117.40
2	AB	2732	G	P-O3'-C3'	5.65	126.48	119.70
4	AD	70	LYS	O-C-N	5.65	131.74	122.70
12	AL	37	ARG	NE-CZ-NH2	5.65	123.12	120.30
35	BA	704	A	N1-C6-N6	-5.65	115.21	118.60
35	BA	927	G	C5-C6-O6	-5.65	125.21	128.60
35	BA	1043	G	C4-C5-C6	5.65	122.19	118.80
2	AB	589	U	C1'-O4'-C4'	-5.65	105.38	109.90
2	AB	1991	U	C6-N1-C2	-5.65	117.61	121.00
37	BC	63	C	C5'-C4'-O4'	5.65	115.88	109.10
2	AB	364	C	O4'-C4'-C3'	5.65	110.62	106.10
2	AB	531	C	C2-N3-C4	5.65	122.72	119.90
2	AB	2124	G	C4-C5-C6	5.65	122.19	118.80
2	AB	2250	G	N3-C4-C5	-5.65	125.78	128.60
2	AB	2266	A	C8-N9-C4	5.65	108.06	105.80
2	AB	2618	G	N3-C4-C5	-5.65	125.78	128.60
2	AB	2825	G	N3-C2-N2	-5.65	115.95	119.90
35	BA	103	U	C5'-C4'-O4'	5.65	115.88	109.10
35	BA	115	G	C5-N7-C8	-5.65	101.48	104.30
35	BA	141	G	C3'-C2'-C1'	-5.65	96.98	101.50
35	BA	597	G	C4-C5-N7	-5.65	108.54	110.80
35	BA	688	G	C4-C5-N7	5.65	113.06	110.80
35	BA	804	U	C4'-C3'-C2'	-5.65	96.95	102.60
35	BA	1008	U	C4-C5-C6	5.65	123.09	119.70
35	BA	1285	A	N3-C4-N9	5.65	131.92	127.40
37	BC	25	U	N3-C4-O4	-5.65	115.45	119.40
2	AB	715	A	C4-C5-N7	-5.65	107.88	110.70
2	AB	1038	G	C2-N3-C4	5.65	114.72	111.90
2	AB	1938	A	C4-C5-N7	-5.65	107.88	110.70
2	AB	2545	G	N1-C2-N3	-5.65	120.51	123.90
35	BA	269	C	N1-C2-O2	-5.65	115.51	118.90
35	BA	592	G	N1-C6-O6	-5.65	116.51	119.90
35	BA	620	C	N1-C2-O2	5.65	122.29	118.90
35	BA	890	G	C5-N7-C8	-5.65	101.48	104.30
2	AB	99	U	C2-N3-C4	-5.64	123.61	127.00
2	AB	1296	G	C4-C5-C6	-5.64	115.41	118.80
2	AB	1516	G	C8-N9-C1'	5.64	134.34	127.00
2	AB	1841	U	C4-C5-C6	5.64	123.09	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2148	G	C5'-C4'-C3'	5.64	125.03	116.00
2	AB	2364	C	O4'-C1'-N1	5.64	112.72	108.20
2	AB	2471	A	C5-N7-C8	5.64	106.72	103.90
2	AB	2473	U	C4-C5-C6	5.64	123.09	119.70
2	AB	2692	G	N1-C2-N3	5.64	127.29	123.90
2	AB	2700	A	C5-C6-N1	5.64	120.52	117.70
5	AE	125	TRP	CB-CG-CD2	5.64	133.94	126.60
35	BA	552	U	C2-N3-C4	-5.64	123.61	127.00
35	BA	701	U	O4'-C1'-N1	-5.64	103.69	108.20
35	BA	875	U	C5'-C4'-O4'	5.64	115.87	109.10
35	BA	1232	U	N1-C1'-C2'	-5.64	105.79	112.00
35	BA	1333	A	C6-C5-N7	5.64	136.25	132.30
35	BA	1348	U	C4-C5-C6	5.64	123.09	119.70
1	AA	45	A	C4-C5-N7	5.64	113.52	110.70
2	AB	756	A	C4-C5-C6	-5.64	114.18	117.00
2	AB	1572	A	O4'-C1'-N9	5.64	112.72	108.20
2	AB	1707	G	C8-N9-C1'	5.64	134.34	127.00
2	AB	1786	A	O4'-C1'-N9	5.64	112.71	108.20
2	AB	2262	U	N1-C2-N3	5.64	118.28	114.90
2	AB	2525	G	N1-C2-N3	5.64	127.29	123.90
2	AB	2668	G	N3-C4-C5	-5.64	125.78	128.60
2	AB	2889	C	C1'-O4'-C4'	5.64	114.41	109.90
35	BA	208	U	OP2-P-O3'	5.64	117.61	105.20
35	BA	424	G	N9-C4-C5	5.64	107.66	105.40
35	BA	690	G	N9-C1'-C2'	-5.64	105.79	112.00
35	BA	1007	U	O4'-C1'-N1	5.64	112.71	108.20
35	BA	1089	G	C6-C5-N7	-5.64	127.02	130.40
35	BA	1134	G	N9-C4-C5	5.64	107.66	105.40
35	BA	1180	A	O4'-C1'-N9	5.64	112.71	108.20
38	BD	63	LYS	CA-CB-CG	5.64	125.81	113.40
2	AB	252	G	N7-C8-N9	5.64	115.92	113.10
2	AB	1071	G	C4-C5-N7	-5.64	108.54	110.80
2	AB	1510	G	N3-C4-N9	-5.64	122.62	126.00
2	AB	1650	A	O4'-C1'-N9	-5.64	103.69	108.20
2	AB	1773	A	O4'-C1'-N9	-5.64	103.69	108.20
2	AB	2587	A	P-O3'-C3'	5.64	126.47	119.70
35	BA	343	U	C5'-C4'-O4'	5.64	115.87	109.10
35	BA	1260	G	N3-C2-N2	5.64	123.85	119.90
35	BA	1288	A	N9-C1'-C2'	-5.64	105.79	112.00
36	BB	29	G	C8-N9-C4	-5.64	104.14	106.40
2	AB	468	G	N9-C1'-C2'	-5.64	105.80	112.00
2	AB	512	G	C8-N9-C1'	5.64	134.33	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	515	A	C4'-C3'-C2'	-5.64	96.96	102.60
2	AB	821	A	N1-C2-N3	-5.64	126.48	129.30
2	AB	892	A	C5'-C4'-O4'	5.64	115.87	109.10
2	AB	1536	C	N1-C1'-C2'	5.64	121.33	114.00
2	AB	1637	A	N1-C2-N3	-5.64	126.48	129.30
2	AB	1668	A	C4-C5-C6	5.64	119.82	117.00
2	AB	1811	G	N3-C4-N9	5.64	129.38	126.00
2	AB	1838	C	O4'-C1'-N1	5.64	112.71	108.20
2	AB	2430	A	C6-N1-C2	-5.64	115.22	118.60
2	AB	2894	G	C2-N3-C4	5.64	114.72	111.90
35	BA	93	U	C3'-C2'-C1'	5.64	106.01	101.50
35	BA	325	A	N1-C6-N6	-5.64	115.22	118.60
35	BA	663	A	N7-C8-N9	5.64	116.62	113.80
35	BA	803	G	N1-C6-O6	-5.64	116.52	119.90
35	BA	1259	C	N3-C4-N4	5.64	121.95	118.00
39	BE	163	ARG	NE-CZ-NH1	-5.64	117.48	120.30
2	AB	712	G	C6-N1-C2	5.64	128.48	125.10
2	AB	1427	A	C6-C5-N7	5.64	136.25	132.30
2	AB	2557	G	N1-C6-O6	-5.64	116.52	119.90
2	AB	2879	A	C4-C5-C6	-5.64	114.18	117.00
35	BA	258	G	C5-N7-C8	-5.64	101.48	104.30
35	BA	573	A	C2-N3-C4	5.64	113.42	110.60
1	AA	79	G	C5-N7-C8	-5.64	101.48	104.30
2	AB	98	G	N3-C2-N2	-5.64	115.95	119.90
2	AB	509	C	O4'-C4'-C3'	5.64	110.61	106.10
2	AB	561	G	N9-C1'-C2'	-5.64	105.80	112.00
2	AB	648	G	C2'-C3'-O3'	5.64	122.72	113.70
2	AB	904	G	N3-C2-N2	-5.64	115.95	119.90
2	AB	1104	C	C2-N3-C4	-5.64	117.08	119.90
2	AB	1135	C	N1-C2-N3	-5.64	115.25	119.20
2	AB	1200	C	C2-N3-C4	5.64	122.72	119.90
2	AB	1268	A	N1-C2-N3	-5.64	126.48	129.30
2	AB	1675	C	N1-C2-O2	5.64	122.28	118.90
2	AB	1749	A	N3-C4-N9	-5.64	122.89	127.40
2	AB	1823	G	C5-C6-N1	-5.64	108.68	111.50
2	AB	1990	C	N3-C2-O2	-5.64	117.95	121.90
2	AB	2098	U	C4'-C3'-C2'	-5.64	96.96	102.60
2	AB	2148	G	C5-C6-N1	5.64	114.32	111.50
2	AB	2356	U	N3-C4-O4	-5.64	115.45	119.40
2	AB	2885	G	N3-C4-C5	-5.64	125.78	128.60
4	AD	202	ARG	NE-CZ-NH1	5.64	123.12	120.30
7	AG	78	ILE	CB-CA-C	5.64	122.88	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	148	G	C6-N1-C2	-5.64	121.72	125.10
35	BA	182	A	N9-C4-C5	5.64	108.06	105.80
35	BA	722	G	N3-C4-C5	5.64	131.42	128.60
35	BA	745	G	O3'-P-O5'	-5.64	93.29	104.00
35	BA	1080	A	P-O3'-C3'	5.64	126.46	119.70
50	BP	80	ARG	NE-CZ-NH2	5.64	123.12	120.30
2	AB	411	G	O5'-P-OP2	-5.63	100.63	105.70
2	AB	481	G	C5-C6-N1	5.63	114.32	111.50
2	AB	612	G	N3-C2-N2	5.63	123.84	119.90
2	AB	810	U	O4'-C1'-N1	-5.63	103.69	108.20
2	AB	1419	A	N1-C2-N3	-5.63	126.48	129.30
2	AB	1819	A	C3'-C2'-C1'	5.63	106.01	101.50
2	AB	2418	A	N9-C1'-C2'	-5.63	105.80	112.00
2	AB	2421	G	C1'-O4'-C4'	5.63	114.41	109.90
2	AB	2610	C	O4'-C1'-N1	-5.63	103.69	108.20
2	AB	2896	C	C5-C4-N4	-5.63	116.26	120.20
25	AY	59	PHE	CB-CG-CD2	-5.63	116.86	120.80
35	BA	278	G	C5-C6-O6	-5.63	125.22	128.60
35	BA	293	G	C6-C5-N7	-5.63	127.02	130.40
35	BA	710	G	C4-C5-N7	-5.63	108.55	110.80
35	BA	715	A	O5'-P-OP1	-5.63	100.63	105.70
35	BA	840	C	C1'-O4'-C4'	-5.63	105.39	109.90
35	BA	1158	C	C5-C6-N1	5.63	123.82	121.00
35	BA	1455	G	C8-N9-C4	-5.63	104.15	106.40
2	AB	828	U	C5'-C4'-O4'	5.63	115.86	109.10
2	AB	1585	C	N1-C2-N3	-5.63	115.26	119.20
35	BA	1331	G	N7-C8-N9	5.63	115.92	113.10
48	BN	47	ALA	N-CA-CB	-5.63	102.21	110.10
1	AA	2	G	C4-C5-N7	-5.63	108.55	110.80
1	AA	10	G	N3-C2-N2	-5.63	115.96	119.90
2	AB	160	A	N3-C4-C5	-5.63	122.86	126.80
2	AB	362	A	C4-C5-C6	-5.63	114.18	117.00
2	AB	551	G	N3-C4-N9	5.63	129.38	126.00
2	AB	609	A	C5-C6-N1	-5.63	114.89	117.70
2	AB	719	C	C5-C4-N4	-5.63	116.26	120.20
2	AB	915	C	O4'-C1'-N1	5.63	112.70	108.20
2	AB	1393	A	O4'-C1'-C2'	5.63	112.67	107.60
2	AB	2350	C	N3-C2-O2	-5.63	117.96	121.90
35	BA	152	A	C4'-C3'-C2'	-5.63	96.97	102.60
35	BA	296	U	N3-C4-C5	-5.63	111.22	114.60
35	BA	558	G	N1-C2-N2	5.63	121.27	116.20
35	BA	562	U	N1-C2-N3	5.63	118.28	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1017	U	C1'-O4'-C4'	5.63	114.41	109.90
35	BA	1041	G	N9-C4-C5	5.63	107.65	105.40
35	BA	1487	G	C5'-C4'-O4'	5.63	115.86	109.10
35	BA	1496	C	O4'-C1'-N1	5.63	112.70	108.20
37	BC	4	G	C3'-C2'-C1'	5.63	106.00	101.50
37	BC	19	G	N9-C4-C5	-5.63	103.15	105.40
2	AB	164	C	O5'-P-OP2	-5.63	100.63	105.70
2	AB	191	A	C3'-C2'-C1'	5.63	106.00	101.50
2	AB	1036	G	N9-C4-C5	5.63	107.65	105.40
2	AB	1169	A	C5-C6-N6	-5.63	119.20	123.70
2	AB	1777	U	C4'-C3'-C2'	-5.63	96.97	102.60
2	AB	2057	G	C5-C6-O6	-5.63	125.22	128.60
2	AB	2496	C	C3'-C2'-C1'	5.63	106.00	101.50
2	AB	2544	G	C8-N9-C4	5.63	108.65	106.40
35	BA	247	G	C2-N3-C4	5.63	114.72	111.90
35	BA	1008	U	C5-C6-N1	-5.63	119.89	122.70
1	AA	107	G	C5'-C4'-O4'	5.63	115.85	109.10
2	AB	956	G	N3-C4-C5	-5.63	125.78	128.60
2	AB	1362	C	C2-N3-C4	5.63	122.72	119.90
2	AB	1474	U	N1-C2-N3	-5.63	111.52	114.90
2	AB	1712	U	P-O3'-C3'	5.63	126.45	119.70
2	AB	1932	A	C5-C6-N1	5.63	120.52	117.70
2	AB	2010	G	O4'-C1'-N9	5.63	112.70	108.20
2	AB	2134	A	C4-C5-N7	-5.63	107.89	110.70
2	AB	2572	A	C6-C5-N7	5.63	136.24	132.30
2	AB	2846	G	N1-C2-N3	-5.63	120.52	123.90
35	BA	366	A	N9-C4-C5	5.63	108.05	105.80
35	BA	597	G	N3-C4-N9	-5.63	122.62	126.00
35	BA	611	C	C1'-O4'-C4'	-5.63	105.40	109.90
35	BA	664	G	C8-N9-C1'	5.63	134.32	127.00
35	BA	878	A	C8-N9-C4	-5.63	103.55	105.80
55	BU	53	GLY	CA-C-O	-5.63	110.47	120.60
2	AB	418	C	N1-C2-O2	5.63	122.28	118.90
2	AB	984	A	C2-N3-C4	-5.63	107.79	110.60
2	AB	1116	G	N9-C4-C5	5.63	107.65	105.40
2	AB	1206	G	N1-C6-O6	-5.63	116.52	119.90
2	AB	1877	A	C5-N7-C8	-5.63	101.09	103.90
2	AB	2081	U	C4'-C3'-C2'	-5.63	96.97	102.60
2	AB	2105	U	N1-C2-N3	-5.63	111.52	114.90
2	AB	2176	A	C5'-C4'-O4'	5.63	115.85	109.10
2	AB	2286	G	N1-C2-N2	5.63	121.26	116.20
35	BA	50	A	C5-C6-N1	5.63	120.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	211	G	C5'-C4'-C3'	-5.63	107.00	116.00
35	BA	550	G	C2-N3-C4	5.63	114.71	111.90
35	BA	873	A	N7-C8-N9	5.63	116.61	113.80
35	BA	1166	G	C4-C5-N7	-5.63	108.55	110.80
35	BA	1172	C	C5-C6-N1	5.63	123.81	121.00
36	BB	52	U	N3-C4-O4	-5.63	115.46	119.40
2	AB	187	G	N1-C6-O6	-5.62	116.53	119.90
2	AB	357	C	O4'-C1'-N1	5.62	112.70	108.20
2	AB	665	U	N3-C2-O2	-5.62	118.26	122.20
2	AB	804	A	N7-C8-N9	5.62	116.61	113.80
2	AB	2305	U	C5'-C4'-O4'	5.62	115.85	109.10
35	BA	380	G	N1-C2-N3	-5.62	120.53	123.90
35	BA	1424	U	C4-C5-C6	5.62	123.08	119.70
35	BA	1434	A	C4-C5-C6	-5.62	114.19	117.00
37	BC	29	C	C4'-C3'-C2'	-5.62	96.97	102.60
51	BQ	52	ARG	NH1-CZ-NH2	-5.62	113.21	119.40
1	AA	55	U	C2-N3-C4	-5.62	123.63	127.00
2	AB	467	G	C5-N7-C8	5.62	107.11	104.30
2	AB	820	A	C3'-C2'-C1'	-5.62	97.00	101.50
2	AB	1017	G	C8-N9-C4	-5.62	104.15	106.40
2	AB	1124	G	C6-N1-C2	-5.62	121.73	125.10
2	AB	1234	U	N1-C2-O2	5.62	126.74	122.80
2	AB	1246	A	C4-C5-C6	-5.62	114.19	117.00
2	AB	1682	G	C6-C5-N7	-5.62	127.03	130.40
35	BA	393	A	C5-C6-N6	-5.62	119.20	123.70
35	BA	653	U	C4'-C3'-C2'	5.62	108.22	102.60
35	BA	1095	U	C4-C5-C6	5.62	123.08	119.70
35	BA	1160	G	O4'-C1'-N9	-5.62	103.70	108.20
35	BA	1422	G	N3-C4-N9	5.62	129.37	126.00
36	BB	48	C	O4'-C1'-N1	5.62	112.70	108.20
37	BC	31	G	C6-C5-N7	-5.62	127.03	130.40
2	AB	331	C	C5-C6-N1	5.62	123.81	121.00
2	AB	1029	A	C4-C5-C6	5.62	119.81	117.00
2	AB	1035	U	P-O3'-C3'	5.62	126.45	119.70
2	AB	1275	A	C4-C5-C6	-5.62	114.19	117.00
2	AB	1428	C	C1'-O4'-C4'	5.62	114.40	109.90
2	AB	1653	G	P-O3'-C3'	5.62	126.45	119.70
2	AB	1802	A	C6-C5-N7	-5.62	128.36	132.30
2	AB	1889	A	C4'-C3'-C2'	-5.62	96.98	102.60
2	AB	1910	G	N9-C4-C5	5.62	107.65	105.40
2	AB	2105	U	C3'-C2'-C1'	5.62	106.00	101.50
2	AB	2709	G	C5-C6-N1	5.62	114.31	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2854	G	N1-C6-O6	-5.62	116.53	119.90
35	BA	110	C	C3'-C2'-C1'	5.62	106.00	101.50
35	BA	141	G	C5-C6-O6	-5.62	125.23	128.60
35	BA	422	C	O4'-C1'-C2'	-5.62	100.18	105.80
35	BA	766	A	C4-C5-N7	-5.62	107.89	110.70
35	BA	877	G	N3-C2-N2	-5.62	115.97	119.90
35	BA	1019	A	C4-C5-N7	5.62	113.51	110.70
35	BA	1065	U	N3-C4-C5	-5.62	111.23	114.60
35	BA	1134	G	O4'-C1'-N9	5.62	112.70	108.20
35	BA	1166	G	N3-C4-N9	5.62	129.37	126.00
35	BA	1267	C	N1-C2-O2	5.62	122.27	118.90
36	BB	37	G	C4-C5-N7	-5.62	108.55	110.80
2	AB	381	G	N7-C8-N9	5.62	115.91	113.10
2	AB	949	G	N3-C2-N2	-5.62	115.97	119.90
2	AB	2196	C	N3-C4-N4	5.62	121.93	118.00
2	AB	2661	G	C3'-C2'-C1'	5.62	106.00	101.50
35	BA	1256	A	O4'-C1'-N9	5.62	112.70	108.20
2	AB	681	G	C6-N1-C2	-5.62	121.73	125.10
2	AB	1018	U	C6-N1-C2	-5.62	117.63	121.00
2	AB	1305	C	C4'-C3'-C2'	-5.62	96.98	102.60
2	AB	1458	U	O5'-P-OP1	-5.62	100.64	105.70
2	AB	1755	A	C4-C5-N7	-5.62	107.89	110.70
2	AB	2626	C	N1-C2-N3	5.62	123.13	119.20
30	A3	48	TYR	CB-CG-CD1	-5.62	117.63	121.00
35	BA	81	A	N1-C2-N3	5.62	132.11	129.30
35	BA	202	G	N7-C8-N9	-5.62	110.29	113.10
35	BA	605	U	C4-C5-C6	5.62	123.07	119.70
35	BA	845	A	N1-C6-N6	-5.62	115.23	118.60
35	BA	924	C	N1-C1'-C2'	-5.62	105.82	112.00
35	BA	1509	C	N1-C2-N3	-5.62	115.27	119.20
1	AA	112	G	C1'-O4'-C4'	5.62	114.39	109.90
2	AB	335	C	P-O3'-C3'	5.62	126.44	119.70
2	AB	849	A	N1-C6-N6	-5.62	115.23	118.60
2	AB	2266	A	O4'-C4'-C3'	5.62	110.59	106.10
2	AB	2418	A	C3'-C2'-C1'	-5.62	97.01	101.50
13	AM	105	ARG	NE-CZ-NH1	-5.62	117.49	120.30
35	BA	46	G	C8-N9-C1'	5.62	134.30	127.00
35	BA	383	A	N7-C8-N9	5.62	116.61	113.80
2	AB	131	A	C4-C5-N7	5.62	113.51	110.70
2	AB	252	G	C8-N9-C4	-5.62	104.15	106.40
2	AB	869	G	N7-C8-N9	5.62	115.91	113.10
2	AB	932	U	O4'-C4'-C3'	5.62	110.59	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1103	A	C4-C5-N7	-5.62	107.89	110.70
2	AB	1339	G	C4-C5-N7	5.62	113.05	110.80
2	AB	1354	A	C6-N1-C2	-5.62	115.23	118.60
2	AB	1605	C	N3-C4-C5	-5.62	119.65	121.90
2	AB	2040	G	C2-N3-C4	5.62	114.71	111.90
2	AB	2478	A	C1'-O4'-C4'	-5.62	105.41	109.90
2	AB	2564	A	P-O3'-C3'	5.62	126.44	119.70
2	AB	2852	G	N3-C2-N2	5.62	123.83	119.90
24	AX	79	ARG	NE-CZ-NH2	-5.62	117.49	120.30
35	BA	166	U	C2-N3-C4	-5.62	123.63	127.00
35	BA	1382	C	O4'-C1'-N1	5.62	112.69	108.20
2	AB	54	G	C5-C6-O6	-5.61	125.23	128.60
2	AB	89	A	N7-C8-N9	-5.61	110.99	113.80
2	AB	572	A	C4'-C3'-O3'	5.61	124.23	113.00
2	AB	650	C	C6-N1-C2	-5.61	118.06	120.30
2	AB	1324	G	C6-N1-C2	-5.61	121.73	125.10
2	AB	1684	G	C8-N9-C4	-5.61	104.16	106.40
2	AB	2132	U	C5-C6-N1	-5.61	119.89	122.70
7	AG	82	TYR	CB-CG-CD2	-5.61	117.63	121.00
35	BA	195	A	N3-C4-N9	5.61	131.89	127.40
35	BA	337	G	N9-C4-C5	5.61	107.64	105.40
35	BA	538	G	C5-C6-N1	5.61	114.31	111.50
35	BA	816	A	O4'-C1'-N9	5.61	112.69	108.20
35	BA	963	G	C1'-O4'-C4'	-5.61	105.41	109.90
35	BA	974	A	C1'-O4'-C4'	-5.61	105.41	109.90
35	BA	1480	A	C8-N9-C4	-5.61	103.55	105.80
2	AB	677	A	C5-N7-C8	-5.61	101.09	103.90
2	AB	980	A	C5-N7-C8	-5.61	101.09	103.90
2	AB	1715	G	C5'-C4'-C3'	-5.61	107.02	116.00
2	AB	2077	A	O5'-C5'-C4'	5.61	122.36	111.70
35	BA	165	G	N9-C1'-C2'	-5.61	105.83	112.00
37	BC	26	C	N1-C2-O2	5.61	122.27	118.90
2	AB	62	U	C5-C6-N1	-5.61	119.89	122.70
2	AB	112	U	C5-C6-N1	-5.61	119.89	122.70
2	AB	348	A	C5-C6-N1	5.61	120.50	117.70
2	AB	1088	A	C4'-C3'-C2'	-5.61	96.99	102.60
2	AB	1282	U	O4'-C1'-N1	5.61	112.69	108.20
2	AB	1588	G	C4-C5-N7	-5.61	108.56	110.80
2	AB	1735	A	N9-C4-C5	5.61	108.04	105.80
2	AB	1859	U	N3-C2-O2	-5.61	118.27	122.20
2	AB	2375	G	N3-C2-N2	5.61	123.83	119.90
2	AB	2391	G	C5-N7-C8	5.61	107.11	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2459	A	N9-C4-C5	-5.61	103.56	105.80
35	BA	659	U	N3-C2-O2	-5.61	118.27	122.20
35	BA	801	U	C5-C6-N1	-5.61	119.89	122.70
35	BA	889	A	C4'-C3'-C2'	-5.61	96.99	102.60
35	BA	1039	G	C1'-O4'-C4'	-5.61	105.41	109.90
35	BA	1427	C	O5'-P-OP2	-5.61	100.65	105.70
36	BB	28	U	N1-C1'-C2'	-5.61	105.83	112.00
36	BB	37	G	C1'-O4'-C4'	-5.61	105.41	109.90
1	AA	47	C	C6-N1-C1'	5.61	127.53	120.80
2	AB	6	A	N9-C1'-C2'	5.61	121.29	114.00
2	AB	1124	G	O4'-C1'-N9	5.61	112.69	108.20
2	AB	1422	G	C4-C5-C6	-5.61	115.43	118.80
2	AB	2576	G	C5-N7-C8	5.61	107.11	104.30
2	AB	2860	A	C8-N9-C4	-5.61	103.56	105.80
2	AB	2897	U	C3'-C2'-C1'	5.61	105.99	101.50
35	BA	724	G	C1'-O4'-C4'	-5.61	105.41	109.90
37	BC	63	C	P-O3'-C3'	5.61	126.43	119.70
37	BC	77	A	C5-C6-N6	-5.61	119.21	123.70
2	AB	297	G	N9-C4-C5	-5.61	103.16	105.40
2	AB	1187	G	C4-C5-C6	-5.61	115.44	118.80
2	AB	1481	U	C6-N1-C1'	5.61	129.05	121.20
2	AB	1642	G	C4-C5-N7	-5.61	108.56	110.80
2	AB	1675	C	N3-C4-N4	5.61	121.93	118.00
2	AB	2436	G	C5'-C4'-O4'	5.61	115.83	109.10
35	BA	220	G	N1-C2-N2	5.61	121.25	116.20
35	BA	258	G	C1'-O4'-C4'	-5.61	105.41	109.90
35	BA	541	G	N1-C2-N2	5.61	121.25	116.20
35	BA	1400	C	O4'-C1'-C2'	-5.61	100.19	105.80
40	BF	96	ARG	NH1-CZ-NH2	-5.61	113.23	119.40
57	BW	68	ARG	NH1-CZ-NH2	5.61	125.57	119.40
2	AB	58	G	C5'-C4'-O4'	5.61	115.83	109.10
2	AB	284	U	N3-C4-O4	-5.61	115.48	119.40
2	AB	437	U	C1'-O4'-C4'	-5.61	105.42	109.90
2	AB	534	U	C5'-C4'-O4'	5.61	115.83	109.10
2	AB	558	U	C4'-C3'-C2'	-5.61	97.00	102.60
2	AB	1170	C	O5'-P-OP2	-5.61	100.66	105.70
2	AB	1354	A	N1-C6-N6	5.61	121.96	118.60
2	AB	2223	G	N1-C2-N3	-5.61	120.54	123.90
2	AB	2864	G	N3-C4-C5	-5.61	125.80	128.60
35	BA	141	G	C4-N9-C1'	-5.61	119.21	126.50
35	BA	142	G	C2-N3-C4	5.61	114.70	111.90
35	BA	146	G	C4-C5-N7	-5.61	108.56	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	185	U	C3'-C2'-C1'	5.61	105.98	101.50
35	BA	335	C	P-O3'-C3'	5.61	126.43	119.70
35	BA	608	A	N3-C4-N9	5.61	131.88	127.40
35	BA	747	A	C5-C6-N1	-5.61	114.90	117.70
35	BA	770	C	C5-C4-N4	-5.61	116.28	120.20
35	BA	906	A	C8-N9-C4	-5.61	103.56	105.80
35	BA	1160	G	C2-N3-C4	5.61	114.70	111.90
43	BI	154	ARG	NE-CZ-NH1	5.61	123.10	120.30
52	BR	16	PHE	CB-CG-CD2	-5.61	116.88	120.80
2	AB	104	A	N3-C4-C5	5.60	130.72	126.80
2	AB	571	U	N3-C4-O4	5.60	123.32	119.40
2	AB	1208	C	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	2247	A	C5-C6-N1	5.60	120.50	117.70
2	AB	2718	G	C8-N9-C4	5.60	108.64	106.40
35	BA	858	G	C5-N7-C8	5.60	107.10	104.30
35	BA	923	A	C2-N3-C4	-5.60	107.80	110.60
35	BA	1006	G	C4-C5-N7	-5.60	108.56	110.80
35	BA	1483	A	N7-C8-N9	-5.60	111.00	113.80
37	BC	64	G	C5-C6-O6	-5.60	125.24	128.60
1	AA	76	G	C4'-C3'-C2'	-5.60	97.00	102.60
2	AB	458	G	C8-N9-C1'	5.60	134.28	127.00
2	AB	476	G	N3-C4-C5	-5.60	125.80	128.60
2	AB	764	A	C6-N1-C2	5.60	121.96	118.60
2	AB	1008	A	N3-C4-N9	5.60	131.88	127.40
2	AB	1319	C	C5'-C4'-C3'	-5.60	107.04	116.00
2	AB	1518	C	C5-C6-N1	5.60	123.80	121.00
2	AB	1540	G	C8-N9-C4	-5.60	104.16	106.40
2	AB	2159	G	N1-C2-N3	-5.60	120.54	123.90
2	AB	2284	A	C5-N7-C8	-5.60	101.10	103.90
2	AB	2549	G	C5'-C4'-O4'	5.60	115.82	109.10
35	BA	64	G	C8-N9-C1'	5.60	134.28	127.00
35	BA	358	U	N3-C2-O2	-5.60	118.28	122.20
35	BA	392	C	N1-C1'-C2'	-5.60	105.84	112.00
35	BA	1239	A	N1-C6-N6	5.60	121.96	118.60
35	BA	1288	A	N3-C4-C5	5.60	130.72	126.80
35	BA	1419	G	O4'-C1'-N9	5.60	112.68	108.20
35	BA	1476	A	C4-C5-C6	-5.60	114.20	117.00
41	BG	92	ARG	NH1-CZ-NH2	-5.60	113.24	119.40
2	AB	273	G	C4-C5-N7	-5.60	108.56	110.80
2	AB	507	A	N7-C8-N9	5.60	116.60	113.80
2	AB	1206	G	C4-C5-N7	5.60	113.04	110.80
2	AB	1820	U	O4'-C1'-C2'	-5.60	100.20	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1965	C	O4'-C1'-N1	5.60	112.68	108.20
2	AB	2881	U	N3-C4-C5	-5.60	111.24	114.60
8	AH	140	ILE	CB-CA-C	5.60	122.80	111.60
35	BA	635	A	O5'-C5'-C4'	5.60	122.34	111.70
35	BA	1243	C	N1-C2-O2	5.60	122.26	118.90
2	AB	276	U	N3-C4-O4	5.60	123.32	119.40
2	AB	308	G	C5-C6-N1	5.60	114.30	111.50
2	AB	1646	C	N1-C2-O2	5.60	122.26	118.90
2	AB	1662	U	C5-C6-N1	-5.60	119.90	122.70
2	AB	2013	A	O4'-C1'-N9	5.60	112.68	108.20
2	AB	2295	C	N1-C2-O2	5.60	122.26	118.90
2	AB	2331	G	C2-N3-C4	5.60	114.70	111.90
2	AB	2357	G	C5'-C4'-O4'	5.60	115.82	109.10
2	AB	2689	U	C4-C5-C6	-5.60	116.34	119.70
8	AH	164	ALA	CB-CA-C	5.60	118.50	110.10
35	BA	259	G	N1-C2-N2	-5.60	111.16	116.20
35	BA	550	G	N3-C4-C5	-5.60	125.80	128.60
35	BA	754	C	C4-C5-C6	5.60	120.20	117.40
35	BA	794	A	N9-C4-C5	5.60	108.04	105.80
35	BA	808	C	N1-C2-O2	5.60	122.26	118.90
35	BA	817	C	O5'-C5'-C4'	-5.60	101.06	111.70
35	BA	885	G	C2'-C3'-O3'	5.60	122.66	113.70
35	BA	1285	A	C2-N3-C4	5.60	113.40	110.60
35	BA	1379	G	C4-C5-C6	-5.60	115.44	118.80
35	BA	1487	G	N1-C6-O6	5.60	123.26	119.90
38	BD	94	ARG	NH1-CZ-NH2	-5.60	113.24	119.40
1	AA	43	C	N3-C2-O2	-5.60	117.98	121.90
2	AB	519	U	C5'-C4'-O4'	5.60	115.82	109.10
2	AB	701	G	C6-C5-N7	-5.60	127.04	130.40
2	AB	840	C	C6-N1-C2	5.60	122.54	120.30
2	AB	2090	A	C4-C5-N7	-5.60	107.90	110.70
2	AB	2103	C	O4'-C1'-N1	5.60	112.68	108.20
2	AB	2641	G	P-O3'-C3'	5.60	126.42	119.70
13	AM	100	PHE	CD1-CG-CD2	-5.60	111.02	118.30
28	A1	12	ALA	N-CA-CB	-5.60	102.26	110.10
35	BA	113	G	N3-C4-C5	-5.60	125.80	128.60
35	BA	156	C	O4'-C4'-C3'	5.60	110.58	106.10
35	BA	474	G	N3-C2-N2	5.60	123.82	119.90
2	AB	93	G	C5-C6-N1	5.60	114.30	111.50
2	AB	804	A	C4-C5-C6	-5.60	114.20	117.00
2	AB	1156	A	C6-N1-C2	5.60	121.96	118.60
2	AB	1517	G	O4'-C1'-N9	5.60	112.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2374	C	N1-C2-O2	5.60	122.26	118.90
35	BA	611	C	O4'-C4'-C3'	5.60	110.58	106.10
35	BA	694	A	P-O3'-C3'	5.60	126.42	119.70
35	BA	914	A	C2-N3-C4	5.60	113.40	110.60
2	AB	389	G	C4-C5-N7	-5.59	108.56	110.80
2	AB	472	A	C4'-C3'-C2'	-5.59	97.01	102.60
2	AB	780	G	C2-N3-C4	-5.59	109.10	111.90
2	AB	1276	A	C5'-C4'-O4'	5.59	115.81	109.10
2	AB	1300	G	N3-C4-N9	-5.59	122.64	126.00
2	AB	1581	G	N7-C8-N9	5.59	115.90	113.10
35	BA	18	C	C5'-C4'-C3'	5.59	124.95	116.00
35	BA	167	A	C2-N3-C4	-5.59	107.80	110.60
35	BA	318	G	C4-C5-N7	-5.59	108.56	110.80
35	BA	1001	C	C5-C4-N4	-5.59	116.28	120.20
35	BA	1088	G	C5-C6-O6	-5.59	125.24	128.60
35	BA	1148	U	O4'-C4'-C3'	-5.59	98.41	104.00
48	BN	15	VAL	CA-CB-CG1	5.59	119.29	110.90
2	AB	1064	C	C3'-C2'-C1'	5.59	105.97	101.50
2	AB	1973	G	O4'-C1'-N9	5.59	112.67	108.20
2	AB	2183	A	N3-C4-N9	-5.59	122.92	127.40
2	AB	2288	A	C3'-C2'-C1'	-5.59	97.03	101.50
2	AB	2350	C	P-O3'-C3'	5.59	126.41	119.70
9	AI	110	VAL	CG1-CB-CG2	-5.59	101.95	110.90
35	BA	36	C	O4'-C4'-C3'	5.59	110.57	106.10
35	BA	335	C	C2-N3-C4	5.59	122.70	119.90
35	BA	838	G	C5-C6-N1	5.59	114.30	111.50
35	BA	860	A	C3'-C2'-C1'	5.59	105.97	101.50
1	AA	31	C	N1-C2-N3	5.59	123.11	119.20
1	AA	54	G	C8-N9-C1'	5.59	134.27	127.00
2	AB	241	A	OP1-P-O3'	5.59	117.50	105.20
2	AB	961	C	O4'-C1'-N1	5.59	112.67	108.20
2	AB	1089	A	C5-N7-C8	-5.59	101.10	103.90
2	AB	1413	A	C1'-O4'-C4'	5.59	114.37	109.90
2	AB	1666	G	C8-N9-C1'	5.59	134.27	127.00
2	AB	1872	A	N1-C6-N6	5.59	121.95	118.60
2	AB	2108	A	C4-C5-C6	-5.59	114.20	117.00
2	AB	2199	A	N9-C4-C5	5.59	108.04	105.80
2	AB	2394	C	C2-N3-C4	5.59	122.70	119.90
2	AB	2700	A	N1-C2-N3	-5.59	126.50	129.30
2	AB	2756	U	N3-C4-O4	5.59	123.31	119.40
9	AI	97	ARG	CD-NE-CZ	5.59	131.43	123.60
35	BA	28	A	O4'-C1'-N9	5.59	112.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	112	G	C8-N9-C4	-5.59	104.16	106.40
35	BA	127	G	N1-C6-O6	5.59	123.25	119.90
37	BC	12	G	C4-C5-N7	-5.59	108.56	110.80
2	AB	474	G	P-O5'-C5'	5.59	129.84	120.90
2	AB	1089	A	P-O3'-C3'	5.59	126.41	119.70
2	AB	1673	G	N1-C6-O6	5.59	123.25	119.90
2	AB	2131	U	C6-N1-C1'	-5.59	113.37	121.20
2	AB	2241	A	C4-C5-C6	-5.59	114.20	117.00
2	AB	2286	G	N1-C2-N3	-5.59	120.55	123.90
2	AB	2725	A	C4-C5-C6	5.59	119.80	117.00
35	BA	450	G	C5'-C4'-O4'	5.59	115.81	109.10
35	BA	765	G	N1-C2-N3	-5.59	120.55	123.90
35	BA	785	G	C6-C5-N7	-5.59	127.05	130.40
35	BA	906	A	C2-N3-C4	5.59	113.39	110.60
35	BA	996	A	O5'-C5'-C4'	-5.59	101.08	111.70
35	BA	1300	G	N3-C4-N9	5.59	129.35	126.00
35	BA	1410	A	O5'-P-OP2	-5.59	100.67	105.70
37	BC	74	A	C1'-O4'-C4'	5.59	114.37	109.90
38	BD	21	TYR	CG-CD1-CE1	-5.59	116.83	121.30
50	BP	50	LEU	CB-CG-CD1	5.59	120.50	111.00
2	AB	146	A	N7-C8-N9	-5.59	111.01	113.80
2	AB	157	C	C5'-C4'-C3'	-5.59	107.06	116.00
2	AB	651	G	O4'-C1'-N9	5.59	112.67	108.20
2	AB	1757	A	N1-C2-N3	5.59	132.09	129.30
35	BA	505	G	C5-C6-O6	-5.59	125.25	128.60
35	BA	1179	A	C4-C5-N7	5.59	113.49	110.70
35	BA	1225	A	C2-N3-C4	-5.59	107.81	110.60
35	BA	1396	A	C3'-C2'-C1'	5.59	105.97	101.50
35	BA	1535	C	O4'-C1'-N1	5.59	112.67	108.20
48	BN	56	LEU	CB-CG-CD2	5.59	120.50	111.00
1	AA	67	G	C4-C5-C6	-5.59	115.45	118.80
2	AB	26	G	C5-C6-O6	-5.59	125.25	128.60
2	AB	533	G	C5-N7-C8	-5.59	101.51	104.30
2	AB	633	A	O3'-P-O5'	-5.59	93.38	104.00
2	AB	1388	G	C1'-O4'-C4'	-5.59	105.43	109.90
2	AB	1430	G	C6-N1-C2	5.59	128.45	125.10
2	AB	1640	A	N3-C4-C5	-5.59	122.89	126.80
2	AB	1842	G	O4'-C1'-N9	5.59	112.67	108.20
2	AB	1916	A	C6-N1-C2	-5.59	115.25	118.60
2	AB	2469	A	O5'-P-OP2	5.59	117.40	110.70
2	AB	2756	U	C5'-C4'-O4'	5.59	115.80	109.10
2	AB	2768	U	C5'-C4'-O4'	5.59	115.80	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	490	C	N3-C2-O2	-5.59	117.99	121.90
35	BA	576	C	P-O3'-C3'	5.59	126.40	119.70
35	BA	902	G	C2-N3-C4	5.59	114.69	111.90
35	BA	1108	G	C5-N7-C8	5.59	107.09	104.30
35	BA	1340	A	N3-C4-N9	5.59	131.87	127.40
2	AB	146	A	C8-N9-C4	5.58	108.03	105.80
2	AB	1246	A	C5-C6-N6	-5.58	119.23	123.70
2	AB	1424	G	C6-N1-C2	-5.58	121.75	125.10
2	AB	1678	A	C4-C5-C6	-5.58	114.21	117.00
2	AB	1729	U	C4'-C3'-C2'	-5.58	97.02	102.60
35	BA	1184	G	C5'-C4'-O4'	5.58	115.80	109.10
35	BA	1294	G	C6-N1-C2	-5.58	121.75	125.10
37	BC	24	C	C2-N3-C4	5.58	122.69	119.90
2	AB	1311	G	N3-C4-C5	-5.58	125.81	128.60
2	AB	2161	C	N1-C2-N3	5.58	123.11	119.20
2	AB	2257	U	C6-N1-C2	-5.58	117.65	121.00
2	AB	2370	G	N9-C1'-C2'	-5.58	105.86	112.00
2	AB	2420	C	C3'-C2'-C1'	-5.58	97.03	101.50
2	AB	2876	G	N7-C8-N9	-5.58	110.31	113.10
35	BA	110	C	C2-N1-C1'	5.58	124.94	118.80
35	BA	172	A	O4'-C1'-N9	5.58	112.67	108.20
35	BA	618	C	C2'-C3'-O3'	5.58	122.63	113.70
35	BA	706	A	C5-C6-N6	-5.58	119.23	123.70
35	BA	1180	A	C3'-C2'-C1'	5.58	105.97	101.50
35	BA	1354	U	N3-C2-O2	-5.58	118.29	122.20
2	AB	171	U	N1-C2-O2	5.58	126.71	122.80
2	AB	368	A	N9-C1'-C2'	5.58	121.26	114.00
2	AB	1254	A	N9-C4-C5	5.58	108.03	105.80
2	AB	1265	A	N1-C2-N3	-5.58	126.51	129.30
2	AB	1316	U	C2-N3-C4	-5.58	123.65	127.00
2	AB	1324	G	N3-C4-N9	5.58	129.35	126.00
2	AB	1426	G	C5-N7-C8	-5.58	101.51	104.30
2	AB	1436	G	N1-C2-N3	-5.58	120.55	123.90
2	AB	2227	A	N3-C4-N9	5.58	131.87	127.40
2	AB	2273	A	C5-C6-N6	5.58	128.16	123.70
2	AB	2411	A	C5'-C4'-O4'	5.58	115.80	109.10
2	AB	2865	U	C4-C5-C6	5.58	123.05	119.70
35	BA	244	U	O4'-C4'-C3'	5.58	110.56	106.10
35	BA	376	G	N1-C6-O6	5.58	123.25	119.90
35	BA	456	A	C4-C5-C6	-5.58	114.21	117.00
35	BA	560	A	N1-C6-N6	-5.58	115.25	118.60
35	BA	663	A	C5-C6-N1	5.58	120.49	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	664	G	N3-C2-N2	-5.58	115.99	119.90
35	BA	678	U	C4'-C3'-C2'	5.58	108.18	102.60
35	BA	780	A	C5-C6-N6	5.58	128.16	123.70
35	BA	1133	G	O4'-C4'-C3'	5.58	110.56	106.10
35	BA	1222	G	N7-C8-N9	-5.58	110.31	113.10
35	BA	1414	U	N1-C2-O2	5.58	126.71	122.80
1	AA	62	C	N1-C2-O2	5.58	122.25	118.90
2	AB	529	A	C4-C5-C6	5.58	119.79	117.00
2	AB	630	G	C2-N3-C4	-5.58	109.11	111.90
2	AB	836	G	C5-N7-C8	5.58	107.09	104.30
2	AB	1763	G	C6-N1-C2	-5.58	121.75	125.10
2	AB	2116	G	C5'-C4'-O4'	5.58	115.80	109.10
2	AB	2157	G	N9-C1'-C2'	-5.58	105.86	112.00
2	AB	2469	A	C5'-C4'-O4'	5.58	115.80	109.10
35	BA	164	G	C2-N3-C4	5.58	114.69	111.90
35	BA	799	G	O4'-C1'-N9	5.58	112.66	108.20
35	BA	970	C	O4'-C1'-N1	5.58	112.66	108.20
35	BA	1441	A	N1-C6-N6	-5.58	115.25	118.60
1	AA	43	C	N1-C2-O2	5.58	122.25	118.90
1	AA	113	C	C5-C4-N4	5.58	124.11	120.20
2	AB	236	C	C5'-C4'-O4'	-5.58	102.41	109.10
2	AB	248	G	N1-C2-N3	-5.58	120.55	123.90
2	AB	338	G	C4-C5-C6	-5.58	115.45	118.80
2	AB	352	A	N1-C6-N6	-5.58	115.25	118.60
2	AB	779	U	N1-C1'-C2'	-5.58	105.86	112.00
2	AB	1182	G	C5'-C4'-C3'	5.58	124.93	116.00
2	AB	1477	A	C4'-C3'-C2'	-5.58	97.02	102.60
2	AB	1620	G	N1-C6-O6	5.58	123.25	119.90
2	AB	1669	A	C1'-O4'-C4'	5.58	114.36	109.90
2	AB	1794	A	O4'-C1'-N9	5.58	112.66	108.20
2	AB	2245	U	C5'-C4'-O4'	5.58	115.79	109.10
2	AB	2442	C	C5-C6-N1	5.58	123.79	121.00
2	AB	2456	C	O4'-C1'-N1	5.58	112.66	108.20
2	AB	2621	G	N7-C8-N9	5.58	115.89	113.10
35	BA	389	A	C4-C5-N7	-5.58	107.91	110.70
35	BA	418	C	C5-C6-N1	5.58	123.79	121.00
35	BA	610	U	C5'-C4'-C3'	5.58	124.92	116.00
35	BA	945	G	P-O3'-C3'	-5.58	113.00	119.70
35	BA	1297	G	N1-C2-N2	5.58	121.22	116.20
35	BA	1433	A	P-O3'-C3'	5.58	126.39	119.70
37	BC	34	U	N1-C2-O2	-5.58	118.89	122.80
1	AA	49	C	N3-C4-C5	-5.58	119.67	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2385	C	C4-C5-C6	5.58	120.19	117.40
7	AG	31	GLU	N-CA-CB	-5.58	100.56	110.60
35	BA	686	U	O4'-C4'-C3'	5.58	110.56	106.10
35	BA	1087	G	N3-C2-N2	5.58	123.80	119.90
1	AA	23	G	C4'-C3'-C2'	-5.58	97.03	102.60
1	AA	52	A	O4'-C4'-C3'	5.58	110.56	106.10
1	AA	75	G	N3-C4-C5	-5.58	125.81	128.60
2	AB	242	G	C5-N7-C8	5.58	107.09	104.30
2	AB	837	C	C4-C5-C6	-5.58	114.61	117.40
2	AB	1211	C	C6-N1-C2	-5.58	118.07	120.30
2	AB	1218	G	O4'-C1'-N9	5.58	112.66	108.20
2	AB	1407	G	C6-N1-C2	-5.58	121.75	125.10
2	AB	1540	G	P-O3'-C3'	5.58	126.39	119.70
2	AB	1860	G	C5-C6-O6	5.58	131.94	128.60
2	AB	1971	U	N3-C2-O2	-5.58	118.30	122.20
2	AB	2121	G	C2-N3-C4	5.58	114.69	111.90
2	AB	2237	G	N1-C2-N3	-5.58	120.55	123.90
2	AB	2427	C	P-O3'-C3'	5.58	126.39	119.70
2	AB	2459	A	N7-C8-N9	5.58	116.59	113.80
2	AB	2630	G	N1-C2-N3	-5.58	120.56	123.90
2	AB	2718	G	C5-N7-C8	5.58	107.09	104.30
12	AL	141	ASP	CB-CG-OD2	-5.58	113.28	118.30
35	BA	156	C	C6-N1-C2	-5.58	118.07	120.30
35	BA	996	A	C4'-C3'-C2'	-5.58	97.02	102.60
35	BA	1214	C	C2-N3-C4	5.58	122.69	119.90
35	BA	1341	U	P-O3'-C3'	5.58	126.39	119.70
36	BB	19	A	O4'-C1'-C2'	-5.58	100.22	105.80
37	BC	77	A	C5-C6-N1	5.58	120.49	117.70
47	BM	31	VAL	CG1-CB-CG2	-5.58	101.98	110.90
2	AB	125	A	O4'-C1'-N9	5.57	112.66	108.20
2	AB	585	G	C4-C5-N7	-5.57	108.57	110.80
2	AB	929	U	N1-C2-O2	5.57	126.70	122.80
2	AB	1318	U	N1-C2-N3	-5.57	111.56	114.90
2	AB	1376	C	C5'-C4'-O4'	-5.57	102.41	109.10
2	AB	1456	G	N3-C4-N9	-5.57	122.66	126.00
2	AB	1531	C	C4'-C3'-C2'	-5.57	97.03	102.60
2	AB	2187	U	C4-C5-C6	5.57	123.04	119.70
2	AB	2198	A	N7-C8-N9	5.57	116.59	113.80
2	AB	2352	A	N3-C4-N9	5.57	131.86	127.40
2	AB	2391	G	C2-N3-C4	5.57	114.69	111.90
2	AB	2428	G	C8-N9-C1'	5.57	134.25	127.00
2	AB	2517	C	C2-N3-C4	-5.57	117.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2648	G	N3-C2-N2	-5.57	116.00	119.90
2	AB	2899	A	C5'-C4'-O4'	5.57	115.79	109.10
35	BA	149	A	C8-N9-C4	5.57	108.03	105.80
35	BA	550	G	N9-C1'-C2'	-5.57	105.87	112.00
35	BA	735	C	N1-C2-N3	5.57	123.10	119.20
35	BA	800	G	C1'-O4'-C4'	-5.57	105.44	109.90
35	BA	988	G	C2-N3-C4	5.57	114.69	111.90
35	BA	1153	G	N1-C2-N3	5.57	127.24	123.90
35	BA	1189	U	C5-C4-O4	5.57	129.24	125.90
35	BA	1256	A	C4-C5-N7	5.57	113.49	110.70
2	AB	517	C	C6-N1-C2	-5.57	118.07	120.30
2	AB	1384	A	O5'-P-OP2	-5.57	100.69	105.70
2	AB	2479	U	C5'-C4'-O4'	5.57	115.79	109.10
31	A4	27	ARG	NE-CZ-NH1	-5.57	117.51	120.30
35	BA	26	A	C6-N1-C2	5.57	121.94	118.60
35	BA	204	G	C5-C6-O6	-5.57	125.26	128.60
35	BA	1397	C	C5-C4-N4	-5.57	116.30	120.20
1	AA	88	C	C5-C4-N4	-5.57	116.30	120.20
2	AB	184	C	O5'-P-OP2	-5.57	100.69	105.70
2	AB	1129	A	C2-N3-C4	5.57	113.39	110.60
2	AB	1339	G	N3-C2-N2	5.57	123.80	119.90
2	AB	1365	A	C5-C6-N1	5.57	120.48	117.70
2	AB	1575	C	C5-C4-N4	-5.57	116.30	120.20
2	AB	1674	G	C8-N9-C4	-5.57	104.17	106.40
2	AB	1813	G	N1-C2-N2	5.57	121.21	116.20
2	AB	2845	U	C1'-O4'-C4'	5.57	114.36	109.90
35	BA	138	G	N9-C1'-C2'	-5.57	105.87	112.00
35	BA	230	G	C4-C5-C6	5.57	122.14	118.80
35	BA	774	G	N1-C2-N2	-5.57	111.19	116.20
35	BA	1352	C	N3-C2-O2	-5.57	118.00	121.90
35	BA	1404	C	N3-C4-C5	-5.57	119.67	121.90
36	BB	13	A	C5'-C4'-O4'	5.57	115.78	109.10
41	BG	122	VAL	CA-CB-CG2	5.57	119.26	110.90
49	BO	97	ARG	CD-NE-CZ	5.57	131.40	123.60
2	AB	977	G	C3'-C2'-C1'	5.57	105.95	101.50
2	AB	1532	A	C6-N1-C2	5.57	121.94	118.60
2	AB	1610	A	N3-C4-N9	5.57	131.85	127.40
2	AB	2527	C	N1-C2-N3	5.57	123.10	119.20
35	BA	404	G	C4-C5-C6	-5.57	115.46	118.80
35	BA	974	A	C6-C5-N7	5.57	136.20	132.30
37	BC	63	C	C4-C5-C6	-5.57	114.62	117.40
2	AB	16	C	C1'-O4'-C4'	5.57	114.35	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	119	A	C5-C6-N1	5.57	120.48	117.70
2	AB	204	A	C6-N1-C2	5.57	121.94	118.60
2	AB	492	A	N1-C6-N6	5.57	121.94	118.60
2	AB	510	C	N3-C4-N4	-5.57	114.10	118.00
2	AB	1060	U	O4'-C1'-N1	5.57	112.65	108.20
2	AB	2010	G	C5-C6-O6	5.57	131.94	128.60
35	BA	442	G	O5'-P-OP1	5.57	117.38	110.70
35	BA	829	G	C8-N9-C4	-5.57	104.17	106.40
35	BA	1070	U	N3-C4-O4	5.57	123.30	119.40
35	BA	1382	C	C6-N1-C2	5.57	122.53	120.30
35	BA	1400	C	N1-C2-N3	-5.57	115.30	119.20
37	BC	32	G	C8-N9-C1'	5.57	134.24	127.00
2	AB	190	A	C8-N9-C4	-5.57	103.57	105.80
2	AB	568	U	N3-C4-C5	-5.57	111.26	114.60
2	AB	1328	A	C5-C6-N6	-5.57	119.25	123.70
2	AB	1922	G	C8-N9-C4	-5.57	104.17	106.40
35	BA	1013	G	P-O3'-C3'	5.57	126.38	119.70
35	BA	1076	U	C4'-C3'-C2'	-5.57	97.03	102.60
35	BA	1361	G	C4-C5-C6	5.57	122.14	118.80
52	BR	60	TRP	NE1-CE2-CD2	-5.57	101.73	107.30
2	AB	218	A	C4-C5-N7	-5.56	107.92	110.70
2	AB	226	A	C1'-O4'-C4'	5.56	114.35	109.90
2	AB	552	U	C5-C6-N1	-5.56	119.92	122.70
2	AB	676	A	C4'-C3'-C2'	-5.56	97.04	102.60
2	AB	1624	U	C2-N3-C4	-5.56	123.66	127.00
2	AB	1913	A	C6-C5-N7	5.56	136.19	132.30
2	AB	2597	G	P-O3'-C3'	5.56	126.38	119.70
25	AY	18	LYS	CA-CB-CG	5.56	125.64	113.40
35	BA	596	A	N3-C4-N9	5.56	131.85	127.40
35	BA	904	U	C5-C4-O4	5.56	129.24	125.90
2	AB	197	A	C3'-C2'-C1'	-5.56	97.05	101.50
2	AB	637	A	C5'-C4'-O4'	-5.56	102.42	109.10
2	AB	676	A	C5-C6-N1	-5.56	114.92	117.70
2	AB	834	G	C4-C5-N7	5.56	113.03	110.80
2	AB	1090	A	C5'-C4'-O4'	5.56	115.78	109.10
2	AB	1578	U	P-O3'-C3'	5.56	126.38	119.70
2	AB	1963	U	N3-C2-O2	-5.56	118.31	122.20
2	AB	2033	A	N7-C8-N9	5.56	116.58	113.80
2	AB	2182	U	O4'-C4'-C3'	5.56	110.55	106.10
2	AB	2593	U	O4'-C1'-N1	5.56	112.65	108.20
23	AW	66	VAL	CG1-CB-CG2	-5.56	102.00	110.90
35	BA	162	A	C4-C5-N7	5.56	113.48	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	212	G	C5-C6-N1	5.56	114.28	111.50
35	BA	532	A	O5'-P-OP1	-5.56	100.69	105.70
35	BA	842	U	N3-C4-C5	-5.56	111.26	114.60
35	BA	1186	G	C6-N1-C2	-5.56	121.76	125.10
35	BA	1189	U	C5'-C4'-O4'	5.56	115.77	109.10
35	BA	1526	G	C5-N7-C8	5.56	107.08	104.30
2	AB	193	U	N3-C4-O4	5.56	123.29	119.40
2	AB	515	A	N1-C6-N6	-5.56	115.26	118.60
2	AB	533	G	N9-C1'-C2'	-5.56	105.88	112.00
2	AB	611	C	P-O3'-C3'	5.56	126.37	119.70
2	AB	915	C	C5-C4-N4	-5.56	116.31	120.20
2	AB	1271	G	N3-C4-N9	-5.56	122.66	126.00
2	AB	2151	U	N1-C2-N3	5.56	118.24	114.90
2	AB	2483	C	C5-C4-N4	-5.56	116.31	120.20
35	BA	1034	G	C3'-C2'-C1'	5.56	105.95	101.50
35	BA	1066	C	O4'-C1'-N1	5.56	112.65	108.20
35	BA	1467	C	C4'-C3'-C2'	-5.56	97.04	102.60
2	AB	323	C	C6-N1-C1'	-5.56	114.13	120.80
2	AB	1060	U	C5-C4-O4	5.56	129.24	125.90
2	AB	1221	C	N1-C2-N3	-5.56	115.31	119.20
2	AB	1478	G	C8-N9-C4	-5.56	104.18	106.40
2	AB	1883	U	C1'-O4'-C4'	-5.56	105.45	109.90
2	AB	2409	G	N9-C1'-C2'	-5.56	105.89	112.00
2	AB	2537	U	C5-C6-N1	5.56	125.48	122.70
2	AB	2663	G	C2'-C3'-O3'	5.56	122.60	113.70
2	AB	2781	A	N3-C4-N9	5.56	131.85	127.40
4	AD	202	ARG	NE-CZ-NH2	-5.56	117.52	120.30
35	BA	414	A	O4'-C1'-N9	5.56	112.65	108.20
35	BA	795	C	C2-N1-C1'	5.56	124.92	118.80
35	BA	1184	G	N7-C8-N9	-5.56	110.32	113.10
35	BA	1305	G	N9-C4-C5	5.56	107.62	105.40
2	AB	83	A	C2-N3-C4	-5.56	107.82	110.60
2	AB	118	A	C6-N1-C2	5.56	121.94	118.60
2	AB	172	A	C5'-C4'-O4'	5.56	115.77	109.10
2	AB	185	G	N1-C2-N3	5.56	127.23	123.90
2	AB	455	C	C5-C4-N4	5.56	124.09	120.20
2	AB	524	G	N1-C6-O6	-5.56	116.57	119.90
2	AB	824	U	C5'-C4'-C3'	-5.56	107.11	116.00
2	AB	1718	G	C5-N7-C8	-5.56	101.52	104.30
2	AB	1996	C	C5-C6-N1	5.56	123.78	121.00
2	AB	2792	A	C4-C5-C6	-5.56	114.22	117.00
35	BA	297	G	C8-N9-C4	-5.56	104.18	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	396	C	P-O5'-C5'	5.56	129.79	120.90
35	BA	935	A	C8-N9-C4	-5.56	103.58	105.80
35	BA	1374	A	O4'-C4'-C3'	5.56	110.55	106.10
2	AB	298	G	C5-N7-C8	-5.56	101.52	104.30
2	AB	1386	C	C6-N1-C1'	-5.56	114.13	120.80
2	AB	1516	G	N1-C6-O6	5.56	123.23	119.90
2	AB	1799	G	C4-N9-C1'	-5.56	119.28	126.50
32	A5	19	ARG	NE-CZ-NH2	5.56	123.08	120.30
35	BA	1193	G	N1-C6-O6	5.56	123.23	119.90
35	BA	1479	C	C5'-C4'-O4'	5.56	115.77	109.10
1	AA	59	A	N1-C6-N6	-5.55	115.27	118.60
2	AB	88	G	C1'-O4'-C4'	-5.55	105.46	109.90
2	AB	298	G	C4'-C3'-C2'	-5.55	97.05	102.60
2	AB	950	G	C1'-O4'-C4'	5.55	114.34	109.90
2	AB	1254	A	N1-C2-N3	5.55	132.08	129.30
2	AB	1292	G	C3'-C2'-C1'	5.55	105.94	101.50
2	AB	1521	G	O4'-C1'-N9	5.55	112.64	108.20
2	AB	2601	C	N3-C4-C5	5.55	124.12	121.90
2	AB	2831	G	C8-N9-C4	-5.55	104.18	106.40
3	AC	1	MET	CG-SD-CE	5.55	109.09	100.20
8	AH	10	VAL	CA-CB-CG1	-5.55	102.57	110.90
35	BA	25	C	C6-N1-C2	-5.55	118.08	120.30
35	BA	37	U	N3-C4-C5	5.55	117.93	114.60
35	BA	102	G	C3'-C2'-C1'	-5.55	97.06	101.50
35	BA	340	U	C5'-C4'-O4'	5.55	115.77	109.10
35	BA	357	G	N1-C6-O6	-5.55	116.57	119.90
35	BA	605	U	C3'-C2'-C1'	5.55	105.94	101.50
35	BA	646	G	C5'-C4'-O4'	5.55	115.77	109.10
35	BA	1040	U	C4'-C3'-C2'	-5.55	97.05	102.60
35	BA	1456	A	N7-C8-N9	5.55	116.58	113.80
2	AB	531	C	C6-N1-C2	-5.55	118.08	120.30
2	AB	1208	C	N3-C2-O2	-5.55	118.01	121.90
2	AB	2870	C	P-O5'-C5'	5.55	129.78	120.90
35	BA	53	A	C6-C5-N7	5.55	136.19	132.30
35	BA	810	C	C3'-C2'-C1'	5.55	105.94	101.50
1	AA	106	G	N7-C8-N9	5.55	115.88	113.10
2	AB	43	G	C2-N3-C4	5.55	114.67	111.90
2	AB	428	A	N1-C2-N3	5.55	132.07	129.30
2	AB	1269	A	C6-C5-N7	5.55	136.19	132.30
2	AB	1371	G	C2-N3-C4	5.55	114.67	111.90
2	AB	1490	A	C8-N9-C4	-5.55	103.58	105.80
2	AB	1680	U	P-O3'-C3'	5.55	126.36	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1984	G	C8-N9-C4	5.55	108.62	106.40
2	AB	2466	C	C5'-C4'-C3'	-5.55	107.12	116.00
2	AB	2509	G	C4-C5-C6	5.55	122.13	118.80
2	AB	2696	U	C1'-O4'-C4'	5.55	114.34	109.90
2	AB	2747	G	OP1-P-OP2	-5.55	111.27	119.60
35	BA	505	G	C5'-C4'-C3'	-5.55	107.12	116.00
35	BA	650	G	C6-N1-C2	-5.55	121.77	125.10
35	BA	1031	C	N3-C2-O2	-5.55	118.01	121.90
35	BA	1044	A	C5'-C4'-C3'	-5.55	107.12	116.00
35	BA	1279	G	C5-C6-N1	5.55	114.28	111.50
39	BE	131	ARG	NH1-CZ-NH2	-5.55	113.29	119.40
2	AB	333	G	N1-C6-O6	-5.55	116.57	119.90
2	AB	831	G	N1-C2-N3	-5.55	120.57	123.90
2	AB	1045	C	N1-C2-O2	5.55	122.23	118.90
2	AB	1764	C	C4'-C3'-C2'	-5.55	97.05	102.60
2	AB	2002	G	C1'-O4'-C4'	5.55	114.34	109.90
20	AT	66	HIS	N-CA-CB	5.55	120.59	110.60
35	BA	99	C	P-O3'-C3'	5.55	126.36	119.70
35	BA	153	C	C5'-C4'-O4'	5.55	115.76	109.10
35	BA	249	U	N3-C2-O2	-5.55	118.32	122.20
35	BA	366	A	C1'-O4'-C4'	5.55	114.34	109.90
35	BA	1151	A	C4-C5-C6	5.55	119.77	117.00
35	BA	1299	A	N9-C4-C5	-5.55	103.58	105.80
35	BA	1410	A	O4'-C1'-N9	5.55	112.64	108.20
37	BC	9	G	C1'-O4'-C4'	5.55	114.34	109.90
2	AB	46	G	C6-C5-N7	5.55	133.73	130.40
2	AB	829	A	C3'-C2'-C1'	5.55	105.94	101.50
2	AB	2085	U	C5-C4-O4	-5.55	122.57	125.90
2	AB	2639	A	C5-C6-N1	5.55	120.47	117.70
10	AJ	81	ILE	CA-CB-CG2	5.55	122.00	110.90
35	BA	146	G	C2-N3-C4	5.55	114.67	111.90
35	BA	209	U	O4'-C1'-N1	5.55	112.64	108.20
36	BB	38	G	C6-C5-N7	5.55	133.73	130.40
37	BC	62	C	N3-C4-C5	5.55	124.12	121.90
1	AA	74	U	C5-C4-O4	-5.55	122.57	125.90
2	AB	45	G	C4-C5-C6	5.55	122.13	118.80
2	AB	142	A	C3'-C2'-C1'	5.55	105.94	101.50
2	AB	869	G	C6-C5-N7	5.55	133.73	130.40
2	AB	1042	G	C4-C5-C6	5.55	122.13	118.80
2	AB	1227	G	C2-N3-C4	5.55	114.67	111.90
2	AB	1338	G	N9-C4-C5	-5.55	103.18	105.40
2	AB	1377	G	C4-C5-N7	5.55	113.02	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1742	U	C4-C5-C6	5.55	123.03	119.70
2	AB	1784	A	N3-C4-N9	-5.55	122.96	127.40
2	AB	2345	G	O4'-C4'-C3'	5.55	110.54	106.10
4	AD	34	GLU	OE1-CD-OE2	5.55	129.96	123.30
9	AI	130	VAL	C-N-CA	5.55	135.57	121.70
35	BA	27	G	C5-N7-C8	5.55	107.07	104.30
35	BA	76	G	C5-C6-O6	-5.55	125.27	128.60
35	BA	346	G	N7-C8-N9	5.55	115.87	113.10
35	BA	540	G	C2-N3-C4	5.55	114.67	111.90
35	BA	568	G	N3-C4-N9	5.55	129.33	126.00
35	BA	1030	U	O4'-C4'-C3'	-5.55	98.45	104.00
35	BA	1128	C	N3-C4-N4	5.55	121.88	118.00
35	BA	1292	G	C3'-C2'-C1'	-5.55	97.06	101.50
35	BA	1443	C	N3-C4-N4	5.55	121.88	118.00
1	AA	13	G	C6-N1-C2	-5.54	121.77	125.10
2	AB	761	A	N1-C2-N3	5.54	132.07	129.30
2	AB	1156	A	P-O3'-C3'	5.54	126.35	119.70
2	AB	1623	G	N1-C2-N2	5.54	121.19	116.20
2	AB	2644	G	C5'-C4'-O4'	5.54	115.75	109.10
35	BA	1007	U	C5-C4-O4	5.54	129.23	125.90
35	BA	1203	C	C5'-C4'-C3'	-5.54	107.13	116.00
35	BA	1348	U	N1-C2-N3	5.54	118.23	114.90
56	BV	9	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	AA	98	G	N3-C4-N9	5.54	129.33	126.00
2	AB	674	G	N9-C1'-C2'	-5.54	105.90	112.00
2	AB	937	C	C6-N1-C1'	5.54	127.45	120.80
2	AB	969	G	C2-N3-C4	5.54	114.67	111.90
2	AB	1244	A	P-O3'-C3'	5.54	126.35	119.70
2	AB	1645	G	C4-C5-C6	5.54	122.13	118.80
2	AB	1664	A	O4'-C4'-C3'	5.54	110.53	106.10
2	AB	1944	U	O4'-C4'-C3'	5.54	110.53	106.10
2	AB	2161	C	C4-C5-C6	-5.54	114.63	117.40
2	AB	2178	C	N1-C1'-C2'	5.54	121.21	114.00
2	AB	2202	U	N1-C2-N3	-5.54	111.57	114.90
21	AU	28	LYS	N-CA-CB	5.54	120.58	110.60
35	BA	163	C	N1-C2-N3	-5.54	115.32	119.20
35	BA	667	G	C6-N1-C2	-5.54	121.77	125.10
35	BA	861	G	C4'-C3'-C2'	-5.54	97.06	102.60
35	BA	1022	A	C4-C5-N7	-5.54	107.93	110.70
35	BA	1055	A	N9-C1'-C2'	-5.54	105.90	112.00
35	BA	1294	G	N7-C8-N9	-5.54	110.33	113.10
35	BA	1489	G	C1'-O4'-C4'	-5.54	105.47	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	47	A	C6-C5-N7	5.54	136.18	132.30
2	AB	73	A	O4'-C1'-N9	-5.54	103.77	108.20
2	AB	402	A	C3'-C2'-C1'	5.54	105.93	101.50
2	AB	782	A	C3'-C2'-C1'	-5.54	97.07	101.50
2	AB	814	C	C5'-C4'-O4'	5.54	115.75	109.10
2	AB	875	G	O4'-C4'-C3'	5.54	110.53	106.10
2	AB	1156	A	C1'-O4'-C4'	-5.54	105.47	109.90
2	AB	1371	G	N1-C6-O6	-5.54	116.58	119.90
2	AB	1387	A	C5'-C4'-C3'	5.54	124.87	116.00
2	AB	1405	U	C5'-C4'-C3'	-5.54	107.13	116.00
2	AB	1813	G	C1'-O4'-C4'	5.54	114.33	109.90
2	AB	2394	C	N3-C4-N4	5.54	121.88	118.00
2	AB	2397	G	C5-C6-N1	5.54	114.27	111.50
10	AJ	88	PRO	N-CA-CB	5.54	109.95	103.30
35	BA	311	C	C4-C5-C6	-5.54	114.63	117.40
35	BA	331	G	N3-C4-C5	-5.54	125.83	128.60
35	BA	399	G	O5'-C5'-C4'	-5.54	101.17	111.70
35	BA	431	A	N1-C2-N3	5.54	132.07	129.30
35	BA	666	G	N3-C4-N9	5.54	129.32	126.00
35	BA	1021	A	C5'-C4'-C3'	-5.54	107.13	116.00
35	BA	1178	G	N7-C8-N9	5.54	115.87	113.10
36	BB	27	A	C4-C5-C6	5.54	119.77	117.00
37	BC	24	C	C5'-C4'-O4'	-5.54	102.45	109.10
52	BR	53	ASP	CB-CG-OD2	-5.54	113.31	118.30
2	AB	320	A	C5-C6-N1	5.54	120.47	117.70
2	AB	900	A	C2'-C3'-O3'	5.54	122.56	113.70
2	AB	1133	A	C5-C6-N1	-5.54	114.93	117.70
2	AB	1458	U	N1-C1'-C2'	5.54	121.20	114.00
2	AB	1750	G	C6-C5-N7	5.54	133.72	130.40
35	BA	176	C	OP2-P-O3'	5.54	117.39	105.20
35	BA	961	U	C4-C5-C6	-5.54	116.38	119.70
1	AA	13	G	C1'-O4'-C4'	-5.54	105.47	109.90
2	AB	393	C	C5-C6-N1	-5.54	118.23	121.00
2	AB	661	A	C8-N9-C4	-5.54	103.58	105.80
2	AB	1591	A	C4'-C3'-C2'	-5.54	97.06	102.60
2	AB	1606	C	C5'-C4'-O4'	5.54	115.75	109.10
2	AB	1638	C	C3'-C2'-C1'	5.54	105.93	101.50
2	AB	2533	U	N1-C1'-C2'	-5.54	105.91	112.00
35	BA	50	A	C3'-C2'-C1'	5.54	105.93	101.50
35	BA	65	A	C6-C5-N7	-5.54	128.42	132.30
35	BA	164	G	C5'-C4'-O4'	5.54	115.75	109.10
35	BA	250	A	C4-C5-C6	-5.54	114.23	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	BA	717	U	C5-C6-N1	5.54	125.47	122.70
1	AA	19	C	C5-C4-N4	5.54	124.08	120.20
1	AA	84	G	N3-C4-N9	5.54	129.32	126.00
2	AB	102	U	O4'-C1'-N1	5.54	112.63	108.20
2	AB	257	C	C1'-O4'-C4'	-5.54	105.47	109.90
2	AB	547	A	P-O5'-C5'	5.54	129.76	120.90
2	AB	687	C	C5-C4-N4	-5.54	116.32	120.20
2	AB	1516	G	C6-C5-N7	-5.54	127.08	130.40
2	AB	2608	G	C5'-C4'-O4'	5.54	115.75	109.10
2	AB	2688	G	C5'-C4'-O4'	5.54	115.75	109.10
35	BA	306	A	N7-C8-N9	5.54	116.57	113.80
35	BA	524	G	C2-N3-C4	5.54	114.67	111.90
35	BA	735	C	N3-C2-O2	-5.54	118.02	121.90
35	BA	938	A	C5-N7-C8	5.54	106.67	103.90
2	AB	159	G	N3-C4-C5	-5.54	125.83	128.60
2	AB	377	G	C8-N9-C4	-5.54	104.19	106.40
2	AB	1437	C	N3-C4-C5	5.54	124.11	121.90
2	AB	1995	U	N3-C4-O4	-5.54	115.53	119.40
2	AB	2409	G	C6-N1-C2	-5.54	121.78	125.10
35	BA	533	A	C5-N7-C8	5.54	106.67	103.90
35	BA	1051	C	N1-C2-N3	-5.54	115.33	119.20
2	AB	984	A	C5'-C4'-O4'	-5.53	102.46	109.10
2	AB	1234	U	C2-N3-C4	5.53	130.32	127.00
2	AB	1763	G	P-O3'-C3'	5.53	126.34	119.70
2	AB	1839	G	N1-C2-N3	-5.53	120.58	123.90
2	AB	2437	G	C4-C5-C6	5.53	122.12	118.80
2	AB	2500	U	O4'-C1'-N1	5.53	112.63	108.20
35	BA	259	G	N1-C2-N3	5.53	127.22	123.90
35	BA	260	G	N1-C6-O6	5.53	123.22	119.90
35	BA	320	A	C4'-C3'-C2'	-5.53	97.07	102.60
35	BA	813	U	O4'-C1'-N1	5.53	112.63	108.20
35	BA	911	U	C1'-O4'-C4'	5.53	114.33	109.90
35	BA	1367	C	N1-C2-O2	5.53	122.22	118.90
37	BC	13	C	O4'-C4'-C3'	5.53	110.53	106.10
2	AB	775	G	C3'-C2'-C1'	-5.53	97.08	101.50
2	AB	1720	U	C3'-C2'-C1'	5.53	105.92	101.50
2	AB	1949	G	C4-C5-N7	5.53	113.01	110.80
35	BA	12	U	C1'-O4'-C4'	-5.53	105.47	109.90
35	BA	321	A	N1-C6-N6	5.53	121.92	118.60
35	BA	877	G	C8-N9-C4	-5.53	104.19	106.40
35	BA	1448	C	C2'-C3'-O3'	5.53	122.55	113.70
46	BL	62	ARG	CD-NE-CZ	5.53	131.34	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	17	C	N3-C4-C5	-5.53	119.69	121.90
2	AB	68	G	C3'-C2'-C1'	5.53	105.92	101.50
2	AB	572	A	C4'-C3'-C2'	-5.53	97.07	102.60
2	AB	766	U	C4'-C3'-C2'	-5.53	97.07	102.60
2	AB	832	U	C3'-C2'-C1'	5.53	105.92	101.50
2	AB	1037	G	C3'-C2'-C1'	5.53	105.92	101.50
2	AB	2074	U	P-O5'-C5'	5.53	129.75	120.90
2	AB	2318	G	N7-C8-N9	5.53	115.86	113.10
2	AB	2761	A	C5'-C4'-O4'	5.53	115.74	109.10
15	AO	6	ARG	NE-CZ-NH2	5.53	123.06	120.30
35	BA	59	A	C8-N9-C4	-5.53	103.59	105.80
40	BF	171	GLU	OE1-CD-OE2	5.53	129.94	123.30
1	AA	90	C	C5'-C4'-C3'	-5.53	107.15	116.00
2	AB	532	A	C6-N1-C2	-5.53	115.28	118.60
2	AB	2227	A	N7-C8-N9	5.53	116.56	113.80
2	AB	2375	G	C4-N9-C1'	-5.53	119.31	126.50
2	AB	2670	A	C4-C5-C6	-5.53	114.23	117.00
35	BA	293	G	C3'-C2'-C1'	5.53	105.92	101.50
35	BA	1419	G	C5'-C4'-O4'	5.53	115.73	109.10
1	AA	76	G	C6-N1-C2	-5.53	121.78	125.10
1	AA	81	G	C2-N3-C4	-5.53	109.14	111.90
2	AB	233	A	N7-C8-N9	5.53	116.56	113.80
2	AB	646	U	C1'-O4'-C4'	-5.53	105.48	109.90
2	AB	1166	G	P-O3'-C3'	5.53	126.33	119.70
2	AB	1263	U	N3-C4-O4	5.53	123.27	119.40
2	AB	1558	C	O4'-C1'-N1	5.53	112.62	108.20
2	AB	1569	A	O4'-C1'-N9	-5.53	103.78	108.20
2	AB	1822	C	C6-N1-C2	-5.53	118.09	120.30
2	AB	1903	G	C2-N3-C4	5.53	114.66	111.90
2	AB	2066	C	N3-C4-C5	-5.53	119.69	121.90
2	AB	2083	G	N3-C4-N9	5.53	129.32	126.00
2	AB	2091	C	C6-N1-C2	-5.53	118.09	120.30
2	AB	2221	G	N3-C4-N9	-5.53	122.68	126.00
2	AB	2317	A	C6-C5-N7	5.53	136.17	132.30
2	AB	2361	G	P-O3'-C3'	5.53	126.33	119.70
2	AB	2512	C	C4-C5-C6	5.53	120.16	117.40
2	AB	2674	G	C8-N9-C1'	5.53	134.19	127.00
2	AB	2757	A	O5'-C5'-C4'	5.53	122.20	111.70
35	BA	144	G	C8-N9-C4	-5.53	104.19	106.40
35	BA	485	U	C4'-C3'-C2'	-5.53	97.07	102.60
35	BA	930	C	C4-C5-C6	5.53	120.16	117.40
37	BC	59	A	C6-C5-N7	5.53	136.17	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	BD	117	GLU	OE1-CD-OE2	5.53	129.93	123.30
1	AA	15	A	C5-N7-C8	5.53	106.66	103.90
2	AB	88	G	N1-C6-O6	-5.53	116.58	119.90
2	AB	176	A	C8-N9-C4	-5.53	103.59	105.80
2	AB	249	C	C5'-C4'-C3'	-5.53	107.16	116.00
2	AB	525	U	P-O3'-C3'	5.53	126.33	119.70
2	AB	1418	G	C6-N1-C2	-5.53	121.78	125.10
2	AB	1475	G	N1-C2-N3	5.53	127.22	123.90
2	AB	2201	G	C4'-C3'-C2'	-5.53	97.07	102.60
2	AB	2308	G	P-O3'-C3'	5.53	126.33	119.70
2	AB	2470	G	C5-C6-O6	5.53	131.92	128.60
2	AB	2873	A	C6-N1-C2	5.53	121.92	118.60
2	AB	2882	A	N9-C1'-C2'	-5.53	105.92	112.00
35	BA	375	U	C5'-C4'-C3'	-5.53	107.16	116.00
35	BA	495	A	C5'-C4'-O4'	5.53	115.73	109.10
35	BA	741	G	N1-C2-N3	5.53	127.22	123.90
35	BA	985	C	C6-N1-C2	5.53	122.51	120.30
35	BA	1322	C	C6-N1-C2	-5.53	118.09	120.30
35	BA	1339	A	P-O3'-C3'	5.53	126.33	119.70
35	BA	1373	G	N1-C2-N3	-5.53	120.58	123.90
36	BB	15	G	O4'-C4'-C3'	5.53	110.52	106.10
37	BC	20	G	N3-C2-N2	5.53	123.77	119.90
37	BC	41	C	C2-N3-C4	5.53	122.66	119.90
2	AB	1148	U	C2-N3-C4	-5.52	123.69	127.00
2	AB	1838	C	C5-C6-N1	-5.52	118.24	121.00
2	AB	2484	G	N3-C2-N2	-5.52	116.03	119.90
35	BA	272	C	OP2-P-O3'	5.52	117.35	105.20
35	BA	1105	A	C1'-O4'-C4'	-5.52	105.48	109.90
47	BM	76	TYR	CG-CD1-CE1	5.52	125.72	121.30
2	AB	902	C	O4'-C1'-N1	5.52	112.62	108.20
2	AB	942	G	C5'-C4'-C3'	-5.52	107.16	116.00
2	AB	1048	A	C8-N9-C4	-5.52	103.59	105.80
2	AB	1185	G	N3-C4-C5	-5.52	125.84	128.60
2	AB	1219	U	O4'-C4'-C3'	5.52	110.52	106.10
2	AB	1294	U	N3-C2-O2	-5.52	118.33	122.20
2	AB	1313	U	N1-C2-N3	5.52	118.21	114.90
2	AB	1445	G	N7-C8-N9	-5.52	110.34	113.10
2	AB	1451	C	C5-C4-N4	-5.52	116.33	120.20
2	AB	1496	A	N1-C2-N3	-5.52	126.54	129.30
2	AB	2007	U	C5'-C4'-O4'	5.52	115.73	109.10
2	AB	2559	C	C5'-C4'-O4'	5.52	115.73	109.10
2	AB	2672	U	O4'-C1'-N1	5.52	112.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2824	C	C6-N1-C2	5.52	122.51	120.30
7	AG	27	VAL	CG1-CB-CG2	-5.52	102.06	110.90
13	AM	94	PRO	N-CD-CG	5.52	111.48	103.20
35	BA	91	U	C4-C5-C6	5.52	123.01	119.70
35	BA	494	G	C8-N9-C1'	5.52	134.18	127.00
35	BA	495	A	N7-C8-N9	-5.52	111.04	113.80
35	BA	538	G	C5'-C4'-O4'	5.52	115.73	109.10
35	BA	583	A	C1'-O4'-C4'	-5.52	105.48	109.90
35	BA	646	G	C4-C5-C6	5.52	122.11	118.80
35	BA	694	A	C8-N9-C4	5.52	108.01	105.80
35	BA	868	C	C5'-C4'-O4'	5.52	115.73	109.10
35	BA	1174	G	C6-C5-N7	-5.52	127.09	130.40
36	BB	56	G	C5'-C4'-O4'	-5.52	102.47	109.10
45	BK	108	ARG	NE-CZ-NH2	-5.52	117.54	120.30
2	AB	86	G	C5-C6-N1	5.52	114.26	111.50
2	AB	761	A	C5'-C4'-C3'	-5.52	107.17	116.00
2	AB	2384	U	C3'-C2'-C1'	5.52	105.92	101.50
2	AB	2556	C	C5'-C4'-C3'	-5.52	107.17	116.00
35	BA	61	G	C5'-C4'-O4'	5.52	115.72	109.10
35	BA	860	A	C5-N7-C8	-5.52	101.14	103.90
37	BC	52	C	P-O5'-C5'	-5.52	112.07	120.90
2	AB	74	A	N1-C6-N6	-5.52	115.29	118.60
2	AB	104	A	C4-C5-C6	-5.52	114.24	117.00
2	AB	1908	C	C4'-C3'-C2'	-5.52	97.08	102.60
2	AB	1987	A	C5-C6-N1	5.52	120.46	117.70
2	AB	2435	A	O5'-C5'-C4'	-5.52	101.21	111.70
2	AB	2711	A	P-O3'-C3'	5.52	126.32	119.70
2	AB	2712	C	C5-C6-N1	-5.52	118.24	121.00
2	AB	2760	C	N3-C4-C5	-5.52	119.69	121.90
35	BA	41	G	N1-C2-N3	-5.52	120.59	123.90
35	BA	271	C	N3-C4-C5	-5.52	119.69	121.90
35	BA	404	G	C6-N1-C2	-5.52	121.79	125.10
35	BA	431	A	O4'-C1'-N9	5.52	112.62	108.20
35	BA	759	A	C5-N7-C8	-5.52	101.14	103.90
35	BA	812	G	C3'-C2'-C1'	5.52	105.92	101.50
35	BA	909	A	N9-C4-C5	5.52	108.01	105.80
43	BI	139	ASP	CB-CG-OD2	-5.52	113.33	118.30
1	AA	108	A	N3-C4-N9	-5.52	122.99	127.40
2	AB	48	G	C4-N9-C1'	-5.52	119.33	126.50
2	AB	195	A	C4-C5-N7	5.52	113.46	110.70
2	AB	287	G	C4-C5-N7	-5.52	108.59	110.80
2	AB	294	A	N1-C6-N6	-5.52	115.29	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	374	A	N1-C2-N3	5.52	132.06	129.30
2	AB	885	C	C6-N1-C2	-5.52	118.09	120.30
2	AB	1018	U	P-O3'-C3'	5.52	126.32	119.70
2	AB	1058	U	C3'-C2'-C1'	5.52	105.91	101.50
2	AB	1058	U	C5'-C4'-O4'	5.52	115.72	109.10
2	AB	1779	U	P-O5'-C5'	5.52	129.73	120.90
2	AB	2190	G	C5-C6-O6	-5.52	125.29	128.60
2	AB	2242	G	N3-C4-N9	5.52	129.31	126.00
2	AB	2314	A	C8-N9-C4	5.52	108.01	105.80
2	AB	2693	G	N9-C1'-C2'	-5.52	105.93	112.00
2	AB	2709	G	N7-C8-N9	5.52	115.86	113.10
2	AB	2751	G	N9-C1'-C2'	5.52	121.17	114.00
2	AB	2757	A	N9-C4-C5	-5.52	103.59	105.80
35	BA	411	A	N9-C4-C5	5.52	108.01	105.80
35	BA	974	A	C4'-C3'-C2'	-5.52	97.08	102.60
35	BA	1168	U	C4-C5-C6	5.52	123.01	119.70
36	BB	45	G	N1-C6-O6	-5.52	116.59	119.90
2	AB	14	A	C5'-C4'-C3'	-5.52	107.17	116.00
2	AB	1543	G	N1-C6-O6	-5.52	116.59	119.90
2	AB	1719	G	N7-C8-N9	5.52	115.86	113.10
35	BA	354	G	C5-C6-O6	5.52	131.91	128.60
2	AB	17	G	C3'-C2'-C1'	5.51	105.91	101.50
2	AB	879	G	N1-C6-O6	-5.51	116.59	119.90
2	AB	987	C	N1-C2-N3	-5.51	115.34	119.20
2	AB	1036	G	C8-N9-C4	-5.51	104.19	106.40
2	AB	1229	C	N1-C2-O2	5.51	122.21	118.90
2	AB	1264	A	C4-C5-C6	-5.51	114.24	117.00
2	AB	1388	G	C3'-C2'-C1'	5.51	105.91	101.50
2	AB	1734	G	N1-C2-N3	-5.51	120.59	123.90
2	AB	2217	G	N3-C4-C5	-5.51	125.84	128.60
2	AB	2364	C	N3-C2-O2	-5.51	118.04	121.90
2	AB	2794	C	O4'-C1'-N1	5.51	112.61	108.20
8	AH	170	THR	C-N-CA	5.51	135.49	121.70
35	BA	554	A	C4'-C3'-C2'	-5.51	97.09	102.60
35	BA	794	A	P-O3'-C3'	5.51	126.32	119.70
35	BA	858	G	C6-C5-N7	5.51	133.71	130.40
2	AB	103	A	C5-N7-C8	-5.51	101.14	103.90
2	AB	950	G	N1-C2-N3	-5.51	120.59	123.90
2	AB	2027	G	O4'-C1'-N9	5.51	112.61	108.20
2	AB	2304	G	N3-C4-N9	5.51	129.31	126.00
2	AB	2825	G	C4'-C3'-C2'	-5.51	97.09	102.60
35	BA	1017	U	C5-C4-O4	5.51	129.21	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	34	U	O4'-C1'-N1	5.51	112.61	108.20
2	AB	951	C	C4-C5-C6	-5.51	114.64	117.40
2	AB	1153	C	C6-N1-C2	-5.51	118.09	120.30
2	AB	1156	A	C4-C5-C6	-5.51	114.24	117.00
2	AB	1196	C	C4'-C3'-O3'	5.51	124.02	113.00
2	AB	2341	G	C5-C6-N1	-5.51	108.75	111.50
2	AB	2388	A	C1'-O4'-C4'	-5.51	105.49	109.90
2	AB	2673	G	C6-N1-C2	-5.51	121.79	125.10
35	BA	106	C	N3-C4-C5	-5.51	119.69	121.90
35	BA	324	G	N3-C4-N9	5.51	129.31	126.00
35	BA	446	G	N3-C4-N9	5.51	129.31	126.00
35	BA	590	U	N1-C1'-C2'	-5.51	105.94	112.00
2	AB	153	U	N1-C2-N3	-5.51	111.59	114.90
2	AB	802	A	C5-C6-N1	-5.51	114.94	117.70
2	AB	819	A	C6-N1-C2	-5.51	115.30	118.60
2	AB	1013	C	N1-C2-N3	-5.51	115.34	119.20
2	AB	1215	G	C8-N9-C4	-5.51	104.20	106.40
2	AB	1308	A	C4-C5-N7	-5.51	107.95	110.70
2	AB	1366	A	N1-C6-N6	5.51	121.91	118.60
2	AB	1479	G	O4'-C1'-N9	5.51	112.61	108.20
2	AB	1883	U	O4'-C1'-C2'	5.51	112.56	107.60
2	AB	2482	A	C2-N3-C4	5.51	113.36	110.60
2	AB	2783	U	N1-C2-O2	-5.51	118.94	122.80
3	AC	60	ARG	NE-CZ-NH2	5.51	123.06	120.30
35	BA	5	U	N3-C4-O4	5.51	123.26	119.40
35	BA	420	U	C5'-C4'-O4'	5.51	115.71	109.10
35	BA	572	A	N1-C6-N6	-5.51	115.29	118.60
2	AB	858	G	N9-C4-C5	5.51	107.60	105.40
2	AB	1833	C	N3-C4-C5	-5.51	119.70	121.90
2	AB	2014	A	C5-N7-C8	-5.51	101.15	103.90
2	AB	2084	C	C4-C5-C6	-5.51	114.65	117.40
2	AB	2198	A	C3'-C2'-C1'	5.51	105.91	101.50
35	BA	177	G	O4'-C1'-C2'	-5.51	100.29	105.80
35	BA	424	G	C5-C6-N1	5.51	114.25	111.50
35	BA	809	G	C5'-C4'-C3'	-5.51	107.19	116.00
42	BH	112	ARG	NH1-CZ-NH2	5.51	125.46	119.40
2	AB	97	C	C5-C6-N1	5.51	123.75	121.00
2	AB	155	A	N3-C4-N9	-5.51	122.99	127.40
2	AB	216	A	N9-C4-C5	5.51	108.00	105.80
2	AB	845	A	O3'-P-O5'	-5.51	93.54	104.00
2	AB	1106	G	C2-N3-C4	5.51	114.65	111.90
2	AB	1199	U	O5'-P-OP2	-5.51	100.74	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1528	A	O4'-C1'-N9	5.51	112.61	108.20
2	AB	1625	C	N3-C4-N4	-5.51	114.15	118.00
2	AB	1649	G	C8-N9-C1'	5.51	134.16	127.00
2	AB	1904	G	C4-N9-C1'	-5.51	119.34	126.50
2	AB	2514	U	N1-C1'-C2'	-5.51	105.94	112.00
2	AB	2561	U	N1-C1'-C2'	-5.51	105.94	112.00
2	AB	2615	U	C2-N3-C4	-5.51	123.70	127.00
2	AB	2631	G	C4-C5-C6	5.51	122.10	118.80
35	BA	105	G	N3-C4-C5	-5.51	125.85	128.60
35	BA	158	G	C5'-C4'-O4'	5.51	115.71	109.10
35	BA	163	C	C4-C5-C6	5.51	120.15	117.40
35	BA	464	U	C4-C5-C6	-5.51	116.40	119.70
35	BA	1327	C	C4'-C3'-C2'	-5.51	97.09	102.60
41	BG	81	GLN	CB-CG-CD	5.51	125.92	111.60
2	AB	408	G	C4-C5-C6	-5.50	115.50	118.80
2	AB	533	G	P-O3'-C3'	5.50	126.31	119.70
2	AB	707	G	N1-C2-N3	5.50	127.20	123.90
2	AB	839	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	1584	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	2282	G	N1-C6-O6	5.50	123.20	119.90
2	AB	2367	G	N3-C4-N9	5.50	129.30	126.00
2	AB	2817	U	C2-N3-C4	5.50	130.30	127.00
35	BA	247	G	C6-N1-C2	-5.50	121.80	125.10
35	BA	539	A	P-O3'-C3'	5.50	126.31	119.70
35	BA	545	C	P-O3'-C3'	5.50	126.31	119.70
35	BA	1441	A	N3-C4-N9	-5.50	123.00	127.40
35	BA	1468	A	C2-N3-C4	5.50	113.35	110.60
2	AB	60	G	C5-C6-O6	5.50	131.90	128.60
2	AB	84	A	C4-C5-C6	-5.50	114.25	117.00
2	AB	146	A	N3-C4-C5	-5.50	122.95	126.80
2	AB	186	G	C6-C5-N7	-5.50	127.10	130.40
2	AB	411	G	N3-C4-N9	5.50	129.30	126.00
2	AB	433	C	P-O3'-C3'	5.50	126.31	119.70
2	AB	492	A	N7-C8-N9	-5.50	111.05	113.80
2	AB	506	G	C5-C6-N1	5.50	114.25	111.50
2	AB	732	C	N1-C2-N3	5.50	123.05	119.20
2	AB	782	A	N9-C1'-C2'	-5.50	105.95	112.00
2	AB	941	A	C2-N3-C4	5.50	113.35	110.60
2	AB	1309	G	N1-C6-O6	5.50	123.20	119.90
2	AB	1559	U	C6-N1-C1'	-5.50	113.50	121.20
2	AB	2290	G	N3-C4-C5	-5.50	125.85	128.60
2	AB	2317	A	N1-C2-N3	-5.50	126.55	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2381	A	C4-C5-C6	-5.50	114.25	117.00
35	BA	246	A	N3-C4-N9	5.50	131.80	127.40
35	BA	573	A	N7-C8-N9	-5.50	111.05	113.80
35	BA	696	A	O4'-C1'-C2'	5.50	112.55	107.60
35	BA	826	C	N1-C2-N3	-5.50	115.35	119.20
35	BA	1079	G	C5-N7-C8	5.50	107.05	104.30
35	BA	1151	A	C4'-C3'-C2'	-5.50	97.10	102.60
41	BG	30	PHE	CB-CG-CD2	-5.50	116.95	120.80
2	AB	1	G	N1-C2-N2	5.50	121.15	116.20
2	AB	228	C	C6-N1-C2	-5.50	118.10	120.30
2	AB	229	C	O4'-C4'-C3'	-5.50	98.50	104.00
2	AB	492	A	C4-C5-N7	-5.50	107.95	110.70
2	AB	628	G	N7-C8-N9	5.50	115.85	113.10
2	AB	883	G	C5-C6-O6	5.50	131.90	128.60
2	AB	895	U	O3'-P-O5'	-5.50	93.55	104.00
2	AB	998	C	N3-C4-C5	-5.50	119.70	121.90
2	AB	1175	A	P-O3'-C3'	5.50	126.30	119.70
2	AB	1389	G	C4-N9-C1'	-5.50	119.35	126.50
2	AB	2071	A	C3'-C2'-C1'	-5.50	97.10	101.50
2	AB	2212	A	N1-C2-N3	5.50	132.05	129.30
2	AB	2348	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	2427	C	C5-C4-N4	-5.50	116.35	120.20
2	AB	2452	C	C5-C4-N4	5.50	124.05	120.20
2	AB	2488	G	N3-C4-C5	-5.50	125.85	128.60
2	AB	2516	A	C4'-C3'-C2'	-5.50	97.10	102.60
2	AB	2619	C	N1-C2-O2	5.50	122.20	118.90
2	AB	2854	G	N9-C1'-C2'	-5.50	105.95	112.00
24	AX	30	ILE	CA-CB-CG1	5.50	121.45	111.00
35	BA	941	G	O4'-C1'-N9	5.50	112.60	108.20
35	BA	1028	C	N1-C2-O2	5.50	122.20	118.90
35	BA	1236	A	C5'-C4'-C3'	-5.50	107.20	116.00
35	BA	1314	C	N1-C2-O2	5.50	122.20	118.90
35	BA	1374	A	N1-C6-N6	-5.50	115.30	118.60
35	BA	1495	U	O4'-C1'-N1	5.50	112.60	108.20
36	BB	33	A	C3'-C2'-C1'	5.50	105.90	101.50
2	AB	582	A	C3'-C2'-C1'	5.50	105.90	101.50
4	AD	257	ARG	CD-NE-CZ	5.50	131.30	123.60
35	BA	261	U	C5'-C4'-O4'	5.50	115.70	109.10
35	BA	689	C	C2-N3-C4	-5.50	117.15	119.90
35	BA	718	A	C2-N3-C4	-5.50	107.85	110.60
35	BA	1379	G	C5-C6-N1	5.50	114.25	111.50
46	BL	26	VAL	CB-CA-C	5.50	121.85	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	56	A	C4'-C3'-C2'	-5.50	97.10	102.60
2	AB	333	G	N3-C4-N9	5.50	129.30	126.00
2	AB	388	G	C5'-C4'-O4'	5.50	115.70	109.10
2	AB	533	G	C6-C5-N7	-5.50	127.10	130.40
2	AB	1851	U	N3-C4-O4	5.50	123.25	119.40
2	AB	1874	C	C3'-C2'-C1'	5.50	105.90	101.50
2	AB	2262	U	N1-C1'-C2'	-5.50	105.95	112.00
2	AB	2354	C	C5-C4-N4	-5.50	116.35	120.20
2	AB	2400	G	N7-C8-N9	5.50	115.85	113.10
7	AG	112	ASP	CB-CG-OD2	-5.50	113.35	118.30
35	BA	87	C	C6-N1-C2	-5.50	118.10	120.30
35	BA	441	A	N7-C8-N9	5.50	116.55	113.80
35	BA	760	G	C5-N7-C8	5.50	107.05	104.30
35	BA	958	A	C6-N1-C2	5.50	121.90	118.60
35	BA	1003	G	N7-C8-N9	-5.50	110.35	113.10
35	BA	1108	G	C6-C5-N7	5.50	133.70	130.40
36	BB	21	U	C2-N3-C4	-5.50	123.70	127.00
1	AA	66	A	C8-N9-C4	-5.50	103.60	105.80
2	AB	632	A	N3-C4-N9	5.50	131.80	127.40
2	AB	952	G	C5'-C4'-C3'	-5.50	107.21	116.00
2	AB	1407	G	N1-C6-O6	-5.50	116.60	119.90
2	AB	1995	U	N3-C2-O2	-5.50	118.35	122.20
2	AB	2015	A	C8-N9-C4	-5.50	103.60	105.80
2	AB	2148	G	C5-C6-O6	-5.50	125.30	128.60
2	AB	2702	G	C5'-C4'-C3'	-5.50	107.21	116.00
2	AB	2893	A	C5-N7-C8	-5.50	101.15	103.90
35	BA	135	C	C2-N3-C4	5.50	122.65	119.90
35	BA	201	G	N3-C4-C5	5.50	131.35	128.60
35	BA	389	A	O4'-C1'-N9	5.50	112.60	108.20
35	BA	948	C	O4'-C1'-C2'	5.50	112.55	107.60
2	AB	580	U	N1-C2-N3	5.50	118.20	114.90
2	AB	631	A	O4'-C1'-N9	5.50	112.60	108.20
2	AB	1022	G	N1-C6-O6	-5.50	116.60	119.90
12	AL	17	VAL	CA-CB-CG1	5.50	119.14	110.90
35	BA	15	G	C6-C5-N7	-5.50	127.10	130.40
35	BA	328	C	C1'-O4'-C4'	5.50	114.30	109.90
35	BA	1342	C	C5'-C4'-O4'	5.50	115.69	109.10
35	BA	1515	G	C4-C5-N7	-5.50	108.60	110.80
37	BC	9	G	N7-C8-N9	5.50	115.85	113.10
41	BG	137	ARG	NE-CZ-NH1	5.50	123.05	120.30
42	BH	94	HIS	CB-CA-C	5.50	121.39	110.40
1	AA	32	U	C2-N3-C4	-5.49	123.70	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	116	G	C3'-C2'-C1'	5.49	105.89	101.50
2	AB	333	G	C5-C6-N1	5.49	114.25	111.50
2	AB	590	A	N9-C1'-C2'	-5.49	105.96	112.00
2	AB	773	U	C2-N3-C4	-5.49	123.70	127.00
2	AB	809	G	C6-N1-C2	-5.49	121.80	125.10
2	AB	1144	A	C3'-C2'-C1'	5.49	105.89	101.50
2	AB	1483	G	N3-C2-N2	-5.49	116.05	119.90
2	AB	1987	A	C5-N7-C8	-5.49	101.15	103.90
2	AB	2372	U	N1-C1'-C2'	-5.49	105.96	112.00
2	AB	2409	G	N3-C2-N2	-5.49	116.05	119.90
21	AU	18	ARG	CD-NE-CZ	5.49	131.29	123.60
35	BA	242	G	N3-C4-C5	-5.49	125.85	128.60
35	BA	1195	C	N1-C2-O2	-5.49	115.60	118.90
2	AB	176	A	C1'-O4'-C4'	-5.49	105.51	109.90
2	AB	375	G	O4'-C1'-N9	5.49	112.59	108.20
2	AB	1600	C	O4'-C1'-N1	5.49	112.59	108.20
2	AB	2323	G	C6-C5-N7	5.49	133.69	130.40
2	AB	2497	A	O4'-C4'-C3'	5.49	110.49	106.10
21	AU	34	ASP	CB-CG-OD2	-5.49	113.36	118.30
27	A0	42	LEU	CB-CG-CD2	5.49	120.34	111.00
35	BA	3	A	O4'-C1'-N9	5.49	112.59	108.20
35	BA	879	C	N3-C2-O2	-5.49	118.06	121.90
35	BA	1180	A	C5'-C4'-O4'	5.49	115.69	109.10
35	BA	1499	A	C5-N7-C8	-5.49	101.15	103.90
2	AB	134	G	P-O3'-C3'	5.49	126.29	119.70
2	AB	423	A	C5'-C4'-O4'	5.49	115.69	109.10
2	AB	711	G	C1'-O4'-C4'	-5.49	105.51	109.90
2	AB	1167	C	N1-C2-O2	5.49	122.19	118.90
2	AB	2099	U	C4'-C3'-C2'	-5.49	97.11	102.60
35	BA	64	G	P-O3'-C3'	5.49	126.29	119.70
35	BA	111	G	C2-N3-C4	5.49	114.64	111.90
35	BA	247	G	C5-N7-C8	-5.49	101.55	104.30
35	BA	1098	C	N1-C2-O2	5.49	122.19	118.90
2	AB	321	U	O4'-C4'-C3'	5.49	110.49	106.10
2	AB	531	C	O4'-C4'-C3'	5.49	110.49	106.10
2	AB	849	A	C3'-C2'-C1'	5.49	105.89	101.50
2	AB	934	U	N1-C1'-C2'	-5.49	105.96	112.00
2	AB	1111	A	N9-C1'-C2'	-5.49	105.96	112.00
2	AB	1192	G	C2-N3-C4	5.49	114.64	111.90
2	AB	1381	G	N3-C4-C5	-5.49	125.86	128.60
2	AB	1475	G	C5-C6-O6	-5.49	125.31	128.60
2	AB	1501	G	C6-C5-N7	-5.49	127.11	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1627	G	C8-N9-C4	5.49	108.59	106.40
2	AB	2381	A	C1'-O4'-C4'	5.49	114.29	109.90
2	AB	2760	C	O4'-C1'-N1	5.49	112.59	108.20
35	BA	230	G	C4'-C3'-C2'	-5.49	97.11	102.60
35	BA	246	A	C6-C5-N7	-5.49	128.46	132.30
35	BA	716	A	C1'-O4'-C4'	-5.49	105.51	109.90
35	BA	1104	G	C5'-C4'-O4'	5.49	115.69	109.10
35	BA	1113	C	N3-C4-N4	-5.49	114.16	118.00
35	BA	1180	A	C5-C6-N6	-5.49	119.31	123.70
35	BA	1269	A	C5-N7-C8	5.49	106.64	103.90
37	BC	39	A	C4-C5-C6	5.49	119.74	117.00
2	AB	246	C	C5-C6-N1	5.49	123.74	121.00
2	AB	284	U	C5'-C4'-O4'	5.49	115.68	109.10
2	AB	1850	G	N9-C4-C5	5.49	107.59	105.40
2	AB	2048	G	C3'-C2'-C1'	-5.49	97.11	101.50
2	AB	2727	A	N3-C4-C5	-5.49	122.96	126.80
17	AQ	1	MET	CG-SD-CE	5.49	108.98	100.20
19	AS	101	ASP	CB-CA-C	5.49	121.37	110.40
35	BA	723	U	C5'-C4'-C3'	-5.49	107.22	116.00
35	BA	1174	G	C2-N3-C4	-5.49	109.16	111.90
35	BA	1320	C	C4'-C3'-C2'	-5.49	97.11	102.60
2	AB	229	C	N3-C4-N4	-5.49	114.16	118.00
2	AB	879	G	C2-N3-C4	-5.49	109.16	111.90
2	AB	1013	C	C2-N3-C4	5.49	122.64	119.90
2	AB	1291	C	N1-C2-O2	5.49	122.19	118.90
2	AB	1311	G	C5-C6-O6	-5.49	125.31	128.60
2	AB	1333	G	N1-C6-O6	5.49	123.19	119.90
2	AB	1471	G	O4'-C4'-C3'	-5.49	98.52	104.00
2	AB	1810	A	C6-N1-C2	5.49	121.89	118.60
2	AB	1935	G	C2-N3-C4	5.49	114.64	111.90
2	AB	2417	C	C3'-C2'-C1'	-5.49	97.11	101.50
2	AB	2715	C	N1-C2-O2	5.49	122.19	118.90
2	AB	2766	A	C5'-C4'-O4'	5.49	115.68	109.10
35	BA	192	A	C6-C5-N7	5.49	136.14	132.30
35	BA	300	A	C4-C5-C6	5.49	119.74	117.00
35	BA	320	A	C6-C5-N7	-5.49	128.46	132.30
35	BA	1021	A	C5-N7-C8	5.49	106.64	103.90
35	BA	1121	U	C5-C4-O4	-5.49	122.61	125.90
35	BA	1183	U	O4'-C1'-N1	5.49	112.59	108.20
35	BA	1381	U	C5-C6-N1	-5.49	119.96	122.70
37	BC	62	C	C5-C4-N4	-5.49	116.36	120.20
40	BF	64	TYR	CA-CB-CG	5.49	123.82	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	81	G	N1-C2-N3	5.48	127.19	123.90
2	AB	849	A	C5'-C4'-O4'	5.48	115.68	109.10
2	AB	1040	A	C8-N9-C4	-5.48	103.61	105.80
2	AB	2145	C	C4'-C3'-C2'	-5.48	97.12	102.60
2	AB	2692	G	C4-C5-C6	5.48	122.09	118.80
34	A7	20	ASP	CB-CG-OD1	-5.48	113.36	118.30
35	BA	531	U	C4-C5-C6	5.48	122.99	119.70
35	BA	790	A	C2-N3-C4	5.48	113.34	110.60
1	AA	58	A	N1-C2-N3	-5.48	126.56	129.30
2	AB	25	U	N3-C4-C5	-5.48	111.31	114.60
2	AB	44	A	C6-N1-C2	5.48	121.89	118.60
2	AB	1131	G	C6-C5-N7	5.48	133.69	130.40
2	AB	1364	G	C6-N1-C2	5.48	128.39	125.10
2	AB	1928	A	N3-C4-C5	-5.48	122.96	126.80
2	AB	2110	G	P-O3'-C3'	5.48	126.28	119.70
2	AB	2562	U	C2-N3-C4	-5.48	123.71	127.00
2	AB	2667	C	C4-C5-C6	5.48	120.14	117.40
2	AB	2779	U	N3-C4-C5	-5.48	111.31	114.60
35	BA	408	A	N3-C4-C5	-5.48	122.96	126.80
35	BA	475	C	C6-N1-C2	5.48	122.49	120.30
35	BA	572	A	P-O3'-C3'	5.48	126.28	119.70
35	BA	946	A	C5'-C4'-O4'	5.48	115.68	109.10
35	BA	1386	G	N1-C2-N2	5.48	121.14	116.20
35	BA	1441	A	C3'-C2'-C1'	5.48	105.89	101.50
35	BA	1507	A	C5-N7-C8	5.48	106.64	103.90
37	BC	45	A	C2-N3-C4	5.48	113.34	110.60
1	AA	32	U	N3-C2-O2	-5.48	118.36	122.20
2	AB	330	A	C4-C5-N7	5.48	113.44	110.70
2	AB	414	C	C1'-O4'-C4'	-5.48	105.52	109.90
2	AB	1677	A	P-O3'-C3'	5.48	126.28	119.70
2	AB	1774	C	O4'-C1'-N1	5.48	112.58	108.20
2	AB	1791	A	N9-C4-C5	-5.48	103.61	105.80
2	AB	1871	A	C5-C6-N1	5.48	120.44	117.70
2	AB	2202	U	C1'-O4'-C4'	5.48	114.28	109.90
2	AB	2240	U	C5-C4-O4	-5.48	122.61	125.90
2	AB	2300	C	C6-N1-C2	5.48	122.49	120.30
20	AT	59	ILE	N-CA-C	-5.48	96.20	111.00
35	BA	143	A	N9-C1'-C2'	-5.48	105.97	112.00
35	BA	600	A	C4'-C3'-C2'	-5.48	97.12	102.60
35	BA	648	A	N1-C6-N6	5.48	121.89	118.60
35	BA	1344	C	N1-C2-O2	5.48	122.19	118.90
35	BA	1365	G	C4-C5-N7	5.48	112.99	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1368	A	N7-C8-N9	-5.48	111.06	113.80
35	BA	1393	U	C5'-C4'-O4'	5.48	115.68	109.10
38	BD	78	ALA	N-CA-CB	-5.48	102.43	110.10
2	AB	136	G	N3-C4-C5	-5.48	125.86	128.60
2	AB	615	U	C4-C5-C6	5.48	122.99	119.70
2	AB	679	C	C5'-C4'-O4'	5.48	115.67	109.10
2	AB	1159	U	C6-N1-C2	5.48	124.29	121.00
2	AB	2508	G	C4-C5-C6	5.48	122.09	118.80
3	AC	211	LYS	N-CA-CB	-5.48	100.74	110.60
35	BA	1030	U	C5-C6-N1	5.48	125.44	122.70
35	BA	1386	G	O4'-C1'-N9	5.48	112.58	108.20
35	BA	1432	G	C4-C5-C6	5.48	122.09	118.80
1	AA	106	G	C5'-C4'-O4'	5.48	115.67	109.10
2	AB	246	C	C5'-C4'-O4'	5.48	115.67	109.10
2	AB	712	G	P-O3'-C3'	5.48	126.27	119.70
2	AB	1054	A	C3'-C2'-C1'	-5.48	97.12	101.50
2	AB	1403	A	O4'-C1'-N9	5.48	112.58	108.20
2	AB	1409	U	C4'-C3'-C2'	-5.48	97.12	102.60
2	AB	1451	C	C4-C5-C6	-5.48	114.66	117.40
2	AB	1541	C	C5-C6-N1	5.48	123.74	121.00
2	AB	1608	A	O4'-C1'-N9	5.48	112.58	108.20
2	AB	2177	C	O4'-C4'-C3'	5.48	110.48	106.10
2	AB	2456	C	N3-C2-O2	5.48	125.73	121.90
2	AB	2509	G	N3-C2-N2	-5.48	116.07	119.90
2	AB	2532	G	N9-C1'-C2'	-5.48	105.98	112.00
2	AB	2732	G	C5-C6-N1	-5.48	108.76	111.50
2	AB	2794	C	C3'-C2'-C1'	-5.48	97.12	101.50
7	AG	177	ARG	NE-CZ-NH1	5.48	123.04	120.30
15	AO	59	ARG	CB-CG-CD	5.48	125.84	111.60
35	BA	11	G	C2-N3-C4	5.48	114.64	111.90
35	BA	251	G	N3-C2-N2	-5.48	116.07	119.90
35	BA	724	G	O4'-C1'-C2'	5.48	112.53	107.60
35	BA	745	G	C1'-O4'-C4'	5.48	114.28	109.90
35	BA	763	G	C5-C6-O6	-5.48	125.31	128.60
35	BA	1196	A	C4'-C3'-C2'	-5.48	97.12	102.60
45	BK	120	ALA	N-CA-CB	-5.48	102.43	110.10
49	BO	22	TYR	CB-CG-CD1	5.48	124.29	121.00
2	AB	1022	G	O4'-C1'-N9	5.48	112.58	108.20
2	AB	2416	C	C5-C6-N1	5.48	123.74	121.00
2	AB	2582	G	C5'-C4'-O4'	5.48	115.67	109.10
35	BA	78	A	C5-C6-N1	-5.48	114.96	117.70
35	BA	167	A	N3-C4-C5	5.48	130.63	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	670	G	N7-C8-N9	5.48	115.84	113.10
35	BA	913	A	C8-N9-C4	-5.48	103.61	105.80
55	BU	62	THR	CA-CB-CG2	5.48	120.07	112.40
2	AB	253	C	O4'-C4'-C3'	-5.47	98.53	104.00
2	AB	783	A	O4'-C1'-C2'	-5.47	100.33	105.80
2	AB	916	G	C8-N9-C4	-5.47	104.21	106.40
2	AB	1260	A	N3-C4-N9	-5.47	123.02	127.40
2	AB	1367	A	O5'-C5'-C4'	-5.47	101.30	111.70
2	AB	1555	G	N9-C4-C5	5.47	107.59	105.40
2	AB	1812	U	C4-C5-C6	5.47	122.98	119.70
2	AB	2425	A	C2-N3-C4	5.47	113.34	110.60
2	AB	2429	G	N3-C4-N9	-5.47	122.72	126.00
2	AB	2777	G	N3-C4-C5	-5.47	125.86	128.60
2	AB	2853	C	C4'-C3'-C2'	-5.47	97.12	102.60
35	BA	922	G	C3'-C2'-C1'	5.47	105.88	101.50
35	BA	1120	C	N1-C2-O2	-5.47	115.61	118.90
35	BA	1387	G	C5'-C4'-C3'	-5.47	107.24	116.00
35	BA	1461	G	N3-C2-N2	5.47	123.73	119.90
39	BE	63	ILE	O-C-N	5.47	131.46	122.70
1	AA	38	C	C5-C4-N4	-5.47	116.37	120.20
2	AB	37	C	C5'-C4'-C3'	-5.47	107.24	116.00
2	AB	251	A	C5'-C4'-O4'	5.47	115.67	109.10
2	AB	822	G	N1-C6-O6	-5.47	116.62	119.90
2	AB	1261	C	C4'-C3'-C2'	-5.47	97.13	102.60
2	AB	1550	C	C6-N1-C1'	5.47	127.37	120.80
2	AB	1656	C	C5'-C4'-C3'	-5.47	107.24	116.00
2	AB	1989	G	P-O5'-C5'	5.47	129.66	120.90
2	AB	1991	U	C2-N3-C4	-5.47	123.72	127.00
2	AB	2313	C	C2-N3-C4	5.47	122.64	119.90
2	AB	2512	C	C5-C4-N4	5.47	124.03	120.20
2	AB	2673	G	N1-C2-N2	5.47	121.13	116.20
2	AB	2762	C	N1-C2-N3	-5.47	115.37	119.20
7	AG	6	TYR	CG-CD2-CE2	-5.47	116.92	121.30
7	AG	166	ARG	NE-CZ-NH2	-5.47	117.56	120.30
35	BA	74	A	N3-C4-C5	5.47	130.63	126.80
35	BA	83	C	N3-C4-N4	5.47	121.83	118.00
35	BA	435	A	C5'-C4'-O4'	5.47	115.67	109.10
35	BA	756	C	C5-C4-N4	5.47	124.03	120.20
35	BA	792	A	N3-C4-N9	5.47	131.78	127.40
35	BA	854	U	C5-C6-N1	5.47	125.44	122.70
35	BA	1036	A	N3-C4-C5	5.47	130.63	126.80
35	BA	1433	A	N7-C8-N9	5.47	116.54	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	511	U	C4'-C3'-C2'	-5.47	97.13	102.60
2	AB	817	C	O4'-C1'-N1	5.47	112.58	108.20
2	AB	1403	A	N3-C4-C5	5.47	130.63	126.80
2	AB	1460	U	N1-C1'-C2'	5.47	121.11	114.00
2	AB	1867	G	N9-C4-C5	5.47	107.59	105.40
2	AB	1904	G	C2-N3-C4	-5.47	109.16	111.90
2	AB	1970	A	C2-N3-C4	5.47	113.34	110.60
35	BA	112	G	N3-C4-C5	-5.47	125.86	128.60
35	BA	152	A	N3-C4-C5	5.47	130.63	126.80
35	BA	237	G	C5'-C4'-C3'	5.47	124.75	116.00
35	BA	1243	C	P-O3'-C3'	5.47	126.27	119.70
35	BA	1266	G	C6-N1-C2	-5.47	121.82	125.10
35	BA	1273	C	N1-C2-O2	5.47	122.18	118.90
35	BA	1454	G	N9-C1'-C2'	-5.47	105.98	112.00
35	BA	1458	G	C4'-C3'-C2'	-5.47	97.13	102.60
36	BB	35	G	N3-C4-C5	-5.47	125.86	128.60
2	AB	283	G	P-O3'-C3'	5.47	126.26	119.70
2	AB	1057	A	C4'-C3'-C2'	5.47	108.07	102.60
2	AB	1922	G	O4'-C1'-C2'	5.47	112.52	107.60
2	AB	2012	G	N1-C2-N2	-5.47	111.28	116.20
2	AB	2037	A	C5'-C4'-O4'	5.47	115.66	109.10
2	AB	2124	G	N3-C4-N9	5.47	129.28	126.00
2	AB	2387	U	C5-C4-O4	-5.47	122.62	125.90
23	AW	76	THR	CA-CB-CG2	-5.47	104.74	112.40
35	BA	162	A	C6-C5-N7	-5.47	128.47	132.30
35	BA	341	C	C4-C5-C6	5.47	120.13	117.40
35	BA	396	C	C6-N1-C2	-5.47	118.11	120.30
35	BA	881	G	C4-C5-N7	5.47	112.99	110.80
35	BA	901	A	C4-C5-C6	-5.47	114.27	117.00
44	BJ	48	PHE	CB-CG-CD1	5.47	124.63	120.80
2	AB	1069	A	P-O3'-C3'	5.47	126.26	119.70
2	AB	1521	G	C5-N7-C8	5.47	107.03	104.30
2	AB	2170	A	C5-N7-C8	-5.47	101.17	103.90
35	BA	537	G	C4-C5-N7	5.47	112.99	110.80
35	BA	1036	A	C8-N9-C4	5.47	107.99	105.80
2	AB	412	A	C8-N9-C4	-5.47	103.61	105.80
2	AB	709	U	C4'-C3'-C2'	-5.47	97.13	102.60
2	AB	770	G	C6-C5-N7	-5.47	127.12	130.40
2	AB	965	C	C6-N1-C2	-5.47	118.11	120.30
2	AB	1063	G	P-O3'-C3'	5.47	126.26	119.70
2	AB	1291	C	C2-N3-C4	5.47	122.63	119.90
2	AB	1636	U	C5-C6-N1	-5.47	119.97	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1741	C	P-O5'-C5'	5.47	129.65	120.90
2	AB	2239	G	O4'-C1'-N9	5.47	112.57	108.20
2	AB	2730	C	C5'-C4'-O4'	5.47	115.66	109.10
2	AB	2742	G	C6-N1-C2	-5.47	121.82	125.10
35	BA	202	G	C5-N7-C8	5.47	107.03	104.30
35	BA	654	G	C6-C5-N7	-5.47	127.12	130.40
35	BA	1190	G	O4'-C4'-C3'	5.47	110.47	106.10
35	BA	1211	U	C5-C6-N1	-5.47	119.97	122.70
35	BA	1280	A	N7-C8-N9	5.47	116.53	113.80
35	BA	1520	C	O4'-C1'-C2'	-5.47	100.33	105.80
37	BC	23	G	C5'-C4'-C3'	5.47	124.75	116.00
2	AB	411	G	C3'-C2'-C1'	-5.46	97.13	101.50
2	AB	599	A	P-O3'-C3'	5.46	126.26	119.70
2	AB	937	C	N3-C4-N4	5.46	121.83	118.00
2	AB	1019	U	C1'-O4'-C4'	5.46	114.27	109.90
2	AB	1369	G	C4'-C3'-C2'	-5.46	97.14	102.60
2	AB	1441	G	C5'-C4'-O4'	5.46	115.66	109.10
2	AB	1919	A	C4-C5-C6	-5.46	114.27	117.00
2	AB	2226	C	O4'-C1'-N1	5.46	112.57	108.20
2	AB	2639	A	C3'-C2'-C1'	5.46	105.87	101.50
5	AE	90	PHE	CB-CG-CD1	-5.46	116.97	120.80
35	BA	195	A	C1'-O4'-C4'	5.46	114.27	109.90
35	BA	213	G	N1-C2-N2	-5.46	111.28	116.20
35	BA	597	G	C4'-C3'-C2'	-5.46	97.14	102.60
35	BA	868	C	N1-C2-O2	5.46	122.18	118.90
35	BA	874	G	N3-C4-C5	-5.46	125.87	128.60
35	BA	1066	C	C5'-C4'-O4'	5.46	115.66	109.10
35	BA	1218	C	N3-C4-N4	-5.46	114.17	118.00
35	BA	1338	G	C4'-C3'-C2'	-5.46	97.14	102.60
36	BB	49	U	C5'-C4'-O4'	5.46	115.66	109.10
2	AB	139	U	C5'-C4'-C3'	-5.46	107.26	116.00
2	AB	647	G	C2-N3-C4	5.46	114.63	111.90
2	AB	1115	G	C6-N1-C2	-5.46	121.82	125.10
2	AB	1272	A	C6-N1-C2	5.46	121.88	118.60
35	BA	9	G	C1'-O4'-C4'	-5.46	105.53	109.90
35	BA	237	G	C8-N9-C4	-5.46	104.22	106.40
1	AA	17	C	C3'-C2'-C1'	-5.46	97.13	101.50
1	AA	25	U	O4'-C1'-C2'	-5.46	100.34	105.80
2	AB	60	G	O3'-P-O5'	-5.46	93.62	104.00
2	AB	69	C	C5-C4-N4	5.46	124.02	120.20
2	AB	444	C	N1-C1'-C2'	-5.46	105.99	112.00
2	AB	1182	G	N9-C4-C5	5.46	107.58	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1186	G	C8-N9-C4	5.46	108.58	106.40
2	AB	1247	A	OP2-P-O3'	5.46	117.22	105.20
2	AB	1284	A	N1-C2-N3	-5.46	126.57	129.30
2	AB	1286	A	P-O5'-C5'	5.46	129.64	120.90
2	AB	1444	G	C5-C6-O6	5.46	131.88	128.60
2	AB	1550	C	C6-N1-C2	-5.46	118.11	120.30
2	AB	1866	A	C8-N9-C4	-5.46	103.61	105.80
2	AB	1903	G	P-O3'-C3'	5.46	126.25	119.70
2	AB	1952	A	O4'-C1'-N9	5.46	112.57	108.20
2	AB	2180	U	O5'-C5'-C4'	-5.46	101.32	111.70
2	AB	2231	U	C2-N3-C4	-5.46	123.72	127.00
2	AB	2493	U	C2-N3-C4	-5.46	123.72	127.00
2	AB	2877	G	N1-C2-N2	5.46	121.11	116.20
24	AX	92	VAL	CA-CB-CG2	5.46	119.09	110.90
35	BA	362	G	N7-C8-N9	5.46	115.83	113.10
35	BA	737	C	O4'-C1'-N1	5.46	112.57	108.20
35	BA	783	C	N3-C4-C5	-5.46	119.72	121.90
35	BA	1537	U	O4'-C1'-N1	5.46	112.57	108.20
36	BB	43	U	O3'-P-O5'	-5.46	93.62	104.00
37	BC	68	C	N1-C2-O2	5.46	122.18	118.90
2	AB	1395	A	O4'-C1'-C2'	-5.46	100.34	105.80
2	AB	1402	U	O4'-C1'-N1	5.46	112.57	108.20
2	AB	2264	C	C5'-C4'-O4'	5.46	115.65	109.10
35	BA	818	G	P-O3'-C3'	5.46	126.25	119.70
35	BA	1263	C	C4'-C3'-C2'	-5.46	97.14	102.60
2	AB	509	C	C1'-O4'-C4'	-5.46	105.53	109.90
2	AB	737	C	C6-N1-C2	5.46	122.48	120.30
2	AB	1017	G	C6-C5-N7	-5.46	127.12	130.40
2	AB	1028	A	O4'-C1'-N9	5.46	112.57	108.20
2	AB	1439	A	C5-C6-N6	5.46	128.07	123.70
2	AB	1719	G	C6-N1-C2	5.46	128.38	125.10
2	AB	1763	G	C2'-C3'-O3'	5.46	122.44	113.70
2	AB	2403	C	C4-C5-C6	5.46	120.13	117.40
2	AB	2454	G	O4'-C4'-C3'	5.46	110.47	106.10
2	AB	2555	U	N1-C2-O2	5.46	126.62	122.80
2	AB	2659	G	C4-C5-C6	5.46	122.08	118.80
35	BA	255	G	O4'-C1'-N9	5.46	112.57	108.20
35	BA	298	A	C6-C5-N7	5.46	136.12	132.30
35	BA	305	G	O4'-C4'-C3'	5.46	110.47	106.10
35	BA	429	U	N3-C2-O2	-5.46	118.38	122.20
35	BA	982	U	O4'-C1'-N1	5.46	112.57	108.20
35	BA	1082	A	C8-N9-C4	-5.46	103.62	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	59	A	C6-N1-C2	-5.46	115.33	118.60
2	AB	580	U	C4-C5-C6	5.46	122.97	119.70
2	AB	743	A	C2-N3-C4	5.46	113.33	110.60
2	AB	862	G	N7-C8-N9	5.46	115.83	113.10
2	AB	934	U	C3'-C2'-C1'	-5.46	97.13	101.50
2	AB	1196	C	N3-C2-O2	-5.46	118.08	121.90
2	AB	1841	U	C5'-C4'-C3'	5.46	124.73	116.00
2	AB	1906	G	C8-N9-C4	5.46	108.58	106.40
2	AB	2144	G	O3'-P-O5'	-5.46	93.63	104.00
2	AB	2715	C	N3-C4-C5	5.46	124.08	121.90
35	BA	114	U	O4'-C4'-C3'	5.46	110.47	106.10
35	BA	127	G	C4'-C3'-C2'	-5.46	97.14	102.60
35	BA	283	U	N1-C2-O2	-5.46	118.98	122.80
35	BA	447	G	O4'-C4'-C3'	5.46	110.47	106.10
35	BA	462	G	C2-N3-C4	5.46	114.63	111.90
35	BA	509	A	C3'-C2'-C1'	5.46	105.86	101.50
35	BA	744	C	O4'-C1'-N1	5.46	112.56	108.20
35	BA	1231	G	C5-N7-C8	5.46	107.03	104.30
36	BB	15	G	C5-N7-C8	5.46	107.03	104.30
1	AA	73	A	N1-C6-N6	5.46	121.87	118.60
2	AB	369	U	C5-C4-O4	-5.46	122.63	125.90
2	AB	832	U	N1-C2-N3	5.46	118.17	114.90
2	AB	1071	G	C4-C5-C6	5.46	122.07	118.80
2	AB	1425	G	N1-C2-N2	-5.46	111.29	116.20
2	AB	1937	A	C4-C5-N7	-5.46	107.97	110.70
26	AZ	38	TRP	NE1-CE2-CZ2	5.46	136.40	130.40
35	BA	339	C	C6-N1-C2	5.46	122.48	120.30
35	BA	690	G	C8-N9-C4	-5.46	104.22	106.40
35	BA	1062	U	P-O3'-C3'	5.46	126.25	119.70
35	BA	1505	G	N9-C4-C5	5.46	107.58	105.40
2	AB	142	A	C4-C5-C6	-5.45	114.27	117.00
2	AB	254	G	C1'-O4'-C4'	5.45	114.26	109.90
2	AB	732	C	O5'-C5'-C4'	5.45	122.06	111.70
2	AB	1025	G	O4'-C4'-C3'	-5.45	98.55	104.00
2	AB	1138	G	P-O3'-C3'	5.45	126.24	119.70
2	AB	1191	G	C2-N3-C4	5.45	114.63	111.90
2	AB	1554	U	N1-C2-N3	5.45	118.17	114.90
2	AB	1648	U	C3'-C2'-C1'	-5.45	97.14	101.50
2	AB	1743	G	P-O3'-C3'	5.45	126.24	119.70
2	AB	1933	G	C5'-C4'-C3'	5.45	124.73	116.00
2	AB	2687	U	C5-C6-N1	5.45	125.43	122.70
2	AB	2756	U	N1-C2-O2	5.45	126.62	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2827	C	N3-C4-C5	-5.45	119.72	121.90
35	BA	109	A	N1-C6-N6	-5.45	115.33	118.60
35	BA	588	G	P-O3'-C3'	5.45	126.25	119.70
35	BA	856	C	N1-C2-N3	-5.45	115.38	119.20
35	BA	906	A	C6-C5-N7	-5.45	128.48	132.30
35	BA	1038	C	C2-N3-C4	5.45	122.63	119.90
35	BA	1191	A	C8-N9-C4	5.45	107.98	105.80
35	BA	1346	A	N1-C6-N6	-5.45	115.33	118.60
35	BA	1447	A	C8-N9-C4	-5.45	103.62	105.80
36	BB	51	C	N1-C2-O2	5.45	122.17	118.90
37	BC	73	A	C5-C6-N6	-5.45	119.34	123.70
2	AB	100	U	O4'-C1'-N1	5.45	112.56	108.20
2	AB	714	U	N3-C2-O2	-5.45	118.38	122.20
2	AB	1752	C	C2-N3-C4	-5.45	117.17	119.90
2	AB	1892	C	C1'-O4'-C4'	-5.45	105.54	109.90
2	AB	2212	A	C4'-C3'-C2'	-5.45	97.15	102.60
2	AB	2681	C	N1-C2-O2	5.45	122.17	118.90
10	AJ	117	ILE	CA-CB-CG1	5.45	121.36	111.00
35	BA	459	A	P-O3'-C3'	5.45	126.24	119.70
35	BA	588	G	N3-C4-C5	-5.45	125.87	128.60
35	BA	610	U	O5'-P-OP2	-5.45	100.79	105.70
35	BA	864	A	O4'-C1'-N9	5.45	112.56	108.20
35	BA	1089	G	C5-C6-N1	-5.45	108.77	111.50
35	BA	1204	A	N3-C4-N9	5.45	131.76	127.40
35	BA	1218	C	N1-C1'-C2'	-5.45	106.00	112.00
1	AA	39	A	C4-C5-N7	-5.45	107.97	110.70
2	AB	423	A	C4-C5-N7	5.45	113.42	110.70
2	AB	599	A	O4'-C1'-C2'	-5.45	100.35	105.80
2	AB	1153	C	C5'-C4'-C3'	-5.45	107.28	116.00
2	AB	1423	G	C5-N7-C8	-5.45	101.58	104.30
2	AB	1462	C	C4-C5-C6	5.45	120.12	117.40
2	AB	1959	G	N3-C2-N2	-5.45	116.08	119.90
2	AB	2049	G	C4-C5-C6	5.45	122.07	118.80
2	AB	2653	U	N3-C2-O2	-5.45	118.38	122.20
2	AB	2725	A	N1-C6-N6	-5.45	115.33	118.60
2	AB	2734	A	C4-C5-N7	5.45	113.42	110.70
35	BA	424	G	O4'-C1'-N9	5.45	112.56	108.20
35	BA	499	A	N1-C2-N3	-5.45	126.58	129.30
35	BA	602	A	C5'-C4'-O4'	5.45	115.64	109.10
35	BA	761	G	N1-C6-O6	5.45	123.17	119.90
35	BA	946	A	C8-N9-C4	-5.45	103.62	105.80
35	BA	1224	U	C6-N1-C2	5.45	124.27	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1303	C	C3'-C2'-C1'	5.45	105.86	101.50
1	AA	44	G	N3-C4-C5	-5.45	125.88	128.60
2	AB	126	A	N9-C4-C5	5.45	107.98	105.80
2	AB	128	C	N3-C4-C5	-5.45	119.72	121.90
2	AB	133	U	N3-C4-C5	-5.45	111.33	114.60
2	AB	236	C	N3-C2-O2	-5.45	118.09	121.90
2	AB	633	A	N3-C4-N9	5.45	131.76	127.40
2	AB	762	U	C5-C6-N1	-5.45	119.98	122.70
2	AB	846	U	C5-C4-O4	-5.45	122.63	125.90
2	AB	1546	G	C3'-C2'-C1'	5.45	105.86	101.50
2	AB	1614	A	C8-N9-C4	-5.45	103.62	105.80
2	AB	2282	G	C4-C5-C6	5.45	122.07	118.80
2	AB	2773	C	O4'-C4'-C3'	5.45	110.46	106.10
16	AP	71	ARG	NH1-CZ-NH2	5.45	125.39	119.40
35	BA	14	U	C5-C6-N1	5.45	125.42	122.70
35	BA	110	C	N1-C2-O2	-5.45	115.63	118.90
35	BA	1000	A	N3-C4-C5	5.45	130.61	126.80
35	BA	1277	C	C5-C4-N4	5.45	124.01	120.20
35	BA	1368	A	C4-C5-N7	-5.45	107.98	110.70
2	AB	632	A	C2'-C3'-O3'	5.45	122.42	113.70
2	AB	749	A	C4-C5-N7	-5.45	107.98	110.70
2	AB	2440	C	C3'-C2'-C1'	-5.45	97.14	101.50
2	AB	2490	G	O4'-C1'-N9	5.45	112.56	108.20
35	BA	358	U	N1-C2-O2	5.45	126.61	122.80
35	BA	569	C	N3-C4-C5	-5.45	119.72	121.90
35	BA	652	U	N1-C2-N3	-5.45	111.63	114.90
37	BC	20	G	C5-C6-N1	5.45	114.22	111.50
53	BS	1	THR	CA-CB-CG2	5.45	120.03	112.40
2	AB	319	G	C5-C6-O6	-5.45	125.33	128.60
2	AB	596	U	C2-N3-C4	-5.45	123.73	127.00
2	AB	818	G	N1-C2-N2	5.45	121.10	116.20
2	AB	1024	G	C4-C5-C6	-5.45	115.53	118.80
2	AB	1216	G	P-O5'-C5'	5.45	129.61	120.90
2	AB	1732	C	C2-N3-C4	-5.45	117.18	119.90
2	AB	1856	U	N3-C4-C5	-5.45	111.33	114.60
2	AB	2193	G	C5-N7-C8	-5.45	101.58	104.30
2	AB	2409	G	N1-C2-N3	-5.45	120.63	123.90
2	AB	2417	C	C4'-C3'-C2'	5.45	108.05	102.60
35	BA	143	A	P-O3'-C3'	5.45	126.23	119.70
35	BA	337	G	P-O3'-C3'	5.45	126.24	119.70
35	BA	374	A	C5-C6-N1	-5.45	114.98	117.70
35	BA	484	G	C2-N3-C4	5.45	114.62	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	493	A	N1-C2-N3	-5.45	126.58	129.30
35	BA	513	C	C5-C6-N1	5.45	123.72	121.00
35	BA	818	G	N9-C1'-C2'	-5.45	106.01	112.00
35	BA	1383	C	C5'-C4'-C3'	-5.45	107.29	116.00
35	BA	1413	A	C8-N9-C4	-5.45	103.62	105.80
35	BA	1534	A	N1-C2-N3	-5.45	126.58	129.30
48	BN	30	ARG	CD-NE-CZ	5.45	131.22	123.60
2	AB	1279	G	C6-C5-N7	-5.44	127.13	130.40
2	AB	1586	A	C4'-C3'-C2'	-5.44	97.16	102.60
2	AB	1948	G	O4'-C4'-C3'	-5.44	98.56	104.00
2	AB	2642	G	C2-N3-C4	5.44	114.62	111.90
35	BA	76	G	N3-C4-C5	-5.44	125.88	128.60
35	BA	699	C	C2-N3-C4	-5.44	117.18	119.90
35	BA	708	C	C6-N1-C2	5.44	122.48	120.30
35	BA	1070	U	O4'-C1'-N1	5.44	112.56	108.20
1	AA	109	A	N3-C4-N9	5.44	131.75	127.40
2	AB	39	G	N3-C4-N9	-5.44	122.73	126.00
2	AB	899	A	C1'-O4'-C4'	5.44	114.25	109.90
2	AB	971	G	C5-N7-C8	5.44	107.02	104.30
2	AB	1046	A	N9-C4-C5	-5.44	103.62	105.80
2	AB	1079	C	N1-C2-O2	5.44	122.17	118.90
2	AB	1813	G	C5-C6-N1	-5.44	108.78	111.50
2	AB	2133	G	P-O3'-C3'	5.44	126.23	119.70
2	AB	2393	U	C5-C6-N1	5.44	125.42	122.70
35	BA	25	C	C3'-C2'-C1'	-5.44	97.15	101.50
35	BA	198	G	C6-C5-N7	5.44	133.67	130.40
35	BA	353	A	P-O5'-C5'	5.44	129.61	120.90
35	BA	403	C	N3-C4-N4	5.44	121.81	118.00
35	BA	412	A	O4'-C1'-N9	5.44	112.55	108.20
35	BA	460	A	C4-C5-C6	-5.44	114.28	117.00
35	BA	548	G	C5-C6-N1	5.44	114.22	111.50
35	BA	692	U	C1'-O4'-C4'	-5.44	105.55	109.90
35	BA	752	G	C5'-C4'-C3'	-5.44	107.29	116.00
35	BA	819	A	C3'-C2'-C1'	5.44	105.85	101.50
35	BA	867	G	O4'-C1'-C2'	-5.44	100.36	105.80
35	BA	913	A	C1'-O4'-C4'	5.44	114.25	109.90
35	BA	1258	G	P-O3'-C3'	5.44	126.23	119.70
37	BC	68	C	C1'-O4'-C4'	5.44	114.25	109.90
39	BE	10	ARG	CD-NE-CZ	5.44	131.22	123.60
57	BW	70	TYR	CB-CG-CD1	-5.44	117.73	121.00
2	AB	56	A	C6-N1-C2	-5.44	115.34	118.60
2	AB	85	G	C3'-C2'-C1'	-5.44	97.15	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	700	G	N9-C1'-C2'	-5.44	106.02	112.00
2	AB	761	A	C5-N7-C8	-5.44	101.18	103.90
2	AB	979	A	O4'-C1'-N9	5.44	112.55	108.20
2	AB	2278	A	C5-N7-C8	5.44	106.62	103.90
35	BA	47	C	C4-C5-C6	-5.44	114.68	117.40
35	BA	871	U	O4'-C4'-C3'	5.44	110.45	106.10
35	BA	926	G	N1-C6-O6	-5.44	116.64	119.90
35	BA	1313	U	N1-C1'-C2'	-5.44	106.02	112.00
51	BQ	49	HIS	CA-CB-CG	5.44	122.85	113.60
2	AB	1187	G	C4-C5-N7	5.44	112.98	110.80
2	AB	2122	U	N3-C4-O4	5.44	123.21	119.40
2	AB	2587	A	O4'-C1'-N9	5.44	112.55	108.20
35	BA	750	C	N1-C2-O2	5.44	122.16	118.90
35	BA	972	C	N3-C4-C5	5.44	124.08	121.90
35	BA	974	A	C5-C6-N1	5.44	120.42	117.70
35	BA	1184	G	C2-N3-C4	-5.44	109.18	111.90
37	BC	42	C	C2-N3-C4	5.44	122.62	119.90
1	AA	64	G	C5-C6-O6	5.44	131.86	128.60
2	AB	56	A	C1'-O4'-C4'	-5.44	105.55	109.90
2	AB	80	G	C5-C6-N1	5.44	114.22	111.50
2	AB	86	G	O4'-C1'-N9	5.44	112.55	108.20
2	AB	261	G	N1-C6-O6	-5.44	116.64	119.90
2	AB	330	A	C6-C5-N7	-5.44	128.49	132.30
2	AB	699	A	N3-C4-C5	-5.44	122.99	126.80
2	AB	1037	G	N3-C4-N9	5.44	129.26	126.00
2	AB	1050	A	C4-C5-N7	-5.44	107.98	110.70
2	AB	1483	G	N9-C1'-C2'	-5.44	106.02	112.00
2	AB	1635	A	C5-N7-C8	-5.44	101.18	103.90
2	AB	1814	G	N1-C2-N3	-5.44	120.64	123.90
2	AB	2458	G	O4'-C1'-N9	5.44	112.55	108.20
2	AB	2473	U	C3'-C2'-C1'	-5.44	97.15	101.50
2	AB	2520	C	N1-C2-N3	-5.44	115.39	119.20
2	AB	2814	A	C4-C5-C6	-5.44	114.28	117.00
35	BA	13	U	C1'-O4'-C4'	5.44	114.25	109.90
35	BA	112	G	C5-N7-C8	-5.44	101.58	104.30
35	BA	447	G	C4-C5-N7	-5.44	108.62	110.80
35	BA	498	A	O4'-C4'-C3'	5.44	110.45	106.10
35	BA	689	C	N1-C2-O2	5.44	122.16	118.90
35	BA	814	A	C5-N7-C8	5.44	106.62	103.90
35	BA	1215	G	C4-C5-C6	5.44	122.06	118.80
36	BB	51	C	O4'-C1'-N1	-5.44	103.85	108.20
54	BT	22	TYR	CA-CB-CG	5.44	123.73	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	92	C	N1-C2-O2	5.44	122.16	118.90
1	AA	104	A	C5-N7-C8	-5.44	101.18	103.90
2	AB	1336	A	C2'-C3'-O3'	5.44	122.40	113.70
2	AB	1354	A	N9-C4-C5	-5.44	103.63	105.80
2	AB	1855	U	O4'-C1'-N1	5.44	112.55	108.20
35	BA	876	C	C1'-O4'-C4'	5.44	114.25	109.90
2	AB	184	C	C2-N3-C4	-5.43	117.18	119.90
2	AB	274	C	C3'-C2'-C1'	5.43	105.85	101.50
2	AB	291	G	C6-N1-C2	5.43	128.36	125.10
2	AB	503	A	C3'-C2'-C1'	5.43	105.85	101.50
2	AB	506	G	N7-C8-N9	5.43	115.82	113.10
2	AB	890	C	O4'-C1'-N1	5.43	112.55	108.20
2	AB	1525	A	C4'-C3'-C2'	-5.43	97.17	102.60
2	AB	1629	U	C3'-C2'-C1'	-5.43	97.15	101.50
2	AB	1809	A	C4-C5-N7	5.43	113.42	110.70
2	AB	2117	A	N9-C1'-C2'	-5.43	106.02	112.00
2	AB	2557	G	C5'-C4'-O4'	5.43	115.62	109.10
2	AB	2828	G	C5'-C4'-O4'	5.43	115.62	109.10
35	BA	14	U	C2-N3-C4	5.43	130.26	127.00
35	BA	34	C	P-O3'-C3'	5.43	126.22	119.70
35	BA	394	G	C6-N1-C2	-5.43	121.84	125.10
35	BA	835	U	N3-C4-O4	5.43	123.20	119.40
35	BA	941	G	C3'-C2'-C1'	5.43	105.85	101.50
43	BI	97	ALA	CB-CA-C	-5.43	101.95	110.10
2	AB	302	C	N1-C2-O2	5.43	122.16	118.90
2	AB	570	G	N1-C6-O6	5.43	123.16	119.90
2	AB	708	G	C5'-C4'-O4'	5.43	115.62	109.10
2	AB	768	G	C3'-C2'-C1'	5.43	105.85	101.50
2	AB	1107	G	C5'-C4'-O4'	5.43	115.62	109.10
2	AB	1153	C	C5'-C4'-O4'	5.43	115.62	109.10
2	AB	1422	G	C5-C6-N1	5.43	114.22	111.50
17	AQ	93	ASP	CB-CG-OD2	5.43	123.19	118.30
35	BA	162	A	C2-N3-C4	5.43	113.32	110.60
35	BA	480	U	C5-C6-N1	-5.43	119.98	122.70
35	BA	715	A	O4'-C4'-C3'	-5.43	98.57	104.00
35	BA	910	C	C4-C5-C6	-5.43	114.68	117.40
35	BA	1514	G	C3'-C2'-C1'	-5.43	97.15	101.50
2	AB	250	G	N7-C8-N9	-5.43	110.38	113.10
2	AB	406	G	C5-N7-C8	5.43	107.02	104.30
2	AB	649	G	N9-C1'-C2'	-5.43	106.03	112.00
2	AB	1494	A	N1-C2-N3	-5.43	126.58	129.30
2	AB	1508	A	C5-C6-N1	-5.43	114.98	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1773	A	C5-C6-N6	-5.43	119.36	123.70
2	AB	2037	A	C5-C6-N6	-5.43	119.36	123.70
2	AB	2268	A	C5'-C4'-C3'	-5.43	107.31	116.00
2	AB	2431	U	C5'-C4'-O4'	5.43	115.62	109.10
35	BA	114	U	C4'-C3'-C2'	-5.43	97.17	102.60
35	BA	615	G	C8-N9-C1'	5.43	134.06	127.00
35	BA	624	C	P-O3'-C3'	5.43	126.22	119.70
2	AB	520	G	N1-C2-N2	5.43	121.09	116.20
2	AB	764	A	C3'-C2'-C1'	-5.43	97.16	101.50
2	AB	978	G	P-O3'-C3'	5.43	126.22	119.70
2	AB	993	G	N7-C8-N9	5.43	115.81	113.10
2	AB	1069	A	C5-C6-N6	-5.43	119.36	123.70
2	AB	1246	A	C5-C6-N1	5.43	120.42	117.70
2	AB	1376	C	C4-C5-C6	5.43	120.11	117.40
2	AB	1620	G	C5-C6-O6	-5.43	125.34	128.60
2	AB	1820	U	C5-C4-O4	-5.43	122.64	125.90
2	AB	2006	C	C6-N1-C1'	5.43	127.32	120.80
2	AB	2073	C	N1-C2-N3	-5.43	115.40	119.20
2	AB	2382	G	N3-C4-C5	-5.43	125.89	128.60
2	AB	2421	G	N7-C8-N9	5.43	115.81	113.10
2	AB	2835	A	C6-C5-N7	-5.43	128.50	132.30
3	AC	172	HIS	CA-CB-CG	5.43	122.83	113.60
13	AM	63	VAL	CB-CA-C	5.43	121.72	111.40
35	BA	523	A	C5-C6-N6	5.43	128.04	123.70
35	BA	1097	C	C4'-C3'-C2'	-5.43	97.17	102.60
35	BA	1199	U	O4'-C4'-C3'	5.43	110.44	106.10
35	BA	1204	A	O4'-C1'-N9	5.43	112.54	108.20
37	BC	4	G	N1-C6-O6	5.43	123.16	119.90
2	AB	890	C	C6-N1-C2	-5.43	118.13	120.30
2	AB	1175	A	N1-C2-N3	-5.43	126.59	129.30
2	AB	1327	A	O4'-C4'-C3'	5.43	110.44	106.10
2	AB	1866	A	C4-C5-C6	5.43	119.71	117.00
2	AB	2159	G	N3-C2-N2	-5.43	116.10	119.90
2	AB	2349	G	N3-C4-N9	5.43	129.26	126.00
2	AB	2443	C	C6-N1-C2	-5.43	118.13	120.30
2	AB	2594	C	O4'-C1'-N1	5.43	112.54	108.20
8	AH	152	ARG	CD-NE-CZ	5.43	131.20	123.60
35	BA	372	C	O3'-P-O5'	5.43	114.31	104.00
35	BA	447	G	C5-C6-N1	5.43	114.21	111.50
35	BA	1086	U	C4'-C3'-C2'	-5.43	97.17	102.60
35	BA	1095	U	N1-C2-N3	5.43	118.16	114.90
2	AB	77	G	C2'-C3'-O3'	5.43	122.38	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	453	A	O4'-C1'-N9	5.43	112.54	108.20
2	AB	763	G	C5-C6-N1	5.43	114.21	111.50
2	AB	1204	A	N7-C8-N9	-5.43	111.09	113.80
2	AB	1300	G	C5-C6-N1	-5.43	108.79	111.50
2	AB	1321	A	N1-C2-N3	5.43	132.01	129.30
2	AB	1379	U	C1'-O4'-C4'	5.43	114.24	109.90
2	AB	2802	G	N9-C4-C5	5.43	107.57	105.40
25	AY	30	VAL	O-C-N	5.43	131.38	122.70
35	BA	1035	A	O4'-C1'-N9	5.43	112.54	108.20
35	BA	1316	G	P-O3'-C3'	5.43	126.21	119.70
56	BV	67	HIS	N-CA-CB	-5.43	100.83	110.60
1	AA	31	C	C6-N1-C2	-5.42	118.13	120.30
2	AB	252	G	N9-C4-C5	5.42	107.57	105.40
2	AB	293	U	C4'-C3'-C2'	-5.42	97.17	102.60
2	AB	370	G	C5-C6-O6	-5.42	125.35	128.60
2	AB	917	A	C1'-O4'-C4'	5.42	114.24	109.90
2	AB	936	A	C5-C6-N1	5.42	120.41	117.70
2	AB	981	A	N9-C1'-C2'	-5.42	106.03	112.00
2	AB	1138	G	N3-C2-N2	5.42	123.70	119.90
2	AB	1146	C	N3-C2-O2	-5.42	118.10	121.90
2	AB	1914	C	C3'-C2'-C1'	5.42	105.84	101.50
2	AB	2370	G	N3-C2-N2	-5.42	116.10	119.90
2	AB	2704	C	C1'-O4'-C4'	-5.42	105.56	109.90
2	AB	2727	A	C2-N3-C4	5.42	113.31	110.60
4	AD	2	VAL	CA-CB-CG2	-5.42	102.76	110.90
27	A0	7	ARG	NH1-CZ-NH2	-5.42	113.43	119.40
35	BA	558	G	C5-C6-O6	5.42	131.85	128.60
35	BA	777	A	N7-C8-N9	5.42	116.51	113.80
35	BA	1230	C	N3-C2-O2	-5.42	118.10	121.90
35	BA	1262	C	N3-C2-O2	-5.42	118.10	121.90
37	BC	72	C	C5-C6-N1	-5.42	118.29	121.00
2	AB	497	A	N7-C8-N9	5.42	116.51	113.80
2	AB	1023	U	C1'-O4'-C4'	-5.42	105.56	109.90
2	AB	1117	C	N1-C2-O2	5.42	122.15	118.90
2	AB	1240	U	N3-C2-O2	-5.42	118.40	122.20
2	AB	1608	A	OP2-P-O3'	5.42	117.13	105.20
2	AB	1746	A	N3-C4-N9	5.42	131.74	127.40
2	AB	2202	U	O4'-C1'-N1	5.42	112.54	108.20
2	AB	2415	G	N9-C4-C5	5.42	107.57	105.40
2	AB	2471	A	N9-C4-C5	5.42	107.97	105.80
35	BA	711	G	N3-C2-N2	-5.42	116.10	119.90
35	BA	1153	G	C4'-C3'-C2'	-5.42	97.18	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1428	A	C4'-C3'-C2'	-5.42	97.18	102.60
35	BA	1474	U	N1-C1'-C2'	-5.42	106.03	112.00
2	AB	224	U	C4-C5-C6	5.42	122.95	119.70
2	AB	325	G	N1-C6-O6	-5.42	116.65	119.90
2	AB	809	G	C5-C6-O6	-5.42	125.35	128.60
2	AB	900	A	N3-C4-C5	-5.42	123.01	126.80
2	AB	1857	G	C5-C6-O6	-5.42	125.35	128.60
2	AB	1864	U	N3-C4-C5	-5.42	111.35	114.60
2	AB	1888	G	N3-C4-N9	5.42	129.25	126.00
2	AB	2325	G	C8-N9-C4	-5.42	104.23	106.40
2	AB	2397	G	N3-C4-C5	-5.42	125.89	128.60
2	AB	2529	G	C6-C5-N7	-5.42	127.15	130.40
2	AB	2639	A	C4-C5-C6	-5.42	114.29	117.00
2	AB	2715	C	N3-C2-O2	-5.42	118.11	121.90
5	AE	125	TRP	NE1-CE2-CZ2	5.42	136.36	130.40
7	AG	31	GLU	CB-CA-C	5.42	121.24	110.40
35	BA	172	A	C5'-C4'-O4'	5.42	115.61	109.10
35	BA	546	A	N1-C6-N6	-5.42	115.35	118.60
35	BA	872	A	C2-N3-C4	5.42	113.31	110.60
35	BA	1101	A	N1-C2-N3	-5.42	126.59	129.30
35	BA	1149	C	C5-C4-N4	5.42	123.99	120.20
35	BA	1410	A	N9-C1'-C2'	-5.42	106.04	112.00
42	BH	42	TRP	CD1-NE1-CE2	5.42	113.88	109.00
56	BV	61	ALA	N-CA-CB	-5.42	102.51	110.10
2	AB	991	C	N3-C2-O2	5.42	125.69	121.90
2	AB	1051	G	N1-C2-N2	-5.42	111.32	116.20
2	AB	1530	G	C2-N3-C4	5.42	114.61	111.90
2	AB	2530	A	N9-C4-C5	5.42	107.97	105.80
2	AB	2721	A	N7-C8-N9	-5.42	111.09	113.80
35	BA	648	A	C4-C5-C6	-5.42	114.29	117.00
35	BA	965	U	C2-N3-C4	-5.42	123.75	127.00
37	BC	31	G	N7-C8-N9	5.42	115.81	113.10
1	AA	105	G	N1-C2-N2	5.42	121.08	116.20
2	AB	9	G	O3'-P-O5'	-5.42	93.70	104.00
2	AB	61	C	C6-N1-C2	-5.42	118.13	120.30
2	AB	910	A	C6-N1-C2	-5.42	115.35	118.60
2	AB	934	U	C5'-C4'-O4'	5.42	115.60	109.10
2	AB	1226	A	N9-C4-C5	5.42	107.97	105.80
2	AB	1413	A	P-O3'-C3'	5.42	126.20	119.70
2	AB	2434	A	N9-C4-C5	5.42	107.97	105.80
2	AB	2453	A	C5'-C4'-O4'	5.42	115.60	109.10
2	AB	2549	G	N1-C2-N3	5.42	127.15	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2875	C	C2-N3-C4	5.42	122.61	119.90
22	AV	86	THR	N-CA-C	5.42	125.63	111.00
35	BA	241	G	C5-C6-O6	-5.42	125.35	128.60
35	BA	574	A	O4'-C1'-N9	5.42	112.53	108.20
35	BA	855	U	O3'-P-O5'	5.42	114.30	104.00
35	BA	1087	G	N1-C2-N2	-5.42	111.32	116.20
35	BA	1391	U	C6-N1-C2	-5.42	117.75	121.00
1	AA	39	A	O5'-C5'-C4'	-5.42	101.41	111.70
2	AB	38	A	N9-C1'-C2'	-5.42	106.04	112.00
2	AB	490	C	P-O5'-C5'	5.42	129.56	120.90
2	AB	671	C	C5'-C4'-O4'	5.42	115.60	109.10
2	AB	744	U	C4'-C3'-C2'	-5.42	97.18	102.60
2	AB	758	C	O4'-C4'-C3'	-5.42	98.58	104.00
2	AB	1191	G	O4'-C4'-C3'	5.42	110.43	106.10
2	AB	1275	A	N1-C6-N6	-5.42	115.35	118.60
2	AB	1419	A	N9-C1'-C2'	-5.42	106.04	112.00
2	AB	1595	C	N3-C4-N4	5.42	121.79	118.00
2	AB	1764	C	C6-N1-C2	-5.42	118.13	120.30
2	AB	2077	A	N7-C8-N9	-5.42	111.09	113.80
2	AB	2728	U	C6-N1-C2	5.42	124.25	121.00
2	AB	2773	C	C5-C4-N4	-5.42	116.41	120.20
17	AQ	12	THR	O-C-N	-5.42	114.03	122.70
35	BA	265	G	N3-C2-N2	5.42	123.69	119.90
35	BA	694	A	N9-C4-C5	-5.42	103.63	105.80
35	BA	795	C	N3-C2-O2	-5.42	118.11	121.90
35	BA	835	U	C2-N3-C4	-5.42	123.75	127.00
35	BA	908	A	O4'-C1'-N9	5.42	112.53	108.20
35	BA	1146	A	C4-C5-C6	5.42	119.71	117.00
35	BA	1305	G	O5'-C5'-C4'	-5.42	101.41	111.70
35	BA	1339	A	N1-C6-N6	5.42	121.85	118.60
47	BM	114	PRO	CA-CB-CG	-5.42	93.71	104.00
1	AA	30	C	N1-C2-O2	5.42	122.15	118.90
2	AB	589	U	N1-C2-N3	5.42	118.15	114.90
2	AB	743	A	C5-N7-C8	5.42	106.61	103.90
2	AB	1672	A	N1-C6-N6	5.42	121.85	118.60
2	AB	1686	C	C2-N3-C4	-5.42	117.19	119.90
2	AB	1836	C	C1'-O4'-C4'	-5.42	105.57	109.90
2	AB	2175	C	O5'-P-OP2	-5.42	100.83	105.70
2	AB	2740	A	P-O3'-C3'	5.42	126.20	119.70
3	AC	12	ARG	NE-CZ-NH2	-5.42	117.59	120.30
13	AM	117	SER	N-CA-CB	-5.42	102.38	110.50
35	BA	1310	G	C5'-C4'-O4'	5.42	115.60	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1326	U	O4'-C1'-N1	5.42	112.53	108.20
35	BA	1340	A	C4-C5-C6	5.42	119.71	117.00
1	AA	79	G	O4'-C1'-N9	5.41	112.53	108.20
2	AB	209	C	C5-C4-N4	5.41	123.99	120.20
2	AB	228	C	P-O3'-C3'	5.41	126.20	119.70
2	AB	368	A	C5-N7-C8	5.41	106.61	103.90
2	AB	598	U	N1-C2-N3	5.41	118.15	114.90
2	AB	758	C	C5'-C4'-O4'	5.41	115.60	109.10
2	AB	913	U	N3-C4-C5	5.41	117.85	114.60
2	AB	931	U	C3'-C2'-C1'	5.41	105.83	101.50
2	AB	1027	A	C6-N1-C2	-5.41	115.35	118.60
2	AB	1090	A	C6-C5-N7	5.41	136.09	132.30
2	AB	1121	C	O4'-C1'-N1	5.41	112.53	108.20
2	AB	1596	A	N3-C4-N9	-5.41	123.07	127.40
2	AB	2892	G	P-O3'-C3'	5.41	126.20	119.70
4	AD	65	ASP	CB-CG-OD1	-5.41	113.43	118.30
9	AI	39	ALA	CB-CA-C	5.41	118.22	110.10
33	A6	26	ALA	N-CA-CB	-5.41	102.52	110.10
35	BA	123	U	N1-C1'-C2'	-5.41	106.05	112.00
35	BA	293	G	C1'-O4'-C4'	-5.41	105.57	109.90
35	BA	508	U	C5'-C4'-C3'	-5.41	107.34	116.00
35	BA	673	A	O4'-C1'-N9	5.41	112.53	108.20
35	BA	973	G	O4'-C1'-N9	5.41	112.53	108.20
35	BA	1055	A	C2-N3-C4	5.41	113.31	110.60
2	AB	931	U	O3'-P-O5'	-5.41	93.72	104.00
2	AB	965	C	P-O3'-C3'	5.41	126.19	119.70
2	AB	1684	G	C5-C6-N1	5.41	114.21	111.50
2	AB	2063	C	N3-C4-N4	5.41	121.79	118.00
2	AB	2486	C	N1-C2-O2	5.41	122.15	118.90
35	BA	197	A	C5'-C4'-C3'	-5.41	107.34	116.00
35	BA	1201	A	C1'-O4'-C4'	-5.41	105.57	109.90
35	BA	1311	A	C5'-C4'-O4'	5.41	115.59	109.10
1	AA	100	G	N1-C2-N2	5.41	121.07	116.20
2	AB	41	C	C2-N3-C4	5.41	122.61	119.90
2	AB	355	U	C5'-C4'-O4'	5.41	115.59	109.10
2	AB	500	G	C2'-C3'-O3'	5.41	122.36	113.70
2	AB	716	A	C4-C5-C6	5.41	119.70	117.00
2	AB	1035	U	C5'-C4'-O4'	5.41	115.59	109.10
2	AB	1195	G	C6-N1-C2	-5.41	121.85	125.10
2	AB	1316	U	P-O3'-C3'	5.41	126.19	119.70
2	AB	1497	U	C2-N1-C1'	5.41	124.19	117.70
2	AB	1701	A	C8-N9-C4	-5.41	103.64	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1822	C	N3-C4-N4	5.41	121.79	118.00
2	AB	1839	G	C1'-O4'-C4'	-5.41	105.57	109.90
2	AB	2081	U	C2-N3-C4	-5.41	123.75	127.00
2	AB	2239	G	N7-C8-N9	5.41	115.81	113.10
2	AB	2655	G	N3-C2-N2	5.41	123.69	119.90
2	AB	2890	G	C5'-C4'-O4'	5.41	115.59	109.10
35	BA	388	G	C5'-C4'-O4'	5.41	115.59	109.10
35	BA	495	A	O3'-P-O5'	-5.41	93.72	104.00
35	BA	1164	G	C4'-C3'-C2'	-5.41	97.19	102.60
36	BB	31	U	O4'-C1'-N1	5.41	112.53	108.20
36	BB	43	U	O4'-C1'-N1	-5.41	103.87	108.20
2	AB	386	G	N1-C2-N3	-5.41	120.66	123.90
2	AB	397	U	N1-C1'-C2'	-5.41	106.05	112.00
2	AB	617	G	C4-C5-N7	5.41	112.96	110.80
2	AB	760	G	N1-C2-N2	5.41	121.07	116.20
2	AB	941	A	N7-C8-N9	-5.41	111.10	113.80
2	AB	1233	C	O4'-C1'-N1	5.41	112.53	108.20
2	AB	1235	G	C3'-C2'-C1'	5.41	105.83	101.50
2	AB	1292	G	C4'-C3'-C2'	-5.41	97.19	102.60
2	AB	1420	A	C3'-C2'-C1'	5.41	105.83	101.50
2	AB	1660	G	C4-C5-N7	-5.41	108.64	110.80
2	AB	1710	G	N9-C1'-C2'	-5.41	106.05	112.00
2	AB	1740	G	N1-C6-O6	5.41	123.14	119.90
2	AB	2439	A	C8-N9-C4	-5.41	103.64	105.80
2	AB	2637	U	C4-C5-C6	5.41	122.94	119.70
2	AB	2705	A	N9-C1'-C2'	-5.41	106.05	112.00
18	AR	30	TRP	CD1-NE1-CE2	5.41	113.87	109.00
35	BA	147	G	C6-N1-C2	-5.41	121.86	125.10
35	BA	601	G	N9-C4-C5	5.41	107.56	105.40
35	BA	939	G	C6-C5-N7	-5.41	127.15	130.40
35	BA	1184	G	N9-C4-C5	-5.41	103.24	105.40
35	BA	1467	C	N1-C1'-C2'	-5.41	106.05	112.00
36	BB	14	G	C6-N1-C2	5.41	128.34	125.10
43	BI	155	TRP	CD1-CG-CD2	-5.41	101.97	106.30
1	AA	34	A	C4-C5-C6	-5.41	114.30	117.00
2	AB	383	C	C5'-C4'-O4'	5.41	115.59	109.10
2	AB	695	G	C5-C6-O6	5.41	131.84	128.60
2	AB	1653	G	C1'-O4'-C4'	-5.41	105.57	109.90
35	BA	711	G	C5'-C4'-O4'	5.41	115.59	109.10
35	BA	1177	G	C1'-O4'-C4'	5.41	114.23	109.90
35	BA	1299	A	N7-C8-N9	5.41	116.50	113.80
37	BC	32	G	C8-N9-C4	-5.41	104.24	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	69	C	C5'-C4'-C3'	-5.41	107.35	116.00
2	AB	401	A	N1-C6-N6	5.41	121.84	118.60
2	AB	897	C	C5-C4-N4	-5.41	116.42	120.20
2	AB	1522	A	C5-C6-N1	-5.41	115.00	117.70
2	AB	1602	U	C2-N1-C1'	-5.41	111.21	117.70
2	AB	1647	U	N3-C2-O2	-5.41	118.42	122.20
2	AB	1749	A	C6-N1-C2	5.41	121.84	118.60
2	AB	1866	A	C4-C5-N7	-5.41	108.00	110.70
2	AB	1983	G	C3'-C2'-C1'	-5.41	97.18	101.50
2	AB	2240	U	N3-C4-C5	5.41	117.84	114.60
6	AF	21	ARG	NE-CZ-NH1	-5.41	117.60	120.30
6	AF	105	LEU	O-C-N	-5.41	114.05	122.70
28	A1	37	ARG	NE-CZ-NH1	-5.41	117.60	120.30
35	BA	223	A	C4'-C3'-C2'	-5.41	97.19	102.60
35	BA	339	C	O4'-C1'-C2'	5.41	112.47	107.60
35	BA	344	A	N7-C8-N9	-5.41	111.10	113.80
35	BA	448	A	C4-C5-N7	5.41	113.40	110.70
35	BA	494	G	C4-N9-C1'	-5.41	119.47	126.50
35	BA	586	C	N1-C2-N3	5.41	122.98	119.20
35	BA	672	U	N3-C4-C5	5.41	117.84	114.60
35	BA	1384	C	N3-C4-N4	-5.41	114.22	118.00
35	BA	1492	A	C6-C5-N7	-5.41	128.52	132.30
36	BB	15	G	C6-C5-N7	5.41	133.64	130.40
2	AB	1305	C	C6-N1-C1'	5.40	127.28	120.80
2	AB	2317	A	O4'-C1'-N9	5.40	112.52	108.20
35	BA	195	A	C5'-C4'-C3'	-5.40	107.35	116.00
35	BA	297	G	N7-C8-N9	5.40	115.80	113.10
36	BB	22	G	C4-C5-N7	5.40	112.96	110.80
2	AB	278	A	C8-N9-C4	-5.40	103.64	105.80
2	AB	1531	C	O4'-C1'-N1	5.40	112.52	108.20
2	AB	1721	G	C5'-C4'-O4'	5.40	115.58	109.10
2	AB	2246	G	N7-C8-N9	5.40	115.80	113.10
23	AW	7	ASP	CB-CG-OD1	-5.40	113.44	118.30
35	BA	739	C	N3-C4-C5	-5.40	119.74	121.90
35	BA	852	G	O4'-C1'-N9	5.40	112.52	108.20
35	BA	872	A	C8-N9-C4	5.40	107.96	105.80
2	AB	238	C	O4'-C1'-N1	5.40	112.52	108.20
2	AB	466	A	N7-C8-N9	-5.40	111.10	113.80
2	AB	476	G	C1'-O4'-C4'	5.40	114.22	109.90
2	AB	992	C	N1-C2-O2	5.40	122.14	118.90
2	AB	1721	G	C5-C6-N1	-5.40	108.80	111.50
2	AB	2369	A	N1-C2-N3	5.40	132.00	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2381	A	C5-C6-N6	-5.40	119.38	123.70
2	AB	2862	G	N1-C2-N3	-5.40	120.66	123.90
16	AP	80	PHE	CB-CG-CD2	-5.40	117.02	120.80
35	BA	79	G	C4'-C3'-C2'	-5.40	97.20	102.60
35	BA	260	G	N1-C2-N2	5.40	121.06	116.20
35	BA	751	U	N1-C2-O2	-5.40	119.02	122.80
35	BA	951	G	C5-N7-C8	-5.40	101.60	104.30
35	BA	1346	A	C2-N3-C4	5.40	113.30	110.60
35	BA	1475	G	O4'-C4'-C3'	5.40	110.42	106.10
1	AA	22	U	C4-C5-C6	5.40	122.94	119.70
2	AB	178	G	C3'-C2'-C1'	-5.40	97.18	101.50
2	AB	1177	G	P-O5'-C5'	5.40	129.54	120.90
2	AB	1866	A	C5'-C4'-O4'	5.40	115.58	109.10
2	AB	1869	G	C5'-C4'-O4'	5.40	115.58	109.10
2	AB	2611	C	C4-C5-C6	5.40	120.10	117.40
2	AB	2616	C	N3-C4-C5	-5.40	119.74	121.90
32	A5	12	ARG	NH1-CZ-NH2	-5.40	113.46	119.40
35	BA	1392	G	C4'-C3'-O3'	5.40	123.80	113.00
45	BK	37	TYR	CD1-CG-CD2	5.40	123.84	117.90
52	BR	3	THR	O-C-N	5.40	131.34	122.70
2	AB	223	A	C2-N3-C4	-5.40	107.90	110.60
2	AB	335	C	C6-N1-C2	-5.40	118.14	120.30
2	AB	953	G	C5-C6-N1	-5.40	108.80	111.50
2	AB	1760	C	N3-C2-O2	-5.40	118.12	121.90
2	AB	1839	G	N3-C4-C5	-5.40	125.90	128.60
2	AB	1899	A	OP1-P-O3'	5.40	117.08	105.20
2	AB	2707	U	C4'-C3'-C2'	-5.40	97.20	102.60
5	AE	5	VAL	CA-CB-CG1	5.40	119.00	110.90
9	AI	109	GLU	CA-CB-CG	5.40	125.27	113.40
35	BA	185	U	C5-C4-O4	5.40	129.14	125.90
35	BA	675	A	C5-C6-N6	5.40	128.02	123.70
35	BA	735	C	O4'-C1'-N1	5.40	112.52	108.20
35	BA	794	A	N7-C8-N9	5.40	116.50	113.80
35	BA	997	U	N3-C2-O2	-5.40	118.42	122.20
35	BA	1074	G	O4'-C1'-C2'	-5.40	100.40	105.80
35	BA	1122	U	O4'-C1'-N1	5.40	112.52	108.20
45	BK	52	GLU	OE1-CD-OE2	5.40	129.78	123.30
48	BN	61	GLU	CG-CD-OE1	5.40	129.10	118.30
2	AB	176	A	O4'-C4'-C3'	5.40	110.42	106.10
2	AB	317	G	C3'-C2'-C1'	-5.40	97.18	101.50
2	AB	340	A	C4'-C3'-C2'	-5.40	97.20	102.60
2	AB	458	G	C5'-C4'-C3'	-5.40	107.37	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	889	C	C5-C6-N1	5.40	123.70	121.00
2	AB	894	U	C4-C5-C6	5.40	122.94	119.70
2	AB	949	G	N1-C2-N3	5.40	127.14	123.90
2	AB	1553	A	N9-C1'-C2'	-5.40	106.06	112.00
2	AB	1885	A	C5-N7-C8	-5.40	101.20	103.90
2	AB	2140	G	C4-N9-C1'	-5.40	119.48	126.50
2	AB	2886	A	C6-C5-N7	5.40	136.08	132.30
35	BA	1375	A	O4'-C1'-N9	5.40	112.52	108.20
2	AB	227	A	O3'-P-O5'	-5.39	93.75	104.00
2	AB	865	C	N1-C1'-C2'	5.39	121.01	114.00
2	AB	939	G	C2-N3-C4	5.39	114.60	111.90
2	AB	1231	U	O4'-C4'-C3'	5.39	110.42	106.10
2	AB	1610	A	C4-C5-N7	5.39	113.40	110.70
2	AB	2100	G	C8-N9-C1'	5.39	134.01	127.00
2	AB	2121	G	N9-C4-C5	-5.39	103.24	105.40
2	AB	2146	C	C5'-C4'-O4'	5.39	115.57	109.10
2	AB	2544	G	C1'-O4'-C4'	5.39	114.22	109.90
35	BA	88	U	C2-N3-C4	-5.39	123.76	127.00
35	BA	268	U	O4'-C1'-N1	5.39	112.52	108.20
35	BA	459	A	C5-C6-N6	-5.39	119.38	123.70
35	BA	512	U	C4'-C3'-C2'	-5.39	97.20	102.60
35	BA	908	A	C2-N3-C4	-5.39	107.90	110.60
35	BA	1003	G	C5'-C4'-O4'	5.39	115.57	109.10
35	BA	1253	G	C4-C5-C6	5.39	122.04	118.80
35	BA	1373	G	C5'-C4'-O4'	5.39	115.57	109.10
2	AB	176	A	N3-C4-N9	5.39	131.72	127.40
2	AB	191	A	C5-N7-C8	-5.39	101.20	103.90
2	AB	504	A	C5-C6-N6	-5.39	119.39	123.70
2	AB	619	G	N9-C1'-C2'	5.39	121.01	114.00
2	AB	1009	A	C5'-C4'-O4'	-5.39	102.63	109.10
2	AB	1160	G	N1-C6-O6	5.39	123.14	119.90
2	AB	1999	C	C5-C4-N4	-5.39	116.42	120.20
2	AB	2196	C	C5-C4-N4	-5.39	116.42	120.20
2	AB	2279	G	C4-N9-C1'	-5.39	119.49	126.50
2	AB	2317	A	N1-C6-N6	5.39	121.83	118.60
2	AB	2481	G	C2-N3-C4	5.39	114.60	111.90
2	AB	2668	G	C6-C5-N7	-5.39	127.16	130.40
2	AB	2779	U	C1'-O4'-C4'	-5.39	105.58	109.90
2	AB	2847	U	N3-C2-O2	-5.39	118.43	122.20
2	AB	2865	U	C4'-C3'-C2'	-5.39	97.21	102.60
20	AT	80	ARG	NE-CZ-NH2	-5.39	117.60	120.30
35	BA	432	A	P-O3'-C3'	5.39	126.17	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	746	A	C5-C6-N6	-5.39	119.39	123.70
35	BA	789	U	O4'-C4'-C3'	5.39	110.41	106.10
35	BA	1248	A	C5'-C4'-O4'	5.39	115.57	109.10
35	BA	1274	A	O4'-C1'-N9	5.39	112.51	108.20
2	AB	252	G	N9-C1'-C2'	-5.39	106.07	112.00
2	AB	521	U	C5'-C4'-O4'	5.39	115.57	109.10
2	AB	528	A	N1-C6-N6	-5.39	115.36	118.60
2	AB	684	G	N1-C6-O6	5.39	123.13	119.90
2	AB	896	A	C4'-C3'-C2'	-5.39	97.21	102.60
2	AB	1333	G	C4-C5-C6	5.39	122.03	118.80
2	AB	1346	G	N7-C8-N9	5.39	115.80	113.10
2	AB	2432	A	C2-N3-C4	5.39	113.30	110.60
2	AB	2470	G	C3'-C2'-C1'	5.39	105.81	101.50
35	BA	929	G	C4-C5-N7	-5.39	108.64	110.80
35	BA	1014	A	N1-C6-N6	5.39	121.83	118.60
2	AB	266	G	C5-N7-C8	5.39	107.00	104.30
2	AB	332	A	C6-C5-N7	5.39	136.07	132.30
2	AB	521	U	N3-C4-C5	-5.39	111.37	114.60
2	AB	532	A	N1-C2-N3	5.39	132.00	129.30
2	AB	647	G	C5-C6-O6	-5.39	125.37	128.60
2	AB	665	U	C1'-O4'-C4'	5.39	114.21	109.90
2	AB	700	G	C6-C5-N7	5.39	133.63	130.40
2	AB	895	U	P-O3'-C3'	5.39	126.17	119.70
2	AB	987	C	O4'-C4'-C3'	5.39	110.41	106.10
2	AB	1091	G	N1-C6-O6	-5.39	116.67	119.90
2	AB	1130	U	O4'-C4'-C3'	5.39	110.41	106.10
2	AB	2120	G	O3'-P-O5'	-5.39	93.76	104.00
35	BA	99	C	N3-C4-N4	5.39	121.77	118.00
35	BA	351	G	N1-C2-N3	-5.39	120.67	123.90
35	BA	819	A	N3-C4-C5	-5.39	123.03	126.80
35	BA	901	A	C5-N7-C8	5.39	106.59	103.90
35	BA	976	G	C2-N3-C4	5.39	114.59	111.90
35	BA	1032	G	N1-C2-N3	-5.39	120.67	123.90
35	BA	1335	U	P-O5'-C5'	5.39	129.52	120.90
37	BC	24	C	C4-C5-C6	-5.39	114.70	117.40
2	AB	588	U	C4-C5-C6	5.39	122.93	119.70
2	AB	1400	U	C2-N1-C1'	5.39	124.17	117.70
2	AB	2720	U	N1-C2-N3	5.39	118.13	114.90
35	BA	180	U	C5-C4-O4	-5.39	122.67	125.90
35	BA	213	G	C5'-C4'-C3'	-5.39	107.38	116.00
35	BA	1171	A	N9-C4-C5	-5.39	103.64	105.80
35	BA	1262	C	C2'-C3'-O3'	5.39	122.32	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	BT	31	TYR	CB-CG-CD1	-5.39	117.77	121.00
1	AA	59	A	N9-C1'-C2'	-5.39	106.07	112.00
2	AB	176	A	C6-N1-C2	-5.39	115.37	118.60
2	AB	495	G	N1-C2-N2	-5.39	111.35	116.20
2	AB	1148	U	C5-C4-O4	-5.39	122.67	125.90
2	AB	1600	C	N1-C2-O2	5.39	122.13	118.90
2	AB	1905	C	C5'-C4'-C3'	-5.39	107.38	116.00
2	AB	2027	G	O4'-C4'-C3'	5.39	110.41	106.10
2	AB	2330	G	N3-C2-N2	-5.39	116.13	119.90
2	AB	2516	A	N9-C4-C5	5.39	107.95	105.80
2	AB	2770	G	N9-C1'-C2'	5.39	121.00	114.00
2	AB	2820	A	C3'-C2'-C1'	-5.39	97.19	101.50
35	BA	765	G	C5-C6-N1	5.39	114.19	111.50
35	BA	1157	A	N3-C4-N9	5.39	131.71	127.40
35	BA	1299	A	C4'-C3'-C2'	5.39	107.99	102.60
2	AB	240	C	N1-C2-O2	5.38	122.13	118.90
2	AB	248	G	C5-N7-C8	-5.38	101.61	104.30
2	AB	508	A	O4'-C1'-N9	5.38	112.51	108.20
2	AB	546	U	N3-C4-O4	-5.38	115.63	119.40
2	AB	1216	G	C8-N9-C4	-5.38	104.25	106.40
2	AB	1263	U	C3'-C2'-C1'	5.38	105.81	101.50
2	AB	1290	C	N1-C1'-C2'	-5.38	106.08	112.00
2	AB	1412	U	O4'-C1'-N1	5.38	112.51	108.20
2	AB	1696	G	C6-N1-C2	-5.38	121.87	125.10
2	AB	1956	U	N3-C4-O4	5.38	123.17	119.40
2	AB	2062	A	C3'-C2'-C1'	5.38	105.81	101.50
2	AB	2111	U	N1-C2-O2	5.38	126.57	122.80
2	AB	2371	G	N7-C8-N9	5.38	115.79	113.10
35	BA	158	G	N1-C6-O6	-5.38	116.67	119.90
35	BA	225	C	C4-C5-C6	5.38	120.09	117.40
35	BA	754	C	C6-N1-C2	5.38	122.45	120.30
35	BA	968	A	C8-N9-C1'	-5.38	118.01	127.70
35	BA	1127	G	C1'-O4'-C4'	5.38	114.21	109.90
37	BC	72	C	C4'-C3'-C2'	-5.38	97.22	102.60
38	BD	224	ARG	NE-CZ-NH2	-5.38	117.61	120.30
47	BM	73	VAL	CG1-CB-CG2	-5.38	102.28	110.90
1	AA	20	G	C5-N7-C8	-5.38	101.61	104.30
2	AB	333	G	C3'-C2'-C1'	-5.38	97.19	101.50
2	AB	501	A	C6-N1-C2	-5.38	115.37	118.60
2	AB	768	G	O4'-C1'-C2'	-5.38	100.42	105.80
2	AB	843	G	O4'-C1'-N9	5.38	112.51	108.20
2	AB	1055	G	C3'-C2'-C1'	-5.38	97.19	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2236	U	C4-C5-C6	5.38	122.93	119.70
35	BA	921	U	C6-N1-C1'	-5.38	113.66	121.20
2	AB	28	A	O4'-C1'-C2'	5.38	112.44	107.60
2	AB	449	A	C5'-C4'-C3'	-5.38	107.39	116.00
2	AB	665	U	C3'-C2'-C1'	5.38	105.81	101.50
2	AB	954	G	N3-C2-N2	5.38	123.67	119.90
2	AB	1135	C	C5-C6-N1	-5.38	118.31	121.00
2	AB	1162	G	P-O3'-C3'	5.38	126.16	119.70
2	AB	1234	U	O3'-P-O5'	-5.38	93.78	104.00
2	AB	1239	G	C5'-C4'-C3'	-5.38	107.39	116.00
2	AB	1315	C	N1-C2-O2	5.38	122.13	118.90
2	AB	1734	G	C5'-C4'-C3'	-5.38	107.39	116.00
2	AB	2659	G	C6-N1-C2	-5.38	121.87	125.10
2	AB	2901	C	N1-C2-O2	5.38	122.13	118.90
6	AF	61	ARG	C-N-CA	5.38	135.15	121.70
8	AH	88	LEU	CB-CG-CD2	5.38	120.15	111.00
29	A2	9	TYR	CG-CD2-CE2	5.38	125.61	121.30
35	BA	267	C	N3-C4-N4	5.38	121.77	118.00
35	BA	988	G	C5-N7-C8	-5.38	101.61	104.30
35	BA	1109	C	N3-C4-N4	5.38	121.77	118.00
35	BA	1111	A	C1'-O4'-C4'	-5.38	105.59	109.90
35	BA	1326	U	C6-N1-C2	-5.38	117.77	121.00
2	AB	501	A	N3-C4-C5	-5.38	123.03	126.80
2	AB	675	A	C5'-C4'-O4'	5.38	115.56	109.10
2	AB	773	U	C6-N1-C2	-5.38	117.77	121.00
2	AB	2427	C	N3-C4-C5	-5.38	119.75	121.90
15	AO	81	ARG	CD-NE-CZ	5.38	131.13	123.60
35	BA	3	A	P-O3'-C3'	5.38	126.16	119.70
35	BA	485	U	P-O3'-C3'	5.38	126.16	119.70
35	BA	556	C	C4-C5-C6	5.38	120.09	117.40
35	BA	667	G	O4'-C1'-N9	5.38	112.50	108.20
2	AB	170	U	C5-C4-O4	-5.38	122.67	125.90
2	AB	451	U	C5'-C4'-C3'	-5.38	107.39	116.00
2	AB	633	A	N1-C2-N3	-5.38	126.61	129.30
2	AB	756	A	C2-N3-C4	-5.38	107.91	110.60
2	AB	760	G	N9-C4-C5	-5.38	103.25	105.40
2	AB	1122	G	P-O3'-C3'	5.38	126.15	119.70
2	AB	1702	G	C8-N9-C1'	5.38	133.99	127.00
2	AB	1856	U	N1-C2-O2	5.38	126.56	122.80
2	AB	2187	U	C1'-O4'-C4'	-5.38	105.60	109.90
2	AB	2720	U	C5-C4-O4	5.38	129.13	125.90
2	AB	2844	G	P-O3'-C3'	5.38	126.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	271	C	O4'-C4'-C3'	5.38	110.40	106.10
35	BA	371	A	C6-N1-C2	-5.38	115.37	118.60
35	BA	682	G	C5-N7-C8	-5.38	101.61	104.30
35	BA	769	G	P-O3'-C3'	5.38	126.15	119.70
43	BI	89	GLU	OE1-CD-OE2	5.38	129.75	123.30
43	BI	108	ARG	NE-CZ-NH2	-5.38	117.61	120.30
2	AB	82	U	O4'-C1'-C2'	5.38	112.44	107.60
2	AB	337	C	C3'-C2'-C1'	-5.38	97.20	101.50
2	AB	344	A	P-O3'-C3'	5.38	126.15	119.70
2	AB	411	G	C4'-C3'-C2'	5.38	107.98	102.60
2	AB	748	G	N1-C2-N3	-5.38	120.67	123.90
2	AB	825	A	O4'-C4'-C3'	-5.38	98.62	104.00
2	AB	944	C	C2-N3-C4	5.38	122.59	119.90
2	AB	1077	A	N1-C6-N6	5.38	121.83	118.60
2	AB	1600	C	O4'-C4'-C3'	-5.38	98.62	104.00
2	AB	1740	G	N9-C1'-C2'	-5.38	106.09	112.00
2	AB	2150	C	C1'-O4'-C4'	-5.38	105.60	109.90
2	AB	2338	C	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	2517	C	O3'-P-O5'	-5.38	93.79	104.00
2	AB	2615	U	C4-C5-C6	5.38	122.93	119.70
2	AB	2893	A	P-O3'-C3'	5.38	126.15	119.70
12	AL	125	TYR	CD1-CG-CD2	5.38	123.81	117.90
18	AR	20	ARG	CA-CB-CG	5.38	125.23	113.40
35	BA	112	G	C4-N9-C1'	5.38	133.49	126.50
35	BA	164	G	C3'-C2'-C1'	-5.38	97.20	101.50
35	BA	233	C	N1-C2-N3	5.38	122.96	119.20
35	BA	465	A	O5'-C5'-C4'	-5.38	101.48	111.70
35	BA	582	C	N3-C4-N4	-5.38	114.24	118.00
35	BA	685	G	C4-C5-C6	-5.38	115.57	118.80
35	BA	774	G	N3-C4-C5	-5.38	125.91	128.60
35	BA	853	C	N3-C4-C5	-5.38	119.75	121.90
35	BA	938	A	C5-C6-N1	5.38	120.39	117.70
35	BA	1297	G	C4'-C3'-C2'	-5.38	97.22	102.60
2	AB	71	A	C5-N7-C8	-5.38	101.21	103.90
2	AB	307	G	N9-C1'-C2'	-5.38	106.09	112.00
2	AB	371	A	O5'-C5'-C4'	5.38	121.91	111.70
2	AB	1023	U	N3-C4-C5	5.38	117.83	114.60
2	AB	1137	G	C8-N9-C1'	5.38	133.99	127.00
2	AB	1309	G	P-O3'-C3'	5.38	126.15	119.70
2	AB	1373	A	C5-C6-N1	5.38	120.39	117.70
2	AB	2375	G	C5'-C4'-O4'	5.38	115.55	109.10
35	BA	92	U	C5'-C4'-C3'	-5.38	107.40	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	BN	7	VAL	CA-CB-CG2	5.38	118.96	110.90
1	AA	53	A	C6-N1-C2	5.37	121.83	118.60
2	AB	47	C	O4'-C1'-N1	5.37	112.50	108.20
2	AB	52	A	O4'-C1'-N9	5.37	112.50	108.20
2	AB	146	A	C3'-C2'-C1'	5.37	105.80	101.50
2	AB	254	G	C5-C6-O6	5.37	131.82	128.60
2	AB	532	A	C5-N7-C8	-5.37	101.21	103.90
2	AB	688	U	C2-N3-C4	-5.37	123.78	127.00
2	AB	778	G	C4'-C3'-C2'	-5.37	97.23	102.60
2	AB	1169	A	C8-N9-C4	-5.37	103.65	105.80
2	AB	1342	A	O4'-C1'-C2'	5.37	112.44	107.60
2	AB	1431	A	C5-N7-C8	5.37	106.59	103.90
2	AB	1642	G	C5-C6-N1	5.37	114.19	111.50
2	AB	1757	A	C6-N1-C2	-5.37	115.38	118.60
2	AB	2802	G	OP1-P-O3'	5.37	117.02	105.20
2	AB	2818	U	C5-C6-N1	5.37	125.39	122.70
6	AF	114	ARG	NH1-CZ-NH2	-5.37	113.49	119.40
35	BA	316	C	O4'-C1'-N1	5.37	112.50	108.20
35	BA	892	A	C2-N3-C4	-5.37	107.91	110.60
35	BA	1294	G	N9-C1'-C2'	-5.37	106.09	112.00
50	BP	41	TRP	CD1-NE1-CE2	5.37	113.84	109.00
2	AB	114	U	OP1-P-OP2	-5.37	111.54	119.60
2	AB	269	C	O4'-C1'-N1	5.37	112.50	108.20
2	AB	271	G	C5'-C4'-C3'	-5.37	107.41	116.00
2	AB	311	A	N9-C4-C5	5.37	107.95	105.80
2	AB	497	A	N1-C2-N3	-5.37	126.61	129.30
2	AB	504	A	C8-N9-C4	5.37	107.95	105.80
2	AB	662	G	C4-C5-N7	5.37	112.95	110.80
2	AB	1318	U	N3-C4-C5	-5.37	111.38	114.60
2	AB	1414	C	C1'-O4'-C4'	-5.37	105.60	109.90
2	AB	1820	U	C2-N3-C4	-5.37	123.78	127.00
2	AB	1885	A	C5'-C4'-O4'	5.37	115.55	109.10
2	AB	2351	G	C6-C5-N7	-5.37	127.18	130.40
2	AB	2470	G	O5'-P-OP2	-5.37	100.86	105.70
2	AB	2523	G	N9-C4-C5	-5.37	103.25	105.40
10	AJ	30	ARG	NE-CZ-NH2	-5.37	117.61	120.30
35	BA	168	G	C4'-C3'-C2'	-5.37	97.23	102.60
35	BA	393	A	N3-C4-N9	5.37	131.70	127.40
35	BA	462	G	N1-C2-N2	5.37	121.03	116.20
35	BA	1063	C	C3'-C2'-C1'	5.37	105.80	101.50
35	BA	1194	U	N3-C4-C5	-5.37	111.38	114.60
35	BA	1284	C	C5-C6-N1	5.37	123.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1336	C	C5-C4-N4	5.37	123.96	120.20
35	BA	1364	U	P-O3'-C3'	5.37	126.14	119.70
35	BA	1386	G	N3-C2-N2	-5.37	116.14	119.90
35	BA	1388	C	C2-N3-C4	5.37	122.58	119.90
1	AA	22	U	N3-C2-O2	-5.37	118.44	122.20
1	AA	74	U	C4'-C3'-C2'	5.37	107.97	102.60
2	AB	628	G	N3-C2-N2	-5.37	116.14	119.90
2	AB	1438	U	O4'-C1'-N1	5.37	112.50	108.20
2	AB	1941	C	N1-C2-N3	-5.37	115.44	119.20
2	AB	2114	A	C1'-O4'-C4'	5.37	114.20	109.90
2	AB	2390	U	C4-C5-C6	5.37	122.92	119.70
2	AB	2410	G	C3'-C2'-C1'	5.37	105.80	101.50
10	AJ	53	VAL	CG1-CB-CG2	-5.37	102.31	110.90
35	BA	140	U	C5-C4-O4	-5.37	122.68	125.90
35	BA	307	C	C4'-C3'-C2'	-5.37	97.23	102.60
35	BA	338	A	C5-N7-C8	5.37	106.58	103.90
1	AA	83	G	C4-C5-C6	5.37	122.02	118.80
2	AB	359	G	C5-N7-C8	-5.37	101.62	104.30
2	AB	920	A	C4-C5-C6	5.37	119.69	117.00
2	AB	1236	G	N9-C4-C5	5.37	107.55	105.40
2	AB	1262	A	C5-C6-N6	-5.37	119.40	123.70
2	AB	1696	G	C5-C6-N1	5.37	114.18	111.50
2	AB	1868	C	C3'-C2'-C1'	5.37	105.80	101.50
2	AB	2051	A	C6-C5-N7	5.37	136.06	132.30
2	AB	2107	G	C5'-C4'-C3'	-5.37	107.41	116.00
2	AB	2219	U	C5-C6-N1	-5.37	120.02	122.70
2	AB	2462	C	C3'-C2'-C1'	-5.37	97.21	101.50
2	AB	2876	G	C6-N1-C2	-5.37	121.88	125.10
14	AN	69	ARG	NE-CZ-NH1	5.37	122.98	120.30
35	BA	187	G	C2-N3-C4	5.37	114.58	111.90
35	BA	413	G	C5-N7-C8	-5.37	101.61	104.30
35	BA	736	C	C4-C5-C6	-5.37	114.72	117.40
35	BA	768	A	N3-C4-N9	-5.37	123.11	127.40
35	BA	1146	A	O4'-C1'-N9	5.37	112.50	108.20
35	BA	1384	C	C5-C4-N4	5.37	123.96	120.20
1	AA	47	C	C5'-C4'-C3'	-5.37	107.41	116.00
1	AA	74	U	C2-N3-C4	-5.37	123.78	127.00
2	AB	364	C	C4'-C3'-O3'	5.37	123.73	113.00
2	AB	860	U	C3'-C2'-C1'	5.37	105.79	101.50
2	AB	860	U	N1-C1'-C2'	-5.37	106.10	112.00
2	AB	1089	A	C3'-C2'-C1'	5.37	105.79	101.50
2	AB	1282	U	N3-C4-C5	5.37	117.82	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	989	U	N1-C1'-C2'	-5.37	106.10	112.00
2	AB	201	C	N3-C2-O2	-5.37	118.14	121.90
2	AB	350	G	C6-N1-C2	-5.37	121.88	125.10
2	AB	467	G	N3-C4-C5	-5.37	125.92	128.60
2	AB	491	G	C4'-C3'-C2'	-5.37	97.23	102.60
2	AB	630	G	C5-C6-O6	-5.37	125.38	128.60
2	AB	988	A	C4-C5-C6	-5.37	114.32	117.00
2	AB	1170	C	C2-N3-C4	5.37	122.58	119.90
2	AB	1882	U	C5-C6-N1	-5.37	120.02	122.70
2	AB	1901	A	C6-C5-N7	-5.37	128.54	132.30
2	AB	2359	C	N3-C2-O2	-5.37	118.14	121.90
2	AB	2642	G	C5-N7-C8	-5.37	101.62	104.30
25	AY	63	ASP	CB-CG-OD1	5.37	123.13	118.30
35	BA	178	C	C5-C4-N4	-5.37	116.44	120.20
35	BA	313	A	O4'-C1'-N9	5.37	112.49	108.20
35	BA	351	G	C8-N9-C4	5.37	108.55	106.40
48	BN	116	TYR	CZ-CE2-CD2	5.37	124.63	119.80
2	AB	331	C	O4'-C1'-N1	5.36	112.49	108.20
2	AB	664	G	N9-C1'-C2'	-5.36	106.10	112.00
2	AB	833	A	N3-C4-C5	-5.36	123.05	126.80
2	AB	889	C	C5'-C4'-O4'	5.36	115.54	109.10
2	AB	892	A	C6-C5-N7	5.36	136.06	132.30
2	AB	909	A	N9-C4-C5	5.36	107.95	105.80
2	AB	1024	G	O4'-C1'-N9	5.36	112.49	108.20
2	AB	1061	U	C4'-C3'-C2'	-5.36	97.24	102.60
2	AB	1252	G	C3'-C2'-C1'	5.36	105.79	101.50
2	AB	1614	A	C4'-C3'-C2'	-5.36	97.24	102.60
2	AB	2212	A	C2-N3-C4	5.36	113.28	110.60
2	AB	2640	G	C2-N3-C4	5.36	114.58	111.90
2	AB	2673	G	C2-N3-C4	5.36	114.58	111.90
2	AB	2759	G	O4'-C1'-N9	5.36	112.49	108.20
4	AD	68	ARG	NE-CZ-NH2	-5.36	117.62	120.30
17	AQ	112	GLU	OE1-CD-OE2	5.36	129.74	123.30
35	BA	146	G	C6-N1-C2	-5.36	121.88	125.10
35	BA	195	A	C6-N1-C2	5.36	121.82	118.60
35	BA	519	C	O4'-C1'-N1	5.36	112.49	108.20
35	BA	715	A	N3-C4-N9	-5.36	123.11	127.40
35	BA	736	C	N1-C2-O2	5.36	122.12	118.90
35	BA	1013	G	N3-C4-N9	-5.36	122.78	126.00
35	BA	1171	A	C5-N7-C8	-5.36	101.22	103.90
35	BA	1495	U	C2-N3-C4	-5.36	123.78	127.00
40	BF	17	ASP	CA-CB-CG	5.36	125.20	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1025	G	C6-C5-N7	5.36	133.62	130.40
2	AB	1170	C	N1-C2-O2	5.36	122.12	118.90
2	AB	1396	U	C2-N3-C4	-5.36	123.78	127.00
2	AB	1641	A	N7-C8-N9	-5.36	111.12	113.80
35	BA	17	U	N1-C2-N3	5.36	118.12	114.90
35	BA	307	C	N3-C4-N4	-5.36	114.25	118.00
35	BA	672	U	C5'-C4'-O4'	5.36	115.53	109.10
35	BA	1493	A	C2-N3-C4	5.36	113.28	110.60
2	AB	164	C	C5-C4-N4	-5.36	116.45	120.20
2	AB	334	C	N1-C2-O2	5.36	122.12	118.90
2	AB	1442	U	C5-C4-O4	-5.36	122.68	125.90
2	AB	2146	C	O4'-C1'-C2'	-5.36	100.44	105.80
2	AB	2644	G	N9-C4-C5	5.36	107.54	105.40
4	AD	174	ARG	CD-NE-CZ	5.36	131.10	123.60
35	BA	363	A	C4'-C3'-C2'	-5.36	97.24	102.60
35	BA	400	C	O3'-P-O5'	-5.36	93.82	104.00
35	BA	541	G	C8-N9-C4	-5.36	104.26	106.40
35	BA	615	G	C4-N9-C1'	-5.36	119.53	126.50
35	BA	649	A	N3-C4-C5	-5.36	123.05	126.80
35	BA	918	A	N3-C4-N9	5.36	131.69	127.40
35	BA	1039	G	N1-C2-N3	-5.36	120.68	123.90
35	BA	1123	U	C3'-C2'-C1'	5.36	105.79	101.50
38	BD	20	ARG	NE-CZ-NH1	5.36	122.98	120.30
1	AA	19	C	C2-N3-C4	5.36	122.58	119.90
1	AA	111	U	C6-N1-C2	-5.36	117.78	121.00
2	AB	904	G	C4-C5-C6	5.36	122.02	118.80
2	AB	1569	A	C3'-C2'-C1'	5.36	105.79	101.50
2	AB	1775	U	C4-C5-C6	5.36	122.92	119.70
2	AB	2777	G	C5-N7-C8	-5.36	101.62	104.30
6	AF	133	LEU	CB-CG-CD1	5.36	120.11	111.00
48	BN	11	ARG	CD-NE-CZ	5.36	131.10	123.60
1	AA	101	A	C2-N3-C4	5.36	113.28	110.60
2	AB	942	G	C4-N9-C1'	-5.36	119.53	126.50
2	AB	1437	C	P-O3'-C3'	5.36	126.13	119.70
2	AB	2102	G	N1-C2-N3	-5.36	120.69	123.90
2	AB	2425	A	N1-C6-N6	5.36	121.81	118.60
2	AB	2518	A	N9-C4-C5	5.36	107.94	105.80
2	AB	2768	U	C4-C5-C6	-5.36	116.48	119.70
2	AB	2883	A	P-O3'-C3'	5.36	126.13	119.70
35	BA	138	G	C5'-C4'-C3'	-5.36	107.43	116.00
35	BA	381	C	N3-C4-C5	5.36	124.04	121.90
35	BA	464	U	P-O3'-C3'	5.36	126.13	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	713	G	N9-C4-C5	5.36	107.54	105.40
35	BA	1092	A	N3-C4-C5	-5.36	123.05	126.80
35	BA	1099	G	N1-C2-N2	-5.36	111.38	116.20
35	BA	1129	C	N3-C4-N4	5.36	121.75	118.00
2	AB	308	G	N7-C8-N9	5.36	115.78	113.10
2	AB	323	C	C5-C4-N4	5.36	123.95	120.20
2	AB	729	G	C3'-C2'-C1'	5.36	105.78	101.50
2	AB	1168	G	N9-C1'-C2'	-5.36	106.11	112.00
2	AB	1206	G	N9-C1'-C2'	-5.36	106.11	112.00
2	AB	1212	G	O5'-P-OP2	-5.36	100.88	105.70
2	AB	1383	A	C5-C6-N1	-5.36	115.02	117.70
2	AB	1570	A	N3-C4-C5	5.36	130.55	126.80
2	AB	1657	U	C4'-C3'-C2'	-5.36	97.24	102.60
2	AB	1850	G	C8-N9-C4	-5.36	104.26	106.40
2	AB	1899	A	C8-N9-C4	-5.36	103.66	105.80
2	AB	1931	U	C5-C6-N1	-5.36	120.02	122.70
2	AB	2472	G	N1-C2-N3	-5.36	120.69	123.90
2	AB	2904	U	N3-C4-C5	-5.36	111.39	114.60
35	BA	118	U	C2-N3-C4	-5.36	123.79	127.00
35	BA	276	G	N3-C4-N9	5.36	129.21	126.00
35	BA	454	G	P-O3'-C3'	5.36	126.13	119.70
35	BA	788	U	C6-N1-C2	-5.36	117.79	121.00
35	BA	1061	G	N1-C2-N2	-5.36	111.38	116.20
35	BA	1136	C	P-O3'-C3'	5.36	126.13	119.70
35	BA	1392	G	C2-N3-C4	5.36	114.58	111.90
2	AB	638	G	C4'-C3'-C2'	5.35	107.95	102.60
2	AB	989	G	C3'-C2'-C1'	5.35	105.78	101.50
2	AB	1398	C	C2-N3-C4	5.35	122.58	119.90
2	AB	1568	G	C5'-C4'-O4'	5.35	115.53	109.10
12	AL	15	TRP	NE1-CE2-CZ2	5.35	136.29	130.40
35	BA	466	A	N1-C6-N6	5.35	121.81	118.60
35	BA	557	G	N1-C6-O6	5.35	123.11	119.90
2	AB	698	C	N1-C2-N3	5.35	122.95	119.20
2	AB	999	U	O3'-P-O5'	5.35	114.17	104.00
2	AB	1158	C	N1-C1'-C2'	-5.35	106.11	112.00
2	AB	1423	G	N9-C1'-C2'	-5.35	106.11	112.00
2	AB	2032	G	N9-C1'-C2'	5.35	120.96	114.00
2	AB	2090	A	N7-C8-N9	5.35	116.48	113.80
2	AB	2147	A	N3-C4-C5	-5.35	123.05	126.80
2	AB	2616	C	O4'-C1'-N1	-5.35	103.92	108.20
2	AB	2633	G	N3-C4-N9	5.35	129.21	126.00
2	AB	2669	G	C6-C5-N7	-5.35	127.19	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2745	C	C5'-C4'-O4'	5.35	115.52	109.10
35	BA	290	C	C5'-C4'-C3'	-5.35	107.44	116.00
35	BA	856	C	C2-N3-C4	5.35	122.58	119.90
35	BA	1041	G	C2-N3-C4	5.35	114.58	111.90
35	BA	1152	A	N3-C4-C5	5.35	130.55	126.80
35	BA	1263	C	C1'-O4'-C4'	-5.35	105.62	109.90
35	BA	1467	C	C2-N3-C4	-5.35	117.22	119.90
1	AA	89	U	C1'-O4'-C4'	5.35	114.18	109.90
2	AB	1965	C	N3-C4-C5	-5.35	119.76	121.90
2	AB	2003	A	P-O3'-C3'	5.35	126.12	119.70
2	AB	2207	C	P-O3'-C3'	5.35	126.12	119.70
35	BA	343	U	O4'-C1'-N1	5.35	112.48	108.20
35	BA	542	G	C8-N9-C4	-5.35	104.26	106.40
35	BA	744	C	N1-C2-O2	5.35	122.11	118.90
35	BA	1393	U	N1-C2-N3	5.35	118.11	114.90
42	BH	60	VAL	CA-CB-CG1	5.35	118.93	110.90
46	BL	96	VAL	CG1-CB-CG2	-5.35	102.34	110.90
51	BQ	6	ALA	CB-CA-C	5.35	118.13	110.10
2	AB	364	C	C3'-C2'-C1'	5.35	105.78	101.50
2	AB	415	A	N9-C4-C5	5.35	107.94	105.80
2	AB	445	C	O4'-C1'-N1	5.35	112.48	108.20
2	AB	923	G	C4'-C3'-C2'	-5.35	97.25	102.60
2	AB	1026	G	C2'-C3'-O3'	5.35	122.26	113.70
2	AB	1294	U	P-O3'-C3'	5.35	126.12	119.70
2	AB	1338	G	C6-N1-C2	-5.35	121.89	125.10
2	AB	1699	G	O4'-C1'-C2'	5.35	112.42	107.60
2	AB	1842	G	P-O3'-C3'	5.35	126.12	119.70
2	AB	2042	A	C2'-C3'-O3'	5.35	122.26	113.70
2	AB	2137	U	C1'-O4'-C4'	5.35	114.18	109.90
2	AB	2521	C	N1-C2-O2	-5.35	115.69	118.90
2	AB	2738	A	O4'-C1'-N9	-5.35	103.92	108.20
12	AL	124	VAL	CA-CB-CG2	5.35	118.93	110.90
35	BA	179	A	C1'-O4'-C4'	5.35	114.18	109.90
35	BA	867	G	C5'-C4'-C3'	-5.35	107.44	116.00
35	BA	971	G	N9-C1'-C2'	5.35	120.95	114.00
35	BA	1172	C	C2-N3-C4	5.35	122.58	119.90
35	BA	1252	A	P-O3'-C3'	5.35	126.12	119.70
36	BB	38	G	C2-N3-C4	5.35	114.58	111.90
47	BM	104	PHE	CG-CD1-CE1	-5.35	114.92	120.80
1	AA	7	G	N1-C2-N2	5.35	121.01	116.20
2	AB	223	A	C4'-C3'-C2'	5.35	107.95	102.60
2	AB	399	U	C5-C4-O4	-5.35	122.69	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	868	U	C4-C5-C6	5.35	122.91	119.70
2	AB	906	U	C4'-C3'-O3'	5.35	123.69	113.00
2	AB	1258	U	C5-C6-N1	-5.35	120.03	122.70
2	AB	1318	U	C1'-O4'-C4'	5.35	114.18	109.90
2	AB	1524	G	N3-C4-C5	-5.35	125.93	128.60
2	AB	1912	A	N9-C4-C5	5.35	107.94	105.80
2	AB	2064	C	C5-C4-N4	-5.35	116.46	120.20
2	AB	2690	U	N1-C1'-C2'	5.35	120.95	114.00
2	AB	2861	U	N3-C4-O4	-5.35	115.66	119.40
20	AT	94	THR	CA-CB-CG2	-5.35	104.91	112.40
35	BA	147	G	N1-C2-N3	5.35	127.11	123.90
35	BA	650	G	N1-C2-N3	5.35	127.11	123.90
35	BA	650	G	N3-C2-N2	-5.35	116.16	119.90
35	BA	1428	A	C1'-O4'-C4'	-5.35	105.62	109.90
36	BB	35	G	C5'-C4'-O4'	5.35	115.52	109.10
37	BC	53	G	N9-C1'-C2'	-5.35	106.12	112.00
51	BQ	55	LEU	CB-CG-CD2	-5.35	101.91	111.00
2	AB	114	U	C4'-C3'-C2'	-5.35	97.25	102.60
2	AB	1073	A	C5'-C4'-O4'	5.35	115.52	109.10
2	AB	1477	A	C8-N9-C4	-5.35	103.66	105.80
2	AB	2035	G	C2-N3-C4	5.35	114.57	111.90
2	AB	2556	C	N3-C4-C5	-5.35	119.76	121.90
2	AB	2685	G	N7-C8-N9	-5.35	110.43	113.10
21	AU	38	TYR	CG-CD2-CE2	-5.35	117.02	121.30
35	BA	347	G	N3-C2-N2	-5.35	116.16	119.90
35	BA	359	G	C5'-C4'-O4'	5.35	115.52	109.10
35	BA	1528	U	C2-N3-C4	-5.35	123.79	127.00
2	AB	43	G	N7-C8-N9	5.34	115.77	113.10
2	AB	74	A	O4'-C1'-N9	5.34	112.47	108.20
2	AB	108	G	C1'-O4'-C4'	5.34	114.17	109.90
2	AB	998	C	C4-C5-C6	5.34	120.07	117.40
2	AB	1057	A	P-O3'-C3'	5.34	126.11	119.70
2	AB	1058	U	C5'-C4'-C3'	-5.34	107.45	116.00
2	AB	1065	U	N3-C2-O2	-5.34	118.46	122.20
2	AB	1388	G	N3-C4-N9	5.34	129.21	126.00
2	AB	1576	U	P-O3'-C3'	5.34	126.11	119.70
2	AB	1577	C	C4-C5-C6	-5.34	114.73	117.40
2	AB	1822	C	N1-C2-O2	-5.34	115.69	118.90
2	AB	2111	U	O4'-C1'-N1	5.34	112.48	108.20
2	AB	2223	G	C3'-C2'-C1'	-5.34	97.22	101.50
2	AB	2357	G	N1-C2-N2	5.34	121.01	116.20
2	AB	2840	C	O4'-C1'-N1	5.34	112.48	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2884	U	C5'-C4'-C3'	-5.34	107.45	116.00
35	BA	115	G	N3-C4-N9	5.34	129.21	126.00
35	BA	322	C	OP2-P-O3'	5.34	116.96	105.20
35	BA	543	U	N3-C2-O2	5.34	125.94	122.20
35	BA	674	G	C6-N1-C2	-5.34	121.89	125.10
35	BA	720	C	C6-N1-C2	-5.34	118.16	120.30
35	BA	823	C	C1'-O4'-C4'	5.34	114.18	109.90
35	BA	1089	G	N1-C6-O6	-5.34	116.69	119.90
35	BA	1182	G	O4'-C1'-C2'	-5.34	100.46	105.80
35	BA	1353	G	O4'-C4'-C3'	-5.34	98.66	104.00
37	BC	51	U	C1'-O4'-C4'	-5.34	105.62	109.90
53	BS	57	VAL	CG1-CB-CG2	-5.34	102.35	110.90
2	AB	377	G	N9-C1'-C2'	-5.34	106.12	112.00
2	AB	926	G	C4-C5-C6	5.34	122.01	118.80
2	AB	1210	G	C2'-C3'-O3'	5.34	122.25	113.70
2	AB	1249	U	C3'-C2'-C1'	5.34	105.78	101.50
2	AB	1752	C	N3-C4-N4	5.34	121.74	118.00
2	AB	2147	A	C4'-C3'-C2'	-5.34	97.26	102.60
2	AB	2253	G	C5-N7-C8	-5.34	101.63	104.30
35	BA	167	A	O4'-C1'-N9	5.34	112.47	108.20
35	BA	432	A	C4-C5-C6	5.34	119.67	117.00
35	BA	523	A	N9-C4-C5	5.34	107.94	105.80
35	BA	1424	U	N1-C2-N3	5.34	118.11	114.90
44	BJ	33	VAL	CA-CB-CG1	5.34	118.92	110.90
2	AB	154	U	C4-C5-C6	5.34	122.91	119.70
2	AB	818	G	N3-C4-C5	-5.34	125.93	128.60
2	AB	917	A	C5'-C4'-O4'	5.34	115.51	109.10
2	AB	1050	A	C5'-C4'-O4'	5.34	115.51	109.10
2	AB	1360	G	C5-C6-N1	5.34	114.17	111.50
2	AB	1440	U	C3'-C2'-C1'	-5.34	97.23	101.50
2	AB	1502	A	N9-C4-C5	-5.34	103.66	105.80
2	AB	1980	G	N9-C4-C5	5.34	107.54	105.40
2	AB	2674	G	C5'-C4'-O4'	5.34	115.51	109.10
35	BA	30	U	C4-C5-C6	5.34	122.91	119.70
35	BA	123	U	C5-C6-N1	-5.34	120.03	122.70
35	BA	330	C	N1-C2-N3	-5.34	115.46	119.20
35	BA	1134	G	C4'-C3'-C2'	-5.34	97.26	102.60
35	BA	1139	G	P-O3'-C3'	5.34	126.11	119.70
39	BE	21	TRP	CA-CB-CG	5.34	123.85	113.70
2	AB	31	C	C5-C6-N1	5.34	123.67	121.00
2	AB	391	A	C6-N1-C2	-5.34	115.40	118.60
2	AB	406	G	N3-C4-N9	-5.34	122.80	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	983	A	N1-C2-N3	-5.34	126.63	129.30
2	AB	1080	A	C8-N9-C4	-5.34	103.66	105.80
2	AB	1296	G	C5-N7-C8	-5.34	101.63	104.30
2	AB	1386	C	C5'-C4'-O4'	5.34	115.51	109.10
2	AB	1422	G	N1-C2-N2	5.34	121.01	116.20
2	AB	1829	A	N1-C6-N6	-5.34	115.40	118.60
2	AB	1935	G	C5-N7-C8	-5.34	101.63	104.30
2	AB	1945	G	C8-N9-C4	-5.34	104.26	106.40
2	AB	2086	U	C5-C6-N1	-5.34	120.03	122.70
2	AB	2228	G	N3-C4-C5	-5.34	125.93	128.60
35	BA	3	A	C5'-C4'-O4'	5.34	115.51	109.10
35	BA	138	G	N1-C2-N3	-5.34	120.70	123.90
35	BA	702	A	N9-C4-C5	5.34	107.94	105.80
35	BA	950	U	C4-C5-C6	-5.34	116.50	119.70
35	BA	1185	G	N7-C8-N9	5.34	115.77	113.10
35	BA	1330	U	O4'-C1'-N1	5.34	112.47	108.20
42	BH	42	TRP	NE1-CE2-CZ2	5.34	136.27	130.40
1	AA	96	G	C5'-C4'-O4'	5.34	115.50	109.10
2	AB	338	G	N9-C4-C5	-5.34	103.27	105.40
2	AB	721	A	C5-N7-C8	-5.34	101.23	103.90
35	BA	454	G	N9-C4-C5	5.34	107.53	105.40
35	BA	549	C	N3-C4-N4	5.34	121.74	118.00
35	BA	635	A	N3-C4-C5	-5.34	123.06	126.80
35	BA	1422	G	C6-C5-N7	-5.34	127.20	130.40
1	AA	73	A	C5-C6-N1	-5.34	115.03	117.70
1	AA	110	C	O4'-C4'-C3'	-5.34	98.66	104.00
2	AB	258	G	C5-C6-O6	5.34	131.80	128.60
2	AB	476	G	N1-C2-N3	-5.34	120.70	123.90
2	AB	705	A	N7-C8-N9	5.34	116.47	113.80
2	AB	781	A	C8-N9-C4	5.34	107.93	105.80
2	AB	1007	C	C2-N3-C4	5.34	122.57	119.90
2	AB	1070	A	O4'-C4'-C3'	5.34	110.37	106.10
2	AB	1141	U	N3-C4-O4	5.34	123.14	119.40
2	AB	1194	A	C2-N3-C4	5.34	113.27	110.60
2	AB	1231	U	C5-C6-N1	-5.34	120.03	122.70
2	AB	1232	G	C5'-C4'-O4'	5.34	115.50	109.10
2	AB	1399	C	N3-C2-O2	-5.34	118.17	121.90
2	AB	1669	A	N7-C8-N9	-5.34	111.13	113.80
2	AB	1694	C	N3-C4-N4	5.34	121.74	118.00
2	AB	1856	U	N1-C1'-C2'	-5.34	106.13	112.00
2	AB	2468	A	O4'-C1'-N9	5.34	112.47	108.20
2	AB	2571	U	C5-C4-O4	5.34	129.10	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2683	C	C5'-C4'-O4'	5.34	115.50	109.10
2	AB	2714	G	C2-N3-C4	5.34	114.57	111.90
2	AB	2743	U	N1-C2-O2	-5.34	119.06	122.80
20	AT	54	VAL	CA-CB-CG2	5.34	118.91	110.90
35	BA	229	U	N3-C2-O2	-5.34	118.46	122.20
35	BA	307	C	C5-C6-N1	5.34	123.67	121.00
35	BA	554	A	C2-N3-C4	-5.34	107.93	110.60
35	BA	793	U	C4-C5-C6	5.34	122.90	119.70
35	BA	843	U	O3'-P-O5'	-5.34	93.86	104.00
35	BA	981	U	C5-C6-N1	-5.34	120.03	122.70
35	BA	1528	U	C5-C6-N1	-5.34	120.03	122.70
36	BB	45	G	O4'-C4'-C3'	5.34	110.37	106.10
37	BC	61	U	O3'-P-O5'	-5.34	93.86	104.00
57	BW	36	PHE	CB-CG-CD2	5.34	124.54	120.80
2	AB	543	G	N3-C4-C5	-5.33	125.93	128.60
2	AB	547	A	C5-C6-N6	5.33	127.97	123.70
2	AB	1448	G	C5-C6-O6	5.33	131.80	128.60
2	AB	1603	A	N1-C6-N6	-5.33	115.40	118.60
2	AB	2032	G	N3-C4-C5	-5.33	125.93	128.60
2	AB	2157	G	C1'-O4'-C4'	-5.33	105.63	109.90
2	AB	2655	G	N3-C4-N9	5.33	129.20	126.00
2	AB	2771	C	C4'-C3'-C2'	-5.33	97.27	102.60
19	AS	46	TYR	CG-CD2-CE2	-5.33	117.03	121.30
35	BA	160	A	C6-C5-N7	5.33	136.03	132.30
35	BA	1138	G	C5'-C4'-C3'	-5.33	107.46	116.00
35	BA	1171	A	N3-C4-C5	5.33	130.53	126.80
35	BA	1323	G	C4'-C3'-C2'	-5.33	97.27	102.60
53	BS	27	PHE	CD1-CG-CD2	-5.33	111.36	118.30
1	AA	30	C	C1'-O4'-C4'	-5.33	105.63	109.90
1	AA	71	C	C6-N1-C2	-5.33	118.17	120.30
2	AB	122	G	N7-C8-N9	5.33	115.77	113.10
2	AB	544	C	N3-C2-O2	-5.33	118.17	121.90
2	AB	940	G	N1-C2-N3	-5.33	120.70	123.90
2	AB	942	G	C5'-C4'-O4'	5.33	115.50	109.10
2	AB	1080	A	N9-C4-C5	5.33	107.93	105.80
2	AB	1209	U	N1-C2-N3	5.33	118.10	114.90
2	AB	1685	C	C5-C6-N1	5.33	123.67	121.00
2	AB	2130	U	C5-C6-N1	5.33	125.37	122.70
2	AB	2833	U	N3-C4-O4	5.33	123.13	119.40
5	AE	77	ARG	N-CA-CB	-5.33	101.00	110.60
35	BA	455	G	C3'-C2'-C1'	-5.33	97.23	101.50
35	BA	513	C	C1'-O4'-C4'	5.33	114.17	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	663	A	C5-C6-N6	-5.33	119.43	123.70
35	BA	842	U	N3-C4-O4	5.33	123.13	119.40
35	BA	1014	A	C5'-C4'-O4'	-5.33	102.70	109.10
35	BA	1036	A	C4-C5-C6	-5.33	114.33	117.00
35	BA	1273	C	C2-N3-C4	5.33	122.57	119.90
35	BA	1363	A	C3'-C2'-C1'	-5.33	97.23	101.50
37	BC	51	U	C4'-C3'-C2'	-5.33	97.27	102.60
49	BO	78	ARG	NE-CZ-NH1	5.33	122.97	120.30
2	AB	11	C	N3-C2-O2	-5.33	118.17	121.90
2	AB	210	C	C5-C6-N1	-5.33	118.33	121.00
2	AB	1013	C	N3-C4-C5	-5.33	119.77	121.90
2	AB	1130	U	C6-N1-C2	-5.33	117.80	121.00
2	AB	1143	A	O4'-C1'-C2'	-5.33	100.47	105.80
2	AB	1772	A	N3-C4-C5	-5.33	123.07	126.80
2	AB	1974	C	C4-C5-C6	5.33	120.06	117.40
2	AB	2218	G	N9-C4-C5	-5.33	103.27	105.40
2	AB	2231	U	C5'-C4'-O4'	5.33	115.50	109.10
2	AB	2463	C	N1-C2-N3	-5.33	115.47	119.20
2	AB	2788	C	N3-C4-C5	5.33	124.03	121.90
6	AF	12	LEU	CB-CG-CD1	5.33	120.06	111.00
24	AX	2	PHE	CB-CG-CD2	-5.33	117.07	120.80
35	BA	177	G	N3-C4-C5	-5.33	125.93	128.60
35	BA	364	A	C4-C5-N7	5.33	113.37	110.70
35	BA	835	U	N1-C1'-C2'	-5.33	106.14	112.00
35	BA	1178	G	C4-C5-N7	-5.33	108.67	110.80
35	BA	1270	G	C5-C6-O6	-5.33	125.40	128.60
35	BA	1336	C	C6-N1-C2	5.33	122.43	120.30
2	AB	41	C	N3-C2-O2	5.33	125.63	121.90
2	AB	87	U	N1-C1'-C2'	-5.33	106.14	112.00
2	AB	278	A	C3'-C2'-C1'	-5.33	97.24	101.50
2	AB	343	C	P-O3'-C3'	5.33	126.10	119.70
2	AB	654	A	O4'-C4'-C3'	5.33	110.36	106.10
2	AB	748	G	C4'-C3'-C2'	-5.33	97.27	102.60
2	AB	887	U	C5'-C4'-C3'	-5.33	107.47	116.00
2	AB	996	A	C5-C6-N1	-5.33	115.03	117.70
2	AB	1687	G	N3-C2-N2	5.33	123.63	119.90
2	AB	1854	A	O5'-P-OP2	-5.33	100.90	105.70
2	AB	2736	A	N1-C6-N6	5.33	121.80	118.60
35	BA	740	U	C4'-C3'-C2'	-5.33	97.27	102.60
35	BA	876	C	C2-N1-C1'	-5.33	112.94	118.80
35	BA	1190	G	O4'-C1'-C2'	5.33	112.40	107.60
35	BA	1502	A	OP2-P-O3'	5.33	116.93	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	BI	113	LYS	O-C-N	-5.33	114.17	122.70
2	AB	114	U	C5-C4-O4	-5.33	122.70	125.90
2	AB	142	A	C5-C6-N6	-5.33	119.44	123.70
2	AB	522	A	C4-C5-C6	5.33	119.66	117.00
2	AB	615	U	N1-C2-N3	5.33	118.10	114.90
2	AB	755	U	C2-N3-C4	-5.33	123.80	127.00
2	AB	1047	G	C4'-C3'-C2'	-5.33	97.27	102.60
2	AB	1133	A	O4'-C4'-C3'	5.33	110.36	106.10
2	AB	1150	C	N3-C2-O2	-5.33	118.17	121.90
2	AB	1289	C	C3'-C2'-C1'	5.33	105.76	101.50
2	AB	1367	A	C5-C6-N1	5.33	120.36	117.70
2	AB	1410	G	C5'-C4'-O4'	5.33	115.50	109.10
2	AB	1670	C	N3-C4-C5	-5.33	119.77	121.90
2	AB	1767	G	N9-C1'-C2'	-5.33	106.14	112.00
2	AB	2010	G	N9-C4-C5	-5.33	103.27	105.40
2	AB	2133	G	N3-C4-N9	5.33	129.20	126.00
2	AB	2183	A	N1-C6-N6	-5.33	115.40	118.60
2	AB	2190	G	N9-C1'-C2'	-5.33	106.14	112.00
2	AB	2616	C	O4'-C4'-C3'	-5.33	98.67	104.00
24	AX	72	VAL	CA-CB-CG2	5.33	118.89	110.90
2	AB	462	C	N3-C2-O2	-5.33	118.17	121.90
2	AB	677	A	N7-C8-N9	5.33	116.46	113.80
2	AB	913	U	C1'-O4'-C4'	-5.33	105.64	109.90
2	AB	1355	G	C2-N3-C4	5.33	114.56	111.90
2	AB	2564	A	C5'-C4'-O4'	5.33	115.49	109.10
2	AB	2706	A	C3'-C2'-C1'	5.33	105.76	101.50
35	BA	455	G	C5-C6-N1	5.33	114.16	111.50
35	BA	913	A	N1-C6-N6	5.33	121.80	118.60
35	BA	1458	G	C5'-C4'-C3'	-5.33	107.48	116.00
37	BC	2	G	C3'-C2'-C1'	5.33	105.76	101.50
2	AB	154	U	C1'-O4'-C4'	-5.33	105.64	109.90
2	AB	782	A	C4-C5-C6	5.33	119.66	117.00
2	AB	894	U	O4'-C1'-N1	5.33	112.46	108.20
2	AB	1003	G	C3'-C2'-C1'	-5.33	97.24	101.50
2	AB	1320	C	O3'-P-O5'	-5.33	93.88	104.00
2	AB	1509	A	N9-C4-C5	5.33	107.93	105.80
2	AB	1537	G	C4'-C3'-C2'	-5.33	97.27	102.60
2	AB	1970	A	N3-C4-C5	-5.33	123.07	126.80
2	AB	2531	A	C5-C6-N1	-5.33	115.04	117.70
2	AB	2711	A	C4-C5-C6	-5.33	114.34	117.00
9	AI	98	ASP	CB-CG-OD1	-5.33	113.51	118.30
35	BA	21	G	C3'-C2'-C1'	-5.33	97.24	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	150	U	C2-N3-C4	-5.33	123.80	127.00
35	BA	367	U	C5'-C4'-C3'	-5.33	107.48	116.00
35	BA	409	U	O4'-C1'-N1	5.33	112.46	108.20
35	BA	483	C	O4'-C1'-N1	5.33	112.46	108.20
35	BA	500	G	N1-C2-N3	5.33	127.09	123.90
35	BA	680	C	C5'-C4'-O4'	5.33	115.49	109.10
35	BA	681	A	C2-N3-C4	5.33	113.26	110.60
35	BA	715	A	P-O3'-C3'	5.33	126.09	119.70
35	BA	880	C	C5-C4-N4	-5.33	116.47	120.20
35	BA	1056	U	C4-C5-C6	5.33	122.90	119.70
35	BA	1087	G	C1'-O4'-C4'	-5.33	105.64	109.90
35	BA	1094	G	C5-C6-N1	5.33	114.16	111.50
35	BA	1183	U	C2'-C3'-O3'	5.33	122.22	113.70
35	BA	1382	C	C5'-C4'-O4'	5.33	115.49	109.10
1	AA	25	U	O5'-P-OP2	-5.32	100.91	105.70
2	AB	1050	A	C3'-C2'-C1'	-5.32	97.24	101.50
2	AB	1845	G	C8-N9-C4	-5.32	104.27	106.40
2	AB	1893	C	C2-N3-C4	5.32	122.56	119.90
2	AB	2098	U	C2-N1-C1'	5.32	124.09	117.70
14	AN	55	MET	CG-SD-CE	5.32	108.72	100.20
35	BA	628	G	C6-N1-C2	-5.32	121.91	125.10
35	BA	701	U	N3-C4-C5	-5.32	111.41	114.60
35	BA	1028	C	P-O3'-C3'	5.32	126.09	119.70
35	BA	1100	C	C5-C6-N1	5.32	123.66	121.00
35	BA	1192	C	N1-C2-N3	-5.32	115.47	119.20
35	BA	1219	A	N9-C4-C5	-5.32	103.67	105.80
35	BA	1337	G	C8-N9-C1'	5.32	133.92	127.00
35	BA	1416	G	C4-C5-C6	5.32	121.99	118.80
35	BA	1435	G	O5'-C5'-C4'	-5.32	101.59	111.70
2	AB	2607	G	N3-C4-N9	5.32	129.19	126.00
2	AB	2675	A	C2'-C3'-O3'	5.32	122.22	113.70
35	BA	847	G	C4-C5-N7	5.32	112.93	110.80
35	BA	1387	G	C8-N9-C4	-5.32	104.27	106.40
35	BA	1496	C	C4'-C3'-C2'	5.32	107.92	102.60
1	AA	23	G	O4'-C4'-C3'	5.32	110.36	106.10
1	AA	114	C	C6-N1-C2	5.32	122.43	120.30
2	AB	240	C	C5-C6-N1	-5.32	118.34	121.00
2	AB	701	G	N1-C2-N2	5.32	120.99	116.20
2	AB	730	A	C6-N1-C2	5.32	121.79	118.60
2	AB	1049	C	N3-C4-N4	5.32	121.72	118.00
2	AB	1622	G	N3-C2-N2	5.32	123.62	119.90
2	AB	1653	G	C3'-C2'-C1'	-5.32	97.24	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2035	G	C4-C5-N7	-5.32	108.67	110.80
2	AB	2395	C	N3-C4-C5	5.32	124.03	121.90
2	AB	2435	A	N1-C2-N3	-5.32	126.64	129.30
2	AB	2470	G	O4'-C1'-C2'	-5.32	100.48	105.80
2	AB	2722	G	C8-N9-C4	-5.32	104.27	106.40
2	AB	2743	U	C4-C5-C6	5.32	122.89	119.70
2	AB	2788	C	C4-C5-C6	-5.32	114.74	117.40
19	AS	17	LEU	CB-CG-CD2	5.32	120.04	111.00
35	BA	41	G	C6-C5-N7	-5.32	127.21	130.40
35	BA	451	A	C5'-C4'-O4'	5.32	115.48	109.10
35	BA	507	C	O4'-C4'-C3'	5.32	110.36	106.10
35	BA	561	U	N3-C4-C5	5.32	117.79	114.60
35	BA	693	G	O4'-C1'-N9	5.32	112.46	108.20
35	BA	710	G	C4'-C3'-C2'	-5.32	97.28	102.60
35	BA	729	A	N7-C8-N9	5.32	116.46	113.80
35	BA	871	U	C4-C5-C6	5.32	122.89	119.70
35	BA	923	A	C1'-O4'-C4'	-5.32	105.64	109.90
35	BA	1013	G	C6-N1-C2	5.32	128.29	125.10
35	BA	1245	C	O4'-C1'-N1	5.32	112.46	108.20
35	BA	1501	C	C5-C6-N1	5.32	123.66	121.00
35	BA	1513	A	C5'-C4'-O4'	5.32	115.48	109.10
2	AB	435	C	C4'-C3'-C2'	-5.32	97.28	102.60
2	AB	443	A	N1-C6-N6	5.32	121.79	118.60
2	AB	991	C	N1-C1'-C2'	-5.32	106.15	112.00
2	AB	1005	C	P-O3'-C3'	5.32	126.08	119.70
2	AB	1574	C	C4-C5-C6	5.32	120.06	117.40
2	AB	1662	U	C4'-C3'-C2'	-5.32	97.28	102.60
2	AB	1941	C	C6-N1-C2	5.32	122.43	120.30
35	BA	85	U	N1-C1'-C2'	-5.32	106.15	112.00
35	BA	279	A	C5-N7-C8	5.32	106.56	103.90
35	BA	820	U	C2-N3-C4	-5.32	123.81	127.00
35	BA	1015	G	N9-C1'-C2'	-5.32	106.15	112.00
2	AB	150	U	C1'-O4'-C4'	-5.32	105.65	109.90
2	AB	1076	C	O4'-C1'-N1	5.32	112.45	108.20
2	AB	1258	U	O4'-C1'-N1	5.32	112.45	108.20
2	AB	1497	U	C4'-C3'-C2'	-5.32	97.28	102.60
2	AB	1557	C	N3-C4-C5	-5.32	119.77	121.90
2	AB	2149	U	O4'-C1'-N1	5.32	112.45	108.20
2	AB	2279	G	C4-C5-N7	5.32	112.93	110.80
2	AB	2299	U	C4'-C3'-C2'	-5.32	97.28	102.60
2	AB	2523	G	C5-N7-C8	-5.32	101.64	104.30
2	AB	2665	A	C5'-C4'-O4'	5.32	115.48	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AL	15	TRP	CD1-NE1-CE2	5.32	113.79	109.00
35	BA	344	A	O4'-C1'-N9	5.32	112.45	108.20
35	BA	1099	G	C5-C6-O6	-5.32	125.41	128.60
35	BA	1142	G	N3-C2-N2	5.32	123.62	119.90
35	BA	1188	A	C2-N3-C4	5.32	113.26	110.60
35	BA	1275	A	C6-C5-N7	-5.32	128.58	132.30
35	BA	1330	U	C2-N3-C4	5.32	130.19	127.00
35	BA	1435	G	N9-C1'-C2'	-5.32	106.15	112.00
37	BC	72	C	N3-C4-C5	5.32	124.03	121.90
50	BP	41	TRP	NE1-CE2-CD2	-5.32	101.98	107.30
1	AA	28	C	C5-C6-N1	-5.32	118.34	121.00
1	AA	72	G	C8-N9-C4	-5.32	104.27	106.40
1	AA	105	G	C8-N9-C4	5.32	108.53	106.40
2	AB	552	U	N1-C2-O2	5.32	126.52	122.80
2	AB	1461	C	O5'-C5'-C4'	5.32	121.80	111.70
2	AB	1863	G	C4-C5-C6	5.32	121.99	118.80
2	AB	2360	G	N3-C4-N9	5.32	129.19	126.00
2	AB	2714	G	C5-N7-C8	-5.32	101.64	104.30
35	BA	354	G	O4'-C1'-C2'	-5.32	100.48	105.80
35	BA	694	A	C4-C5-N7	5.32	113.36	110.70
35	BA	1426	G	C6-N1-C2	-5.32	121.91	125.10
2	AB	901	C	C4'-C3'-C2'	-5.31	97.29	102.60
2	AB	1308	A	C5'-C4'-O4'	5.31	115.48	109.10
2	AB	1757	A	C4-C5-C6	5.31	119.66	117.00
2	AB	2134	A	C4-C5-C6	-5.31	114.34	117.00
22	AV	76	ARG	NE-CZ-NH2	-5.31	117.64	120.30
35	BA	474	G	C5'-C4'-C3'	-5.31	107.50	116.00
35	BA	1191	A	C5-C6-N1	5.31	120.36	117.70
2	AB	122	G	N1-C2-N3	-5.31	120.71	123.90
2	AB	177	G	C3'-C2'-C1'	-5.31	97.25	101.50
2	AB	553	G	N1-C6-O6	-5.31	116.71	119.90
2	AB	555	G	C5-C6-O6	5.31	131.79	128.60
2	AB	630	G	N1-C6-O6	5.31	123.09	119.90
2	AB	659	G	N1-C2-N2	5.31	120.98	116.20
2	AB	1323	C	C1'-O4'-C4'	-5.31	105.65	109.90
2	AB	1380	G	C1'-O4'-C4'	-5.31	105.65	109.90
2	AB	1389	G	C8-N9-C4	5.31	108.53	106.40
2	AB	1598	A	C5'-C4'-C3'	-5.31	107.50	116.00
2	AB	2160	C	C5-C4-N4	-5.31	116.48	120.20
2	AB	2526	G	P-O3'-C3'	5.31	126.08	119.70
19	AS	29	ARG	CA-CB-CG	5.31	125.09	113.40
35	BA	265	G	C5'-C4'-C3'	-5.31	107.50	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	518	C	C3'-C2'-C1'	5.31	105.75	101.50
35	BA	747	A	O4'-C1'-N9	5.31	112.45	108.20
35	BA	1326	U	C5-C6-N1	-5.31	120.04	122.70
35	BA	1461	G	C5-N7-C8	5.31	106.96	104.30
2	AB	1543	G	C5'-C4'-C3'	-5.31	107.50	116.00
2	AB	2052	A	O4'-C1'-N9	5.31	112.45	108.20
30	A3	39	ARG	NE-CZ-NH2	-5.31	117.64	120.30
35	BA	1335	U	C5-C4-O4	-5.31	122.71	125.90
1	AA	35	C	C4'-C3'-C2'	-5.31	97.29	102.60
2	AB	563	A	C4-C5-C6	-5.31	114.34	117.00
2	AB	581	C	O4'-C1'-N1	5.31	112.45	108.20
2	AB	1129	A	N9-C4-C5	-5.31	103.68	105.80
2	AB	1560	G	C2-N3-C4	5.31	114.56	111.90
2	AB	1727	C	C5-C6-N1	-5.31	118.34	121.00
2	AB	1761	C	N3-C2-O2	-5.31	118.18	121.90
2	AB	1928	A	N1-C2-N3	5.31	131.96	129.30
2	AB	1935	G	C1'-O4'-C4'	5.31	114.15	109.90
2	AB	2285	C	C6-N1-C2	-5.31	118.18	120.30
2	AB	2758	A	N1-C6-N6	-5.31	115.41	118.60
2	AB	2786	U	C2-N3-C4	-5.31	123.81	127.00
35	BA	180	U	O3'-P-O5'	-5.31	93.91	104.00
35	BA	295	C	C5-C6-N1	-5.31	118.34	121.00
35	BA	321	A	N3-C4-C5	5.31	130.52	126.80
35	BA	785	G	C8-N9-C4	-5.31	104.28	106.40
35	BA	1342	C	C5-C6-N1	-5.31	118.34	121.00
35	BA	1440	U	C5-C4-O4	5.31	129.09	125.90
35	BA	1495	U	C6-N1-C2	-5.31	117.81	121.00
37	BC	24	C	C1'-O4'-C4'	-5.31	105.65	109.90
2	AB	16	C	P-O5'-C5'	5.31	129.39	120.90
2	AB	195	A	N7-C8-N9	5.31	116.45	113.80
2	AB	414	C	N1-C2-O2	5.31	122.08	118.90
2	AB	693	A	N9-C4-C5	5.31	107.92	105.80
2	AB	835	C	N3-C2-O2	-5.31	118.19	121.90
2	AB	890	C	C4-C5-C6	5.31	120.05	117.40
2	AB	1224	U	N3-C4-C5	-5.31	111.42	114.60
2	AB	1590	A	C1'-O4'-C4'	-5.31	105.65	109.90
2	AB	1702	G	C5-N7-C8	-5.31	101.65	104.30
2	AB	1888	G	C4-C5-C6	5.31	121.98	118.80
2	AB	2036	C	C5-C4-N4	-5.31	116.48	120.20
2	AB	2121	G	N9-C1'-C2'	-5.31	106.16	112.00
2	AB	2712	C	P-O3'-C3'	5.31	126.07	119.70
35	BA	65	A	N3-C4-N9	5.31	131.65	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	359	G	C4'-C3'-C2'	-5.31	97.29	102.60
35	BA	543	U	C5'-C4'-C3'	-5.31	107.51	116.00
35	BA	886	G	C8-N9-C4	-5.31	104.28	106.40
35	BA	949	A	C4-C5-N7	-5.31	108.05	110.70
35	BA	1059	C	N1-C2-N3	5.31	122.92	119.20
35	BA	1372	U	N3-C2-O2	-5.31	118.48	122.20
2	AB	599	A	N1-C2-N3	-5.31	126.65	129.30
2	AB	1020	A	N7-C8-N9	5.31	116.45	113.80
2	AB	1204	A	N1-C6-N6	5.31	121.78	118.60
2	AB	1645	G	O4'-C1'-N9	5.31	112.44	108.20
2	AB	1762	A	N9-C4-C5	-5.31	103.68	105.80
2	AB	2192	U	N3-C4-O4	-5.31	115.69	119.40
2	AB	2287	A	C6-N1-C2	-5.31	115.42	118.60
2	AB	2647	U	C2-N3-C4	-5.31	123.82	127.00
35	BA	11	G	N3-C4-C5	-5.31	125.95	128.60
35	BA	374	A	N9-C1'-C2'	-5.31	106.16	112.00
35	BA	539	A	C4'-C3'-O3'	5.31	123.61	113.00
35	BA	579	A	C5'-C4'-O4'	5.31	115.47	109.10
1	AA	55	U	O4'-C4'-C3'	5.30	110.34	106.10
2	AB	214	G	C8-N9-C4	-5.30	104.28	106.40
2	AB	1088	A	C1'-O4'-C4'	-5.30	105.66	109.90
2	AB	1096	A	C5-N7-C8	-5.30	101.25	103.90
2	AB	1179	G	O4'-C1'-N9	5.30	112.44	108.20
2	AB	1396	U	C1'-O4'-C4'	5.30	114.14	109.90
2	AB	1941	C	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	1961	C	C5'-C4'-O4'	5.30	115.47	109.10
2	AB	2380	C	N1-C2-O2	5.30	122.08	118.90
2	AB	2792	A	C5-N7-C8	-5.30	101.25	103.90
35	BA	278	G	N1-C2-N3	-5.30	120.72	123.90
35	BA	330	C	N1-C1'-C2'	-5.30	106.17	112.00
35	BA	384	G	C4-N9-C1'	-5.30	119.60	126.50
35	BA	426	U	C4'-C3'-C2'	5.30	107.90	102.60
35	BA	812	G	C5'-C4'-O4'	5.30	115.47	109.10
35	BA	866	C	C4'-C3'-C2'	-5.30	97.30	102.60
35	BA	1040	U	C5'-C4'-O4'	5.30	115.47	109.10
1	AA	56	G	C5-N7-C8	5.30	106.95	104.30
2	AB	132	G	C8-N9-C1'	5.30	133.89	127.00
2	AB	234	U	C1'-O4'-C4'	5.30	114.14	109.90
2	AB	1322	A	N1-C6-N6	5.30	121.78	118.60
2	AB	2285	C	C5-C6-N1	5.30	123.65	121.00
35	BA	241	G	O4'-C1'-N9	5.30	112.44	108.20
2	AB	106	C	N3-C2-O2	-5.30	118.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	118	A	C3'-C2'-C1'	-5.30	97.26	101.50
2	AB	470	A	C6-C5-N7	5.30	136.01	132.30
2	AB	554	U	P-O5'-C5'	5.30	129.38	120.90
2	AB	579	G	C6-C5-N7	-5.30	127.22	130.40
2	AB	704	G	C6-C5-N7	5.30	133.58	130.40
2	AB	876	C	C1'-O4'-C4'	-5.30	105.66	109.90
2	AB	1292	G	C5-N7-C8	5.30	106.95	104.30
2	AB	1817	G	N9-C4-C5	5.30	107.52	105.40
2	AB	1969	A	C6-N1-C2	-5.30	115.42	118.60
2	AB	2532	G	C5'-C4'-O4'	5.30	115.46	109.10
35	BA	54	C	P-O3'-C3'	5.30	126.06	119.70
35	BA	587	G	N3-C4-N9	-5.30	122.82	126.00
35	BA	646	G	C6-C5-N7	5.30	133.58	130.40
35	BA	1079	G	P-O3'-C3'	5.30	126.06	119.70
36	BB	51	C	O4'-C1'-C2'	5.30	112.37	107.60
40	BF	170	LEU	CB-CA-C	5.30	120.27	110.20
1	AA	24	G	C4-C5-C6	-5.30	115.62	118.80
2	AB	377	G	N1-C2-N2	5.30	120.97	116.20
2	AB	651	G	P-O3'-C3'	5.30	126.06	119.70
2	AB	846	U	C2-N3-C4	5.30	130.18	127.00
2	AB	1073	A	O4'-C1'-N9	-5.30	103.96	108.20
2	AB	1117	C	O4'-C1'-N1	5.30	112.44	108.20
2	AB	1564	C	C4-C5-C6	5.30	120.05	117.40
2	AB	1879	C	N3-C2-O2	-5.30	118.19	121.90
2	AB	2567	G	N3-C2-N2	5.30	123.61	119.90
2	AB	2576	G	O4'-C1'-N9	5.30	112.44	108.20
21	AU	9	HIS	CA-CB-CG	5.30	122.61	113.60
35	BA	98	A	C3'-C2'-C1'	5.30	105.74	101.50
35	BA	376	G	C2-N3-C4	-5.30	109.25	111.90
35	BA	655	A	C2-N3-C4	5.30	113.25	110.60
35	BA	844	G	N3-C2-N2	-5.30	116.19	119.90
35	BA	1127	G	O4'-C1'-N9	-5.30	103.96	108.20
35	BA	1305	G	O4'-C1'-N9	5.30	112.44	108.20
35	BA	1392	G	O5'-P-OP2	-5.30	100.93	105.70
47	BM	122	PRO	N-CD-CG	5.30	111.15	103.20
1	AA	100	G	N7-C8-N9	5.30	115.75	113.10
2	AB	891	G	N7-C8-N9	5.30	115.75	113.10
2	AB	1594	U	O4'-C4'-C3'	-5.30	98.70	104.00
2	AB	2598	A	N9-C4-C5	5.30	107.92	105.80
35	BA	112	G	N3-C4-N9	5.30	129.18	126.00
35	BA	403	C	N1-C1'-C2'	-5.30	106.17	112.00
2	AB	221	A	C5'-C4'-C3'	-5.30	107.53	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	690	G	C5'-C4'-O4'	5.30	115.46	109.10
2	AB	1249	U	N3-C2-O2	-5.30	118.49	122.20
2	AB	1413	A	N9-C4-C5	5.30	107.92	105.80
2	AB	1426	G	C8-N9-C1'	-5.30	120.11	127.00
2	AB	1936	A	C4-C5-C6	-5.30	114.35	117.00
2	AB	2375	G	N7-C8-N9	5.30	115.75	113.10
2	AB	2549	G	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	2620	C	C4'-C3'-C2'	-5.30	97.30	102.60
2	AB	2734	A	C5'-C4'-C3'	-5.30	107.53	116.00
28	A1	37	ARG	CD-NE-CZ	5.30	131.01	123.60
35	BA	98	A	C4-C5-N7	-5.30	108.05	110.70
35	BA	133	U	C5-C4-O4	-5.30	122.72	125.90
35	BA	432	A	C4-C5-N7	-5.30	108.05	110.70
35	BA	671	G	C5'-C4'-O4'	5.30	115.45	109.10
35	BA	700	G	C3'-C2'-C1'	-5.30	97.26	101.50
35	BA	778	G	O4'-C1'-N9	-5.30	103.96	108.20
35	BA	1055	A	N7-C8-N9	-5.30	111.15	113.80
35	BA	1138	G	C3'-C2'-C1'	5.30	105.74	101.50
35	BA	1239	A	O4'-C1'-N9	-5.30	103.96	108.20
35	BA	1423	G	C4-C5-C6	5.30	121.98	118.80
43	BI	84	TYR	CG-CD1-CE1	-5.30	117.06	121.30
2	AB	353	C	C2-N1-C1'	-5.29	112.98	118.80
2	AB	522	A	N3-C4-C5	-5.29	123.09	126.80
2	AB	1205	A	N1-C2-N3	5.29	131.95	129.30
2	AB	1580	A	N9-C4-C5	-5.29	103.68	105.80
2	AB	1967	C	C5-C6-N1	-5.29	118.35	121.00
2	AB	2876	G	C1'-O4'-C4'	-5.29	105.66	109.90
35	BA	951	G	C4-C5-N7	5.29	112.92	110.80
1	AA	98	G	C1'-O4'-C4'	5.29	114.13	109.90
2	AB	297	G	C4-C5-C6	5.29	121.98	118.80
2	AB	388	G	C4-C5-N7	5.29	112.92	110.80
2	AB	660	C	C5-C6-N1	5.29	123.65	121.00
2	AB	942	G	C1'-O4'-C4'	5.29	114.14	109.90
2	AB	1256	G	C2-N3-C4	5.29	114.55	111.90
2	AB	2050	C	C2-N3-C4	5.29	122.55	119.90
2	AB	2154	A	N7-C8-N9	5.29	116.45	113.80
2	AB	2327	A	O4'-C1'-C2'	-5.29	100.51	105.80
2	AB	2389	G	O4'-C1'-N9	5.29	112.43	108.20
2	AB	2496	C	C5-C4-N4	-5.29	116.50	120.20
2	AB	2765	A	C8-N9-C4	-5.29	103.68	105.80
5	AE	107	VAL	CA-CB-CG1	-5.29	102.96	110.90
6	AF	154	ASP	CB-CG-OD2	-5.29	113.54	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	342	C	C5-C6-N1	5.29	123.65	121.00
35	BA	722	G	C5'-C4'-C3'	-5.29	107.53	116.00
35	BA	894	G	C8-N9-C1'	5.29	133.88	127.00
35	BA	1406	U	N1-C2-O2	-5.29	119.09	122.80
35	BA	1408	A	N9-C4-C5	5.29	107.92	105.80
36	BB	32	U	P-O3'-C3'	5.29	126.05	119.70
37	BC	1	C	P-O3'-C3'	5.29	126.05	119.70
37	BC	5	G	C6-N1-C2	-5.29	121.92	125.10
37	BC	46	G	C6-N1-C2	-5.29	121.92	125.10
1	AA	113	C	O4'-C1'-N1	5.29	112.43	108.20
2	AB	4	U	C5'-C4'-C3'	-5.29	107.53	116.00
2	AB	772	C	C5-C6-N1	5.29	123.64	121.00
2	AB	839	U	C5'-C4'-O4'	5.29	115.45	109.10
2	AB	957	C	C6-N1-C1'	-5.29	114.45	120.80
2	AB	1048	A	N3-C4-N9	5.29	131.63	127.40
2	AB	1237	A	P-O5'-C5'	5.29	129.37	120.90
2	AB	1388	G	C4-C5-C6	5.29	121.97	118.80
2	AB	1500	G	N1-C2-N3	-5.29	120.73	123.90
2	AB	1711	A	C5'-C4'-C3'	-5.29	107.53	116.00
2	AB	1893	C	C3'-C2'-C1'	5.29	105.73	101.50
2	AB	2486	C	C5'-C4'-O4'	5.29	115.45	109.10
2	AB	2543	G	C8-N9-C4	-5.29	104.28	106.40
2	AB	2698	U	C5-C4-O4	-5.29	122.72	125.90
23	AW	21	ARG	NE-CZ-NH1	-5.29	117.66	120.30
35	BA	10	A	N7-C8-N9	5.29	116.45	113.80
35	BA	244	U	C1'-O4'-C4'	-5.29	105.67	109.90
35	BA	1102	A	N9-C1'-C2'	-5.29	106.18	112.00
35	BA	1535	C	C4-C5-C6	5.29	120.05	117.40
47	BM	51	PHE	CD1-CE1-CZ	5.29	126.45	120.10
2	AB	795	C	O4'-C4'-C3'	5.29	110.33	106.10
2	AB	799	G	C1'-O4'-C4'	5.29	114.13	109.90
2	AB	986	C	C3'-C2'-C1'	-5.29	97.27	101.50
2	AB	1528	A	C3'-C2'-C1'	5.29	105.73	101.50
2	AB	1572	A	C6-N1-C2	5.29	121.77	118.60
2	AB	2422	C	N3-C2-O2	-5.29	118.20	121.90
2	AB	2903	U	C5-C6-N1	5.29	125.34	122.70
20	AT	19	THR	CA-CB-CG2	-5.29	104.99	112.40
35	BA	577	G	C5'-C4'-O4'	5.29	115.45	109.10
35	BA	916	U	P-O3'-C3'	5.29	126.05	119.70
35	BA	957	U	C5-C4-O4	-5.29	122.73	125.90
35	BA	1460	C	C5'-C4'-C3'	5.29	124.47	116.00
36	BB	54	U	N1-C1'-C2'	-5.29	106.18	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	BR	3	THR	N-CA-CB	-5.29	100.25	110.30
1	AA	28	C	N3-C4-C5	-5.29	119.78	121.90
2	AB	750	A	C5-C6-N1	5.29	120.34	117.70
2	AB	855	G	C8-N9-C4	-5.29	104.28	106.40
2	AB	1167	C	N3-C4-C5	-5.29	119.78	121.90
2	AB	1234	U	N3-C4-C5	-5.29	111.43	114.60
2	AB	1907	G	C8-N9-C4	-5.29	104.28	106.40
35	BA	82	G	C2-N3-C4	-5.29	109.25	111.90
35	BA	700	G	C5-N7-C8	5.29	106.94	104.30
35	BA	913	A	N9-C1'-C2'	5.29	120.88	114.00
35	BA	1262	C	C6-N1-C2	-5.29	118.18	120.30
52	BR	32	PHE	CB-CG-CD2	5.29	124.50	120.80
2	AB	799	G	C4-C5-N7	-5.29	108.69	110.80
2	AB	1188	U	N1-C2-O2	5.29	126.50	122.80
2	AB	1567	G	N3-C2-N2	-5.29	116.20	119.90
2	AB	2048	G	O4'-C1'-N9	5.29	112.43	108.20
2	AB	2049	G	C5-C6-O6	5.29	131.77	128.60
2	AB	2212	A	O4'-C1'-C2'	-5.29	100.51	105.80
2	AB	2325	G	O4'-C1'-C2'	5.29	112.36	107.60
2	AB	2817	U	C5-C4-O4	-5.29	122.73	125.90
2	AB	2844	G	C3'-C2'-C1'	-5.29	97.27	101.50
35	BA	128	G	O4'-C1'-N9	5.29	112.43	108.20
35	BA	584	G	N1-C2-N2	5.29	120.96	116.20
35	BA	1168	U	N1-C2-N3	5.29	118.07	114.90
1	AA	55	U	N1-C1'-C2'	-5.29	106.19	112.00
1	AA	78	A	N3-C4-N9	5.29	131.63	127.40
1	AA	87	U	C1'-O4'-C4'	-5.29	105.67	109.90
2	AB	187	G	N1-C2-N2	-5.29	111.44	116.20
2	AB	253	C	C2-N3-C4	-5.29	117.26	119.90
2	AB	366	C	C2-N1-C1'	-5.29	112.99	118.80
2	AB	440	C	C4'-C3'-C2'	-5.29	97.31	102.60
2	AB	590	A	O4'-C1'-N9	5.29	112.43	108.20
2	AB	748	G	C2'-C3'-O3'	5.29	122.16	113.70
2	AB	810	U	C4-C5-C6	5.29	122.87	119.70
2	AB	838	C	C5-C6-N1	5.29	123.64	121.00
2	AB	1229	C	C1'-O4'-C4'	-5.29	105.67	109.90
2	AB	1688	U	C4'-C3'-C2'	-5.29	97.31	102.60
2	AB	1711	A	C4-C5-C6	-5.29	114.36	117.00
2	AB	1790	C	O4'-C1'-N1	5.29	112.43	108.20
2	AB	2286	G	C6-C5-N7	5.29	133.57	130.40
2	AB	2664	G	P-O3'-C3'	5.29	126.04	119.70
2	AB	2836	U	C4-C5-C6	5.29	122.87	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2868	A	P-O5'-C5'	5.29	129.36	120.90
2	AB	2872	A	C4-C5-C6	5.29	119.64	117.00
9	AI	113	SER	N-CA-C	5.29	125.27	111.00
14	AN	58	TYR	CD1-CE1-CZ	5.29	124.56	119.80
35	BA	356	A	C5'-C4'-C3'	-5.29	107.54	116.00
37	BC	35	C	N3-C2-O2	5.29	125.60	121.90
37	BC	69	C	N3-C4-N4	5.29	121.70	118.00
2	AB	194	G	P-O5'-C5'	5.28	129.35	120.90
2	AB	682	G	O4'-C1'-N9	5.28	112.43	108.20
2	AB	759	G	O5'-P-OP2	-5.28	100.95	105.70
2	AB	925	A	C5-C6-N1	-5.28	115.06	117.70
2	AB	1015	U	C5-C6-N1	-5.28	120.06	122.70
2	AB	1254	A	N9-C1'-C2'	-5.28	106.19	112.00
2	AB	1302	A	C5-N7-C8	-5.28	101.26	103.90
2	AB	1811	G	N9-C4-C5	5.28	107.51	105.40
2	AB	1922	G	N3-C2-N2	-5.28	116.20	119.90
2	AB	2057	G	N3-C2-N2	-5.28	116.20	119.90
12	AL	67	ASN	N-CA-CB	-5.28	101.09	110.60
35	BA	1454	G	O4'-C1'-N9	5.28	112.43	108.20
42	BH	65	GLU	N-CA-CB	-5.28	101.09	110.60
2	AB	1215	G	N1-C2-N2	5.28	120.95	116.20
2	AB	1590	A	N7-C8-N9	5.28	116.44	113.80
2	AB	2748	A	C5'-C4'-O4'	5.28	115.44	109.10
2	AB	2856	A	C4-C5-C6	5.28	119.64	117.00
35	BA	141	G	C5'-C4'-C3'	-5.28	107.55	116.00
35	BA	215	C	N1-C1'-C2'	-5.28	106.19	112.00
37	BC	41	C	P-O3'-C3'	5.28	126.04	119.70
1	AA	90	C	C1'-O4'-C4'	-5.28	105.68	109.90
2	AB	479	A	C5-N7-C8	-5.28	101.26	103.90
2	AB	774	G	N3-C4-N9	-5.28	122.83	126.00
2	AB	1265	A	C1'-O4'-C4'	-5.28	105.68	109.90
2	AB	1435	G	C2-N3-C4	5.28	114.54	111.90
2	AB	1538	G	C2-N3-C4	5.28	114.54	111.90
2	AB	2564	A	C5-C6-N1	5.28	120.34	117.70
2	AB	2658	C	C2'-C3'-O3'	5.28	122.15	113.70
2	AB	2781	A	C2-N3-C4	5.28	113.24	110.60
19	AS	95	ALA	N-CA-CB	-5.28	102.71	110.10
35	BA	873	A	C5-N7-C8	-5.28	101.26	103.90
35	BA	962	C	N1-C2-O2	5.28	122.07	118.90
35	BA	1127	G	C2-N3-C4	5.28	114.54	111.90
35	BA	1360	A	O4'-C1'-N9	5.28	112.42	108.20
35	BA	1373	G	C4-C5-N7	5.28	112.91	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1386	G	C2-N3-C4	5.28	114.54	111.90
35	BA	1439	G	C4-C5-C6	5.28	121.97	118.80
36	BB	53	G	C5-N7-C8	5.28	106.94	104.30
2	AB	145	C	C2-N3-C4	-5.28	117.26	119.90
2	AB	1588	G	N3-C2-N2	5.28	123.59	119.90
2	AB	1742	U	C2-N3-C4	-5.28	123.83	127.00
2	AB	1909	C	O4'-C4'-C3'	-5.28	98.72	104.00
2	AB	2181	U	C2-N3-C4	-5.28	123.83	127.00
35	BA	136	C	O4'-C1'-N1	5.28	112.42	108.20
35	BA	1163	A	N1-C2-N3	-5.28	126.66	129.30
35	BA	1533	C	C6-N1-C1'	5.28	127.14	120.80
1	AA	112	G	C8-N9-C4	5.28	108.51	106.40
2	AB	234	U	N1-C2-N3	5.28	118.07	114.90
2	AB	392	U	O4'-C1'-N1	5.28	112.42	108.20
2	AB	407	G	N1-C6-O6	-5.28	116.73	119.90
2	AB	1074	G	O3'-P-O5'	-5.28	93.97	104.00
2	AB	1324	G	N7-C8-N9	-5.28	110.46	113.10
2	AB	1606	C	O4'-C4'-C3'	-5.28	98.72	104.00
2	AB	2046	G	C3'-C2'-C1'	-5.28	97.28	101.50
2	AB	2345	G	C8-N9-C4	-5.28	104.29	106.40
2	AB	2482	A	N3-C4-C5	-5.28	123.11	126.80
2	AB	2637	U	O4'-C1'-N1	5.28	112.42	108.20
2	AB	2718	G	C2-N3-C4	5.28	114.54	111.90
35	BA	176	C	C4'-C3'-C2'	-5.28	97.32	102.60
35	BA	402	G	C4-C5-C6	5.28	121.97	118.80
35	BA	444	G	N9-C4-C5	5.28	107.51	105.40
35	BA	951	G	C6-N1-C2	-5.28	121.93	125.10
35	BA	1155	A	N1-C6-N6	5.28	121.77	118.60
35	BA	1274	A	O3'-P-O5'	5.28	114.03	104.00
35	BA	1336	C	O5'-C5'-C4'	-5.28	101.67	111.70
35	BA	1434	A	P-O3'-C3'	5.28	126.03	119.70
35	BA	1500	A	C6-N1-C2	-5.28	115.43	118.60
36	BB	49	U	O4'-C4'-C3'	-5.28	98.72	104.00
2	AB	7	G	C4-C5-N7	5.28	112.91	110.80
2	AB	713	G	C3'-C2'-C1'	5.28	105.72	101.50
2	AB	795	C	N3-C4-C5	-5.28	119.79	121.90
2	AB	1474	U	O4'-C1'-N1	5.28	112.42	108.20
2	AB	2238	G	O4'-C1'-N9	-5.28	103.98	108.20
2	AB	2532	G	C5-N7-C8	-5.28	101.66	104.30
35	BA	120	A	O4'-C4'-C3'	5.28	110.32	106.10
35	BA	122	G	OP1-P-O3'	5.28	116.81	105.20
35	BA	185	U	C5-C6-N1	5.28	125.34	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	560	A	N9-C4-C5	-5.28	103.69	105.80
35	BA	846	G	P-O3'-C3'	5.28	126.03	119.70
35	BA	1282	C	P-O5'-C5'	5.28	129.34	120.90
35	BA	1499	A	C3'-C2'-C1'	-5.28	97.28	101.50
35	BA	1521	C	C5'-C4'-O4'	5.28	115.43	109.10
2	AB	384	A	N3-C4-C5	-5.27	123.11	126.80
2	AB	427	U	C1'-O4'-C4'	-5.27	105.68	109.90
2	AB	1235	G	C1'-O4'-C4'	-5.27	105.68	109.90
2	AB	1634	A	C5-C6-N6	-5.27	119.48	123.70
2	AB	2178	C	N3-C4-N4	-5.27	114.31	118.00
2	AB	2655	G	C4-C5-C6	-5.27	115.64	118.80
6	AF	60	TRP	CD1-NE1-CE2	5.27	113.75	109.00
35	BA	525	C	N3-C2-O2	-5.27	118.21	121.90
35	BA	1230	C	N1-C2-O2	5.27	122.06	118.90
35	BA	1337	G	C5-N7-C8	5.27	106.94	104.30
2	AB	9	G	P-O3'-C3'	5.27	126.03	119.70
2	AB	121	G	C8-N9-C4	-5.27	104.29	106.40
2	AB	404	A	C5-C6-N6	-5.27	119.48	123.70
2	AB	538	A	C5-C6-N1	5.27	120.34	117.70
2	AB	937	C	N1-C2-O2	5.27	122.06	118.90
2	AB	1026	G	N1-C2-N3	-5.27	120.74	123.90
2	AB	1427	A	C4-C5-C6	-5.27	114.36	117.00
2	AB	1439	A	C4-C5-N7	-5.27	108.06	110.70
2	AB	1631	G	C5'-C4'-O4'	5.27	115.43	109.10
2	AB	2528	U	C4'-C3'-C2'	5.27	107.87	102.60
2	AB	2571	U	O4'-C1'-N1	5.27	112.42	108.20
2	AB	2671	G	N3-C4-C5	-5.27	125.96	128.60
2	AB	2791	G	O4'-C4'-C3'	5.27	110.32	106.10
2	AB	2861	U	C5-C4-O4	5.27	129.06	125.90
4	AD	29	PHE	CB-CG-CD2	5.27	124.49	120.80
30	A3	54	ILE	CB-CA-C	5.27	122.14	111.60
35	BA	146	G	N1-C2-N2	5.27	120.94	116.20
35	BA	310	G	P-O3'-C3'	5.27	126.03	119.70
35	BA	348	G	N1-C6-O6	-5.27	116.74	119.90
35	BA	349	A	C5-N7-C8	5.27	106.54	103.90
35	BA	1137	C	C5-C4-N4	5.27	123.89	120.20
35	BA	1303	C	C5'-C4'-O4'	5.27	115.43	109.10
2	AB	65	U	N3-C2-O2	-5.27	118.51	122.20
2	AB	189	G	C5-C6-N1	-5.27	108.86	111.50
2	AB	611	C	C2'-C3'-O3'	5.27	122.13	113.70
2	AB	941	A	C5-C6-N6	-5.27	119.48	123.70
2	AB	2372	U	C5-C4-O4	-5.27	122.74	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	371	A	P-O3'-C3'	5.27	126.03	119.70
35	BA	880	C	C5-C6-N1	-5.27	118.36	121.00
50	BP	76	PHE	CB-CG-CD2	-5.27	117.11	120.80
2	AB	450	G	C2-N3-C4	5.27	114.53	111.90
2	AB	454	A	C3'-C2'-C1'	-5.27	97.28	101.50
2	AB	875	G	C2-N3-C4	-5.27	109.27	111.90
2	AB	1167	C	C3'-C2'-C1'	5.27	105.72	101.50
2	AB	2322	A	O4'-C1'-N9	5.27	112.42	108.20
2	AB	2470	G	C8-N9-C4	-5.27	104.29	106.40
35	BA	531	U	C6-N1-C2	-5.27	117.84	121.00
35	BA	625	U	C5'-C4'-C3'	-5.27	107.57	116.00
35	BA	748	G	N3-C2-N2	5.27	123.59	119.90
35	BA	1002	G	O4'-C1'-N9	5.27	112.42	108.20
35	BA	1312	G	C5-C6-N1	5.27	114.14	111.50
35	BA	1356	G	O4'-C4'-C3'	5.27	110.32	106.10
2	AB	74	A	C5-N7-C8	5.27	106.53	103.90
2	AB	358	U	O4'-C4'-C3'	5.27	110.31	106.10
2	AB	585	G	C1'-O4'-C4'	-5.27	105.69	109.90
2	AB	1086	A	C2-N3-C4	-5.27	107.97	110.60
2	AB	1334	G	N1-C2-N3	5.27	127.06	123.90
2	AB	1340	U	N1-C2-N3	5.27	118.06	114.90
2	AB	1569	A	C6-N1-C2	-5.27	115.44	118.60
2	AB	1796	U	C6-N1-C1'	5.27	128.58	121.20
2	AB	2242	G	C5-C6-N1	5.27	114.13	111.50
2	AB	2286	G	O4'-C1'-N9	5.27	112.42	108.20
2	AB	2693	G	N3-C4-N9	5.27	129.16	126.00
2	AB	2850	A	C2-N3-C4	-5.27	107.97	110.60
35	BA	18	C	O4'-C4'-C3'	-5.27	98.73	104.00
35	BA	76	G	C5'-C4'-O4'	5.27	115.42	109.10
35	BA	528	C	N1-C1'-C2'	-5.27	106.20	112.00
35	BA	863	U	N3-C2-O2	-5.27	118.51	122.20
35	BA	1141	C	C2-N3-C4	5.27	122.53	119.90
35	BA	1368	A	N9-C4-C5	5.27	107.91	105.80
2	AB	1015	U	O4'-C1'-N1	5.27	112.41	108.20
2	AB	1423	G	C1'-O4'-C4'	5.27	114.11	109.90
2	AB	1798	U	C5'-C4'-O4'	5.27	115.42	109.10
2	AB	1986	C	N1-C2-O2	5.27	122.06	118.90
35	BA	561	U	O4'-C4'-C3'	-5.27	98.73	104.00
35	BA	782	A	C4'-C3'-C2'	-5.27	97.33	102.60
1	AA	50	A	N9-C4-C5	5.26	107.91	105.80
2	AB	107	G	C5'-C4'-C3'	-5.26	107.58	116.00
2	AB	148	U	C4-C5-C6	5.26	122.86	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	295	G	C5-C6-N1	5.26	114.13	111.50
2	AB	541	A	C3'-C2'-C1'	5.26	105.71	101.50
2	AB	668	A	C5-N7-C8	-5.26	101.27	103.90
2	AB	1519	G	N3-C2-N2	5.26	123.58	119.90
2	AB	1653	G	O4'-C4'-C3'	5.26	110.31	106.10
2	AB	1659	G	C5'-C4'-O4'	5.26	115.42	109.10
2	AB	1899	A	O4'-C4'-C3'	5.26	110.31	106.10
2	AB	1979	U	P-O3'-C3'	5.26	126.02	119.70
2	AB	2319	G	O4'-C4'-C3'	5.26	110.31	106.10
2	AB	2376	A	N1-C6-N6	-5.26	115.44	118.60
2	AB	2659	G	C8-N9-C4	-5.26	104.29	106.40
19	AS	60	TRP	CG-CD2-CE3	5.26	138.64	133.90
35	BA	146	G	C5-N7-C8	5.26	106.93	104.30
35	BA	381	C	C5'-C4'-O4'	5.26	115.42	109.10
35	BA	550	G	C4-C5-N7	-5.26	108.69	110.80
35	BA	572	A	C3'-C2'-C1'	5.26	105.71	101.50
35	BA	829	G	N1-C2-N3	-5.26	120.74	123.90
35	BA	961	U	C3'-C2'-C1'	5.26	105.71	101.50
35	BA	1014	A	C2'-C3'-O3'	5.26	122.12	113.70
35	BA	1437	A	C6-N1-C2	-5.26	115.44	118.60
35	BA	1470	U	N1-C2-O2	-5.26	119.11	122.80
2	AB	854	C	C2-N3-C4	5.26	122.53	119.90
2	AB	1206	G	C4-C5-C6	-5.26	115.64	118.80
2	AB	2490	G	C5-N7-C8	-5.26	101.67	104.30
2	AB	2567	G	N1-C6-O6	-5.26	116.74	119.90
2	AB	2597	G	N1-C6-O6	5.26	123.06	119.90
35	BA	778	G	O4'-C1'-C2'	5.26	112.34	107.60
35	BA	1063	C	N3-C2-O2	-5.26	118.22	121.90
35	BA	1427	C	N3-C4-N4	5.26	121.68	118.00
1	AA	52	A	N3-C4-C5	5.26	130.48	126.80
2	AB	155	A	C4'-C3'-C2'	-5.26	97.34	102.60
2	AB	441	U	C5'-C4'-O4'	5.26	115.41	109.10
2	AB	1172	C	C1'-O4'-C4'	5.26	114.11	109.90
2	AB	1437	C	C4-C5-C6	-5.26	114.77	117.40
2	AB	1488	C	N3-C4-C5	5.26	124.00	121.90
2	AB	1593	A	C4'-C3'-C2'	-5.26	97.34	102.60
2	AB	1652	A	N7-C8-N9	-5.26	111.17	113.80
2	AB	1694	C	P-O3'-C3'	5.26	126.01	119.70
2	AB	1895	C	C5'-C4'-C3'	5.26	124.42	116.00
2	AB	1955	U	C2-N3-C4	-5.26	123.84	127.00
2	AB	2019	A	C6-N1-C2	5.26	121.76	118.60
2	AB	2262	U	C4'-C3'-C2'	-5.26	97.34	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2621	G	C8-N9-C1'	5.26	133.84	127.00
2	AB	2781	A	C5-C6-N6	-5.26	119.49	123.70
35	BA	265	G	C2-N3-C4	5.26	114.53	111.90
35	BA	302	G	C4-C5-N7	5.26	112.90	110.80
35	BA	611	C	C2'-C3'-O3'	5.26	122.12	113.70
35	BA	1112	C	O3'-P-O5'	-5.26	94.00	104.00
47	BM	127	ARG	NE-CZ-NH2	-5.26	117.67	120.30
2	AB	53	A	N9-C4-C5	-5.26	103.70	105.80
2	AB	467	G	C3'-C2'-C1'	5.26	105.71	101.50
2	AB	647	G	C5'-C4'-O4'	5.26	115.41	109.10
2	AB	770	G	C3'-C2'-C1'	-5.26	97.29	101.50
2	AB	1062	G	C4'-C3'-C2'	-5.26	97.34	102.60
2	AB	1219	U	C4'-C3'-C2'	-5.26	97.34	102.60
2	AB	1751	U	C1'-O4'-C4'	-5.26	105.69	109.90
2	AB	2056	G	N3-C4-N9	5.26	129.16	126.00
2	AB	2310	C	C2-N3-C4	5.26	122.53	119.90
2	AB	2388	A	C4'-C3'-C2'	5.26	107.86	102.60
35	BA	132	C	C1'-O4'-C4'	5.26	114.11	109.90
35	BA	468	A	O5'-C5'-C4'	5.26	121.69	111.70
35	BA	512	U	C5'-C4'-O4'	5.26	115.41	109.10
35	BA	550	G	C3'-C2'-C1'	5.26	105.71	101.50
35	BA	1162	C	C2-N1-C1'	-5.26	113.02	118.80
37	BC	12	G	C6-N1-C2	-5.26	121.94	125.10
2	AB	103	A	C5-C6-N6	-5.26	119.49	123.70
2	AB	1166	G	N9-C1'-C2'	-5.26	106.22	112.00
2	AB	1288	G	O4'-C1'-N9	5.26	112.41	108.20
2	AB	2356	U	N1-C2-N3	5.26	118.06	114.90
35	BA	149	A	N3-C4-C5	-5.26	123.12	126.80
35	BA	736	C	C2-N3-C4	5.26	122.53	119.90
1	AA	79	G	OP1-P-OP2	-5.26	111.71	119.60
2	AB	350	G	N1-C6-O6	5.26	123.05	119.90
2	AB	987	C	O4'-C1'-N1	5.26	112.40	108.20
2	AB	1280	G	C5-N7-C8	5.26	106.93	104.30
2	AB	1540	G	N1-C2-N2	5.26	120.93	116.20
2	AB	1759	A	C4-C5-C6	5.26	119.63	117.00
2	AB	1874	C	C4'-C3'-C2'	-5.26	97.34	102.60
2	AB	2077	A	N9-C1'-C2'	-5.26	106.22	112.00
2	AB	2394	C	N1-C1'-C2'	-5.26	106.22	112.00
2	AB	2419	U	C6-N1-C2	5.26	124.15	121.00
2	AB	2766	A	C1'-O4'-C4'	-5.26	105.70	109.90
2	AB	2798	U	C2-N3-C4	5.26	130.15	127.00
13	AM	121	GLU	OE1-CD-OE2	5.26	129.61	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	38	G	C8-N9-C1'	5.26	133.83	127.00
35	BA	134	G	C1'-O4'-C4'	5.26	114.10	109.90
35	BA	355	C	C2-N1-C1'	5.26	124.58	118.80
35	BA	646	G	N9-C4-C5	5.26	107.50	105.40
35	BA	888	G	C5-C6-N1	5.26	114.13	111.50
35	BA	983	A	C5-C6-N1	5.26	120.33	117.70
35	BA	1324	A	N3-C4-C5	-5.26	123.12	126.80
37	BC	10	G	N1-C2-N2	5.26	120.93	116.20
2	AB	362	A	C5-C6-N1	5.25	120.33	117.70
2	AB	1531	C	C1'-O4'-C4'	-5.25	105.70	109.90
2	AB	2890	G	C4-C5-C6	5.25	121.95	118.80
35	BA	292	G	P-O3'-C3'	5.25	126.01	119.70
35	BA	1081	A	C2-N3-C4	5.25	113.23	110.60
35	BA	1436	U	C3'-C2'-C1'	5.25	105.70	101.50
43	BI	74	VAL	CA-CB-CG1	-5.25	103.02	110.90
1	AA	33	G	C4-C5-N7	5.25	112.90	110.80
2	AB	103	A	C1'-O4'-C4'	5.25	114.10	109.90
2	AB	157	C	C3'-C2'-C1'	5.25	105.70	101.50
2	AB	493	G	C5'-C4'-O4'	5.25	115.40	109.10
2	AB	1311	G	N9-C4-C5	-5.25	103.30	105.40
2	AB	1428	C	N1-C1'-C2'	5.25	120.83	114.00
2	AB	1679	A	C8-N9-C4	-5.25	103.70	105.80
2	AB	1824	G	N9-C1'-C2'	-5.25	106.22	112.00
2	AB	1893	C	N3-C4-N4	5.25	121.68	118.00
2	AB	1910	G	C4-N9-C1'	5.25	133.33	126.50
2	AB	2083	G	N7-C8-N9	5.25	115.73	113.10
2	AB	2264	C	C6-N1-C2	-5.25	118.20	120.30
2	AB	2822	G	C5-C6-N1	5.25	114.13	111.50
2	AB	2885	G	N3-C2-N2	5.25	123.58	119.90
35	BA	118	U	C3'-C2'-C1'	5.25	105.70	101.50
35	BA	189	A	C6-N1-C2	-5.25	115.45	118.60
35	BA	254	G	C5-C6-N1	5.25	114.13	111.50
35	BA	489	C	N1-C2-O2	5.25	122.05	118.90
35	BA	867	G	C4-C5-N7	5.25	112.90	110.80
35	BA	1186	G	C5-N7-C8	5.25	106.93	104.30
35	BA	1374	A	C6-N1-C2	-5.25	115.45	118.60
35	BA	1468	A	O4'-C1'-N9	5.25	112.40	108.20
35	BA	1488	G	N9-C1'-C2'	-5.25	106.22	112.00
36	BB	59	A	N3-C4-N9	-5.25	123.20	127.40
45	BK	60	LEU	O-C-N	-5.25	114.30	122.70
1	AA	15	A	C6-N1-C2	-5.25	115.45	118.60
1	AA	57	A	N9-C4-C5	-5.25	103.70	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	637	A	C6-N1-C2	5.25	121.75	118.60
2	AB	684	G	N9-C1'-C2'	-5.25	106.22	112.00
2	AB	931	U	N1-C2-N3	-5.25	111.75	114.90
2	AB	1304	A	N9-C4-C5	-5.25	103.70	105.80
2	AB	1660	G	N9-C1'-C2'	-5.25	106.22	112.00
2	AB	2405	G	N3-C2-N2	-5.25	116.22	119.90
2	AB	2842	G	C4'-C3'-O3'	5.25	123.50	113.00
31	A4	48	TYR	CB-CG-CD1	5.25	124.15	121.00
35	BA	19	A	C5-N7-C8	5.25	106.53	103.90
35	BA	322	C	P-O3'-C3'	5.25	126.00	119.70
54	BT	31	TYR	N-CA-CB	-5.25	101.15	110.60
2	AB	142	A	C1'-O4'-C4'	-5.25	105.70	109.90
2	AB	398	C	N3-C4-N4	5.25	121.67	118.00
2	AB	1094	U	N1-C2-N3	5.25	118.05	114.90
35	BA	517	G	C1'-O4'-C4'	-5.25	105.70	109.90
35	BA	771	G	C5'-C4'-O4'	5.25	115.40	109.10
35	BA	1225	A	C5-C6-N1	-5.25	115.08	117.70
35	BA	1384	C	C5'-C4'-C3'	-5.25	107.60	116.00
35	BA	1421	G	P-O3'-C3'	5.25	126.00	119.70
43	BI	150	PHE	CB-CG-CD2	5.25	124.47	120.80
2	AB	212	G	N3-C4-C5	-5.25	125.98	128.60
2	AB	254	G	C5'-C4'-O4'	5.25	115.40	109.10
2	AB	358	U	C3'-C2'-C1'	5.25	105.70	101.50
2	AB	403	U	N3-C2-O2	-5.25	118.53	122.20
2	AB	1070	A	N1-C6-N6	5.25	121.75	118.60
2	AB	1177	G	N3-C4-N9	5.25	129.15	126.00
2	AB	1239	G	N3-C2-N2	5.25	123.57	119.90
2	AB	2175	C	N1-C1'-C2'	-5.25	106.23	112.00
2	AB	2663	G	C5-C6-O6	-5.25	125.45	128.60
2	AB	2865	U	C5-C6-N1	-5.25	120.08	122.70
35	BA	90	C	O4'-C1'-N1	5.25	112.40	108.20
35	BA	712	A	C5-N7-C8	5.25	106.52	103.90
35	BA	1190	G	C5-N7-C8	5.25	106.92	104.30
35	BA	1296	C	C3'-C2'-C1'	5.25	105.70	101.50
35	BA	1502	A	C4-C5-N7	-5.25	108.08	110.70
1	AA	54	G	C4'-C3'-C2'	-5.25	97.35	102.60
1	AA	108	A	C4-C5-N7	-5.25	108.08	110.70
1	AA	110	C	C3'-C2'-C1'	-5.25	97.30	101.50
2	AB	725	G	C4-C5-C6	5.25	121.95	118.80
2	AB	1002	G	P-O3'-C3'	5.25	126.00	119.70
2	AB	1266	G	C5-C6-O6	-5.25	125.45	128.60
2	AB	1416	G	C4'-C3'-C2'	-5.25	97.35	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1478	G	N9-C4-C5	5.25	107.50	105.40
2	AB	1608	A	C1'-O4'-C4'	-5.25	105.70	109.90
2	AB	1755	A	N9-C4-C5	5.25	107.90	105.80
2	AB	1820	U	C1'-O4'-C4'	5.25	114.10	109.90
2	AB	2218	G	C4-C5-C6	-5.25	115.65	118.80
2	AB	2224	G	C6-N1-C2	-5.25	121.95	125.10
2	AB	2506	U	C1'-O4'-C4'	-5.25	105.70	109.90
2	AB	2539	C	C4-C5-C6	-5.25	114.78	117.40
35	BA	202	G	O4'-C1'-N9	5.25	112.40	108.20
35	BA	591	U	N3-C4-O4	-5.25	115.73	119.40
35	BA	1387	G	C2-N3-C4	5.25	114.52	111.90
2	AB	529	A	O5'-P-OP2	-5.25	100.98	105.70
2	AB	542	C	O4'-C1'-N1	5.25	112.40	108.20
2	AB	1215	G	C5'-C4'-C3'	-5.25	107.61	116.00
2	AB	1542	U	C5'-C4'-O4'	5.25	115.39	109.10
2	AB	2532	G	N1-C6-O6	-5.25	116.75	119.90
2	AB	2782	G	C2-N3-C4	5.25	114.52	111.90
35	BA	15	G	N3-C4-C5	-5.25	125.98	128.60
35	BA	94	G	N3-C4-C5	5.25	131.22	128.60
35	BA	360	G	O4'-C1'-C2'	-5.25	100.56	105.80
35	BA	1008	U	C4'-C3'-C2'	-5.25	97.36	102.60
1	AA	39	A	C5-C6-N1	-5.24	115.08	117.70
2	AB	568	U	C5-C6-N1	5.24	125.32	122.70
2	AB	788	A	P-O3'-C3'	5.24	125.99	119.70
2	AB	897	C	C4-C5-C6	-5.24	114.78	117.40
2	AB	929	U	C4-C5-C6	5.24	122.85	119.70
2	AB	1367	A	P-O3'-C3'	5.24	125.99	119.70
2	AB	2146	C	N3-C4-N4	-5.24	114.33	118.00
2	AB	2201	G	N3-C2-N2	-5.24	116.23	119.90
2	AB	2285	C	C5'-C4'-O4'	5.24	115.39	109.10
2	AB	2346	A	N9-C4-C5	5.24	107.90	105.80
2	AB	2607	G	C1'-O4'-C4'	5.24	114.09	109.90
35	BA	355	C	O5'-C5'-C4'	5.24	121.66	111.70
35	BA	613	C	C2-N3-C4	5.24	122.52	119.90
35	BA	676	A	C2-N3-C4	5.24	113.22	110.60
35	BA	735	C	C5'-C4'-O4'	5.24	115.39	109.10
35	BA	743	A	C5'-C4'-C3'	-5.24	107.61	116.00
35	BA	857	C	O4'-C1'-N1	5.24	112.39	108.20
35	BA	1011	C	N1-C2-O2	5.24	122.05	118.90
35	BA	1104	G	N1-C2-N3	-5.24	120.75	123.90
35	BA	1180	A	C8-N9-C4	-5.24	103.70	105.80
40	BF	110	ARG	NE-CZ-NH1	5.24	122.92	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	7	G	N1-C2-N3	-5.24	120.75	123.90
2	AB	248	G	C8-N9-C4	-5.24	104.30	106.40
2	AB	581	C	N1-C2-O2	-5.24	115.75	118.90
2	AB	735	A	C4'-C3'-C2'	-5.24	97.36	102.60
2	AB	1553	A	N7-C8-N9	-5.24	111.18	113.80
2	AB	1556	C	O4'-C4'-C3'	5.24	110.29	106.10
2	AB	1720	U	C4-C5-C6	5.24	122.84	119.70
2	AB	1952	A	C2-N3-C4	5.24	113.22	110.60
2	AB	2592	G	C4-C5-N7	-5.24	108.70	110.80
11	AK	55	PRO	C-N-CA	5.24	134.81	121.70
35	BA	119	A	C1'-O4'-C4'	5.24	114.09	109.90
35	BA	412	A	O3'-P-O5'	-5.24	94.04	104.00
35	BA	701	U	P-O3'-C3'	5.24	125.99	119.70
35	BA	728	A	C4-C5-N7	-5.24	108.08	110.70
35	BA	1062	U	C6-N1-C2	5.24	124.14	121.00
35	BA	1120	C	N3-C4-C5	5.24	124.00	121.90
35	BA	1408	A	C4'-C3'-C2'	-5.24	97.36	102.60
36	BB	15	G	O4'-C1'-N9	5.24	112.39	108.20
2	AB	156	A	C2-N3-C4	-5.24	107.98	110.60
2	AB	555	G	N9-C4-C5	5.24	107.50	105.40
2	AB	818	G	C2-N3-C4	5.24	114.52	111.90
2	AB	877	A	C8-N9-C4	5.24	107.90	105.80
2	AB	1239	G	C2-N3-C4	5.24	114.52	111.90
2	AB	1326	U	O5'-P-OP1	5.24	116.99	110.70
2	AB	1425	G	C4-C5-N7	5.24	112.90	110.80
2	AB	1440	U	C5'-C4'-O4'	5.24	115.39	109.10
2	AB	1653	G	C4-C5-C6	-5.24	115.66	118.80
2	AB	2293	G	C6-N1-C2	-5.24	121.96	125.10
2	AB	2673	G	C1'-O4'-C4'	-5.24	105.71	109.90
2	AB	2877	G	N3-C4-C5	-5.24	125.98	128.60
35	BA	69	G	N3-C4-N9	5.24	129.15	126.00
35	BA	370	C	N3-C2-O2	-5.24	118.23	121.90
35	BA	416	G	C4-C5-C6	5.24	121.94	118.80
35	BA	422	C	C6-N1-C1'	-5.24	114.51	120.80
35	BA	1027	C	C5'-C4'-C3'	-5.24	107.61	116.00
35	BA	1247	U	P-O3'-C3'	5.24	125.99	119.70
35	BA	1304	G	P-O3'-C3'	5.24	125.99	119.70
2	AB	30	G	N7-C8-N9	5.24	115.72	113.10
2	AB	949	G	N9-C4-C5	-5.24	103.31	105.40
2	AB	1009	A	C6-C5-N7	5.24	135.97	132.30
2	AB	1390	U	C3'-C2'-C1'	5.24	105.69	101.50
2	AB	1476	U	N3-C2-O2	-5.24	118.53	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1526	C	C5-C4-N4	5.24	123.87	120.20
2	AB	1642	G	C8-N9-C1'	5.24	133.81	127.00
2	AB	1682	G	C8-N9-C4	5.24	108.50	106.40
2	AB	2392	A	C1'-O4'-C4'	-5.24	105.71	109.90
2	AB	2427	C	C3'-C2'-C1'	5.24	105.69	101.50
2	AB	2685	G	N9-C4-C5	-5.24	103.31	105.40
35	BA	631	C	N3-C4-N4	5.24	121.67	118.00
35	BA	750	C	C1'-O4'-C4'	-5.24	105.71	109.90
35	BA	1437	A	O5'-C5'-C4'	5.24	121.65	111.70
35	BA	1445	U	N3-C4-O4	5.24	123.07	119.40
55	BU	9	PHE	CG-CD2-CE2	5.24	126.56	120.80
2	AB	980	A	C5-C6-N1	5.24	120.32	117.70
2	AB	1052	C	N3-C4-C5	5.24	124.00	121.90
2	AB	1076	C	N3-C4-C5	-5.24	119.81	121.90
2	AB	1420	A	C5-N7-C8	5.24	106.52	103.90
2	AB	1989	G	C5'-C4'-O4'	5.24	115.38	109.10
2	AB	2406	A	C3'-C2'-C1'	5.24	105.69	101.50
2	AB	2791	G	N9-C1'-C2'	-5.24	106.24	112.00
35	BA	151	A	C6-C5-N7	5.24	135.97	132.30
35	BA	803	G	N1-C2-N2	5.24	120.91	116.20
35	BA	860	A	N7-C8-N9	5.24	116.42	113.80
35	BA	1051	C	C2-N1-C1'	-5.24	113.04	118.80
1	AA	32	U	C1'-O4'-C4'	-5.24	105.71	109.90
2	AB	655	A	P-O5'-C5'	5.24	129.28	120.90
2	AB	723	C	C6-N1-C2	-5.24	118.21	120.30
2	AB	726	G	C2-N3-C4	5.24	114.52	111.90
2	AB	1318	U	C6-N1-C2	5.24	124.14	121.00
2	AB	1532	A	C3'-C2'-C1'	-5.24	97.31	101.50
2	AB	1701	A	C6-C5-N7	5.24	135.97	132.30
2	AB	1839	G	C4-C5-N7	-5.24	108.70	110.80
2	AB	2495	G	C2-N3-C4	5.24	114.52	111.90
2	AB	2645	G	N9-C4-C5	5.24	107.49	105.40
2	AB	2718	G	N1-C2-N2	5.24	120.91	116.20
6	AF	111	GLU	OE1-CD-OE2	5.24	129.58	123.30
35	BA	21	G	N1-C6-O6	-5.24	116.76	119.90
35	BA	89	U	N1-C2-N3	5.24	118.04	114.90
35	BA	218	U	C4'-C3'-O3'	5.24	123.47	113.00
35	BA	860	A	O4'-C1'-C2'	-5.24	100.56	105.80
35	BA	1261	A	C8-N9-C4	-5.24	103.70	105.80
35	BA	1394	A	C5-C6-N6	-5.24	119.51	123.70
1	AA	71	C	C5'-C4'-C3'	-5.23	107.63	116.00
2	AB	165	A	N9-C4-C5	-5.23	103.71	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	520	G	N1-C2-N3	-5.23	120.76	123.90
2	AB	524	G	N3-C2-N2	-5.23	116.24	119.90
2	AB	1750	G	N3-C2-N2	-5.23	116.24	119.90
2	AB	2460	U	N1-C2-N3	5.23	118.04	114.90
35	BA	60	A	P-O3'-C3'	5.23	125.98	119.70
36	BB	55	A	C2'-C3'-O3'	5.23	122.07	113.70
2	AB	146	A	N3-C4-N9	5.23	131.59	127.40
2	AB	1373	A	P-O3'-C3'	5.23	125.98	119.70
2	AB	1465	G	C1'-O4'-C4'	-5.23	105.71	109.90
2	AB	1563	U	C4'-C3'-C2'	-5.23	97.37	102.60
2	AB	1828	G	N7-C8-N9	5.23	115.72	113.10
2	AB	2189	U	C1'-O4'-C4'	5.23	114.09	109.90
2	AB	2549	G	N9-C1'-C2'	-5.23	106.24	112.00
2	AB	2553	G	N7-C8-N9	5.23	115.72	113.10
2	AB	2802	G	C2-N3-C4	5.23	114.52	111.90
2	AB	2808	G	N3-C4-C5	-5.23	125.98	128.60
3	AC	60	ARG	NH1-CZ-NH2	-5.23	113.64	119.40
35	BA	328	C	C6-N1-C2	5.23	122.39	120.30
35	BA	592	G	N3-C4-C5	-5.23	125.98	128.60
35	BA	776	G	N3-C4-C5	-5.23	125.98	128.60
35	BA	1490	U	N3-C4-C5	5.23	117.74	114.60
1	AA	85	G	N3-C4-N9	5.23	129.14	126.00
2	AB	473	G	C6-C5-N7	-5.23	127.26	130.40
2	AB	1256	G	N3-C4-N9	5.23	129.14	126.00
2	AB	1408	G	N1-C2-N2	5.23	120.91	116.20
2	AB	1494	A	N9-C4-C5	5.23	107.89	105.80
2	AB	1797	G	N1-C6-O6	-5.23	116.76	119.90
2	AB	2159	G	C8-N9-C4	-5.23	104.31	106.40
2	AB	2255	G	C3'-C2'-C1'	5.23	105.69	101.50
2	AB	2723	C	N3-C2-O2	-5.23	118.24	121.90
35	BA	40	C	C6-N1-C2	-5.23	118.21	120.30
35	BA	429	U	C5-C4-O4	-5.23	122.76	125.90
35	BA	917	G	N3-C2-N2	5.23	123.56	119.90
35	BA	1014	A	C4'-C3'-C2'	5.23	107.83	102.60
35	BA	1267	C	C4-C5-C6	5.23	120.02	117.40
35	BA	1435	G	C5-C6-N1	5.23	114.11	111.50
35	BA	1509	C	N1-C1'-C2'	-5.23	106.25	112.00
37	BC	73	A	N1-C6-N6	5.23	121.74	118.60
2	AB	234	U	C2-N3-C4	-5.23	123.86	127.00
2	AB	361	G	N1-C2-N2	5.23	120.91	116.20
2	AB	697	G	N3-C4-C5	-5.23	125.98	128.60
2	AB	1136	G	C1'-O4'-C4'	5.23	114.08	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1165	A	C5-C6-N1	5.23	120.31	117.70
2	AB	2192	U	C2-N3-C4	-5.23	123.86	127.00
2	AB	2709	G	C4-N9-C1'	5.23	133.30	126.50
35	BA	226	G	C5-C6-N1	-5.23	108.89	111.50
35	BA	513	C	N3-C2-O2	-5.23	118.24	121.90
35	BA	636	U	C5-C4-O4	-5.23	122.76	125.90
35	BA	826	C	C4-C5-C6	-5.23	114.79	117.40
35	BA	920	U	O5'-P-OP1	-5.23	100.99	105.70
35	BA	1469	C	C1'-O4'-C4'	5.23	114.08	109.90
37	BC	32	G	N7-C8-N9	5.23	115.71	113.10
39	BE	96	VAL	CG1-CB-CG2	-5.23	102.53	110.90
2	AB	161	A	N1-C6-N6	5.23	121.74	118.60
2	AB	446	G	C4-C5-C6	-5.23	115.66	118.80
2	AB	911	A	C5-C6-N1	5.23	120.31	117.70
2	AB	1889	A	C1'-O4'-C4'	-5.23	105.72	109.90
2	AB	2211	A	C4-C5-N7	-5.23	108.09	110.70
2	AB	2402	U	C1'-O4'-C4'	-5.23	105.72	109.90
2	AB	2838	G	C3'-C2'-C1'	5.23	105.68	101.50
15	AO	66	ARG	NE-CZ-NH2	-5.23	117.69	120.30
20	AT	75	VAL	CG1-CB-CG2	-5.23	102.53	110.90
35	BA	23	C	P-O3'-C3'	5.23	125.97	119.70
35	BA	312	C	C4-C5-C6	-5.23	114.79	117.40
35	BA	316	C	C5-C6-N1	5.23	123.61	121.00
35	BA	475	C	C4-C5-C6	5.23	120.01	117.40
35	BA	588	G	N1-C2-N3	-5.23	120.76	123.90
35	BA	607	A	N1-C6-N6	-5.23	115.46	118.60
35	BA	624	C	N3-C4-C5	-5.23	119.81	121.90
35	BA	708	C	C5'-C4'-O4'	5.23	115.37	109.10
35	BA	765	G	C6-C5-N7	-5.23	127.26	130.40
35	BA	1521	C	C5-C6-N1	5.23	123.61	121.00
35	BA	1523	G	C5-N7-C8	-5.23	101.69	104.30
36	BB	39	U	C2'-C3'-O3'	5.23	122.06	113.70
1	AA	116	G	C5-C6-O6	5.23	131.74	128.60
2	AB	1584	U	C6-N1-C2	-5.23	117.86	121.00
2	AB	2163	A	N3-C4-C5	-5.23	123.14	126.80
2	AB	2565	A	C5-N7-C8	-5.23	101.29	103.90
2	AB	2617	U	P-O3'-C3'	5.23	125.97	119.70
2	AB	2857	G	N3-C2-N2	-5.23	116.24	119.90
35	BA	19	A	C5-C6-N1	-5.23	115.09	117.70
35	BA	573	A	C6-C5-N7	5.23	135.96	132.30
35	BA	575	G	C1'-O4'-C4'	-5.23	105.72	109.90
35	BA	1034	G	N3-C4-N9	5.23	129.13	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1206	G	O4'-C1'-N9	5.23	112.38	108.20
35	BA	1395	C	C5-C4-N4	5.23	123.86	120.20
1	AA	74	U	N3-C2-O2	-5.22	118.54	122.20
2	AB	600	G	N3-C4-C5	-5.22	125.99	128.60
2	AB	1065	U	O4'-C1'-N1	5.22	112.38	108.20
2	AB	1096	A	N1-C6-N6	-5.22	115.47	118.60
2	AB	1455	G	N7-C8-N9	5.22	115.71	113.10
2	AB	1522	A	C3'-C2'-C1'	5.22	105.68	101.50
2	AB	1646	C	N3-C2-O2	-5.22	118.24	121.90
2	AB	1993	U	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	2315	G	O4'-C1'-C2'	5.22	112.30	107.60
2	AB	2327	A	N1-C6-N6	-5.22	115.47	118.60
2	AB	2494	G	N3-C2-N2	5.22	123.56	119.90
2	AB	2772	C	O4'-C4'-C3'	-5.22	98.78	104.00
8	AH	42	VAL	CG1-CB-CG2	5.22	119.26	110.90
30	A3	24	VAL	CA-CB-CG2	5.22	118.74	110.90
35	BA	834	U	O4'-C1'-N1	5.22	112.38	108.20
35	BA	984	C	C5-C6-N1	-5.22	118.39	121.00
35	BA	1027	C	C3'-C2'-C1'	5.22	105.68	101.50
35	BA	1061	G	N9-C4-C5	5.22	107.49	105.40
35	BA	1072	G	C3'-C2'-C1'	5.22	105.68	101.50
35	BA	1183	U	C5-C4-O4	-5.22	122.77	125.90
35	BA	1190	G	C5-C6-O6	-5.22	125.47	128.60
35	BA	1394	A	C5-N7-C8	-5.22	101.29	103.90
35	BA	1405	G	P-O3'-C3'	5.22	125.97	119.70
40	BF	45	PRO	N-CA-CB	5.22	109.57	103.30
43	BI	52	ARG	CD-NE-CZ	5.22	130.91	123.60
2	AB	37	C	C5'-C4'-O4'	5.22	115.37	109.10
2	AB	350	G	C5-C6-O6	-5.22	125.47	128.60
2	AB	361	G	N3-C2-N2	-5.22	116.25	119.90
2	AB	1707	G	O5'-C5'-C4'	-5.22	101.78	111.70
2	AB	2279	G	C5-C6-N1	5.22	114.11	111.50
2	AB	2325	G	N3-C4-N9	5.22	129.13	126.00
2	AB	2835	A	O5'-C5'-C4'	-5.22	101.78	111.70
35	BA	292	G	C5-C6-O6	-5.22	125.47	128.60
35	BA	361	G	C5-N7-C8	-5.22	101.69	104.30
35	BA	1180	A	N3-C4-C5	-5.22	123.14	126.80
35	BA	1381	U	C6-N1-C2	-5.22	117.87	121.00
41	BG	116	VAL	C-N-CA	5.22	134.75	121.70
2	AB	96	C	C6-N1-C2	-5.22	118.21	120.30
2	AB	1715	G	C2-N3-C4	5.22	114.51	111.90
2	AB	1934	C	C5-C6-N1	5.22	123.61	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2386	A	C4-C5-C6	-5.22	114.39	117.00
2	AB	2501	C	C5'-C4'-C3'	5.22	124.35	116.00
2	AB	2573	C	C5-C6-N1	5.22	123.61	121.00
2	AB	2574	G	C5'-C4'-O4'	-5.22	102.83	109.10
2	AB	2610	C	C2-N3-C4	5.22	122.51	119.90
2	AB	2740	A	C4'-C3'-C2'	5.22	107.82	102.60
2	AB	2903	U	O3'-P-O5'	-5.22	94.08	104.00
35	BA	1041	G	N1-C6-O6	-5.22	116.77	119.90
1	AA	111	U	C4-C5-C6	5.22	122.83	119.70
2	AB	144	A	C5'-C4'-O4'	5.22	115.36	109.10
2	AB	238	C	N3-C4-C5	-5.22	119.81	121.90
2	AB	585	G	N1-C2-N3	-5.22	120.77	123.90
2	AB	631	A	N1-C2-N3	5.22	131.91	129.30
2	AB	1125	G	C2-N3-C4	5.22	114.51	111.90
2	AB	1135	C	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	1482	G	N3-C4-C5	-5.22	125.99	128.60
2	AB	1695	G	C8-N9-C4	5.22	108.49	106.40
2	AB	1870	C	C3'-C2'-C1'	5.22	105.67	101.50
2	AB	2240	U	N1-C2-O2	-5.22	119.15	122.80
2	AB	2283	C	C6-N1-C1'	5.22	127.06	120.80
30	A3	1	ALA	CB-CA-C	5.22	117.93	110.10
35	BA	81	A	N1-C6-N6	5.22	121.73	118.60
35	BA	1398	A	N7-C8-N9	-5.22	111.19	113.80
53	BS	21	VAL	CA-CB-CG2	5.22	118.73	110.90
2	AB	217	A	C3'-C2'-C1'	-5.22	97.33	101.50
2	AB	778	G	N3-C2-N2	5.22	123.55	119.90
2	AB	1111	A	C6-N1-C2	5.22	121.73	118.60
2	AB	1165	A	C2-N3-C4	-5.22	107.99	110.60
2	AB	1961	C	C5-C4-N4	-5.22	116.55	120.20
2	AB	2627	G	C5'-C4'-C3'	5.22	124.35	116.00
6	AF	187	VAL	CA-CB-CG1	5.22	118.73	110.90
35	BA	945	G	N1-C2-N2	-5.22	111.50	116.20
35	BA	1399	C	P-O3'-C3'	5.22	125.96	119.70
2	AB	148	U	N3-C4-C5	-5.22	111.47	114.60
2	AB	529	A	C3'-C2'-C1'	-5.22	97.33	101.50
2	AB	778	G	N7-C8-N9	5.22	115.71	113.10
2	AB	877	A	N3-C4-N9	5.22	131.57	127.40
2	AB	1463	C	C4'-C3'-C2'	-5.22	97.38	102.60
2	AB	2469	A	N9-C1'-C2'	-5.22	106.26	112.00
2	AB	2507	C	C5'-C4'-O4'	5.22	115.36	109.10
2	AB	2812	G	C5-C6-N1	5.22	114.11	111.50
2	AB	2816	G	C1'-O4'-C4'	-5.22	105.73	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AH	78	VAL	CA-CB-CG1	5.22	118.73	110.90
35	BA	92	U	N3-C4-O4	5.22	123.05	119.40
35	BA	177	G	C4-N9-C1'	5.22	133.28	126.50
35	BA	191	G	N3-C4-N9	5.22	129.13	126.00
35	BA	372	C	P-O3'-C3'	5.22	125.96	119.70
35	BA	523	A	C4-C5-N7	-5.22	108.09	110.70
35	BA	637	C	O4'-C1'-N1	5.22	112.37	108.20
35	BA	726	C	N1-C2-O2	5.22	122.03	118.90
35	BA	749	A	C4-C5-C6	5.22	119.61	117.00
35	BA	824	G	O4'-C1'-N9	5.22	112.37	108.20
35	BA	1128	C	C4'-C3'-C2'	-5.22	97.38	102.60
35	BA	1513	A	C1'-O4'-C4'	-5.22	105.73	109.90
40	BF	49	ASP	CB-CG-OD1	5.22	123.00	118.30
46	BL	78	GLU	OE1-CD-OE2	5.22	129.56	123.30
56	BV	40	ALA	CB-CA-C	-5.22	102.28	110.10
2	AB	66	C	C5'-C4'-C3'	-5.21	107.66	116.00
2	AB	221	A	C4-C5-C6	-5.21	114.39	117.00
2	AB	236	C	N1-C1'-C2'	-5.21	106.26	112.00
2	AB	281	C	O3'-P-O5'	-5.21	94.09	104.00
2	AB	473	G	C5-N7-C8	5.21	106.91	104.30
2	AB	1082	U	C2-N3-C4	-5.21	123.87	127.00
2	AB	1160	G	N3-C2-N2	5.21	123.55	119.90
2	AB	1405	U	O4'-C1'-N1	5.21	112.37	108.20
2	AB	2578	G	C5-C6-O6	-5.21	125.47	128.60
2	AB	2818	U	C4'-C3'-C2'	-5.21	97.39	102.60
35	BA	199	A	P-O3'-C3'	5.21	125.96	119.70
35	BA	568	G	C2-N3-C4	5.21	114.51	111.90
35	BA	603	U	C4-C5-C6	5.21	122.83	119.70
35	BA	976	G	C4-C5-N7	5.21	112.89	110.80
35	BA	1234	C	N1-C2-O2	5.21	122.03	118.90
42	BH	114	ASP	CB-CG-OD2	5.21	122.99	118.30
35	BA	156	C	C4'-C3'-C2'	-5.21	97.39	102.60
35	BA	673	A	C5-C6-N6	-5.21	119.53	123.70
2	AB	376	G	N3-C4-C5	-5.21	125.99	128.60
2	AB	660	C	C3'-C2'-C1'	5.21	105.67	101.50
2	AB	1040	A	C4-C5-C6	5.21	119.61	117.00
2	AB	1072	C	N1-C2-O2	5.21	122.03	118.90
2	AB	1125	G	C2'-C3'-O3'	5.21	122.04	113.70
2	AB	1137	G	C1'-O4'-C4'	-5.21	105.73	109.90
2	AB	1244	A	N7-C8-N9	5.21	116.41	113.80
2	AB	1545	A	C5'-C4'-O4'	5.21	115.35	109.10
2	AB	1813	G	N1-C6-O6	5.21	123.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1870	C	C4'-C3'-C2'	-5.21	97.39	102.60
2	AB	1949	G	C1'-O4'-C4'	-5.21	105.73	109.90
2	AB	2678	C	N3-C4-C5	-5.21	119.82	121.90
35	BA	73	C	N1-C1'-C2'	-5.21	106.27	112.00
35	BA	957	U	C5-C6-N1	-5.21	120.09	122.70
1	AA	76	G	C5'-C4'-O4'	5.21	115.35	109.10
2	AB	471	A	O4'-C1'-C2'	5.21	112.29	107.60
2	AB	534	U	C2'-C3'-O3'	5.21	122.04	113.70
2	AB	1990	C	N3-C4-C5	5.21	123.98	121.90
2	AB	2175	C	C5-C6-N1	-5.21	118.39	121.00
2	AB	2233	U	C5'-C4'-O4'	5.21	115.35	109.10
2	AB	2423	U	C3'-C2'-C1'	-5.21	97.33	101.50
2	AB	2527	C	C4-C5-C6	5.21	120.00	117.40
35	BA	1442	G	C6-C5-N7	5.21	133.53	130.40
2	AB	1177	G	C2-N3-C4	5.21	114.50	111.90
2	AB	1253	A	C3'-C2'-C1'	-5.21	97.33	101.50
2	AB	1255	U	C5'-C4'-O4'	5.21	115.35	109.10
2	AB	1481	U	N3-C4-C5	-5.21	111.47	114.60
2	AB	1596	A	C3'-C2'-C1'	-5.21	97.33	101.50
2	AB	1601	G	N3-C2-N2	5.21	123.55	119.90
2	AB	1897	G	C6-C5-N7	-5.21	127.28	130.40
2	AB	1968	G	C4'-C3'-C2'	-5.21	97.39	102.60
2	AB	2379	G	N1-C2-N2	5.21	120.89	116.20
2	AB	2442	C	C6-N1-C2	-5.21	118.22	120.30
2	AB	2454	G	C4-C5-N7	5.21	112.88	110.80
2	AB	2747	G	O4'-C1'-C2'	5.21	112.29	107.60
2	AB	2803	G	N1-C2-N3	-5.21	120.78	123.90
2	AB	2862	G	C5-C6-N1	5.21	114.10	111.50
4	AD	132	ARG	NE-CZ-NH1	5.21	122.90	120.30
35	BA	230	G	C6-N1-C2	-5.21	121.97	125.10
35	BA	396	C	O3'-P-O5'	-5.21	94.10	104.00
35	BA	1179	A	C5-N7-C8	-5.21	101.30	103.90
35	BA	1232	U	C5'-C4'-C3'	-5.21	107.67	116.00
35	BA	1475	G	N3-C4-C5	-5.21	126.00	128.60
37	BC	11	A	P-O3'-C3'	5.21	125.95	119.70
2	AB	140	C	C5'-C4'-O4'	5.21	115.35	109.10
2	AB	285	G	P-O3'-C3'	5.21	125.95	119.70
2	AB	663	G	N1-C2-N3	-5.21	120.78	123.90
2	AB	782	A	C5-C6-N6	-5.21	119.53	123.70
2	AB	880	G	N3-C2-N2	5.21	123.54	119.90
2	AB	985	C	N3-C2-O2	-5.21	118.26	121.90
2	AB	1897	G	C5-N7-C8	-5.21	101.70	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2730	C	C2-N3-C4	5.21	122.50	119.90
13	AM	39	ILE	CA-CB-CG1	5.21	120.89	111.00
35	BA	1415	G	N7-C8-N9	5.21	115.70	113.10
2	AB	76	C	N1-C2-N3	-5.21	115.56	119.20
2	AB	122	G	N3-C4-N9	-5.21	122.88	126.00
2	AB	470	A	N9-C4-C5	-5.21	103.72	105.80
2	AB	710	U	C5'-C4'-O4'	-5.21	102.85	109.10
2	AB	1071	G	C2-N3-C4	5.21	114.50	111.90
2	AB	1214	A	N7-C8-N9	-5.21	111.20	113.80
2	AB	1666	G	C4-C5-C6	5.21	121.92	118.80
2	AB	2410	G	C4-C5-C6	5.21	121.92	118.80
35	BA	573	A	C5'-C4'-O4'	5.21	115.34	109.10
35	BA	1364	U	O4'-C1'-C2'	-5.21	100.59	105.80
1	AA	21	G	N7-C8-N9	-5.20	110.50	113.10
2	AB	132	G	N9-C1'-C2'	-5.20	106.28	112.00
2	AB	875	G	C5-N7-C8	-5.20	101.70	104.30
2	AB	998	C	C5'-C4'-O4'	5.20	115.34	109.10
2	AB	1342	A	C4-C5-N7	-5.20	108.10	110.70
2	AB	1756	G	C4-C5-N7	-5.20	108.72	110.80
2	AB	1816	C	C5'-C4'-C3'	-5.20	107.67	116.00
2	AB	1859	U	C5'-C4'-O4'	5.20	115.34	109.10
2	AB	2063	C	C5'-C4'-O4'	5.20	115.34	109.10
2	AB	2147	A	C5'-C4'-C3'	-5.20	107.67	116.00
2	AB	2587	A	C5-N7-C8	-5.20	101.30	103.90
2	AB	2649	C	C4'-C3'-C2'	-5.20	97.40	102.60
2	AB	2737	G	N9-C4-C5	5.20	107.48	105.40
2	AB	2750	A	OP1-P-OP2	5.20	127.40	119.60
35	BA	850	U	N3-C2-O2	-5.20	118.56	122.20
35	BA	857	C	N3-C4-C5	-5.20	119.82	121.90
35	BA	1064	G	C6-C5-N7	-5.20	127.28	130.40
35	BA	1413	A	N1-C2-N3	-5.20	126.70	129.30
1	AA	104	A	P-O3'-C3'	5.20	125.94	119.70
2	AB	423	A	C5-N7-C8	-5.20	101.30	103.90
2	AB	594	U	C4-C5-C6	5.20	122.82	119.70
2	AB	810	U	O4'-C1'-C2'	5.20	112.28	107.60
2	AB	1283	G	C3'-C2'-C1'	-5.20	97.34	101.50
2	AB	1358	G	C5-C6-N1	5.20	114.10	111.50
2	AB	1488	C	C3'-C2'-C1'	5.20	105.66	101.50
2	AB	2214	C	C2-N3-C4	5.20	122.50	119.90
2	AB	2380	C	C3'-C2'-C1'	5.20	105.66	101.50
2	AB	2477	U	C2-N1-C1'	5.20	123.94	117.70
30	A3	15	ARG	NE-CZ-NH1	-5.20	117.70	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	568	G	N9-C4-C5	5.20	107.48	105.40
35	BA	1401	G	C5'-C4'-C3'	-5.20	107.68	116.00
37	BC	4	G	C1'-O4'-C4'	5.20	114.06	109.90
1	AA	51	G	N1-C2-N3	5.20	127.02	123.90
2	AB	118	A	N1-C6-N6	5.20	121.72	118.60
2	AB	286	U	C2-N3-C4	5.20	130.12	127.00
2	AB	501	A	C5-C6-N1	5.20	120.30	117.70
2	AB	579	G	N1-C2-N2	5.20	120.88	116.20
2	AB	583	G	N9-C4-C5	5.20	107.48	105.40
2	AB	715	A	C8-N9-C4	5.20	107.88	105.80
2	AB	1816	C	C5'-C4'-O4'	5.20	115.34	109.10
2	AB	2279	G	N3-C2-N2	-5.20	116.26	119.90
2	AB	2447	G	N9-C4-C5	-5.20	103.32	105.40
2	AB	2621	G	C4-N9-C1'	-5.20	119.74	126.50
2	AB	2773	C	N3-C4-N4	5.20	121.64	118.00
14	AN	61	LEU	CB-CG-CD2	5.20	119.84	111.00
35	BA	235	C	N3-C4-N4	5.20	121.64	118.00
35	BA	895	G	C4-C5-N7	-5.20	108.72	110.80
35	BA	1396	A	N9-C1'-C2'	-5.20	106.28	112.00
35	BA	1404	C	C5-C6-N1	5.20	123.60	121.00
35	BA	1493	A	C5'-C4'-O4'	5.20	115.34	109.10
2	AB	34	U	C6-N1-C2	-5.20	117.88	121.00
2	AB	46	G	N3-C4-C5	-5.20	126.00	128.60
2	AB	304	U	N3-C2-O2	-5.20	118.56	122.20
2	AB	692	C	N3-C4-N4	5.20	121.64	118.00
2	AB	836	G	C6-N1-C2	-5.20	121.98	125.10
2	AB	909	A	C4'-C3'-C2'	-5.20	97.40	102.60
2	AB	1112	G	C4'-C3'-C2'	-5.20	97.40	102.60
2	AB	1161	C	N3-C4-C5	-5.20	119.82	121.90
2	AB	1449	G	C2-N3-C4	5.20	114.50	111.90
2	AB	1501	G	N3-C2-N2	-5.20	116.26	119.90
2	AB	1521	G	N1-C2-N3	-5.20	120.78	123.90
2	AB	1935	G	N1-C6-O6	-5.20	116.78	119.90
2	AB	2188	U	C6-N1-C2	-5.20	117.88	121.00
2	AB	2263	C	N3-C2-O2	-5.20	118.26	121.90
2	AB	2818	U	C1'-O4'-C4'	-5.20	105.74	109.90
7	AG	83	PRO	N-CA-CB	5.20	109.54	103.30
35	BA	39	G	N7-C8-N9	-5.20	110.50	113.10
35	BA	416	G	C6-N1-C2	-5.20	121.98	125.10
35	BA	480	U	C5'-C4'-O4'	5.20	115.34	109.10
35	BA	495	A	C5-C6-N1	-5.20	115.10	117.70
35	BA	562	U	C1'-O4'-C4'	5.20	114.06	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	997	U	N1-C2-O2	5.20	126.44	122.80
40	BF	30	LYS	CB-CA-C	5.20	120.80	110.40
2	AB	802	A	O4'-C4'-C3'	5.20	110.26	106.10
2	AB	2076	U	C6-N1-C1'	-5.20	113.92	121.20
2	AB	2132	U	P-O3'-C3'	5.20	125.94	119.70
2	AB	2780	G	C5-C6-N1	5.20	114.10	111.50
14	AN	3	LEU	CB-CG-CD1	5.20	119.83	111.00
15	AO	21	ALA	N-CA-CB	5.20	117.38	110.10
35	BA	1027	C	N3-C4-C5	-5.20	119.82	121.90
2	AB	117	G	P-O5'-C5'	5.20	129.21	120.90
2	AB	195	A	C5'-C4'-O4'	5.20	115.33	109.10
2	AB	862	G	P-O3'-C3'	5.20	125.93	119.70
2	AB	1334	G	C5-C6-N1	5.20	114.10	111.50
2	AB	1722	A	C2'-C3'-O3'	5.20	122.01	113.70
2	AB	1867	G	O4'-C1'-N9	5.20	112.36	108.20
2	AB	1920	C	P-O3'-C3'	5.20	125.94	119.70
2	AB	1976	U	N3-C4-O4	5.20	123.04	119.40
2	AB	2014	A	C6-N1-C2	-5.20	115.48	118.60
2	AB	2131	U	N3-C4-C5	-5.20	111.48	114.60
2	AB	2177	C	C1'-O4'-C4'	-5.20	105.74	109.90
2	AB	2537	U	N3-C4-O4	5.20	123.04	119.40
4	AD	51	ARG	NE-CZ-NH1	5.20	122.90	120.30
35	BA	160	A	C4-C5-C6	-5.20	114.40	117.00
35	BA	195	A	C2-N3-C4	5.20	113.20	110.60
35	BA	237	G	OP1-P-OP2	5.20	127.39	119.60
35	BA	557	G	O4'-C1'-N9	5.20	112.36	108.20
35	BA	718	A	P-O3'-C3'	5.20	125.93	119.70
35	BA	946	A	O5'-P-OP2	-5.20	101.03	105.70
35	BA	985	C	C2-N3-C4	-5.20	117.30	119.90
2	AB	6	A	C8-N9-C4	-5.19	103.72	105.80
2	AB	527	C	C3'-C2'-C1'	-5.19	97.34	101.50
2	AB	553	G	C4-N9-C1'	-5.19	119.75	126.50
2	AB	718	A	C4-C5-C6	5.19	119.60	117.00
2	AB	809	G	C4'-C3'-C2'	-5.19	97.41	102.60
6	AF	161	ALA	CB-CA-C	-5.19	102.31	110.10
35	BA	149	A	N1-C6-N6	-5.19	115.48	118.60
35	BA	386	C	C2-N1-C1'	-5.19	113.09	118.80
35	BA	520	A	N1-C6-N6	-5.19	115.48	118.60
35	BA	602	A	C5-C6-N1	-5.19	115.10	117.70
35	BA	1130	A	C4-C5-C6	5.19	119.60	117.00
35	BA	1522	U	C6-N1-C2	-5.19	117.88	121.00
39	BE	171	ARG	NE-CZ-NH1	5.19	122.90	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	241	A	C5-N7-C8	-5.19	101.30	103.90
2	AB	245	G	C5'-C4'-O4'	5.19	115.33	109.10
2	AB	454	A	C8-N9-C4	5.19	107.88	105.80
2	AB	1363	C	P-O3'-C3'	5.19	125.93	119.70
2	AB	2858	C	C4'-C3'-C2'	5.19	107.79	102.60
19	AS	29	ARG	NE-CZ-NH1	5.19	122.90	120.30
35	BA	16	A	O4'-C4'-C3'	-5.19	98.81	104.00
35	BA	266	G	O3'-P-O5'	5.19	113.86	104.00
35	BA	775	G	N3-C4-N9	-5.19	122.88	126.00
2	AB	498	G	C5-N7-C8	-5.19	101.70	104.30
2	AB	528	A	P-O3'-C3'	5.19	125.93	119.70
2	AB	528	A	O4'-C1'-C2'	5.19	112.27	107.60
2	AB	579	G	C5-C6-O6	-5.19	125.48	128.60
2	AB	1248	G	C3'-C2'-C1'	5.19	105.65	101.50
2	AB	1342	A	C1'-O4'-C4'	-5.19	105.75	109.90
2	AB	1421	G	C6-C5-N7	-5.19	127.28	130.40
2	AB	1423	G	N1-C2-N2	-5.19	111.53	116.20
2	AB	1770	G	C2-N3-C4	5.19	114.50	111.90
2	AB	1802	A	N3-C4-N9	5.19	131.55	127.40
2	AB	2401	U	N3-C4-C5	-5.19	111.48	114.60
2	AB	2544	G	C2'-C3'-O3'	5.19	122.00	113.70
24	AX	12	GLN	O-C-N	-5.19	114.38	123.20
35	BA	584	G	O5'-P-OP2	-5.19	101.03	105.70
35	BA	838	G	C8-N9-C4	-5.19	104.32	106.40
35	BA	961	U	C4'-C3'-C2'	-5.19	97.41	102.60
35	BA	1090	U	N1-C2-O2	-5.19	119.17	122.80
35	BA	1107	C	C4-C5-C6	5.19	120.00	117.40
35	BA	1131	G	C5-N7-C8	5.19	106.89	104.30
35	BA	1305	G	C4-C5-C6	5.19	121.91	118.80
35	BA	1352	C	N3-C4-C5	5.19	123.98	121.90
35	BA	1375	A	C4-C5-C6	5.19	119.60	117.00
35	BA	1418	A	C4-C5-N7	-5.19	108.11	110.70
35	BA	1441	A	C4'-C3'-C2'	-5.19	97.41	102.60
37	BC	75	C	C5'-C4'-O4'	5.19	115.33	109.10
2	AB	735	A	P-O3'-C3'	5.19	125.93	119.70
2	AB	1669	A	N3-C4-C5	-5.19	123.17	126.80
2	AB	1981	A	N1-C6-N6	-5.19	115.49	118.60
2	AB	2415	G	N3-C4-C5	-5.19	126.01	128.60
2	AB	2439	A	C6-N1-C2	-5.19	115.49	118.60
2	AB	2665	A	C4-C5-N7	5.19	113.29	110.70
25	AY	38	ARG	CD-NE-CZ	5.19	130.87	123.60
35	BA	254	G	N3-C2-N2	-5.19	116.27	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	698	G	N3-C4-N9	5.19	129.11	126.00
35	BA	851	G	O4'-C1'-N9	5.19	112.35	108.20
35	BA	867	G	O5'-P-OP2	5.19	116.93	110.70
35	BA	1106	G	N7-C8-N9	5.19	115.69	113.10
35	BA	1228	C	C5-C4-N4	-5.19	116.57	120.20
37	BC	19	G	N7-C8-N9	5.19	115.69	113.10
1	AA	117	G	C4-N9-C1'	-5.19	119.76	126.50
2	AB	669	G	N3-C4-N9	-5.19	122.89	126.00
2	AB	748	G	C1'-O4'-C4'	-5.19	105.75	109.90
2	AB	1237	A	C8-N9-C4	-5.19	103.72	105.80
2	AB	1412	U	C1'-O4'-C4'	-5.19	105.75	109.90
2	AB	1473	G	C5-C6-O6	-5.19	125.49	128.60
2	AB	1491	G	C5-C6-N1	5.19	114.09	111.50
2	AB	2013	A	N3-C4-C5	-5.19	123.17	126.80
2	AB	2041	U	C4'-C3'-C2'	-5.19	97.41	102.60
2	AB	2100	G	N1-C6-O6	5.19	123.01	119.90
2	AB	2147	A	C4-C5-N7	-5.19	108.11	110.70
2	AB	2253	G	N3-C4-N9	-5.19	122.89	126.00
2	AB	2727	A	C5-N7-C8	5.19	106.49	103.90
35	BA	150	U	N3-C4-C5	-5.19	111.49	114.60
35	BA	492	C	C4-C5-C6	-5.19	114.81	117.40
35	BA	585	G	C8-N9-C1'	5.19	133.74	127.00
35	BA	628	G	C4-C5-N7	5.19	112.88	110.80
35	BA	1071	C	N3-C2-O2	-5.19	118.27	121.90
35	BA	1278	G	N3-C2-N2	5.19	123.53	119.90
35	BA	1527	U	O4'-C1'-C2'	-5.19	100.61	105.80
36	BB	17	U	N3-C2-O2	-5.19	118.57	122.20
36	BB	28	U	C4'-C3'-C2'	-5.19	97.41	102.60
43	BI	80	GLY	C-N-CA	5.19	133.19	122.30
2	AB	606	U	C1'-O4'-C4'	-5.19	105.75	109.90
2	AB	792	A	C6-C5-N7	5.19	135.93	132.30
2	AB	981	A	C5'-C4'-O4'	5.19	115.32	109.10
2	AB	1086	A	C1'-O4'-C4'	5.19	114.05	109.90
2	AB	1387	A	C2-N3-C4	-5.19	108.01	110.60
2	AB	1840	G	C5'-C4'-C3'	-5.19	107.70	116.00
2	AB	2244	U	N3-C2-O2	5.19	125.83	122.20
2	AB	2391	G	C5'-C4'-C3'	-5.19	107.70	116.00
2	AB	2518	A	C5-N7-C8	-5.19	101.31	103.90
2	AB	2744	G	C5-C6-N1	-5.19	108.91	111.50
35	BA	158	G	C8-N9-C4	-5.19	104.33	106.40
35	BA	289	G	C5-N7-C8	5.19	106.89	104.30
35	BA	363	A	C5-C6-N1	5.19	120.29	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	739	C	C1'-O4'-C4'	-5.19	105.75	109.90
35	BA	740	U	N1-C2-O2	-5.19	119.17	122.80
35	BA	759	A	C8-N9-C4	-5.19	103.72	105.80
41	BG	56	PRO	N-CA-CB	5.19	109.52	103.30
2	AB	187	G	C5-C6-N1	5.18	114.09	111.50
2	AB	305	C	C6-N1-C2	-5.18	118.23	120.30
2	AB	358	U	C4-C5-C6	5.18	122.81	119.70
2	AB	908	C	C5'-C4'-C3'	-5.18	107.70	116.00
2	AB	920	A	N1-C2-N3	5.18	131.89	129.30
2	AB	953	G	C5-C6-O6	5.18	131.71	128.60
2	AB	968	C	N3-C2-O2	-5.18	118.27	121.90
2	AB	1389	G	N1-C6-O6	-5.18	116.79	119.90
2	AB	1638	C	C5'-C4'-O4'	5.18	115.32	109.10
2	AB	1789	A	N3-C4-C5	-5.18	123.17	126.80
2	AB	1910	G	C5-N7-C8	-5.18	101.71	104.30
2	AB	1942	C	C2-N3-C4	-5.18	117.31	119.90
2	AB	1982	U	C5'-C4'-C3'	-5.18	107.70	116.00
2	AB	2426	A	N7-C8-N9	5.18	116.39	113.80
2	AB	2761	A	C6-C5-N7	5.18	135.93	132.30
5	AE	189	VAL	CA-CB-CG1	5.18	118.67	110.90
35	BA	155	A	C4'-C3'-C2'	-5.18	97.42	102.60
35	BA	672	U	C5-C6-N1	-5.18	120.11	122.70
35	BA	1243	C	O4'-C4'-C3'	-5.18	98.81	104.00
35	BA	1269	A	C6-N1-C2	5.18	121.71	118.60
2	AB	106	C	OP1-P-OP2	-5.18	111.83	119.60
2	AB	159	G	N3-C4-N9	5.18	129.11	126.00
2	AB	199	A	C1'-O4'-C4'	5.18	114.05	109.90
2	AB	208	C	C2-N1-C1'	-5.18	113.10	118.80
2	AB	314	C	C4-C5-C6	-5.18	114.81	117.40
2	AB	801	G	N1-C6-O6	5.18	123.01	119.90
2	AB	1180	U	N3-C2-O2	-5.18	118.57	122.20
2	AB	1724	G	C5-C6-N1	5.18	114.09	111.50
2	AB	1783	A	C4'-C3'-C2'	5.18	107.78	102.60
2	AB	2019	A	C4-C5-C6	-5.18	114.41	117.00
2	AB	2026	U	N1-C1'-C2'	-5.18	106.30	112.00
2	AB	2377	A	C5-C6-N6	-5.18	119.55	123.70
2	AB	2718	G	N3-C2-N2	-5.18	116.27	119.90
2	AB	2849	U	N3-C2-O2	-5.18	118.57	122.20
6	AF	102	ARG	NE-CZ-NH2	5.18	122.89	120.30
35	BA	1144	G	C5-C6-N1	-5.18	108.91	111.50
35	BA	1174	G	O4'-C1'-N9	5.18	112.35	108.20
35	BA	1387	G	C5-C6-N1	5.18	114.09	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1434	A	N1-C2-N3	-5.18	126.71	129.30
1	AA	39	A	N1-C2-N3	-5.18	126.71	129.30
2	AB	250	G	N9-C4-C5	5.18	107.47	105.40
2	AB	363	G	N3-C4-N9	5.18	129.11	126.00
2	AB	401	A	C4-C5-C6	-5.18	114.41	117.00
2	AB	1031	G	C8-N9-C4	-5.18	104.33	106.40
2	AB	2221	G	C4'-C3'-C2'	5.18	107.78	102.60
2	AB	2781	A	N1-C6-N6	5.18	121.71	118.60
35	BA	820	U	C3'-C2'-C1'	-5.18	97.36	101.50
35	BA	978	A	O5'-P-OP1	-5.18	101.04	105.70
35	BA	1001	C	C3'-C2'-C1'	5.18	105.64	101.50
37	BC	15	G	N9-C1'-C2'	-5.18	106.30	112.00
2	AB	74	A	C5-C6-N6	5.18	127.84	123.70
2	AB	556	A	C4'-C3'-C2'	-5.18	97.42	102.60
2	AB	628	G	N1-C2-N2	5.18	120.86	116.20
2	AB	2075	U	C1'-O4'-C4'	-5.18	105.76	109.90
2	AB	2611	C	N3-C2-O2	-5.18	118.27	121.90
2	AB	2638	G	N7-C8-N9	5.18	115.69	113.10
17	AQ	94	ARG	CB-CA-C	5.18	120.76	110.40
35	BA	912	C	O3'-P-O5'	-5.18	94.16	104.00
2	AB	748	G	C5-N7-C8	-5.18	101.71	104.30
2	AB	1342	A	C5'-C4'-C3'	-5.18	107.72	116.00
2	AB	1516	G	OP2-P-O3'	5.18	116.59	105.20
2	AB	1706	C	N3-C4-N4	5.18	121.62	118.00
2	AB	2191	A	C8-N9-C4	-5.18	103.73	105.80
35	BA	577	G	N1-C6-O6	5.18	123.01	119.90
35	BA	716	A	C3'-C2'-C1'	5.18	105.64	101.50
35	BA	1043	G	P-O5'-C5'	-5.18	112.62	120.90
2	AB	43	G	C3'-C2'-C1'	-5.18	97.36	101.50
2	AB	197	A	C2-N3-C4	5.18	113.19	110.60
2	AB	322	A	C5-N7-C8	-5.18	101.31	103.90
2	AB	734	A	C5'-C4'-C3'	-5.18	107.72	116.00
2	AB	1058	U	C5-C4-O4	5.18	129.00	125.90
2	AB	1122	G	N7-C8-N9	5.18	115.69	113.10
2	AB	1130	U	C2-N3-C4	-5.18	123.89	127.00
2	AB	1151	A	C4'-C3'-C2'	-5.18	97.42	102.60
2	AB	1203	U	P-O3'-C3'	5.18	125.91	119.70
2	AB	1288	G	C4'-C3'-C2'	5.18	107.78	102.60
2	AB	1366	A	C6-C5-N7	5.18	135.92	132.30
2	AB	1496	A	C2-N3-C4	5.18	113.19	110.60
2	AB	1627	G	C5-C6-O6	-5.18	125.49	128.60
2	AB	1695	G	N7-C8-N9	-5.18	110.51	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2138	G	C6-C5-N7	5.18	133.51	130.40
2	AB	2239	G	C5-N7-C8	-5.18	101.71	104.30
2	AB	2269	G	C1'-O4'-C4'	-5.18	105.76	109.90
2	AB	2323	G	C4-C5-N7	-5.18	108.73	110.80
2	AB	2434	A	N1-C6-N6	-5.18	115.49	118.60
2	AB	2523	G	C2'-C3'-O3'	5.18	121.98	113.70
2	AB	2749	A	O4'-C4'-C3'	5.18	110.24	106.10
16	AP	21	PHE	CA-C-O	-5.18	109.23	120.10
17	AQ	56	LYS	CB-CG-CD	5.18	125.06	111.60
35	BA	64	G	C5-N7-C8	-5.18	101.71	104.30
35	BA	220	G	N3-C4-N9	5.18	129.11	126.00
35	BA	481	G	O4'-C1'-C2'	-5.18	100.62	105.80
35	BA	517	G	OP1-P-O3'	5.18	116.59	105.20
35	BA	796	C	C5-C6-N1	5.18	123.59	121.00
35	BA	1090	U	P-O3'-C3'	5.18	125.91	119.70
35	BA	1195	C	C2'-C3'-O3'	5.18	121.98	113.70
35	BA	1319	A	C8-N9-C4	5.18	107.87	105.80
38	BD	31	PHE	CB-CG-CD1	5.18	124.42	120.80
48	BN	98	ARG	N-CA-CB	-5.18	101.28	110.60
2	AB	140	C	N1-C2-O2	5.17	122.00	118.90
2	AB	631	A	N7-C8-N9	5.17	116.39	113.80
2	AB	735	A	C3'-C2'-C1'	5.17	105.64	101.50
2	AB	755	U	N3-C4-O4	5.17	123.02	119.40
2	AB	826	U	O3'-P-O5'	-5.17	94.17	104.00
2	AB	1458	U	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	1505	A	C5'-C4'-C3'	-5.17	107.72	116.00
2	AB	1827	U	C5-C4-O4	-5.17	122.80	125.90
2	AB	1845	G	C4-C5-C6	5.17	121.91	118.80
2	AB	2102	G	N7-C8-N9	5.17	115.69	113.10
2	AB	2425	A	C5-C6-N1	-5.17	115.11	117.70
2	AB	2820	A	C6-C5-N7	5.17	135.92	132.30
2	AB	2859	G	P-O3'-C3'	5.17	125.91	119.70
6	AF	146	VAL	CA-CB-CG1	5.17	118.66	110.90
35	BA	102	G	N3-C2-N2	-5.17	116.28	119.90
35	BA	106	C	N3-C4-N4	5.17	121.62	118.00
35	BA	119	A	C4-C5-N7	5.17	113.29	110.70
35	BA	1230	C	O4'-C4'-C3'	-5.17	98.83	104.00
35	BA	1368	A	C4'-C3'-C2'	-5.17	97.43	102.60
36	BB	31	U	C4'-C3'-O3'	5.17	123.35	113.00
37	BC	38	A	C8-N9-C4	5.17	107.87	105.80
2	AB	670	A	O4'-C1'-N9	5.17	112.34	108.20
2	AB	704	G	N3-C2-N2	5.17	123.52	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	976	G	N9-C1'-C2'	-5.17	106.31	112.00
2	AB	1359	A	C4'-C3'-O3'	5.17	123.35	113.00
2	AB	1957	C	C5'-C4'-O4'	5.17	115.31	109.10
2	AB	2019	A	C5-N7-C8	-5.17	101.31	103.90
2	AB	2331	G	C8-N9-C4	5.17	108.47	106.40
2	AB	2374	C	C5'-C4'-C3'	-5.17	107.72	116.00
35	BA	165	G	C4-C5-N7	-5.17	108.73	110.80
35	BA	675	A	C1'-O4'-C4'	-5.17	105.76	109.90
35	BA	687	A	O4'-C1'-C2'	-5.17	100.63	105.80
35	BA	1042	A	C5-N7-C8	-5.17	101.31	103.90
35	BA	1223	C	O3'-P-O5'	-5.17	94.17	104.00
36	BB	45	G	N1-C2-N2	-5.17	111.55	116.20
2	AB	248	G	N9-C4-C5	5.17	107.47	105.40
2	AB	386	G	C4'-C3'-C2'	-5.17	97.43	102.60
2	AB	954	G	C4'-C3'-C2'	-5.17	97.43	102.60
2	AB	1456	G	C8-N9-C1'	5.17	133.72	127.00
2	AB	1529	G	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	2191	A	O4'-C1'-N9	5.17	112.34	108.20
2	AB	2466	C	N1-C2-O2	5.17	122.00	118.90
2	AB	2778	A	O4'-C4'-C3'	5.17	110.24	106.10
2	AB	2864	G	C5-N7-C8	-5.17	101.71	104.30
35	BA	8	A	N9-C1'-C2'	5.17	120.72	114.00
35	BA	211	G	O3'-P-O5'	5.17	113.83	104.00
35	BA	479	U	C6-N1-C2	-5.17	117.90	121.00
35	BA	791	G	O4'-C1'-N9	5.17	112.34	108.20
35	BA	1030	U	C5'-C4'-O4'	5.17	115.31	109.10
35	BA	1167	A	C4-C5-C6	5.17	119.58	117.00
35	BA	1445	U	C4-C5-C6	-5.17	116.60	119.70
1	AA	100	G	C5'-C4'-O4'	5.17	115.30	109.10
2	AB	416	U	C5'-C4'-O4'	5.17	115.30	109.10
2	AB	476	G	C4-C5-C6	5.17	121.90	118.80
2	AB	776	G	C5-C6-O6	-5.17	125.50	128.60
2	AB	1047	G	O4'-C1'-N9	-5.17	104.06	108.20
2	AB	1487	U	C3'-C2'-C1'	-5.17	97.36	101.50
2	AB	2012	G	N3-C4-C5	-5.17	126.02	128.60
35	BA	98	A	C1'-O4'-C4'	-5.17	105.76	109.90
35	BA	1176	A	C5-C6-N6	-5.17	119.56	123.70
35	BA	1433	A	C1'-O4'-C4'	-5.17	105.76	109.90
2	AB	161	A	C5'-C4'-C3'	-5.17	107.73	116.00
2	AB	339	U	C4-C5-C6	5.17	122.80	119.70
2	AB	468	G	C6-C5-N7	5.17	133.50	130.40
2	AB	680	C	C2'-C3'-O3'	5.17	121.97	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1170	C	N1-C1'-C2'	-5.17	106.31	112.00
2	AB	1508	A	C6-N1-C2	5.17	121.70	118.60
2	AB	1546	G	O3'-P-O5'	-5.17	94.18	104.00
2	AB	1773	A	N3-C4-C5	-5.17	123.18	126.80
2	AB	2534	A	C2-N3-C4	-5.17	108.02	110.60
2	AB	2565	A	C6-C5-N7	-5.17	128.68	132.30
8	AH	51	PHE	CB-CG-CD2	5.17	124.42	120.80
26	AZ	46	VAL	CG1-CB-CG2	-5.17	102.63	110.90
35	BA	449	G	N1-C2-N2	5.17	120.85	116.20
35	BA	938	A	N7-C8-N9	-5.17	111.22	113.80
35	BA	1456	A	C3'-C2'-C1'	-5.17	97.37	101.50
36	BB	55	A	C4-C5-C6	5.17	119.58	117.00
1	AA	64	G	C8-N9-C1'	5.17	133.72	127.00
2	AB	168	G	OP2-P-O3'	5.17	116.57	105.20
2	AB	182	A	C5-C6-N1	-5.17	115.12	117.70
2	AB	255	A	C5-N7-C8	5.17	106.48	103.90
2	AB	596	U	N1-C2-N3	5.17	118.00	114.90
2	AB	825	A	C6-N1-C2	-5.17	115.50	118.60
2	AB	841	G	C2-N3-C4	5.17	114.48	111.90
2	AB	1681	G	O4'-C1'-N9	5.17	112.33	108.20
2	AB	1705	A	P-O3'-C3'	5.17	125.90	119.70
2	AB	1737	G	N3-C4-N9	5.17	129.10	126.00
35	BA	122	G	N3-C4-N9	5.17	129.10	126.00
35	BA	133	U	C3'-C2'-C1'	-5.17	97.37	101.50
35	BA	415	A	C5-C6-N1	5.17	120.28	117.70
35	BA	651	C	C5'-C4'-O4'	5.17	115.30	109.10
35	BA	822	U	C3'-C2'-C1'	-5.17	97.37	101.50
35	BA	878	A	C4'-C3'-C2'	-5.17	97.43	102.60
35	BA	1187	G	N9-C1'-C2'	-5.17	106.32	112.00
35	BA	1355	G	C4-C5-C6	5.17	121.90	118.80
36	BB	16	A	N7-C8-N9	5.17	116.38	113.80
49	BO	75	SER	CA-C-O	-5.17	109.25	120.10
1	AA	23	G	N3-C4-C5	5.17	131.18	128.60
2	AB	638	G	C6-C5-N7	5.17	133.50	130.40
2	AB	842	U	C4-C5-C6	5.17	122.80	119.70
2	AB	1348	C	N3-C4-C5	-5.17	119.83	121.90
2	AB	1832	C	C5'-C4'-O4'	5.17	115.30	109.10
2	AB	2329	U	C3'-C2'-C1'	5.17	105.63	101.50
2	AB	2656	U	O4'-C4'-C3'	5.17	110.23	106.10
17	AQ	81	ARG	CD-NE-CZ	5.17	130.83	123.60
35	BA	366	A	C4-C5-N7	-5.17	108.12	110.70
2	AB	121	G	N1-C2-N3	5.16	127.00	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	129	C	O4'-C4'-C3'	5.16	110.23	106.10
2	AB	228	C	O4'-C1'-N1	5.16	112.33	108.20
2	AB	275	C	C5'-C4'-C3'	-5.16	107.74	116.00
2	AB	639	U	N3-C2-O2	-5.16	118.59	122.20
2	AB	1218	G	N7-C8-N9	5.16	115.68	113.10
2	AB	1648	U	C5'-C4'-O4'	5.16	115.30	109.10
2	AB	1719	G	C3'-C2'-C1'	-5.16	97.37	101.50
2	AB	2128	G	C5-N7-C8	-5.16	101.72	104.30
2	AB	2141	G	C2-N3-C4	5.16	114.48	111.90
2	AB	2187	U	P-O3'-C3'	5.16	125.90	119.70
2	AB	2226	C	N3-C2-O2	-5.16	118.29	121.90
2	AB	2547	A	C4-C5-N7	5.16	113.28	110.70
2	AB	2553	G	N9-C1'-C2'	-5.16	106.32	112.00
2	AB	2570	G	C5-N7-C8	-5.16	101.72	104.30
2	AB	2574	G	C5-C6-O6	-5.16	125.50	128.60
7	AG	98	PHE	CG-CD1-CE1	-5.16	115.12	120.80
23	AW	96	LYS	C-N-CA	5.16	134.61	121.70
35	BA	903	G	N3-C4-N9	-5.16	122.90	126.00
35	BA	1081	A	N9-C4-C5	5.16	107.86	105.80
35	BA	1312	G	N1-C2-N3	-5.16	120.80	123.90
35	BA	1398	A	C2-N3-C4	5.16	113.18	110.60
51	BQ	69	LEU	CB-CG-CD1	5.16	119.78	111.00
2	AB	1037	G	N1-C2-N2	5.16	120.85	116.20
2	AB	1659	G	N3-C2-N2	-5.16	116.29	119.90
2	AB	2151	U	N3-C4-O4	5.16	123.01	119.40
2	AB	2532	G	N3-C4-C5	-5.16	126.02	128.60
4	AD	7	PRO	CA-N-CD	-5.16	104.27	111.50
32	A5	5	PHE	CB-CG-CD1	5.16	124.41	120.80
35	BA	276	G	N1-C2-N2	5.16	120.85	116.20
55	BU	21	ALA	N-CA-CB	5.16	117.33	110.10
1	AA	69	G	C6-C5-N7	-5.16	127.30	130.40
2	AB	78	U	C5'-C4'-O4'	5.16	115.29	109.10
2	AB	335	C	C3'-C2'-C1'	5.16	105.63	101.50
2	AB	444	C	C2'-C3'-O3'	5.16	121.96	113.70
2	AB	495	G	C3'-C2'-C1'	5.16	105.63	101.50
2	AB	496	G	C3'-C2'-C1'	-5.16	97.37	101.50
2	AB	678	C	O5'-P-OP1	-5.16	101.06	105.70
2	AB	909	A	P-O5'-C5'	5.16	129.16	120.90
2	AB	1090	A	C8-N9-C4	-5.16	103.74	105.80
2	AB	1111	A	O5'-P-OP2	-5.16	101.06	105.70
2	AB	1183	U	C5-C4-O4	5.16	129.00	125.90
2	AB	1227	G	C6-C5-N7	-5.16	127.30	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1358	G	O5'-P-OP2	-5.16	101.06	105.70
2	AB	1382	G	C4'-C3'-C2'	-5.16	97.44	102.60
2	AB	1558	C	C6-N1-C2	5.16	122.36	120.30
2	AB	1598	A	C5'-C4'-O4'	5.16	115.29	109.10
2	AB	1633	G	C5'-C4'-C3'	-5.16	107.74	116.00
2	AB	1722	A	C4'-C3'-C2'	-5.16	97.44	102.60
2	AB	1806	C	N1-C2-O2	5.16	122.00	118.90
2	AB	2010	G	C5'-C4'-C3'	-5.16	107.74	116.00
2	AB	2145	C	N3-C4-N4	5.16	121.61	118.00
2	AB	2451	A	N1-C6-N6	-5.16	115.50	118.60
2	AB	2550	G	C8-N9-C1'	5.16	133.71	127.00
2	AB	2763	G	N1-C2-N3	-5.16	120.80	123.90
3	AC	55	SER	CB-CA-C	5.16	119.91	110.10
35	BA	789	U	N3-C4-O4	5.16	123.01	119.40
35	BA	807	A	O4'-C1'-N9	-5.16	104.07	108.20
35	BA	950	U	C5-C6-N1	5.16	125.28	122.70
35	BA	1383	C	P-O5'-C5'	5.16	129.16	120.90
2	AB	240	C	C5'-C4'-O4'	5.16	115.29	109.10
2	AB	1139	G	C3'-C2'-C1'	-5.16	97.37	101.50
2	AB	1294	U	N3-C4-O4	5.16	123.01	119.40
2	AB	1506	U	C5'-C4'-O4'	5.16	115.29	109.10
2	AB	2296	U	C5'-C4'-O4'	5.16	115.29	109.10
2	AB	2377	A	N1-C6-N6	5.16	121.69	118.60
2	AB	2715	C	C6-N1-C1'	5.16	126.99	120.80
2	AB	2883	A	C5-N7-C8	5.16	106.48	103.90
2	AB	2885	G	C2-N3-C4	5.16	114.48	111.90
35	BA	244	U	N1-C2-O2	5.16	126.41	122.80
35	BA	807	A	C3'-C2'-C1'	5.16	105.63	101.50
35	BA	1430	A	N1-C6-N6	-5.16	115.50	118.60
2	AB	446	G	C5-N7-C8	-5.16	101.72	104.30
2	AB	488	G	C5'-C4'-O4'	5.16	115.29	109.10
2	AB	650	C	C3'-C2'-C1'	5.16	105.62	101.50
2	AB	775	G	C4'-C3'-C2'	5.16	107.76	102.60
2	AB	1205	A	N3-C4-N9	-5.16	123.27	127.40
2	AB	2328	A	P-O5'-C5'	5.16	129.15	120.90
35	BA	187	G	C8-N9-C1'	5.16	133.70	127.00
35	BA	1126	U	O4'-C1'-N1	5.16	112.33	108.20
35	BA	1307	U	C6-N1-C2	-5.16	117.91	121.00
35	BA	1322	C	O4'-C4'-C3'	5.16	110.22	106.10
35	BA	1345	U	C2-N3-C4	-5.16	123.91	127.00
39	BE	167	TYR	CD1-CE1-CZ	-5.16	115.16	119.80
42	BH	93	LYS	C-N-CA	5.16	134.59	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	25	U	N1-C2-O2	-5.16	119.19	122.80
2	AB	536	G	C4-C5-C6	5.16	121.89	118.80
2	AB	539	G	O4'-C1'-N9	-5.16	104.08	108.20
2	AB	603	A	C5-C6-N1	5.16	120.28	117.70
2	AB	612	G	C4'-C3'-C2'	5.16	107.76	102.60
2	AB	878	A	N9-C1'-C2'	-5.16	106.33	112.00
2	AB	1006	C	C2'-C3'-O3'	5.16	121.95	113.70
2	AB	1215	G	N9-C4-C5	5.16	107.46	105.40
2	AB	1420	A	N7-C8-N9	-5.16	111.22	113.80
2	AB	1772	A	N3-C4-N9	5.16	131.52	127.40
2	AB	1926	U	N1-C1'-C2'	-5.16	106.33	112.00
2	AB	1953	A	N3-C4-C5	-5.16	123.19	126.80
2	AB	1988	G	C5-C6-O6	-5.16	125.51	128.60
2	AB	2521	C	N1-C2-N3	-5.16	115.59	119.20
2	AB	2694	G	N1-C2-N3	5.16	126.99	123.90
4	AD	197	ALA	CB-CA-C	-5.16	102.37	110.10
15	AO	18	ARG	NE-CZ-NH1	5.16	122.88	120.30
35	BA	116	A	C3'-C2'-C1'	-5.16	97.38	101.50
35	BA	374	A	N3-C4-N9	-5.16	123.28	127.40
35	BA	458	U	C5-C4-O4	5.16	128.99	125.90
35	BA	634	C	N3-C2-O2	-5.16	118.29	121.90
35	BA	812	G	C1'-O4'-C4'	5.16	114.02	109.90
35	BA	842	U	C4-C5-C6	5.16	122.79	119.70
35	BA	1000	A	C5-C6-N6	-5.16	119.58	123.70
35	BA	1386	G	C4-C5-N7	-5.16	108.74	110.80
35	BA	1453	G	C5'-C4'-C3'	-5.16	107.75	116.00
2	AB	144	A	N9-C4-C5	5.15	107.86	105.80
2	AB	804	A	C5-N7-C8	-5.15	101.32	103.90
2	AB	892	A	OP2-P-O3'	5.15	116.54	105.20
2	AB	2049	G	C5-C6-N1	-5.15	108.92	111.50
35	BA	250	A	C5-C6-N1	5.15	120.28	117.70
37	BC	42	C	C5-C6-N1	-5.15	118.42	121.00
1	AA	38	C	C5-C6-N1	5.15	123.58	121.00
2	AB	662	G	C3'-C2'-C1'	5.15	105.62	101.50
2	AB	1042	G	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	1139	G	C5-C6-N1	5.15	114.08	111.50
2	AB	1416	G	N3-C4-N9	-5.15	122.91	126.00
2	AB	1516	G	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	2335	A	C4'-C3'-C2'	-5.15	97.45	102.60
2	AB	2401	U	P-O3'-C3'	5.15	125.88	119.70
6	AF	24	ASN	CB-CA-C	5.15	120.70	110.40
35	BA	352	C	C2-N3-C4	5.15	122.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	626	G	C5'-C4'-O4'	5.15	115.28	109.10
35	BA	676	A	C5'-C4'-C3'	-5.15	107.76	116.00
2	AB	455	C	N3-C4-N4	-5.15	114.39	118.00
2	AB	1122	G	N1-C2-N3	-5.15	120.81	123.90
2	AB	1133	A	C2-N3-C4	-5.15	108.03	110.60
2	AB	1231	U	O4'-C1'-N1	5.15	112.32	108.20
2	AB	1250	G	C5-N7-C8	-5.15	101.72	104.30
2	AB	1638	C	C5-C6-N1	5.15	123.58	121.00
2	AB	1805	A	C6-C5-N7	5.15	135.91	132.30
2	AB	1816	C	C2-N1-C1'	5.15	124.47	118.80
2	AB	2584	U	N1-C2-N3	5.15	117.99	114.90
2	AB	2611	C	C1'-O4'-C4'	5.15	114.02	109.90
2	AB	2645	G	C1'-O4'-C4'	-5.15	105.78	109.90
12	AL	85	LYS	CB-CG-CD	5.15	124.99	111.60
16	AP	55	ALA	CB-CA-C	5.15	117.83	110.10
35	BA	488	C	C5-C6-N1	5.15	123.58	121.00
35	BA	497	G	C4-N9-C1'	-5.15	119.80	126.50
35	BA	509	A	C5-C6-N1	5.15	120.28	117.70
35	BA	1451	U	C2-N1-C1'	5.15	123.88	117.70
2	AB	908	C	C1'-O4'-C4'	-5.15	105.78	109.90
2	AB	1059	G	C4-C5-C6	-5.15	115.71	118.80
2	AB	1228	G	C4'-C3'-C2'	-5.15	97.45	102.60
2	AB	2305	U	C2-N3-C4	-5.15	123.91	127.00
2	AB	2335	A	C3'-C2'-C1'	5.15	105.62	101.50
2	AB	2717	C	C6-N1-C1'	5.15	126.98	120.80
3	AC	45	ALA	N-CA-CB	-5.15	102.89	110.10
22	AV	67	VAL	CA-CB-CG2	5.15	118.62	110.90
35	BA	507	C	C5'-C4'-C3'	5.15	124.24	116.00
35	BA	1280	A	C3'-C2'-C1'	5.15	105.62	101.50
35	BA	1459	G	C8-N9-C4	-5.15	104.34	106.40
36	BB	19	A	N1-C6-N6	-5.15	115.51	118.60
37	BC	25	U	O4'-C1'-N1	5.15	112.32	108.20
2	AB	521	U	N1-C1'-C2'	-5.15	106.34	112.00
2	AB	582	A	N9-C4-C5	5.15	107.86	105.80
2	AB	852	U	C2-N1-C1'	5.15	123.88	117.70
2	AB	905	A	C5'-C4'-O4'	5.15	115.28	109.10
2	AB	1653	G	C6-C5-N7	5.15	133.49	130.40
2	AB	1965	C	N1-C2-N3	-5.15	115.60	119.20
2	AB	2282	G	O4'-C4'-C3'	5.15	110.22	106.10
2	AB	2337	G	N9-C4-C5	5.15	107.46	105.40
2	AB	2453	A	C1'-O4'-C4'	-5.15	105.78	109.90
2	AB	2595	G	C5-C6-O6	5.15	131.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2835	A	C5-C6-N1	-5.15	115.13	117.70
2	AB	2879	A	N9-C4-C5	-5.15	103.74	105.80
10	AJ	52	ARG	NE-CZ-NH1	-5.15	117.73	120.30
13	AM	78	ARG	CD-NE-CZ	5.15	130.81	123.60
22	AV	80	TRP	CD2-CE2-CZ2	5.15	128.48	122.30
35	BA	60	A	O4'-C1'-N9	-5.15	104.08	108.20
35	BA	428	G	C5'-C4'-C3'	-5.15	107.76	116.00
35	BA	464	U	O3'-P-O5'	-5.15	94.22	104.00
35	BA	603	U	O4'-C1'-N1	5.15	112.32	108.20
35	BA	750	C	C4'-C3'-C2'	-5.15	97.45	102.60
35	BA	1157	A	C1'-O4'-C4'	5.15	114.02	109.90
1	AA	109	A	C5-C6-N1	-5.15	115.13	117.70
2	AB	978	G	C5-C6-O6	-5.15	125.51	128.60
2	AB	1004	U	C3'-C2'-C1'	5.15	105.62	101.50
2	AB	1562	U	O4'-C1'-N1	5.15	112.32	108.20
2	AB	1799	G	C8-N9-C4	-5.15	104.34	106.40
2	AB	2532	G	O4'-C4'-C3'	-5.15	98.85	104.00
2	AB	2864	G	N9-C4-C5	5.15	107.46	105.40
35	BA	176	C	N3-C4-C5	5.15	123.96	121.90
2	AB	70	G	O5'-P-OP2	-5.14	101.07	105.70
2	AB	129	C	C1'-O4'-C4'	-5.14	105.78	109.90
2	AB	219	A	C1'-O4'-C4'	-5.14	105.78	109.90
2	AB	284	U	P-O3'-C3'	5.14	125.87	119.70
2	AB	291	G	C4-C5-C6	5.14	121.89	118.80
2	AB	464	U	C6-N1-C2	-5.14	117.91	121.00
2	AB	1011	G	C6-C5-N7	-5.14	127.31	130.40
2	AB	1731	G	C4-C5-N7	-5.14	108.74	110.80
2	AB	1923	U	N3-C4-O4	5.14	123.00	119.40
2	AB	2262	U	N3-C2-O2	-5.14	118.60	122.20
2	AB	2444	G	N3-C4-N9	5.14	129.09	126.00
5	AE	107	VAL	CA-CB-CG2	5.14	118.61	110.90
7	AG	148	VAL	CB-CA-C	5.14	121.18	111.40
35	BA	110	C	C2-N3-C4	5.14	122.47	119.90
35	BA	122	G	C4-C5-N7	-5.14	108.74	110.80
35	BA	265	G	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	319	G	O4'-C1'-N9	5.14	112.32	108.20
35	BA	918	A	C5'-C4'-O4'	-5.14	102.93	109.10
35	BA	1000	A	O4'-C1'-N9	5.14	112.31	108.20
35	BA	1287	A	C6-C5-N7	5.14	135.90	132.30
35	BA	1396	A	N1-C2-N3	-5.14	126.73	129.30
35	BA	1431	A	N3-C4-C5	5.14	130.40	126.80
35	BA	1484	C	C3'-C2'-C1'	5.14	105.61	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1533	C	C2-N3-C4	5.14	122.47	119.90
2	AB	814	C	C3'-C2'-C1'	-5.14	97.39	101.50
2	AB	1097	U	N1-C1'-C2'	-5.14	106.34	112.00
2	AB	1175	A	O4'-C1'-N9	5.14	112.31	108.20
2	AB	1420	A	C4-C5-N7	-5.14	108.13	110.70
2	AB	1814	G	N3-C4-N9	5.14	129.09	126.00
10	AJ	64	GLU	OE1-CD-OE2	5.14	129.47	123.30
25	AY	34	SER	N-CA-CB	-5.14	102.79	110.50
35	BA	144	G	C4-C5-C6	5.14	121.89	118.80
35	BA	829	G	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	1000	A	N7-C8-N9	-5.14	111.23	113.80
35	BA	1231	G	C5'-C4'-C3'	-5.14	107.77	116.00
36	BB	37	G	N1-C6-O6	-5.14	116.81	119.90
57	BW	62	GLU	OE1-CD-OE2	5.14	129.47	123.30
2	AB	167	A	O4'-C1'-N9	5.14	112.31	108.20
2	AB	480	A	C4'-C3'-C2'	-5.14	97.46	102.60
2	AB	1127	A	C5-C6-N6	-5.14	119.59	123.70
2	AB	1144	A	C5-N7-C8	-5.14	101.33	103.90
2	AB	1237	A	C5'-C4'-O4'	5.14	115.27	109.10
2	AB	1627	G	C4'-C3'-C2'	-5.14	97.46	102.60
2	AB	2285	C	C3'-C2'-C1'	-5.14	97.39	101.50
2	AB	2451	A	O4'-C1'-C2'	-5.14	100.66	105.80
35	BA	636	U	C2-N3-C4	-5.14	123.92	127.00
35	BA	917	G	C5-C6-N1	5.14	114.07	111.50
35	BA	952	U	C5'-C4'-C3'	5.14	124.23	116.00
53	BS	5	ARG	NE-CZ-NH1	5.14	122.87	120.30
2	AB	367	G	N3-C4-C5	-5.14	126.03	128.60
2	AB	491	G	O3'-P-O5'	-5.14	94.23	104.00
2	AB	921	C	OP2-P-O3'	5.14	116.50	105.20
2	AB	962	G	N7-C8-N9	5.14	115.67	113.10
2	AB	1419	A	C2-N3-C4	5.14	113.17	110.60
2	AB	1598	A	C4-C5-N7	-5.14	108.13	110.70
2	AB	1721	G	O4'-C1'-N9	5.14	112.31	108.20
2	AB	2108	A	N1-C6-N6	-5.14	115.52	118.60
2	AB	2252	G	C4-C5-N7	-5.14	108.74	110.80
2	AB	2321	U	C4'-C3'-C2'	5.14	107.74	102.60
2	AB	2375	G	N3-C4-N9	5.14	129.08	126.00
2	AB	2380	C	O4'-C1'-N1	5.14	112.31	108.20
2	AB	2393	U	O4'-C1'-N1	5.14	112.31	108.20
2	AB	2664	G	C5-N7-C8	5.14	106.87	104.30
2	AB	2743	U	N1-C1'-C2'	-5.14	106.35	112.00
18	AR	10	GLU	OE1-CD-OE2	5.14	129.47	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	256	U	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	361	G	C8-N9-C1'	5.14	133.68	127.00
35	BA	432	A	O4'-C1'-C2'	5.14	112.23	107.60
35	BA	504	C	C5-C6-N1	5.14	123.57	121.00
35	BA	793	U	N3-C4-O4	5.14	123.00	119.40
1	AA	39	A	C3'-C2'-C1'	5.14	105.61	101.50
2	AB	142	A	O4'-C4'-C3'	5.14	110.21	106.10
2	AB	943	A	C5'-C4'-O4'	5.14	115.27	109.10
2	AB	1657	U	N3-C2-O2	-5.14	118.60	122.20
2	AB	1855	U	C5-C4-O4	-5.14	122.82	125.90
2	AB	1875	G	C8-N9-C1'	5.14	133.68	127.00
26	AZ	45	PHE	CB-CG-CD2	-5.14	117.20	120.80
35	BA	44	A	C5-C6-N6	-5.14	119.59	123.70
35	BA	204	G	C5'-C4'-O4'	5.14	115.27	109.10
35	BA	306	A	P-O3'-C3'	5.14	125.86	119.70
35	BA	596	A	C8-N9-C4	-5.14	103.75	105.80
35	BA	666	G	C5-C6-N1	5.14	114.07	111.50
35	BA	1053	G	C5'-C4'-O4'	-5.14	102.93	109.10
2	AB	310	A	N1-C6-N6	5.14	121.68	118.60
2	AB	351	C	O5'-C5'-C4'	-5.14	101.94	111.70
2	AB	502	A	C6-C5-N7	5.14	135.90	132.30
2	AB	1313	U	N3-C4-C5	5.14	117.68	114.60
2	AB	1491	G	N1-C6-O6	-5.14	116.82	119.90
2	AB	2253	G	C4-C5-C6	5.14	121.88	118.80
2	AB	2465	C	C6-N1-C1'	5.14	126.96	120.80
2	AB	2493	U	C5'-C4'-O4'	5.14	115.26	109.10
2	AB	2563	U	O4'-C1'-N1	5.14	112.31	108.20
9	AI	139	PHE	CZ-CE2-CD2	-5.14	113.94	120.10
35	BA	19	A	C4-C5-N7	-5.14	108.13	110.70
35	BA	161	A	N1-C6-N6	-5.14	115.52	118.60
35	BA	562	U	C5-C4-O4	5.14	128.98	125.90
35	BA	587	G	C5'-C4'-O4'	5.14	115.26	109.10
35	BA	817	C	P-O3'-C3'	5.14	125.86	119.70
35	BA	859	G	C2'-C3'-O3'	5.14	121.92	113.70
35	BA	1067	A	P-O3'-C3'	5.14	125.86	119.70
35	BA	1469	C	C6-N1-C1'	5.14	126.96	120.80
35	BA	1478	U	C3'-C2'-C1'	5.14	105.61	101.50
35	BA	1523	G	C3'-C2'-C1'	-5.14	97.39	101.50
35	BA	1525	G	O4'-C1'-N9	5.14	112.31	108.20
2	AB	43	G	C8-N9-C4	-5.13	104.35	106.40
2	AB	211	C	O4'-C1'-C2'	-5.13	100.67	105.80
2	AB	352	A	C1'-O4'-C4'	-5.13	105.79	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	376	G	O5'-P-OP2	-5.13	101.08	105.70
2	AB	1035	U	C4'-C3'-C2'	-5.13	97.47	102.60
2	AB	1131	G	N9-C4-C5	5.13	107.45	105.40
2	AB	1157	G	C4-C5-N7	-5.13	108.75	110.80
2	AB	1294	U	C5-C6-N1	-5.13	120.13	122.70
2	AB	2694	G	N3-C4-C5	-5.13	126.03	128.60
2	AB	2700	A	N3-C4-N9	5.13	131.51	127.40
2	AB	2878	U	P-O5'-C5'	5.13	129.12	120.90
35	BA	21	G	O5'-P-OP1	-5.13	101.08	105.70
35	BA	99	C	N1-C1'-C2'	-5.13	106.35	112.00
35	BA	537	G	N1-C6-O6	-5.13	116.82	119.90
35	BA	557	G	O5'-P-OP1	5.13	116.86	110.70
35	BA	605	U	O4'-C4'-C3'	5.13	110.21	106.10
35	BA	607	A	C3'-C2'-C1'	5.13	105.61	101.50
35	BA	799	G	N1-C2-N3	-5.13	120.82	123.90
35	BA	975	A	C6-C5-N7	-5.13	128.71	132.30
35	BA	1284	C	C5-C4-N4	-5.13	116.61	120.20
35	BA	1362	A	P-O3'-C3'	5.13	125.86	119.70
35	BA	1517	G	C1'-O4'-C4'	-5.13	105.79	109.90
37	BC	36	A	C5'-C4'-C3'	5.13	124.21	116.00
2	AB	448	U	C6-N1-C2	-5.13	117.92	121.00
2	AB	809	G	N9-C1'-C2'	5.13	120.67	114.00
2	AB	1228	G	O5'-C5'-C4'	-5.13	101.95	111.70
2	AB	1597	A	N3-C4-N9	5.13	131.51	127.40
2	AB	2286	G	C2-N3-C4	5.13	114.47	111.90
2	AB	2300	C	N3-C4-N4	5.13	121.59	118.00
2	AB	2309	A	C2-N3-C4	5.13	113.17	110.60
2	AB	2329	U	O4'-C1'-C2'	-5.13	100.67	105.80
2	AB	2631	G	O4'-C1'-C2'	-5.13	100.67	105.80
2	AB	2726	A	N1-C6-N6	-5.13	115.52	118.60
35	BA	50	A	P-O3'-C3'	5.13	125.86	119.70
35	BA	892	A	C3'-C2'-C1'	-5.13	97.39	101.50
35	BA	1358	U	N3-C2-O2	5.13	125.79	122.20
35	BA	1454	G	N3-C4-N9	-5.13	122.92	126.00
35	BA	1504	G	O4'-C1'-C2'	-5.13	100.67	105.80
46	BL	58	ASN	CB-CA-C	5.13	120.67	110.40
1	AA	39	A	C1'-O4'-C4'	-5.13	105.79	109.90
2	AB	250	G	C5-N7-C8	5.13	106.87	104.30
2	AB	1196	C	N1-C2-N3	-5.13	115.61	119.20
2	AB	1499	C	C3'-C2'-C1'	-5.13	97.39	101.50
2	AB	1711	A	N9-C4-C5	-5.13	103.75	105.80
2	AB	1810	A	C4-C5-N7	-5.13	108.13	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1936	A	O4'-C4'-C3'	5.13	110.20	106.10
2	AB	1948	G	C4-C5-C6	5.13	121.88	118.80
2	AB	2339	C	N3-C4-C5	-5.13	119.85	121.90
2	AB	2379	G	C5'-C4'-O4'	5.13	115.26	109.10
2	AB	2433	A	C2-N3-C4	-5.13	108.03	110.60
2	AB	2587	A	O4'-C4'-C3'	5.13	110.21	106.10
2	AB	2820	A	C8-N9-C4	-5.13	103.75	105.80
18	AR	8	GLU	CG-CD-OE2	-5.13	108.04	118.30
35	BA	337	G	O4'-C1'-C2'	-5.13	100.67	105.80
35	BA	497	G	C6-C5-N7	-5.13	127.32	130.40
35	BA	520	A	C4'-C3'-C2'	-5.13	97.47	102.60
35	BA	537	G	N3-C4-N9	5.13	129.08	126.00
35	BA	542	G	C5-N7-C8	-5.13	101.73	104.30
35	BA	767	A	C6-C5-N7	5.13	135.89	132.30
35	BA	884	U	O4'-C1'-C2'	-5.13	100.67	105.80
35	BA	1011	C	C4-C5-C6	5.13	119.97	117.40
35	BA	1458	G	C5'-C4'-O4'	5.13	115.26	109.10
36	BB	55	A	N1-C2-N3	5.13	131.87	129.30
53	BS	39	ARG	NH1-CZ-NH2	5.13	125.05	119.40
1	AA	89	U	C5-C4-O4	-5.13	122.82	125.90
1	AA	120	U	C4-C5-C6	-5.13	116.62	119.70
2	AB	614	A	OP2-P-O3'	5.13	116.49	105.20
2	AB	756	A	C5'-C4'-O4'	-5.13	102.94	109.10
2	AB	858	G	O4'-C1'-N9	5.13	112.30	108.20
2	AB	1530	G	C5-C6-N1	5.13	114.06	111.50
2	AB	1669	A	C8-N9-C4	5.13	107.85	105.80
2	AB	2071	A	OP2-P-O3'	5.13	116.49	105.20
2	AB	2144	G	N1-C2-N2	-5.13	111.58	116.20
2	AB	2438	U	P-O3'-C3'	5.13	125.86	119.70
35	BA	413	G	C5-C6-N1	5.13	114.06	111.50
35	BA	1419	G	C6-N1-C2	5.13	128.18	125.10
45	BK	44	ARG	NH1-CZ-NH2	-5.13	113.76	119.40
2	AB	487	C	C1'-O4'-C4'	-5.13	105.80	109.90
2	AB	641	U	C4'-C3'-C2'	-5.13	97.47	102.60
2	AB	1413	A	N1-C2-N3	5.13	131.87	129.30
2	AB	1881	C	C2-N3-C4	5.13	122.46	119.90
2	AB	2461	A	N3-C4-C5	5.13	130.39	126.80
4	AD	30	ALA	N-CA-CB	5.13	117.28	110.10
35	BA	307	C	O4'-C1'-C2'	-5.13	100.67	105.80
35	BA	367	U	N1-C1'-C2'	5.13	120.67	114.00
35	BA	452	A	O4'-C4'-C3'	5.13	110.20	106.10
35	BA	563	A	OP1-P-O3'	5.13	116.48	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	845	A	N9-C1'-C2'	5.13	120.67	114.00
1	AA	23	G	C6-N1-C2	5.13	128.18	125.10
2	AB	632	A	C5-C6-N1	-5.13	115.14	117.70
2	AB	827	U	N3-C4-C5	-5.13	111.52	114.60
2	AB	1407	G	N3-C4-N9	-5.13	122.92	126.00
2	AB	1738	G	N9-C4-C5	5.13	107.45	105.40
2	AB	1888	G	C5-C6-N1	5.13	114.06	111.50
2	AB	1903	G	O5'-C5'-C4'	5.13	121.44	111.70
2	AB	2011	U	N1-C2-O2	5.13	126.39	122.80
2	AB	2157	G	C4-C5-C6	5.13	121.88	118.80
2	AB	2194	U	P-O3'-C3'	5.13	125.85	119.70
2	AB	2260	C	C5'-C4'-C3'	-5.13	107.80	116.00
2	AB	2800	A	C3'-C2'-C1'	-5.13	97.40	101.50
35	BA	360	G	O4'-C1'-N9	5.13	112.30	108.20
35	BA	505	G	N1-C2-N2	-5.13	111.58	116.20
35	BA	636	U	N3-C2-O2	-5.13	118.61	122.20
35	BA	733	G	O4'-C1'-C2'	-5.13	100.67	105.80
35	BA	909	A	N3-C4-C5	-5.13	123.21	126.80
35	BA	934	C	O4'-C1'-N1	5.13	112.30	108.20
35	BA	1160	G	C4-C5-C6	5.13	121.88	118.80
35	BA	1177	G	N3-C4-N9	-5.13	122.92	126.00
35	BA	1237	C	N3-C4-N4	5.13	121.59	118.00
35	BA	1367	C	C1'-O4'-C4'	5.13	114.00	109.90
35	BA	1457	G	N1-C2-N3	-5.13	120.82	123.90
35	BA	1510	C	C1'-O4'-C4'	-5.13	105.80	109.90
37	BC	16	C	N1-C2-O2	5.13	121.98	118.90
2	AB	119	A	C1'-O4'-C4'	-5.12	105.80	109.90
2	AB	251	A	C5-C6-N6	-5.12	119.60	123.70
2	AB	2287	A	C5-C6-N6	-5.12	119.60	123.70
2	AB	2887	A	N7-C8-N9	5.12	116.36	113.80
11	AK	102	ARG	CD-NE-CZ	5.12	130.78	123.60
19	AS	24	TYR	N-CA-CB	-5.12	101.38	110.60
25	AY	40	ARG	CB-CA-C	5.12	120.65	110.40
35	BA	57	G	C6-C5-N7	-5.12	127.33	130.40
35	BA	379	C	O4'-C1'-N1	5.12	112.30	108.20
43	BI	138	GLU	OE1-CD-OE2	5.12	129.45	123.30
1	AA	40	U	P-O3'-C3'	5.12	125.85	119.70
2	AB	110	G	O4'-C4'-C3'	-5.12	98.88	104.00
2	AB	165	A	C6-N1-C2	-5.12	115.53	118.60
2	AB	209	C	C1'-O4'-C4'	5.12	114.00	109.90
2	AB	224	U	C5'-C4'-C3'	-5.12	107.80	116.00
2	AB	281	C	C4-C5-C6	-5.12	114.84	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	409	G	N1-C2-N3	-5.12	120.83	123.90
2	AB	670	A	O5'-C5'-C4'	5.12	121.44	111.70
2	AB	675	A	C8-N9-C4	-5.12	103.75	105.80
2	AB	768	G	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	1207	C	N3-C4-N4	-5.12	114.41	118.00
2	AB	1487	U	P-O5'-C5'	5.12	129.10	120.90
2	AB	2144	G	N3-C4-N9	-5.12	122.92	126.00
2	AB	2343	U	C5'-C4'-O4'	5.12	115.25	109.10
2	AB	2669	G	C8-N9-C4	-5.12	104.35	106.40
2	AB	2727	A	O4'-C1'-N9	5.12	112.30	108.20
2	AB	2773	C	C5'-C4'-C3'	-5.12	107.80	116.00
35	BA	423	G	C2-N3-C4	5.12	114.46	111.90
35	BA	484	G	N1-C2-N2	-5.12	111.59	116.20
35	BA	727	G	C4-C5-N7	5.12	112.85	110.80
35	BA	786	G	C4-C5-N7	5.12	112.85	110.80
35	BA	797	C	C6-N1-C2	-5.12	118.25	120.30
35	BA	979	C	P-O3'-C3'	5.12	125.85	119.70
35	BA	1272	G	C6-N1-C2	-5.12	122.03	125.10
35	BA	1288	A	C2-N3-C4	-5.12	108.04	110.60
44	BJ	79	ARG	NH1-CZ-NH2	-5.12	113.77	119.40
2	AB	116	C	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	182	A	O4'-C4'-C3'	5.12	110.20	106.10
2	AB	189	G	N9-C1'-C2'	-5.12	106.36	112.00
2	AB	461	C	C5-C4-N4	-5.12	116.61	120.20
2	AB	814	C	N1-C2-O2	5.12	121.97	118.90
2	AB	830	G	C5-C6-O6	-5.12	125.53	128.60
2	AB	886	A	P-O3'-C3'	5.12	125.85	119.70
2	AB	1330	C	N1-C2-O2	-5.12	115.83	118.90
2	AB	1933	G	C5-N7-C8	-5.12	101.74	104.30
2	AB	2228	G	C4'-C3'-C2'	-5.12	97.48	102.60
2	AB	2437	G	C5-C6-O6	5.12	131.67	128.60
2	AB	2654	A	N7-C8-N9	5.12	116.36	113.80
2	AB	2742	G	C5-C6-O6	5.12	131.67	128.60
4	AD	34	GLU	CB-CA-C	5.12	120.64	110.40
35	BA	132	C	C4'-C3'-C2'	-5.12	97.48	102.60
35	BA	188	C	C5-C6-N1	5.12	123.56	121.00
35	BA	640	A	C1'-O4'-C4'	-5.12	105.80	109.90
35	BA	834	U	C1'-O4'-C4'	-5.12	105.80	109.90
35	BA	1339	A	C6-N1-C2	-5.12	115.53	118.60
2	AB	142	A	C5-C6-N1	5.12	120.26	117.70
2	AB	545	U	C2-N3-C4	-5.12	123.93	127.00
2	AB	823	C	C2-N1-C1'	-5.12	113.17	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1174	U	C2-N3-C4	-5.12	123.93	127.00
2	AB	1193	G	N3-C4-C5	-5.12	126.04	128.60
2	AB	1587	G	C5'-C4'-O4'	5.12	115.24	109.10
2	AB	1653	G	N1-C6-O6	-5.12	116.83	119.90
34	A7	30	GLU	OE1-CD-OE2	5.12	129.44	123.30
35	BA	184	G	N9-C1'-C2'	-5.12	106.37	112.00
35	BA	370	C	N3-C4-C5	5.12	123.95	121.90
35	BA	908	A	P-O3'-C3'	5.12	125.84	119.70
35	BA	1113	C	P-O3'-C3'	5.12	125.84	119.70
35	BA	1506	U	C6-N1-C2	-5.12	117.93	121.00
1	AA	118	C	C6-N1-C2	-5.12	118.25	120.30
2	AB	30	G	N1-C2-N3	5.12	126.97	123.90
2	AB	150	U	C5-C6-N1	-5.12	120.14	122.70
2	AB	300	A	C5'-C4'-C3'	5.12	124.19	116.00
2	AB	689	A	C6-N1-C2	5.12	121.67	118.60
2	AB	967	U	N3-C4-C5	-5.12	111.53	114.60
2	AB	1089	A	O4'-C1'-C2'	-5.12	100.68	105.80
2	AB	1179	G	C5-N7-C8	-5.12	101.74	104.30
2	AB	1547	C	C4-C5-C6	5.12	119.96	117.40
2	AB	1580	A	C6-C5-N7	-5.12	128.72	132.30
2	AB	1715	G	O4'-C4'-C3'	5.12	110.19	106.10
2	AB	2005	A	O4'-C1'-N9	5.12	112.30	108.20
2	AB	2064	C	N3-C4-C5	5.12	123.95	121.90
5	AE	15	PHE	CG-CD2-CE2	-5.12	115.17	120.80
35	BA	61	G	N9-C4-C5	5.12	107.45	105.40
35	BA	203	G	C3'-C2'-C1'	-5.12	97.41	101.50
35	BA	1054	C	N1-C2-N3	5.12	122.78	119.20
35	BA	1102	A	C5-N7-C8	-5.12	101.34	103.90
35	BA	1120	C	C4'-C3'-C2'	-5.12	97.48	102.60
35	BA	1286	U	N1-C2-N3	5.12	117.97	114.90
35	BA	1369	C	C5-C4-N4	5.12	123.78	120.20
43	BI	90	VAL	CA-CB-CG2	5.12	118.58	110.90
2	AB	423	A	C5-C6-N1	5.12	120.26	117.70
2	AB	793	A	O4'-C1'-N9	5.12	112.29	108.20
2	AB	812	C	C3'-C2'-C1'	5.12	105.59	101.50
2	AB	814	C	N1-C2-N3	-5.12	115.62	119.20
2	AB	1182	G	O4'-C4'-C3'	-5.12	98.88	104.00
2	AB	1251	C	N3-C4-N4	5.12	121.58	118.00
2	AB	1861	G	N9-C4-C5	-5.12	103.35	105.40
2	AB	2436	G	O4'-C1'-N9	5.12	112.29	108.20
2	AB	2865	U	P-O3'-C3'	5.12	125.84	119.70
35	BA	1476	A	O4'-C1'-N9	5.12	112.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	9	G	N3-C4-N9	5.12	129.07	126.00
2	AB	432	A	C4-C5-C6	-5.12	114.44	117.00
2	AB	928	A	N1-C2-N3	5.12	131.86	129.30
2	AB	990	A	N1-C2-N3	-5.12	126.74	129.30
2	AB	1413	A	C2-N3-C4	-5.12	108.04	110.60
2	AB	1500	G	C3'-C2'-C1'	-5.12	97.41	101.50
2	AB	1850	G	C6-C5-N7	5.12	133.47	130.40
2	AB	2190	G	N1-C2-N3	-5.12	120.83	123.90
2	AB	2383	G	N1-C2-N3	-5.12	120.83	123.90
2	AB	2428	G	N1-C6-O6	-5.12	116.83	119.90
2	AB	2569	G	C5-N7-C8	5.12	106.86	104.30
35	BA	46	G	C5-N7-C8	-5.12	101.74	104.30
35	BA	73	C	C5-C6-N1	5.12	123.56	121.00
35	BA	257	G	C5-C6-O6	-5.12	125.53	128.60
35	BA	356	A	C5-C6-N1	-5.12	115.14	117.70
35	BA	368	U	C2'-C3'-O3'	5.12	121.89	113.70
35	BA	953	G	N1-C2-N3	5.12	126.97	123.90
53	BS	68	LYS	CA-CB-CG	-5.12	102.15	113.40
2	AB	231	A	C5'-C4'-C3'	-5.11	107.82	116.00
2	AB	344	A	C8-N9-C4	-5.11	103.75	105.80
2	AB	645	C	N3-C4-C5	-5.11	119.86	121.90
2	AB	856	G	C5-N7-C8	5.11	106.86	104.30
2	AB	1688	U	O4'-C1'-N1	5.11	112.29	108.20
2	AB	1776	G	N3-C4-C5	-5.11	126.04	128.60
2	AB	2227	A	C4-C5-N7	5.11	113.26	110.70
2	AB	2526	G	N3-C4-C5	-5.11	126.04	128.60
2	AB	2782	G	N3-C4-N9	5.11	129.07	126.00
6	AF	197	GLU	O-C-N	5.11	130.88	122.70
35	BA	150	U	C5'-C4'-O4'	5.11	115.23	109.10
35	BA	182	A	C5-C6-N1	-5.11	115.14	117.70
35	BA	355	C	O4'-C4'-C3'	5.11	110.19	106.10
35	BA	566	G	C5'-C4'-C3'	-5.11	107.82	116.00
35	BA	676	A	C4'-C3'-C2'	-5.11	97.49	102.60
35	BA	1437	A	O4'-C1'-C2'	5.11	112.20	107.60
1	AA	50	A	N9-C1'-C2'	-5.11	106.38	112.00
2	AB	889	C	C4'-C3'-O3'	5.11	123.22	113.00
2	AB	1318	U	C2-N1-C1'	-5.11	111.57	117.70
2	AB	1409	U	C5-C6-N1	-5.11	120.14	122.70
2	AB	1434	A	P-O3'-C3'	5.11	125.83	119.70
2	AB	1518	C	C5'-C4'-C3'	-5.11	107.82	116.00
2	AB	1768	C	C4-C5-C6	5.11	119.96	117.40
2	AB	1791	A	P-O3'-C3'	5.11	125.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2696	U	C5-C4-O4	-5.11	122.83	125.90
35	BA	440	C	N3-C4-N4	5.11	121.58	118.00
35	BA	712	A	P-O3'-C3'	5.11	125.83	119.70
35	BA	798	U	C1'-O4'-C4'	-5.11	105.81	109.90
35	BA	1348	U	C5'-C4'-C3'	-5.11	107.82	116.00
41	BG	68	ARG	NE-CZ-NH2	-5.11	117.74	120.30
2	AB	62	U	C2-N3-C4	-5.11	123.93	127.00
2	AB	287	G	C8-N9-C1'	5.11	133.64	127.00
2	AB	323	C	N3-C2-O2	-5.11	118.32	121.90
2	AB	395	U	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	1024	G	P-O3'-C3'	5.11	125.83	119.70
2	AB	1043	C	O4'-C1'-N1	5.11	112.29	108.20
2	AB	1193	G	C4-C5-N7	-5.11	108.76	110.80
2	AB	1319	C	C4'-C3'-C2'	-5.11	97.49	102.60
2	AB	2320	U	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	2517	C	N1-C1'-C2'	-5.11	106.38	112.00
2	AB	2833	U	C3'-C2'-C1'	-5.11	97.41	101.50
2	AB	2888	C	C4-C5-C6	-5.11	114.84	117.40
2	AB	2888	C	O4'-C4'-C3'	5.11	110.19	106.10
15	AO	103	TYR	CZ-CE2-CD2	-5.11	115.20	119.80
32	A5	18	PHE	CG-CD2-CE2	-5.11	115.18	120.80
35	BA	207	C	C5-C4-N4	-5.11	116.62	120.20
35	BA	313	A	C5'-C4'-O4'	5.11	115.23	109.10
35	BA	443	C	C5-C4-N4	5.11	123.78	120.20
35	BA	606	G	N1-C6-O6	5.11	122.97	119.90
35	BA	644	U	O4'-C1'-C2'	-5.11	100.69	105.80
35	BA	942	G	C4-N9-C1'	-5.11	119.86	126.50
35	BA	1072	G	N3-C4-C5	-5.11	126.05	128.60
35	BA	1316	G	N3-C4-C5	-5.11	126.05	128.60
35	BA	1388	C	C1'-O4'-C4'	-5.11	105.81	109.90
2	AB	1638	C	P-O3'-C3'	5.11	125.83	119.70
2	AB	1715	G	N3-C4-C5	-5.11	126.05	128.60
2	AB	1763	G	C5'-C4'-C3'	-5.11	107.83	116.00
2	AB	2592	G	C6-C5-N7	5.11	133.47	130.40
2	AB	2775	G	C2-N3-C4	5.11	114.45	111.90
35	BA	236	A	C4'-C3'-C2'	-5.11	97.49	102.60
35	BA	832	G	O4'-C1'-N9	5.11	112.29	108.20
35	BA	1249	C	C4-C5-C6	-5.11	114.84	117.40
35	BA	1293	C	C5'-C4'-C3'	-5.11	107.83	116.00
35	BA	1324	A	N9-C4-C5	5.11	107.84	105.80
35	BA	1332	A	C2-N3-C4	-5.11	108.05	110.60
35	BA	1527	U	N1-C2-N3	5.11	117.97	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	BU	46	LEU	O-C-N	5.11	130.87	122.70
1	AA	78	A	N3-C4-C5	-5.11	123.22	126.80
1	AA	102	G	O4'-C1'-N9	5.11	112.29	108.20
2	AB	52	A	C5'-C4'-O4'	5.11	115.23	109.10
2	AB	190	A	O4'-C1'-N9	5.11	112.29	108.20
2	AB	371	A	N1-C6-N6	-5.11	115.54	118.60
2	AB	1808	A	P-O3'-C3'	5.11	125.83	119.70
2	AB	1817	G	N1-C6-O6	5.11	122.96	119.90
2	AB	1924	C	O3'-P-O5'	5.11	113.70	104.00
2	AB	2101	A	C6-N1-C2	-5.11	115.54	118.60
2	AB	2617	U	N3-C2-O2	-5.11	118.62	122.20
2	AB	2686	G	C3'-C2'-C1'	-5.11	97.41	101.50
2	AB	2742	G	N9-C4-C5	5.11	107.44	105.40
6	AF	6	LYS	CB-CA-C	5.11	120.62	110.40
19	AS	110	GLU	OE1-CD-OE2	5.11	129.43	123.30
35	BA	1	A	C5-C6-N1	5.11	120.25	117.70
35	BA	109	A	C8-N9-C4	5.11	107.84	105.80
35	BA	220	G	N3-C4-C5	-5.11	126.05	128.60
35	BA	364	A	N3-C4-N9	-5.11	123.31	127.40
35	BA	393	A	C8-N9-C4	-5.11	103.76	105.80
35	BA	608	A	N3-C4-C5	-5.11	123.22	126.80
35	BA	689	C	C5-C6-N1	-5.11	118.45	121.00
35	BA	705	G	N3-C4-N9	5.11	129.06	126.00
54	BT	50	TYR	CG-CD1-CE1	-5.11	117.21	121.30
1	AA	73	A	C6-C5-N7	-5.11	128.73	132.30
2	AB	415	A	P-O5'-C5'	5.11	129.07	120.90
2	AB	867	C	O4'-C1'-N1	5.11	112.28	108.20
2	AB	914	G	P-O5'-C5'	5.11	129.07	120.90
2	AB	1252	G	N3-C4-N9	-5.11	122.94	126.00
2	AB	1574	C	C5-C4-N4	-5.11	116.63	120.20
2	AB	1751	U	C2-N3-C4	-5.11	123.94	127.00
2	AB	1821	A	N9-C4-C5	5.11	107.84	105.80
2	AB	1895	C	C6-N1-C1'	5.11	126.93	120.80
2	AB	2126	A	C6-N1-C2	-5.11	115.54	118.60
2	AB	2559	C	O4'-C1'-N1	5.11	112.28	108.20
35	BA	8	A	C6-N1-C2	5.11	121.66	118.60
35	BA	79	G	C5'-C4'-O4'	5.11	115.23	109.10
35	BA	218	U	O4'-C1'-N1	5.11	112.28	108.20
35	BA	286	C	C5'-C4'-O4'	5.11	115.23	109.10
35	BA	313	A	N9-C4-C5	-5.11	103.76	105.80
35	BA	398	U	C3'-C2'-C1'	5.11	105.58	101.50
35	BA	466	A	C2-N3-C4	5.11	113.15	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	506	G	O4'-C1'-N9	5.11	112.28	108.20
35	BA	541	G	C4-C5-N7	-5.11	108.76	110.80
35	BA	939	G	C3'-C2'-C1'	5.11	105.58	101.50
35	BA	1082	A	C5'-C4'-C3'	-5.11	107.83	116.00
35	BA	1195	C	O4'-C4'-C3'	5.11	110.18	106.10
2	AB	48	G	C8-N9-C1'	5.10	133.63	127.00
2	AB	718	A	N9-C4-C5	5.10	107.84	105.80
2	AB	777	G	C6-C5-N7	5.10	133.46	130.40
2	AB	938	G	N1-C6-O6	-5.10	116.84	119.90
2	AB	2182	U	C1'-O4'-C4'	-5.10	105.82	109.90
2	AB	2647	U	C5-C6-N1	-5.10	120.15	122.70
35	BA	100	G	N9-C4-C5	5.10	107.44	105.40
35	BA	168	G	O3'-P-O5'	5.10	113.70	104.00
35	BA	634	C	C2-N3-C4	5.10	122.45	119.90
35	BA	900	A	C8-N9-C4	-5.10	103.76	105.80
35	BA	1352	C	N3-C4-N4	-5.10	114.43	118.00
2	AB	100	U	N3-C4-O4	5.10	122.97	119.40
2	AB	176	A	N1-C6-N6	-5.10	115.54	118.60
2	AB	343	C	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	350	G	N9-C4-C5	5.10	107.44	105.40
2	AB	627	A	C5'-C4'-C3'	-5.10	107.84	116.00
2	AB	727	A	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	835	C	C5-C6-N1	-5.10	118.45	121.00
2	AB	1110	G	C8-N9-C4	-5.10	104.36	106.40
2	AB	1366	A	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	1522	A	N9-C4-C5	-5.10	103.76	105.80
2	AB	1878	G	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	2045	C	O4'-C4'-C3'	-5.10	98.90	104.00
2	AB	2131	U	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	2239	G	N9-C4-C5	5.10	107.44	105.40
2	AB	2545	G	N9-C1'-C2'	-5.10	106.39	112.00
35	BA	45	G	N1-C6-O6	5.10	122.96	119.90
35	BA	468	A	C5-C6-N1	5.10	120.25	117.70
35	BA	738	C	N1-C2-N3	-5.10	115.63	119.20
35	BA	1020	G	C4-N9-C1'	-5.10	119.87	126.50
35	BA	1183	U	O4'-C4'-C3'	5.10	110.18	106.10
1	AA	97	C	O3'-P-O5'	-5.10	94.31	104.00
2	AB	856	G	N1-C2-N3	5.10	126.96	123.90
2	AB	1062	G	O5'-P-OP1	-5.10	101.11	105.70
2	AB	1318	U	N3-C4-O4	5.10	122.97	119.40
2	AB	2364	C	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	2522	U	C3'-C2'-C1'	-5.10	97.42	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	625	U	C3'-C2'-C1'	5.10	105.58	101.50
35	BA	954	G	N3-C4-N9	5.10	129.06	126.00
1	AA	107	G	C2-N3-C4	-5.10	109.35	111.90
2	AB	6	A	N1-C2-N3	-5.10	126.75	129.30
2	AB	37	C	C5-C4-N4	-5.10	116.63	120.20
2	AB	202	U	C2-N3-C4	-5.10	123.94	127.00
2	AB	485	C	C6-N1-C2	-5.10	118.26	120.30
2	AB	652	U	P-O3'-C3'	5.10	125.82	119.70
2	AB	801	G	P-O3'-C3'	5.10	125.82	119.70
2	AB	819	A	C5'-C4'-O4'	5.10	115.22	109.10
2	AB	898	C	P-O3'-C3'	5.10	125.82	119.70
2	AB	914	G	C1'-O4'-C4'	-5.10	105.82	109.90
2	AB	938	G	N3-C2-N2	-5.10	116.33	119.90
2	AB	947	A	C5'-C4'-O4'	5.10	115.22	109.10
2	AB	1440	U	O4'-C4'-C3'	-5.10	98.90	104.00
2	AB	1452	G	C6-N1-C2	-5.10	122.04	125.10
2	AB	1600	C	N3-C4-N4	5.10	121.57	118.00
2	AB	1827	U	O4'-C1'-N1	5.10	112.28	108.20
2	AB	1859	U	N1-C2-O2	5.10	126.37	122.80
2	AB	2046	G	N7-C8-N9	5.10	115.65	113.10
2	AB	2791	G	C4'-C3'-C2'	-5.10	97.50	102.60
2	AB	2828	G	C4-C5-C6	-5.10	115.74	118.80
35	BA	250	A	C1'-O4'-C4'	-5.10	105.82	109.90
35	BA	399	G	C4'-C3'-C2'	-5.10	97.50	102.60
35	BA	449	G	C8-N9-C4	-5.10	104.36	106.40
35	BA	466	A	N9-C4-C5	5.10	107.84	105.80
35	BA	960	U	O3'-P-O5'	5.10	113.69	104.00
35	BA	1095	U	C4'-C3'-C2'	-5.10	97.50	102.60
38	BD	197	PHE	CB-CG-CD2	-5.10	117.23	120.80
2	AB	480	A	N7-C8-N9	-5.10	111.25	113.80
2	AB	706	A	C6-N1-C2	5.10	121.66	118.60
2	AB	714	U	O4'-C1'-N1	5.10	112.28	108.20
2	AB	728	G	N3-C4-C5	-5.10	126.05	128.60
2	AB	751	A	O5'-C5'-C4'	-5.10	102.02	111.70
2	AB	861	A	C6-N1-C2	-5.10	115.54	118.60
2	AB	1584	U	C5'-C4'-C3'	-5.10	107.84	116.00
2	AB	1710	G	C8-N9-C1'	5.10	133.63	127.00
2	AB	2119	A	C4'-C3'-C2'	5.10	107.70	102.60
2	AB	2904	U	C5-C6-N1	-5.10	120.15	122.70
5	AE	28	GLU	CG-CD-OE2	-5.10	108.11	118.30
35	BA	611	C	C5-C4-N4	5.10	123.77	120.20
35	BA	665	A	N3-C4-C5	-5.10	123.23	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	812	G	N1-C2-N3	-5.10	120.84	123.90
35	BA	821	G	C6-C5-N7	-5.10	127.34	130.40
35	BA	939	G	C5'-C4'-O4'	5.10	115.22	109.10
35	BA	1119	C	N3-C4-C5	-5.10	119.86	121.90
35	BA	1199	U	P-O3'-C3'	5.10	125.82	119.70
35	BA	1205	U	O3'-P-O5'	5.10	113.68	104.00
35	BA	1280	A	C5'-C4'-O4'	5.10	115.22	109.10
37	BC	10	G	C5-C6-O6	-5.10	125.54	128.60
49	BO	40	GLU	OE1-CD-OE2	5.10	129.42	123.30
49	BO	106	ARG	NH1-CZ-NH2	-5.10	113.79	119.40
1	AA	119	A	N1-C6-N6	5.10	121.66	118.60
2	AB	216	A	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	357	C	C4-C5-C6	5.10	119.95	117.40
2	AB	1099	G	N9-C1'-C2'	-5.10	106.39	112.00
2	AB	1160	G	C3'-C2'-C1'	5.10	105.58	101.50
2	AB	1270	C	C5'-C4'-C3'	-5.10	107.85	116.00
2	AB	1386	C	N1-C2-N3	-5.10	115.63	119.20
2	AB	1801	A	N9-C4-C5	5.10	107.84	105.80
2	AB	1921	G	C4-N9-C1'	-5.10	119.88	126.50
35	BA	198	G	C2'-C3'-O3'	5.10	121.85	113.70
35	BA	202	G	C4-C5-N7	-5.10	108.76	110.80
35	BA	760	G	N1-C2-N2	-5.10	111.61	116.20
35	BA	1201	A	C2'-C3'-O3'	5.10	121.85	113.70
35	BA	1393	U	C2-N3-C4	-5.10	123.94	127.00
35	BA	1451	U	C4-C5-C6	5.10	122.76	119.70
37	BC	17	C	C5'-C4'-O4'	5.10	115.22	109.10
1	AA	11	C	O4'-C1'-C2'	5.09	112.19	107.60
2	AB	351	C	N1-C2-O2	5.09	121.96	118.90
2	AB	661	A	C4-C5-N7	-5.09	108.15	110.70
2	AB	1940	U	O4'-C1'-C2'	-5.09	100.71	105.80
2	AB	2104	C	P-O3'-C3'	5.09	125.81	119.70
2	AB	2173	A	O5'-C5'-C4'	-5.09	102.02	111.70
2	AB	2301	C	N1-C2-O2	5.09	121.96	118.90
2	AB	2474	U	C2-N3-C4	-5.09	123.94	127.00
2	AB	2748	A	N9-C4-C5	5.09	107.84	105.80
2	AB	2826	A	C5-C6-N1	5.09	120.25	117.70
16	AP	45	ARG	CD-NE-CZ	5.09	130.73	123.60
35	BA	61	G	O4'-C1'-N9	5.09	112.28	108.20
35	BA	79	G	O5'-C5'-C4'	-5.09	102.02	111.70
35	BA	523	A	P-O3'-C3'	5.09	125.81	119.70
35	BA	599	C	C5-C6-N1	5.09	123.55	121.00
35	BA	639	G	C6-N1-C2	-5.09	122.04	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	678	U	C3'-C2'-C1'	-5.09	97.42	101.50
35	BA	839	C	N1-C2-N3	5.09	122.77	119.20
35	BA	1178	G	C5-C6-N1	5.09	114.05	111.50
35	BA	1358	U	N3-C4-O4	-5.09	115.83	119.40
35	BA	1457	G	N3-C2-N2	5.09	123.47	119.90
36	BB	37	G	N3-C4-C5	-5.09	126.05	128.60
2	AB	68	G	C5'-C4'-C3'	-5.09	107.85	116.00
2	AB	73	A	N1-C2-N3	5.09	131.85	129.30
2	AB	2194	U	C5'-C4'-O4'	5.09	115.21	109.10
2	AB	2351	G	OP2-P-O3'	5.09	116.41	105.20
2	AB	2644	G	O4'-C1'-N9	5.09	112.28	108.20
2	AB	2881	U	C5'-C4'-C3'	-5.09	107.85	116.00
35	BA	1094	G	C4-C5-N7	5.09	112.84	110.80
35	BA	1137	C	O4'-C1'-C2'	-5.09	100.71	105.80
35	BA	1198	G	C2-N3-C4	5.09	114.45	111.90
35	BA	1209	C	N3-C2-O2	-5.09	118.33	121.90
2	AB	408	G	N9-C1'-C2'	-5.09	106.40	112.00
2	AB	434	U	C4-C5-C6	5.09	122.75	119.70
2	AB	453	A	N9-C4-C5	5.09	107.84	105.80
2	AB	1592	C	C2-N3-C4	5.09	122.45	119.90
2	AB	1603	A	C5'-C4'-C3'	-5.09	107.85	116.00
2	AB	2052	A	C4-C5-N7	5.09	113.25	110.70
2	AB	2597	G	C4-N9-C1'	5.09	133.12	126.50
2	AB	2608	G	N1-C2-N2	5.09	120.78	116.20
2	AB	2756	U	N3-C2-O2	-5.09	118.64	122.20
10	AJ	69	GLU	OE1-CD-OE2	-5.09	117.19	123.30
16	AP	17	ARG	NE-CZ-NH2	-5.09	117.75	120.30
22	AV	41	ALA	CB-CA-C	5.09	117.74	110.10
35	BA	7	A	P-O3'-C3'	5.09	125.81	119.70
35	BA	457	G	C6-N1-C2	-5.09	122.05	125.10
35	BA	467	U	O3'-P-O5'	-5.09	94.33	104.00
35	BA	540	G	C5-C6-N1	5.09	114.05	111.50
35	BA	750	C	P-O5'-C5'	5.09	129.04	120.90
35	BA	857	C	O3'-P-O5'	5.09	113.67	104.00
35	BA	1143	G	C5-C6-O6	5.09	131.66	128.60
35	BA	1148	U	N3-C4-C5	5.09	117.66	114.60
35	BA	1484	C	N1-C2-O2	5.09	121.95	118.90
35	BA	1501	C	C2-N3-C4	5.09	122.45	119.90
36	BB	14	G	O4'-C4'-C3'	5.09	110.17	106.10
1	AA	36	C	N1-C2-N3	-5.09	115.64	119.20
1	AA	72	G	O4'-C1'-C2'	-5.09	100.71	105.80
2	AB	367	G	N9-C1'-C2'	-5.09	106.40	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	518	G	C5-N7-C8	-5.09	101.75	104.30
2	AB	947	A	C1'-O4'-C4'	5.09	113.97	109.90
2	AB	1196	C	C5'-C4'-C3'	-5.09	107.86	116.00
2	AB	1454	C	N1-C2-O2	5.09	121.95	118.90
2	AB	1475	G	C4-N9-C1'	-5.09	119.88	126.50
2	AB	1511	G	C5-C6-O6	5.09	131.65	128.60
2	AB	1637	A	C3'-C2'-C1'	5.09	105.57	101.50
2	AB	1665	A	C5-C6-N6	-5.09	119.63	123.70
2	AB	1743	G	C5-N7-C8	-5.09	101.75	104.30
2	AB	2110	G	N1-C2-N3	-5.09	120.85	123.90
2	AB	2733	A	N7-C8-N9	5.09	116.34	113.80
35	BA	625	U	N1-C1'-C2'	-5.09	106.40	112.00
35	BA	1005	A	C3'-C2'-C1'	5.09	105.57	101.50
35	BA	1398	A	C4-C5-N7	-5.09	108.16	110.70
36	BB	31	U	C3'-C2'-C1'	5.09	105.57	101.50
48	BN	37	TYR	CA-CB-CG	5.09	123.07	113.40
2	AB	135	U	C5-C6-N1	-5.09	120.16	122.70
2	AB	198	C	C4-C5-C6	5.09	119.94	117.40
2	AB	1413	A	C3'-C2'-C1'	5.09	105.57	101.50
2	AB	2683	C	C5'-C4'-C3'	-5.09	107.86	116.00
2	AB	2822	G	C1'-O4'-C4'	-5.09	105.83	109.90
11	AK	126	ARG	NE-CZ-NH1	5.09	122.84	120.30
35	BA	1248	A	N9-C4-C5	5.09	107.83	105.80
35	BA	1386	G	O4'-C4'-C3'	-5.09	98.91	104.00
35	BA	1387	G	N9-C1'-C2'	-5.09	106.40	112.00
1	AA	9	G	N3-C4-N9	5.09	129.05	126.00
2	AB	44	A	P-O3'-C3'	5.09	125.80	119.70
2	AB	104	A	C5'-C4'-O4'	5.09	115.20	109.10
2	AB	138	U	C5-C4-O4	-5.09	122.85	125.90
2	AB	705	A	C5-C6-N1	5.09	120.24	117.70
2	AB	1136	G	N9-C1'-C2'	-5.09	106.41	112.00
2	AB	1213	A	C5-N7-C8	-5.09	101.36	103.90
2	AB	1348	C	N1-C2-N3	5.09	122.76	119.20
2	AB	1779	U	O4'-C1'-N1	5.09	112.27	108.20
2	AB	2220	U	P-O3'-C3'	5.09	125.80	119.70
2	AB	2253	G	C5'-C4'-C3'	-5.09	107.86	116.00
2	AB	2413	G	N1-C2-N2	-5.09	111.62	116.20
2	AB	2490	G	C4-C5-C6	5.09	121.85	118.80
2	AB	2850	A	C8-N9-C4	-5.09	103.77	105.80
2	AB	2870	C	N3-C2-O2	-5.09	118.34	121.90
3	AC	52	ALA	N-CA-CB	5.09	117.22	110.10
35	BA	135	C	N1-C2-O2	5.09	121.95	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1177	G	C3'-C2'-C1'	5.09	105.57	101.50
35	BA	1269	A	C4-C5-N7	-5.09	108.16	110.70
35	BA	1305	G	O5'-P-OP2	-5.09	101.12	105.70
35	BA	1411	C	C1'-O4'-C4'	5.09	113.97	109.90
37	BC	69	C	O4'-C1'-N1	5.09	112.27	108.20
40	BF	61	ARG	CD-NE-CZ	5.09	130.72	123.60
42	BH	79	ARG	NE-CZ-NH1	5.09	122.84	120.30
2	AB	402	A	C8-N9-C4	-5.08	103.77	105.80
2	AB	2523	G	N7-C8-N9	5.08	115.64	113.10
35	BA	35	G	N3-C4-C5	-5.08	126.06	128.60
37	BC	57	C	N3-C2-O2	-5.08	118.34	121.90
57	BW	11	PHE	CB-CG-CD1	-5.08	117.24	120.80
2	AB	498	G	N9-C4-C5	5.08	107.43	105.40
2	AB	1013	C	P-O3'-C3'	5.08	125.80	119.70
2	AB	1812	U	N3-C4-O4	-5.08	115.84	119.40
2	AB	2508	G	O3'-P-O5'	-5.08	94.34	104.00
2	AB	2700	A	C4'-C3'-C2'	-5.08	97.52	102.60
2	AB	2717	C	N1-C1'-C2'	-5.08	106.41	112.00
2	AB	2808	G	C5'-C4'-C3'	5.08	124.13	116.00
4	AD	88	ALA	O-C-N	5.08	130.83	122.70
35	BA	839	C	P-O3'-C3'	-5.08	113.60	119.70
35	BA	897	C	C3'-C2'-C1'	-5.08	97.43	101.50
35	BA	1178	G	N3-C4-C5	-5.08	126.06	128.60
37	BC	68	C	C3'-C2'-C1'	5.08	105.57	101.50
2	AB	16	C	N1-C2-O2	-5.08	115.85	118.90
2	AB	36	G	N1-C2-N2	5.08	120.77	116.20
2	AB	363	G	C5-C6-O6	-5.08	125.55	128.60
2	AB	822	G	N7-C8-N9	-5.08	110.56	113.10
2	AB	1021	A	N1-C2-N3	-5.08	126.76	129.30
2	AB	1027	A	C5-C6-N1	5.08	120.24	117.70
2	AB	1141	U	N3-C2-O2	-5.08	118.64	122.20
2	AB	1266	G	C4-C5-C6	5.08	121.85	118.80
2	AB	1504	A	O4'-C1'-N9	5.08	112.27	108.20
2	AB	1553	A	C6-C5-N7	-5.08	128.74	132.30
2	AB	2367	G	C5-N7-C8	-5.08	101.76	104.30
2	AB	2895	G	C6-N1-C2	-5.08	122.05	125.10
8	AH	61	TRP	CE2-CD2-CG	5.08	111.36	107.30
35	BA	366	A	C8-N9-C4	-5.08	103.77	105.80
35	BA	650	G	C5-C6-N1	5.08	114.04	111.50
35	BA	812	G	C5'-C4'-C3'	-5.08	107.87	116.00
35	BA	892	A	O5'-C5'-C4'	5.08	121.36	111.70
35	BA	1110	A	C2-N3-C4	5.08	113.14	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1141	C	N3-C2-O2	5.08	125.46	121.90
35	BA	1300	G	C4-N9-C1'	-5.08	119.89	126.50
35	BA	1456	A	O4'-C1'-N9	5.08	112.27	108.20
57	BW	70	TYR	CB-CG-CD2	-5.08	117.95	121.00
2	AB	315	G	C5-C6-O6	-5.08	125.55	128.60
2	AB	1434	A	N3-C4-C5	-5.08	123.24	126.80
2	AB	1569	A	C5'-C4'-O4'	5.08	115.20	109.10
2	AB	1704	C	C2-N3-C4	5.08	122.44	119.90
2	AB	2206	C	C5-C4-N4	-5.08	116.64	120.20
2	AB	2469	A	C5-C6-N1	5.08	120.24	117.70
15	AO	6	ARG	C-N-CA	5.08	134.40	121.70
35	BA	608	A	P-O5'-C5'	5.08	129.03	120.90
35	BA	684	U	C3'-C2'-C1'	5.08	105.56	101.50
35	BA	977	A	N9-C4-C5	5.08	107.83	105.80
37	BC	77	A	C5'-C4'-C3'	-5.08	107.87	116.00
40	BF	183	ARG	NE-CZ-NH1	-5.08	117.76	120.30
1	AA	65	U	N3-C4-O4	5.08	122.95	119.40
2	AB	55	G	C1'-O4'-C4'	-5.08	105.84	109.90
2	AB	87	U	N1-C2-N3	-5.08	111.85	114.90
2	AB	180	G	C4'-C3'-C2'	-5.08	97.52	102.60
2	AB	255	A	C5-C6-N6	5.08	127.76	123.70
2	AB	626	A	N7-C8-N9	5.08	116.34	113.80
2	AB	636	G	C1'-O4'-C4'	5.08	113.96	109.90
2	AB	855	G	N3-C4-N9	5.08	129.05	126.00
2	AB	1197	G	N3-C4-C5	-5.08	126.06	128.60
2	AB	1310	G	C5-C6-O6	-5.08	125.55	128.60
2	AB	1358	G	C4-C5-C6	5.08	121.85	118.80
2	AB	1359	A	C5-C6-N6	5.08	127.76	123.70
2	AB	1748	C	C5'-C4'-O4'	5.08	115.19	109.10
2	AB	1748	C	N1-C2-N3	5.08	122.75	119.20
2	AB	1906	G	C5-C6-N1	5.08	114.04	111.50
2	AB	1930	G	O5'-C5'-C4'	-5.08	102.05	111.70
2	AB	2310	C	C1'-O4'-C4'	-5.08	105.84	109.90
2	AB	2386	A	C5-C6-N1	5.08	120.24	117.70
2	AB	2817	U	N3-C4-C5	-5.08	111.55	114.60
35	BA	10	A	C1'-O4'-C4'	5.08	113.96	109.90
35	BA	129	A	C5-N7-C8	-5.08	101.36	103.90
35	BA	269	C	N3-C4-N4	-5.08	114.44	118.00
35	BA	664	G	N1-C6-O6	5.08	122.95	119.90
35	BA	703	G	C4-N9-C1'	5.08	133.10	126.50
35	BA	874	G	O4'-C1'-N9	5.08	112.26	108.20
35	BA	1378	C	N3-C4-C5	-5.08	119.87	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BB	24	A	C2-N3-C4	-5.08	108.06	110.60
2	AB	24	G	N9-C4-C5	5.08	107.43	105.40
2	AB	508	A	C8-N9-C4	-5.08	103.77	105.80
2	AB	739	A	N9-C4-C5	5.08	107.83	105.80
2	AB	952	G	N9-C4-C5	5.08	107.43	105.40
2	AB	1661	G	C8-N9-C4	-5.08	104.37	106.40
2	AB	1710	G	N3-C4-N9	-5.08	122.95	126.00
2	AB	2275	C	C1'-O4'-C4'	5.08	113.96	109.90
2	AB	2334	U	C2-N1-C1'	5.08	123.79	117.70
3	AC	193	LEU	CB-CG-CD2	-5.08	102.37	111.00
35	BA	351	G	C2-N3-C4	5.08	114.44	111.90
35	BA	413	G	N7-C8-N9	5.08	115.64	113.10
35	BA	836	G	C3'-C2'-C1'	5.08	105.56	101.50
37	BC	64	G	C4'-C3'-C2'	-5.08	97.52	102.60
1	AA	13	G	O4'-C1'-C2'	5.08	112.17	107.60
1	AA	26	C	C6-N1-C2	5.08	122.33	120.30
2	AB	728	G	C5'-C4'-C3'	-5.08	107.88	116.00
2	AB	1036	G	C4'-C3'-C2'	-5.08	97.53	102.60
2	AB	1072	C	N3-C2-O2	-5.08	118.35	121.90
2	AB	1098	A	O4'-C1'-C2'	5.08	112.17	107.60
2	AB	1241	A	N1-C6-N6	5.08	121.64	118.60
2	AB	1438	U	O5'-P-OP1	5.08	116.79	110.70
2	AB	1515	A	C6-N1-C2	5.08	121.65	118.60
2	AB	1568	G	N3-C4-N9	5.08	129.04	126.00
2	AB	1734	G	C4-C5-N7	5.08	112.83	110.80
2	AB	1924	C	O4'-C1'-C2'	-5.08	100.72	105.80
2	AB	2098	U	C4-C5-C6	5.08	122.75	119.70
2	AB	2154	A	C5'-C4'-C3'	-5.08	107.88	116.00
2	AB	2331	G	C5-C6-O6	-5.08	125.56	128.60
2	AB	2604	U	C5'-C4'-O4'	5.08	115.19	109.10
8	AH	80	GLU	OE1-CD-OE2	5.08	129.39	123.30
27	A0	46	VAL	O-C-N	5.08	130.82	122.70
35	BA	11	G	C8-N9-C4	-5.08	104.37	106.40
35	BA	272	C	C5'-C4'-O4'	5.08	115.19	109.10
35	BA	317	U	N3-C4-C5	5.08	117.64	114.60
35	BA	381	C	C5-C4-N4	-5.08	116.65	120.20
35	BA	526	C	C4'-C3'-C2'	-5.08	97.53	102.60
35	BA	972	C	C5'-C4'-O4'	5.08	115.19	109.10
35	BA	1341	U	C2-N3-C4	5.08	130.04	127.00
35	BA	1441	A	C1'-O4'-C4'	-5.08	105.84	109.90
37	BC	5	G	N1-C6-O6	5.08	122.94	119.90
37	BC	34	U	N1-C2-N3	5.08	117.94	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	23	G	C5'-C4'-C3'	-5.07	107.88	116.00
2	AB	44	A	C5-N7-C8	5.07	106.44	103.90
2	AB	274	C	C6-N1-C2	5.07	122.33	120.30
2	AB	1073	A	C1'-O4'-C4'	-5.07	105.84	109.90
2	AB	1432	G	N3-C4-C5	-5.07	126.06	128.60
2	AB	1594	U	N3-C4-C5	5.07	117.64	114.60
2	AB	1775	U	C3'-C2'-C1'	5.07	105.56	101.50
2	AB	2205	A	C5-C6-N1	-5.07	115.16	117.70
2	AB	2212	A	C5'-C4'-O4'	-5.07	103.01	109.10
2	AB	2294	G	N7-C8-N9	-5.07	110.56	113.10
2	AB	2675	A	N3-C4-C5	-5.07	123.25	126.80
9	AI	74	ALA	N-CA-C	-5.07	97.30	111.00
35	BA	675	A	N9-C4-C5	-5.07	103.77	105.80
35	BA	867	G	C5'-C4'-O4'	5.07	115.19	109.10
37	BC	20	G	C4-C5-N7	-5.07	108.77	110.80
1	AA	83	G	N9-C1'-C2'	-5.07	106.42	112.00
2	AB	1435	G	C3'-C2'-C1'	5.07	105.56	101.50
2	AB	2263	C	C2-N3-C4	-5.07	117.36	119.90
2	AB	2481	G	P-O3'-C3'	5.07	125.79	119.70
2	AB	2850	A	N1-C6-N6	5.07	121.64	118.60
4	AD	167	ASP	CB-CG-OD1	-5.07	113.73	118.30
35	BA	802	A	N1-C6-N6	-5.07	115.56	118.60
35	BA	1060	U	N1-C1'-C2'	-5.07	106.42	112.00
36	BB	28	U	C5-C4-O4	-5.07	122.86	125.90
1	AA	54	G	N9-C4-C5	5.07	107.43	105.40
1	AA	91	C	C5-C6-N1	5.07	123.53	121.00
1	AA	109	A	C4-C5-N7	-5.07	108.17	110.70
2	AB	160	A	C8-N9-C4	-5.07	103.77	105.80
2	AB	873	C	C2-N3-C4	5.07	122.44	119.90
2	AB	1065	U	O3'-P-O5'	-5.07	94.37	104.00
2	AB	1214	A	N3-C4-N9	5.07	131.46	127.40
2	AB	1331	G	N3-C2-N2	5.07	123.45	119.90
2	AB	2206	C	O5'-P-OP2	-5.07	101.14	105.70
2	AB	2216	G	C4'-C3'-C2'	5.07	107.67	102.60
2	AB	2237	G	N7-C8-N9	5.07	115.64	113.10
2	AB	2308	G	C4-C5-N7	-5.07	108.77	110.80
2	AB	2515	C	N1-C1'-C2'	-5.07	106.42	112.00
2	AB	2613	U	N1-C2-N3	5.07	117.94	114.90
2	AB	2744	G	O4'-C4'-C3'	-5.07	98.93	104.00
2	AB	2805	C	N1-C2-O2	5.07	121.94	118.90
33	A6	35	LYS	O-C-N	5.07	130.81	122.70
35	BA	116	A	C5-N7-C8	5.07	106.44	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	187	G	C5-N7-C8	-5.07	101.77	104.30
35	BA	273	U	N1-C1'-C2'	-5.07	106.42	112.00
35	BA	502	A	N1-C6-N6	-5.07	115.56	118.60
35	BA	705	G	N3-C2-N2	5.07	123.45	119.90
35	BA	727	G	C6-C5-N7	-5.07	127.36	130.40
35	BA	766	A	N3-C4-N9	-5.07	123.34	127.40
35	BA	803	G	C8-N9-C4	-5.07	104.37	106.40
35	BA	880	C	N3-C4-N4	5.07	121.55	118.00
35	BA	1167	A	C4-C5-N7	-5.07	108.17	110.70
35	BA	1219	A	OP1-P-OP2	-5.07	111.99	119.60
35	BA	1338	G	P-O3'-C3'	5.07	125.78	119.70
35	BA	1484	C	C6-N1-C2	-5.07	118.27	120.30
41	BG	16	ALA	N-CA-CB	-5.07	103.00	110.10
47	BM	97	ARG	NE-CZ-NH1	-5.07	117.77	120.30
56	BV	3	ILE	CA-CB-CG1	5.07	120.63	111.00
2	AB	1063	G	N1-C6-O6	5.07	122.94	119.90
2	AB	1566	A	C5-N7-C8	-5.07	101.37	103.90
2	AB	1833	C	C1'-O4'-C4'	-5.07	105.84	109.90
2	AB	1877	A	O4'-C1'-N9	5.07	112.25	108.20
2	AB	2867	G	C4'-C3'-C2'	-5.07	97.53	102.60
19	AS	29	ARG	NE-CZ-NH2	-5.07	117.77	120.30
35	BA	811	C	C5-C4-N4	-5.07	116.65	120.20
35	BA	1029	U	N1-C2-O2	-5.07	119.25	122.80
2	AB	257	C	C5-C4-N4	5.07	123.75	120.20
2	AB	347	A	N9-C4-C5	5.07	107.83	105.80
2	AB	500	G	N7-C8-N9	-5.07	110.57	113.10
2	AB	501	A	C4-C5-C6	5.07	119.53	117.00
2	AB	561	G	C6-C5-N7	-5.07	127.36	130.40
2	AB	610	C	O4'-C1'-N1	5.07	112.25	108.20
2	AB	956	G	C4-C5-N7	-5.07	108.77	110.80
2	AB	1730	C	N1-C1'-C2'	5.07	120.59	114.00
2	AB	1988	G	C6-C5-N7	5.07	133.44	130.40
2	AB	2328	A	C5'-C4'-O4'	5.07	115.18	109.10
6	AF	33	VAL	CG1-CB-CG2	-5.07	102.79	110.90
18	AR	4	ILE	C-N-CA	5.07	134.37	121.70
35	BA	185	U	C4'-C3'-C2'	-5.07	97.53	102.60
35	BA	1152	A	C6-C5-N7	5.07	135.85	132.30
35	BA	1473	G	C5-N7-C8	-5.07	101.77	104.30
35	BA	1536	C	O3'-P-O5'	-5.07	94.37	104.00
2	AB	56	A	C5'-C4'-O4'	5.07	115.18	109.10
2	AB	189	G	C4-C5-C6	5.07	121.84	118.80
2	AB	468	G	N9-C4-C5	5.07	107.43	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	708	G	N3-C2-N2	-5.07	116.36	119.90
2	AB	974	G	N3-C4-N9	5.07	129.04	126.00
2	AB	1026	G	C1'-O4'-C4'	5.07	113.95	109.90
2	AB	1072	C	C6-N1-C2	-5.07	118.27	120.30
2	AB	1394	U	C2-N3-C4	-5.07	123.96	127.00
2	AB	1395	A	C1'-O4'-C4'	-5.07	105.85	109.90
2	AB	1413	A	C4'-C3'-C2'	-5.07	97.53	102.60
2	AB	1512	C	N3-C4-N4	5.07	121.55	118.00
2	AB	1615	C	C2-N3-C4	5.07	122.43	119.90
2	AB	1988	G	C4-C5-C6	5.07	121.84	118.80
2	AB	2158	A	C5-C6-N1	5.07	120.23	117.70
2	AB	2207	C	N3-C2-O2	-5.07	118.35	121.90
10	AJ	68	PHE	CB-CG-CD1	5.07	124.34	120.80
35	BA	73	C	O5'-P-OP2	-5.07	101.14	105.70
35	BA	197	A	N1-C6-N6	-5.07	115.56	118.60
35	BA	627	G	C8-N9-C4	-5.07	104.37	106.40
35	BA	1385	G	N3-C4-C5	5.07	131.13	128.60
37	BC	61	U	C5-C4-O4	-5.07	122.86	125.90
2	AB	70	G	C3'-C2'-C1'	5.06	105.55	101.50
2	AB	574	A	N3-C4-C5	-5.06	123.25	126.80
2	AB	1149	G	N3-C4-C5	-5.06	126.07	128.60
2	AB	1334	G	C8-N9-C4	5.06	108.42	106.40
2	AB	1613	G	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	2175	C	C4-C5-C6	5.06	119.93	117.40
35	BA	576	C	C5-C4-N4	-5.06	116.66	120.20
35	BA	1007	U	C5'-C4'-C3'	-5.06	107.90	116.00
35	BA	1189	U	P-O3'-C3'	5.06	125.78	119.70
2	AB	98	G	O5'-C5'-C4'	-5.06	102.08	111.70
2	AB	116	C	C5-C6-N1	-5.06	118.47	121.00
2	AB	297	G	C2-N3-C4	5.06	114.43	111.90
2	AB	526	A	C5-N7-C8	-5.06	101.37	103.90
2	AB	531	C	O4'-C1'-C2'	-5.06	100.74	105.80
2	AB	816	C	C6-N1-C2	5.06	122.33	120.30
2	AB	827	U	C6-N1-C2	-5.06	117.96	121.00
2	AB	844	A	C4-C5-C6	-5.06	114.47	117.00
2	AB	854	C	N3-C4-N4	5.06	121.54	118.00
2	AB	969	G	C4-C5-N7	-5.06	108.78	110.80
2	AB	1168	G	C6-C5-N7	5.06	133.44	130.40
2	AB	1568	G	C5'-C4'-C3'	-5.06	107.90	116.00
2	AB	1577	C	N3-C2-O2	5.06	125.44	121.90
2	AB	1956	U	C5'-C4'-O4'	5.06	115.18	109.10
2	AB	2165	C	C5'-C4'-O4'	5.06	115.17	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2193	G	C5-C6-O6	-5.06	125.56	128.60
2	AB	2635	A	C5-C6-N1	5.06	120.23	117.70
2	AB	2642	G	O4'-C1'-N9	5.06	112.25	108.20
2	AB	2764	A	N1-C2-N3	-5.06	126.77	129.30
2	AB	2850	A	O4'-C4'-C3'	5.06	110.15	106.10
16	AP	63	ARG	NE-CZ-NH2	-5.06	117.77	120.30
35	BA	22	G	O4'-C4'-C3'	-5.06	98.94	104.00
35	BA	308	C	N1-C2-N3	5.06	122.74	119.20
35	BA	380	G	C2'-C3'-O3'	5.06	121.80	113.70
35	BA	749	A	N9-C1'-C2'	-5.06	106.43	112.00
35	BA	981	U	C4-C5-C6	5.06	122.74	119.70
35	BA	1439	G	C8-N9-C1'	5.06	133.58	127.00
2	AB	1184	U	C6-N1-C2	-5.06	117.96	121.00
2	AB	1633	G	N9-C1'-C2'	-5.06	106.43	112.00
2	AB	1774	C	N3-C4-C5	-5.06	119.88	121.90
2	AB	2428	G	N9-C4-C5	5.06	107.42	105.40
18	AR	100	ARG	NE-CZ-NH1	-5.06	117.77	120.30
35	BA	436	C	P-O3'-C3'	5.06	125.77	119.70
35	BA	450	G	C2-N3-C4	5.06	114.43	111.90
35	BA	553	A	O3'-P-O5'	-5.06	94.38	104.00
35	BA	761	G	O4'-C1'-N9	5.06	112.25	108.20
2	AB	265	A	C2'-C3'-O3'	5.06	121.80	113.70
2	AB	1135	C	N3-C4-N4	-5.06	114.46	118.00
2	AB	1428	C	O3'-P-O5'	-5.06	94.39	104.00
2	AB	1543	G	C5-C6-N1	5.06	114.03	111.50
2	AB	1565	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	2241	A	C4-C5-N7	-5.06	108.17	110.70
2	AB	2412	A	C2-N3-C4	5.06	113.13	110.60
2	AB	2558	C	C5-C4-N4	-5.06	116.66	120.20
2	AB	2800	A	O5'-P-OP2	-5.06	101.15	105.70
4	AD	76	VAL	C-N-CA	5.06	134.35	121.70
26	AZ	26	ARG	NE-CZ-NH1	5.06	122.83	120.30
35	BA	25	C	O4'-C1'-N1	-5.06	104.15	108.20
35	BA	175	C	C3'-C2'-C1'	5.06	105.55	101.50
35	BA	185	U	C1'-O4'-C4'	-5.06	105.85	109.90
35	BA	502	A	C8-N9-C4	-5.06	103.78	105.80
35	BA	537	G	C6-N1-C2	5.06	128.14	125.10
35	BA	1462	C	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	112	U	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	542	C	C1'-O4'-C4'	5.06	113.95	109.90
2	AB	651	G	N3-C4-C5	-5.06	126.07	128.60
2	AB	757	G	C2-N3-C4	5.06	114.43	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	863	A	C3'-C2'-C1'	5.06	105.55	101.50
2	AB	1625	C	C1'-O4'-C4'	-5.06	105.86	109.90
2	AB	1754	A	C1'-O4'-C4'	-5.06	105.85	109.90
2	AB	1873	G	C4-C5-N7	5.06	112.82	110.80
2	AB	2118	U	C4'-C3'-C2'	-5.06	97.54	102.60
2	AB	2297	A	C5-N7-C8	5.06	106.43	103.90
35	BA	159	G	N7-C8-N9	5.06	115.63	113.10
35	BA	316	C	C4'-C3'-C2'	5.06	107.66	102.60
35	BA	634	C	O4'-C1'-N1	5.06	112.25	108.20
35	BA	1103	C	N1-C2-N3	-5.06	115.66	119.20
2	AB	91	A	N7-C8-N9	-5.06	111.27	113.80
2	AB	656	G	C4-C5-C6	5.06	121.83	118.80
2	AB	791	C	C6-N1-C2	-5.06	118.28	120.30
2	AB	1976	U	N1-C2-N3	5.06	117.93	114.90
2	AB	1978	A	N3-C4-N9	5.06	131.44	127.40
2	AB	2215	C	N3-C2-O2	-5.06	118.36	121.90
2	AB	2481	G	C5-C6-N1	5.06	114.03	111.50
2	AB	2557	G	N3-C4-N9	5.06	129.03	126.00
35	BA	95	C	C5'-C4'-O4'	5.06	115.17	109.10
35	BA	711	G	O4'-C1'-N9	5.06	112.25	108.20
52	BR	72	ALA	N-CA-CB	-5.06	103.02	110.10
1	AA	18	G	C4-C5-C6	5.05	121.83	118.80
2	AB	213	A	C6-C5-N7	5.05	135.84	132.30
2	AB	791	C	O3'-P-O5'	-5.05	94.40	104.00
2	AB	887	U	C3'-C2'-C1'	5.05	105.54	101.50
2	AB	930	G	C5-C6-N1	-5.05	108.97	111.50
2	AB	1189	A	C5-N7-C8	-5.05	101.37	103.90
2	AB	1554	U	C6-N1-C2	-5.05	117.97	121.00
2	AB	1697	G	C3'-C2'-C1'	-5.05	97.46	101.50
2	AB	2189	U	C2-N3-C4	5.05	130.03	127.00
2	AB	2362	C	O4'-C4'-C3'	5.05	110.14	106.10
2	AB	2585	U	C1'-O4'-C4'	-5.05	105.86	109.90
2	AB	2629	U	O4'-C1'-C2'	-5.05	100.75	105.80
34	A7	21	GLY	CA-C-O	-5.05	111.50	120.60
35	BA	495	A	C4-C5-N7	5.05	113.23	110.70
35	BA	670	G	O5'-C5'-C4'	-5.05	102.10	111.70
35	BA	821	G	C4'-C3'-C2'	-5.05	97.55	102.60
35	BA	1094	G	C4-C5-C6	-5.05	115.77	118.80
35	BA	1180	A	O4'-C4'-C3'	5.05	110.14	106.10
37	BC	24	C	C5-C6-N1	5.05	123.53	121.00
2	AB	38	A	C6-C5-N7	-5.05	128.76	132.30
2	AB	2121	G	C4'-C3'-C2'	-5.05	97.55	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2613	U	C6-N1-C2	-5.05	117.97	121.00
13	AM	13	ASN	N-CA-CB	-5.05	101.50	110.60
35	BA	859	G	C4'-C3'-C2'	-5.05	97.55	102.60
35	BA	869	G	C5-C6-N1	5.05	114.03	111.50
35	BA	1266	G	C8-N9-C4	-5.05	104.38	106.40
1	AA	115	A	N1-C6-N6	-5.05	115.57	118.60
2	AB	68	G	N1-C2-N3	-5.05	120.87	123.90
2	AB	283	G	C5-N7-C8	5.05	106.83	104.30
2	AB	941	A	C4-C5-N7	-5.05	108.17	110.70
2	AB	1137	G	C4-C5-N7	-5.05	108.78	110.80
2	AB	1511	G	O4'-C4'-C3'	5.05	110.14	106.10
2	AB	1558	C	N3-C4-C5	-5.05	119.88	121.90
2	AB	1625	C	O4'-C1'-N1	5.05	112.24	108.20
2	AB	1829	A	C5-N7-C8	5.05	106.42	103.90
2	AB	1898	U	O3'-P-O5'	-5.05	94.40	104.00
2	AB	2044	C	O3'-P-O5'	-5.05	94.40	104.00
2	AB	2685	G	C5'-C4'-O4'	5.05	115.16	109.10
2	AB	2765	A	C2'-C3'-O3'	5.05	121.78	113.70
18	AR	31	VAL	CG1-CB-CG2	-5.05	102.82	110.90
35	BA	149	A	C5'-C4'-O4'	-5.05	103.04	109.10
35	BA	1398	A	C4-C5-C6	-5.05	114.47	117.00
35	BA	1531	A	C6-C5-N7	5.05	135.84	132.30
37	BC	17	C	C2-N3-C4	5.05	122.43	119.90
37	BC	51	U	N3-C4-C5	-5.05	111.57	114.60
1	AA	103	U	C3'-C2'-C1'	-5.05	97.46	101.50
2	AB	30	G	C4'-C3'-C2'	-5.05	97.55	102.60
2	AB	99	U	C2-N1-C1'	5.05	123.76	117.70
2	AB	457	A	O4'-C1'-N9	5.05	112.24	108.20
2	AB	797	G	O5'-P-OP2	-5.05	101.16	105.70
2	AB	926	G	C5'-C4'-O4'	5.05	115.16	109.10
2	AB	959	A	C8-N9-C4	-5.05	103.78	105.80
2	AB	1107	G	N1-C6-O6	5.05	122.93	119.90
2	AB	1404	C	N1-C1'-C2'	-5.05	106.45	112.00
2	AB	1762	A	C6-C5-N7	-5.05	128.77	132.30
2	AB	2177	C	N1-C1'-C2'	-5.05	106.44	112.00
2	AB	2287	A	N3-C4-N9	5.05	131.44	127.40
2	AB	2418	A	C4-C5-N7	5.05	113.22	110.70
2	AB	2516	A	C4-C5-C6	5.05	119.53	117.00
2	AB	2770	G	C5-C6-N1	5.05	114.03	111.50
35	BA	133	U	C1'-O4'-C4'	-5.05	105.86	109.90
35	BA	146	G	N3-C2-N2	-5.05	116.36	119.90
35	BA	488	C	C2-N1-C1'	-5.05	113.25	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1038	C	OP2-P-O3'	5.05	116.31	105.20
2	AB	92	U	C6-N1-C2	5.05	124.03	121.00
2	AB	122	G	C6-N1-C2	5.05	128.13	125.10
2	AB	790	U	N3-C4-O4	-5.05	115.87	119.40
2	AB	1213	A	O5'-C5'-C4'	5.05	121.29	111.70
2	AB	1805	A	O4'-C1'-N9	5.05	112.24	108.20
2	AB	2147	A	N3-C4-N9	5.05	131.44	127.40
2	AB	2454	G	N3-C2-N2	-5.05	116.37	119.90
4	AD	92	LEU	CB-CA-C	5.05	119.79	110.20
35	BA	272	C	N1-C1'-C2'	-5.05	106.45	112.00
35	BA	282	A	C5-C6-N6	5.05	127.74	123.70
35	BA	661	G	C4-C5-N7	-5.05	108.78	110.80
37	BC	39	A	C1'-O4'-C4'	-5.05	105.86	109.90
52	BR	25	ARG	CB-CA-C	5.05	120.50	110.40
2	AB	85	G	N1-C2-N3	5.05	126.93	123.90
2	AB	150	U	C4'-C3'-C2'	-5.05	97.55	102.60
2	AB	383	C	C3'-C2'-C1'	5.05	105.54	101.50
2	AB	644	A	C3'-C2'-C1'	5.05	105.54	101.50
2	AB	859	G	P-O3'-C3'	5.05	125.75	119.70
2	AB	874	G	N3-C4-N9	-5.05	122.97	126.00
2	AB	921	C	C4'-C3'-C2'	-5.05	97.55	102.60
2	AB	989	G	C6-N1-C2	5.05	128.13	125.10
2	AB	1072	C	O3'-P-O5'	-5.05	94.41	104.00
2	AB	1072	C	C3'-C2'-C1'	-5.05	97.46	101.50
2	AB	1356	G	N1-C2-N2	5.05	120.74	116.20
2	AB	1473	G	C1'-O4'-C4'	-5.05	105.86	109.90
2	AB	1558	C	C5'-C4'-C3'	-5.05	107.92	116.00
2	AB	1594	U	N1-C2-N3	5.05	117.93	114.90
2	AB	1758	U	C4-C5-C6	5.05	122.73	119.70
2	AB	1885	A	N1-C6-N6	5.05	121.63	118.60
2	AB	2102	G	P-O3'-C3'	5.05	125.76	119.70
2	AB	2178	C	N1-C2-O2	5.05	121.93	118.90
2	AB	2443	C	N1-C2-N3	5.05	122.73	119.20
2	AB	2553	G	N1-C6-O6	-5.05	116.87	119.90
2	AB	2587	A	C8-N9-C4	-5.05	103.78	105.80
2	AB	2842	G	N9-C4-C5	-5.05	103.38	105.40
2	AB	2875	C	C5'-C4'-O4'	5.05	115.16	109.10
8	AH	131	VAL	CG1-CB-CG2	-5.05	102.83	110.90
35	BA	346	G	C5'-C4'-O4'	5.05	115.16	109.10
35	BA	503	C	N3-C4-C5	-5.05	119.88	121.90
35	BA	534	U	N3-C2-O2	-5.05	118.67	122.20
35	BA	803	G	C5'-C4'-O4'	5.05	115.16	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1044	A	N9-C1'-C2'	-5.05	106.45	112.00
35	BA	1444	U	C4'-C3'-O3'	5.05	123.09	113.00
2	AB	247	G	N9-C4-C5	-5.04	103.38	105.40
2	AB	408	G	N1-C2-N3	-5.04	120.87	123.90
2	AB	480	A	C5-C6-N6	-5.04	119.66	123.70
2	AB	490	C	N3-C2-O2	-5.04	118.37	121.90
2	AB	1002	G	C4'-C3'-O3'	5.04	123.09	113.00
2	AB	1230	A	N7-C8-N9	5.04	116.32	113.80
2	AB	2395	C	C4-C5-C6	-5.04	114.88	117.40
2	AB	2563	U	C5'-C4'-O4'	5.04	115.15	109.10
2	AB	2674	G	C4-N9-C1'	-5.04	119.94	126.50
2	AB	2705	A	C5-C6-N6	-5.04	119.66	123.70
2	AB	2733	A	C4'-C3'-C2'	-5.04	97.56	102.60
35	BA	2	A	N1-C6-N6	5.04	121.63	118.60
35	BA	1205	U	N3-C4-C5	-5.04	111.57	114.60
2	AB	755	U	C5-C4-O4	-5.04	122.87	125.90
2	AB	1059	G	C4'-C3'-C2'	-5.04	97.56	102.60
2	AB	1608	A	C5-C6-N6	-5.04	119.67	123.70
2	AB	1642	G	C4-N9-C1'	-5.04	119.94	126.50
2	AB	1872	A	C4-C5-N7	-5.04	108.18	110.70
2	AB	1920	C	C4-C5-C6	5.04	119.92	117.40
2	AB	1970	A	O4'-C1'-N9	5.04	112.23	108.20
2	AB	1972	G	C5-N7-C8	-5.04	101.78	104.30
2	AB	2018	G	O4'-C1'-N9	5.04	112.23	108.20
2	AB	2049	G	C2-N3-C4	5.04	114.42	111.90
2	AB	2133	G	O4'-C1'-C2'	5.04	112.14	107.60
2	AB	2335	A	C2-N3-C4	5.04	113.12	110.60
2	AB	2343	U	C4-C5-C6	5.04	122.73	119.70
2	AB	2505	G	C5-N7-C8	-5.04	101.78	104.30
7	AG	76	PHE	CB-CG-CD1	-5.04	117.27	120.80
11	AK	95	ASP	CB-CG-OD1	-5.04	113.76	118.30
18	AR	58	PHE	CD1-CE1-CZ	-5.04	114.05	120.10
35	BA	1524	C	O3'-P-O5'	-5.04	94.42	104.00
37	BC	35	C	O4'-C1'-C2'	-5.04	100.76	105.80
37	BC	76	C	C4-C5-C6	5.04	119.92	117.40
2	AB	222	A	C5-N7-C8	5.04	106.42	103.90
2	AB	488	G	C5-C6-O6	-5.04	125.58	128.60
2	AB	850	U	C3'-C2'-C1'	5.04	105.53	101.50
2	AB	896	A	C5'-C4'-C3'	-5.04	107.94	116.00
2	AB	971	G	C4-N9-C1'	-5.04	119.95	126.50
2	AB	1007	C	P-O3'-C3'	5.04	125.75	119.70
2	AB	1615	C	C5'-C4'-C3'	5.04	124.06	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1651	G	C2-N3-C4	5.04	114.42	111.90
2	AB	1822	C	C4-C5-C6	-5.04	114.88	117.40
2	AB	1888	G	C6-N1-C2	-5.04	122.08	125.10
2	AB	1897	G	C5-C6-N1	-5.04	108.98	111.50
2	AB	2031	A	C6-C5-N7	-5.04	128.77	132.30
2	AB	2725	A	C2'-C3'-O3'	5.04	121.77	113.70
35	BA	134	G	N7-C8-N9	-5.04	110.58	113.10
35	BA	478	A	C4-C5-N7	-5.04	108.18	110.70
35	BA	931	C	N1-C2-O2	-5.04	115.88	118.90
35	BA	958	A	C8-N9-C4	-5.04	103.78	105.80
35	BA	968	A	C1'-O4'-C4'	-5.04	105.87	109.90
35	BA	1021	A	N3-C4-C5	-5.04	123.27	126.80
35	BA	1181	G	N7-C8-N9	5.04	115.62	113.10
35	BA	1186	G	C4-N9-C1'	-5.04	119.94	126.50
35	BA	1186	G	C8-N9-C4	5.04	108.42	106.40
35	BA	1334	G	C5-N7-C8	-5.04	101.78	104.30
35	BA	1502	A	O3'-P-O5'	-5.04	94.42	104.00
36	BB	20	G	N9-C4-C5	-5.04	103.38	105.40
48	BN	94	TYR	CG-CD1-CE1	-5.04	117.27	121.30
2	AB	613	A	P-O3'-C3'	5.04	125.75	119.70
2	AB	1403	A	N7-C8-N9	5.04	116.32	113.80
2	AB	1674	G	N1-C2-N2	5.04	120.74	116.20
2	AB	2146	C	C2-N1-C1'	5.04	124.34	118.80
2	AB	2637	U	C6-N1-C1'	5.04	128.26	121.20
17	AQ	2	ASP	CB-CG-OD1	-5.04	113.76	118.30
35	BA	16	A	C4'-C3'-C2'	5.04	107.64	102.60
35	BA	536	C	O4'-C1'-N1	5.04	112.23	108.20
35	BA	616	G	N1-C6-O6	-5.04	116.88	119.90
35	BA	879	C	C3'-C2'-C1'	-5.04	97.47	101.50
35	BA	894	G	OP1-P-O3'	5.04	116.29	105.20
52	BR	16	PHE	CG-CD2-CE2	-5.04	115.26	120.80
1	AA	86	G	C5-C6-O6	-5.04	125.58	128.60
1	AA	106	G	C4'-C3'-C2'	-5.04	97.56	102.60
2	AB	473	G	N9-C4-C5	5.04	107.42	105.40
2	AB	784	G	O3'-P-O5'	-5.04	94.42	104.00
2	AB	1006	C	N3-C4-N4	5.04	121.53	118.00
2	AB	1015	U	C4-C5-C6	5.04	122.72	119.70
2	AB	1397	U	C5'-C4'-O4'	5.04	115.15	109.10
2	AB	1435	G	N3-C4-C5	-5.04	126.08	128.60
2	AB	1685	C	N3-C2-O2	-5.04	118.37	121.90
2	AB	1710	G	N9-C4-C5	5.04	107.42	105.40
2	AB	2105	U	N3-C4-O4	5.04	122.93	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	49	U	N3-C4-O4	5.04	122.93	119.40
35	BA	129	A	N3-C4-C5	-5.04	123.27	126.80
35	BA	306	A	C6-C5-N7	5.04	135.83	132.30
35	BA	1533	C	C2-N1-C1'	-5.04	113.26	118.80
2	AB	384	A	C5-N7-C8	-5.04	101.38	103.90
2	AB	637	A	C4'-C3'-C2'	-5.04	97.56	102.60
2	AB	734	A	N9-C4-C5	5.04	107.81	105.80
2	AB	1263	U	C4'-C3'-C2'	-5.04	97.56	102.60
2	AB	1496	A	O3'-P-O5'	5.04	113.57	104.00
35	BA	350	G	O4'-C1'-C2'	5.04	112.13	107.60
35	BA	713	G	C1'-O4'-C4'	-5.04	105.87	109.90
35	BA	759	A	C4-C5-N7	-5.04	108.18	110.70
35	BA	1343	G	C4-C5-N7	-5.04	108.78	110.80
1	AA	13	G	N7-C8-N9	5.04	115.62	113.10
2	AB	324	A	P-O3'-C3'	5.04	125.74	119.70
2	AB	517	C	C5-C6-N1	5.04	123.52	121.00
2	AB	905	A	C6-N1-C2	-5.04	115.58	118.60
2	AB	943	A	C2-N3-C4	5.04	113.12	110.60
2	AB	1296	G	C5-C6-N1	5.04	114.02	111.50
2	AB	1354	A	C3'-C2'-C1'	-5.04	97.47	101.50
2	AB	1655	A	N9-C1'-C2'	-5.04	106.46	112.00
2	AB	1669	A	N3-C4-N9	5.04	131.43	127.40
2	AB	1729	U	N3-C4-O4	5.04	122.92	119.40
2	AB	2245	U	N3-C4-C5	-5.04	111.58	114.60
2	AB	2347	C	C2-N3-C4	5.04	122.42	119.90
2	AB	2487	G	P-O3'-C3'	5.04	125.74	119.70
2	AB	2607	G	O4'-C1'-N9	5.04	112.23	108.20
2	AB	2810	A	C8-N9-C4	-5.04	103.79	105.80
9	AI	105	ALA	CB-CA-C	5.04	117.65	110.10
31	A4	20	TYR	CB-CG-CD1	-5.04	117.98	121.00
35	BA	77	A	C5'-C4'-C3'	-5.04	107.94	116.00
35	BA	99	C	OP1-P-O3'	5.04	116.28	105.20
35	BA	1108	G	C5-C6-N1	5.04	114.02	111.50
35	BA	1200	C	N3-C2-O2	-5.04	118.38	121.90
35	BA	1434	A	C6-C5-N7	5.04	135.82	132.30
35	BA	1467	C	OP1-P-O3'	5.04	116.28	105.20
1	AA	7	G	N7-C8-N9	5.03	115.62	113.10
1	AA	25	U	C5'-C4'-C3'	-5.03	107.95	116.00
2	AB	1	G	C4-C5-N7	-5.03	108.79	110.80
2	AB	174	U	N3-C2-O2	-5.03	118.68	122.20
2	AB	289	G	C4'-C3'-C2'	-5.03	97.57	102.60
2	AB	522	A	C5-N7-C8	5.03	106.42	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	587	C	O4'-C1'-N1	5.03	112.23	108.20
2	AB	2014	A	C8-N9-C4	5.03	107.81	105.80
2	AB	2027	G	C3'-C2'-C1'	5.03	105.53	101.50
2	AB	2214	C	C4'-C3'-C2'	-5.03	97.57	102.60
2	AB	2299	U	C5'-C4'-C3'	-5.03	107.95	116.00
2	AB	2383	G	C8-N9-C4	5.03	108.41	106.40
2	AB	2399	G	C6-C5-N7	-5.03	127.38	130.40
4	AD	40	GLY	C-N-CA	5.03	132.87	122.30
17	AQ	95	SER	N-CA-CB	5.03	118.05	110.50
35	BA	133	U	O4'-C1'-C2'	5.03	112.13	107.60
35	BA	183	C	C5'-C4'-O4'	5.03	115.14	109.10
35	BA	192	A	N1-C6-N6	-5.03	115.58	118.60
35	BA	233	C	C5'-C4'-C3'	-5.03	107.95	116.00
35	BA	283	U	C3'-C2'-C1'	5.03	105.53	101.50
35	BA	530	G	C4'-C3'-C2'	5.03	107.63	102.60
35	BA	650	G	C4'-C3'-C2'	-5.03	97.57	102.60
35	BA	712	A	N9-C4-C5	5.03	107.81	105.80
35	BA	727	G	N3-C2-N2	-5.03	116.38	119.90
35	BA	738	C	N3-C2-O2	5.03	125.42	121.90
35	BA	1065	U	C5'-C4'-O4'	-5.03	103.06	109.10
35	BA	1309	G	C4-C5-N7	-5.03	108.79	110.80
35	BA	1425	U	C4-C5-C6	-5.03	116.68	119.70
48	BN	120	ARG	NH1-CZ-NH2	-5.03	113.86	119.40
2	AB	469	G	C5-C6-N1	5.03	114.02	111.50
2	AB	633	A	C6-C5-N7	-5.03	128.78	132.30
2	AB	2051	A	C5'-C4'-O4'	-5.03	103.06	109.10
2	AB	2635	A	N3-C4-N9	5.03	131.43	127.40
2	AB	2777	G	N1-C2-N3	-5.03	120.88	123.90
35	BA	947	G	N1-C2-N3	-5.03	120.88	123.90
35	BA	1388	C	N1-C2-O2	5.03	121.92	118.90
2	AB	114	U	C3'-C2'-C1'	5.03	105.52	101.50
2	AB	371	A	C5-N7-C8	-5.03	101.39	103.90
2	AB	709	U	C3'-C2'-C1'	5.03	105.52	101.50
2	AB	1042	G	O4'-C1'-N9	5.03	112.22	108.20
2	AB	1072	C	C1'-O4'-C4'	5.03	113.92	109.90
2	AB	1256	G	C5-C6-O6	5.03	131.62	128.60
2	AB	1807	G	C4'-C3'-C2'	-5.03	97.57	102.60
2	AB	2031	A	C5'-C4'-C3'	-5.03	107.95	116.00
2	AB	2375	G	C4-C5-N7	-5.03	108.79	110.80
2	AB	2874	C	C1'-O4'-C4'	5.03	113.92	109.90
2	AB	2894	G	N7-C8-N9	-5.03	110.58	113.10
12	AL	99	ARG	NH1-CZ-NH2	-5.03	113.87	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	AQ	85	LYS	CB-CA-C	5.03	120.46	110.40
35	BA	324	G	P-O3'-C3'	5.03	125.74	119.70
35	BA	492	C	C6-N1-C2	-5.03	118.29	120.30
35	BA	1004	A	C2'-C3'-O3'	5.03	121.75	113.70
35	BA	1086	U	P-O3'-C3'	5.03	125.74	119.70
35	BA	1141	C	C3'-C2'-C1'	5.03	105.52	101.50
35	BA	1360	A	N7-C8-N9	-5.03	111.28	113.80
35	BA	1398	A	C5-C6-N6	-5.03	119.68	123.70
35	BA	1467	C	N1-C2-N3	5.03	122.72	119.20
39	BE	128	MET	CA-C-N	5.03	128.26	117.20
45	BK	6	TYR	CG-CD1-CE1	5.03	125.32	121.30
1	AA	66	A	C3'-C2'-C1'	5.03	105.52	101.50
2	AB	432	A	C1'-O4'-C4'	5.03	113.92	109.90
2	AB	903	C	C3'-C2'-C1'	5.03	105.52	101.50
2	AB	1892	C	C3'-C2'-C1'	5.03	105.52	101.50
2	AB	2904	U	C6-N1-C1'	-5.03	114.16	121.20
31	A4	5	ARG	NH1-CZ-NH2	-5.03	113.87	119.40
35	BA	635	A	C4-C5-N7	-5.03	108.19	110.70
35	BA	1014	A	O4'-C1'-C2'	5.03	112.13	107.60
35	BA	1474	U	N3-C2-O2	-5.03	118.68	122.20
2	AB	47	C	C5-C6-N1	-5.03	118.49	121.00
2	AB	338	G	C1'-O4'-C4'	-5.03	105.88	109.90
2	AB	784	G	C6-N1-C2	-5.03	122.08	125.10
2	AB	1053	C	O4'-C1'-N1	5.03	112.22	108.20
2	AB	1138	G	N1-C6-O6	5.03	122.92	119.90
2	AB	1364	G	C8-N9-C4	-5.03	104.39	106.40
2	AB	1481	U	C6-N1-C2	-5.03	117.98	121.00
2	AB	1696	G	N9-C1'-C2'	-5.03	106.47	112.00
2	AB	1935	G	C4'-C3'-C2'	-5.03	97.57	102.60
2	AB	1945	G	C6-C5-N7	-5.03	127.38	130.40
2	AB	2494	G	C4-N9-C1'	-5.03	119.97	126.50
35	BA	179	A	N7-C8-N9	-5.03	111.29	113.80
35	BA	243	A	C5-N7-C8	-5.03	101.39	103.90
35	BA	411	A	C4-C5-C6	5.03	119.51	117.00
35	BA	771	G	N3-C2-N2	5.03	123.42	119.90
35	BA	900	A	O4'-C1'-N9	5.03	112.22	108.20
35	BA	927	G	N9-C4-C5	5.03	107.41	105.40
35	BA	957	U	O4'-C1'-N1	5.03	112.22	108.20
35	BA	1117	A	C5-C6-N1	-5.03	115.19	117.70
35	BA	1168	U	C5-C4-O4	-5.03	122.88	125.90
35	BA	1215	G	N1-C6-O6	5.03	122.92	119.90
35	BA	1229	A	C1'-O4'-C4'	5.03	113.92	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	52	C	N3-C2-O2	-5.03	118.38	121.90
1	AA	33	G	C4'-C3'-C2'	-5.03	97.57	102.60
1	AA	112	G	C4-C5-N7	5.03	112.81	110.80
2	AB	265	A	C5-N7-C8	-5.03	101.39	103.90
2	AB	1044	C	C4-C5-C6	5.03	119.91	117.40
2	AB	1142	A	O3'-P-O5'	5.03	113.55	104.00
2	AB	1175	A	C2-N3-C4	5.03	113.11	110.60
2	AB	1684	G	C4'-C3'-C2'	-5.03	97.57	102.60
2	AB	2163	A	C4-C5-N7	-5.03	108.19	110.70
2	AB	2215	C	C1'-O4'-C4'	5.03	113.92	109.90
2	AB	2858	C	C2-N1-C1'	5.03	124.33	118.80
24	AX	90	ASP	CB-CG-OD2	-5.03	113.78	118.30
35	BA	601	G	C4-C5-N7	-5.03	108.79	110.80
35	BA	787	A	O4'-C4'-C3'	5.03	110.12	106.10
47	BM	85	VAL	CA-CB-CG1	5.03	118.44	110.90
2	AB	2265	U	O4'-C4'-C3'	-5.02	98.98	104.00
2	AB	2268	A	C8-N9-C4	-5.02	103.79	105.80
2	AB	2742	G	C4-C5-C6	5.02	121.81	118.80
2	AB	2780	G	C5'-C4'-C3'	-5.02	107.96	116.00
3	AC	90	ALA	CB-CA-C	5.02	117.64	110.10
35	BA	6	G	P-O5'-C5'	5.02	128.94	120.90
35	BA	96	U	C4'-C3'-C2'	-5.02	97.58	102.60
35	BA	530	G	N1-C2-N2	5.02	120.72	116.20
35	BA	1438	G	P-O3'-C3'	5.02	125.73	119.70
35	BA	1495	U	C1'-O4'-C4'	-5.02	105.88	109.90
2	AB	58	G	C4-C5-N7	-5.02	108.79	110.80
2	AB	194	G	C5-C6-N1	-5.02	108.99	111.50
2	AB	242	G	O4'-C4'-C3'	5.02	110.12	106.10
2	AB	656	G	N1-C6-O6	5.02	122.91	119.90
2	AB	940	G	N1-C2-N2	5.02	120.72	116.20
2	AB	1421	G	C5'-C4'-C3'	-5.02	107.97	116.00
2	AB	1437	C	C2-N3-C4	-5.02	117.39	119.90
2	AB	1661	G	N3-C4-N9	-5.02	122.99	126.00
2	AB	1678	A	C3'-C2'-C1'	-5.02	97.48	101.50
2	AB	1842	G	N1-C2-N3	-5.02	120.89	123.90
2	AB	1873	G	N9-C4-C5	-5.02	103.39	105.40
2	AB	1996	C	O4'-C4'-C3'	5.02	110.12	106.10
2	AB	2481	G	C5-N7-C8	5.02	106.81	104.30
2	AB	2496	C	C6-N1-C2	5.02	122.31	120.30
2	AB	2768	U	C2-N3-C4	-5.02	123.99	127.00
2	AB	2796	U	O3'-P-O5'	5.02	113.54	104.00
35	BA	107	G	C4-C5-N7	5.02	112.81	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	197	A	C4-C5-C6	-5.02	114.49	117.00
35	BA	554	A	N3-C4-N9	-5.02	123.38	127.40
35	BA	603	U	C1'-O4'-C4'	-5.02	105.88	109.90
35	BA	937	A	O4'-C4'-C3'	5.02	110.12	106.10
35	BA	952	U	C5-C4-O4	-5.02	122.89	125.90
35	BA	1349	A	C5'-C4'-O4'	5.02	115.13	109.10
35	BA	1490	U	N1-C2-N3	5.02	117.91	114.90
35	BA	1537	U	O5'-P-OP1	5.02	116.73	110.70
2	AB	135	U	C2-N1-C1'	5.02	123.73	117.70
2	AB	351	C	C2-N3-C4	5.02	122.41	119.90
2	AB	578	G	N9-C1'-C2'	-5.02	106.48	112.00
2	AB	1843	C	C6-N1-C2	5.02	122.31	120.30
2	AB	2259	U	C5-C6-N1	-5.02	120.19	122.70
2	AB	2708	G	C6-N1-C2	-5.02	122.09	125.10
4	AD	194	VAL	CA-CB-CG2	5.02	118.43	110.90
35	BA	14	U	N3-C4-C5	-5.02	111.59	114.60
45	BK	16	ALA	CB-CA-C	5.02	117.63	110.10
54	BT	9	PHE	CB-CA-C	5.02	120.44	110.40
1	AA	22	U	C5-C4-O4	5.02	128.91	125.90
2	AB	51	G	P-O3'-C3'	5.02	125.72	119.70
2	AB	185	G	N1-C6-O6	-5.02	116.89	119.90
2	AB	364	C	N3-C2-O2	-5.02	118.39	121.90
2	AB	471	A	N9-C1'-C2'	-5.02	106.48	112.00
2	AB	990	A	C4-C5-C6	-5.02	114.49	117.00
2	AB	1213	A	N1-C2-N3	-5.02	126.79	129.30
2	AB	1259	G	C8-N9-C4	-5.02	104.39	106.40
2	AB	1478	G	C4-C5-N7	-5.02	108.79	110.80
2	AB	1500	G	O4'-C1'-N9	5.02	112.22	108.20
2	AB	1756	G	N1-C6-O6	-5.02	116.89	119.90
2	AB	1853	A	C4-C5-C6	5.02	119.51	117.00
2	AB	2336	A	C2'-C3'-O3'	5.02	121.73	113.70
2	AB	2568	U	C1'-O4'-C4'	-5.02	105.89	109.90
7	AG	82	TYR	CB-CG-CD1	5.02	124.01	121.00
17	AQ	117	PHE	CB-CG-CD1	-5.02	117.29	120.80
35	BA	97	G	C4-C5-C6	5.02	121.81	118.80
35	BA	158	G	C3'-C2'-C1'	5.02	105.52	101.50
35	BA	346	G	C6-C5-N7	-5.02	127.39	130.40
35	BA	691	G	N9-C1'-C2'	-5.02	106.48	112.00
35	BA	888	G	O4'-C1'-C2'	5.02	112.12	107.60
35	BA	1020	G	N9-C1'-C2'	-5.02	106.48	112.00
35	BA	1050	G	C5'-C4'-C3'	-5.02	107.97	116.00
35	BA	1110	A	C4-C5-N7	-5.02	108.19	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	1138	G	N1-C2-N3	-5.02	120.89	123.90
35	BA	1430	A	O4'-C1'-N9	5.02	112.22	108.20
35	BA	1440	U	C4-C5-C6	5.02	122.71	119.70
37	BC	38	A	C6-N1-C2	5.02	121.61	118.60
2	AB	24	G	N1-C2-N2	5.02	120.72	116.20
2	AB	82	U	O4'-C1'-N1	5.02	112.21	108.20
2	AB	528	A	C5-C6-N1	5.02	120.21	117.70
2	AB	743	A	N1-C2-N3	-5.02	126.79	129.30
2	AB	1177	G	C5'-C4'-O4'	5.02	115.12	109.10
2	AB	1442	U	C3'-C2'-C1'	-5.02	97.48	101.50
2	AB	2281	A	C1'-O4'-C4'	5.02	113.91	109.90
2	AB	2315	G	C4'-C3'-C2'	-5.02	97.58	102.60
2	AB	2541	A	N1-C6-N6	5.02	121.61	118.60
2	AB	2574	G	O4'-C1'-C2'	5.02	112.12	107.60
2	AB	2659	G	O4'-C1'-N9	5.02	112.22	108.20
23	AW	54	PRO	O-C-N	-5.02	114.67	123.20
35	BA	154	U	C5'-C4'-O4'	5.02	115.12	109.10
35	BA	346	G	C1'-O4'-C4'	-5.02	105.89	109.90
35	BA	530	G	C2-N3-C4	5.02	114.41	111.90
35	BA	870	U	C2-N3-C4	-5.02	123.99	127.00
35	BA	1134	G	C4-C5-C6	5.02	121.81	118.80
35	BA	1472	U	P-O3'-C3'	5.02	125.72	119.70
38	BD	221	ARG	N-CA-CB	-5.02	101.57	110.60
2	AB	270	A	O3'-P-O5'	5.02	113.53	104.00
2	AB	682	G	C4-N9-C1'	-5.02	119.98	126.50
2	AB	1248	G	N1-C2-N2	5.02	120.71	116.20
2	AB	1342	A	C6-C5-N7	5.02	135.81	132.30
2	AB	1357	C	N3-C4-C5	-5.02	119.89	121.90
2	AB	1809	A	C4'-C3'-C2'	-5.02	97.58	102.60
2	AB	1839	G	N1-C2-N2	5.02	120.72	116.20
2	AB	2010	G	N3-C4-N9	5.02	129.01	126.00
2	AB	2494	G	O4'-C1'-N9	5.02	112.21	108.20
2	AB	2606	C	N3-C4-C5	5.02	123.91	121.90
11	AK	7	TYR	CA-CB-CG	5.02	122.93	113.40
14	AN	33	ARG	NE-CZ-NH1	5.02	122.81	120.30
35	BA	1167	A	N7-C8-N9	-5.02	111.29	113.80
57	BW	33	ARG	NE-CZ-NH1	5.02	122.81	120.30
2	AB	60	G	C5'-C4'-C3'	-5.01	107.98	116.00
2	AB	73	A	C5-C6-N1	5.01	120.21	117.70
2	AB	687	C	C3'-C2'-C1'	-5.01	97.49	101.50
2	AB	759	G	N9-C4-C5	5.01	107.41	105.40
2	AB	948	C	N3-C4-N4	5.01	121.51	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	971	G	C4'-C3'-C2'	-5.01	97.58	102.60
2	AB	1116	G	C5-C6-N1	-5.01	108.99	111.50
2	AB	1146	C	C2-N3-C4	5.01	122.41	119.90
2	AB	1150	C	C1'-O4'-C4'	5.01	113.91	109.90
2	AB	1285	A	C5'-C4'-O4'	5.01	115.12	109.10
2	AB	1718	G	C4'-C3'-C2'	-5.01	97.59	102.60
2	AB	2181	U	C5-C4-O4	5.01	128.91	125.90
2	AB	2392	A	N9-C4-C5	-5.01	103.79	105.80
2	AB	2396	G	N3-C4-N9	-5.01	122.99	126.00
2	AB	2497	A	C6-N1-C2	5.01	121.61	118.60
4	AD	154	ALA	CB-CA-C	5.01	117.62	110.10
6	AF	198	GLU	CA-CB-CG	5.01	124.43	113.40
35	BA	596	A	C4-C5-N7	5.01	113.21	110.70
35	BA	803	G	C5-N7-C8	-5.01	101.79	104.30
35	BA	1008	U	C1'-O4'-C4'	-5.01	105.89	109.90
35	BA	1242	G	C1'-O4'-C4'	-5.01	105.89	109.90
35	BA	1394	A	N3-C4-N9	5.01	131.41	127.40
39	BE	28	PHE	CB-CG-CD2	-5.01	117.29	120.80
48	BN	92	VAL	CG1-CB-CG2	-5.01	102.88	110.90
2	AB	243	U	C5-C6-N1	-5.01	120.19	122.70
2	AB	1303	G	N3-C4-N9	5.01	129.01	126.00
2	AB	1536	C	C5'-C4'-O4'	-5.01	103.08	109.10
2	AB	2479	U	C4'-C3'-C2'	-5.01	97.59	102.60
7	AG	127	TYR	CB-CG-CD1	-5.01	117.99	121.00
35	BA	74	A	C6-N1-C2	5.01	121.61	118.60
35	BA	370	C	O5'-C5'-C4'	-5.01	102.17	111.70
35	BA	869	G	C2-N3-C4	5.01	114.41	111.90
35	BA	1473	G	C5-C6-N1	5.01	114.01	111.50
1	AA	38	C	N3-C2-O2	-5.01	118.39	121.90
2	AB	384	A	O3'-P-O5'	-5.01	94.48	104.00
2	AB	950	G	N1-C2-N2	5.01	120.71	116.20
2	AB	1020	A	OP1-P-O3'	5.01	116.22	105.20
2	AB	1533	C	N3-C2-O2	-5.01	118.39	121.90
2	AB	1545	A	N1-C6-N6	5.01	121.61	118.60
2	AB	1671	U	N3-C4-O4	5.01	122.91	119.40
2	AB	1733	G	N1-C6-O6	5.01	122.91	119.90
2	AB	2178	C	C5'-C4'-C3'	-5.01	107.98	116.00
2	AB	2231	U	N1-C2-N3	5.01	117.91	114.90
2	AB	2260	C	N3-C4-C5	-5.01	119.89	121.90
2	AB	2382	G	O3'-P-O5'	-5.01	94.48	104.00
2	AB	2484	G	C5-C6-O6	-5.01	125.59	128.60
35	BA	146	G	C4'-C3'-C2'	-5.01	97.59	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	219	U	C2-N3-C4	-5.01	123.99	127.00
35	BA	277	C	C4'-C3'-C2'	-5.01	97.59	102.60
35	BA	515	G	C8-N9-C4	-5.01	104.39	106.40
35	BA	681	A	N3-C4-N9	-5.01	123.39	127.40
35	BA	879	C	O4'-C4'-C3'	-5.01	98.99	104.00
35	BA	1264	U	C3'-C2'-C1'	5.01	105.51	101.50
35	BA	1315	U	N1-C2-O2	5.01	126.31	122.80
2	AB	113	U	N1-C2-N3	5.01	117.91	114.90
2	AB	121	G	C5-C6-N1	5.01	114.00	111.50
2	AB	682	G	C8-N9-C1'	5.01	133.51	127.00
2	AB	804	A	C3'-C2'-C1'	-5.01	97.49	101.50
2	AB	912	C	C5'-C4'-C3'	-5.01	107.98	116.00
2	AB	1464	G	N3-C4-C5	-5.01	126.09	128.60
2	AB	1513	U	C4'-C3'-C2'	-5.01	97.59	102.60
2	AB	1537	G	P-O3'-C3'	5.01	125.71	119.70
2	AB	1634	A	C5-C6-N1	5.01	120.20	117.70
2	AB	1649	G	C5-N7-C8	5.01	106.81	104.30
2	AB	1685	C	O4'-C4'-C3'	-5.01	98.99	104.00
2	AB	2162	G	N3-C4-C5	-5.01	126.09	128.60
2	AB	2425	A	C3'-C2'-C1'	-5.01	97.49	101.50
2	AB	2497	A	C5'-C4'-C3'	-5.01	107.98	116.00
2	AB	2787	C	C2-N3-C4	-5.01	117.39	119.90
29	A2	3	LYS	CB-CA-C	5.01	120.42	110.40
35	BA	784	A	N9-C4-C5	5.01	107.80	105.80
35	BA	944	G	OP1-P-O3'	5.01	116.22	105.20
35	BA	1082	A	C5'-C4'-O4'	5.01	115.11	109.10
35	BA	1298	U	O4'-C1'-N1	5.01	112.21	108.20
35	BA	1472	U	C6-N1-C2	-5.01	117.99	121.00
44	BJ	98	LEU	CB-CG-CD1	5.01	119.52	111.00
2	AB	146	A	C5-C6-N1	5.01	120.20	117.70
2	AB	552	U	C4'-C3'-C2'	-5.01	97.59	102.60
2	AB	810	U	C1'-O4'-C4'	-5.01	105.89	109.90
2	AB	925	A	N9-C1'-C2'	-5.01	106.49	112.00
2	AB	1402	U	N1-C2-O2	5.01	126.31	122.80
2	AB	1903	G	C4-C5-C6	5.01	121.81	118.80
2	AB	1966	A	C6-N1-C2	5.01	121.61	118.60
35	BA	799	G	C6-N1-C2	-5.01	122.09	125.10
1	AA	101	A	C5'-C4'-O4'	5.01	115.11	109.10
2	AB	6	A	C5'-C4'-C3'	5.01	124.01	116.00
2	AB	18	U	N1-C2-N3	5.01	117.90	114.90
2	AB	435	C	C5-C6-N1	-5.01	118.50	121.00
2	AB	476	G	N1-C2-N2	5.01	120.71	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	566	U	C4-C5-C6	5.01	122.70	119.70
2	AB	1758	U	C6-N1-C1'	-5.01	114.19	121.20
2	AB	1926	U	N1-C2-N3	5.01	117.90	114.90
2	AB	2037	A	C8-N9-C4	-5.01	103.80	105.80
2	AB	2126	A	C2-N3-C4	-5.01	108.10	110.60
2	AB	2458	G	C1'-O4'-C4'	-5.01	105.89	109.90
2	AB	2636	C	N1-C2-O2	5.01	121.90	118.90
2	AB	2650	U	N1-C2-O2	-5.01	119.30	122.80
35	BA	41	G	C5'-C4'-O4'	5.01	115.11	109.10
35	BA	211	G	N3-C4-N9	5.01	129.00	126.00
35	BA	417	G	N3-C4-C5	-5.01	126.10	128.60
35	BA	433	G	C2-N3-C4	5.01	114.40	111.90
35	BA	576	C	N3-C2-O2	-5.01	118.39	121.90
35	BA	784	A	C1'-O4'-C4'	-5.01	105.89	109.90
35	BA	802	A	C2-N3-C4	-5.01	108.10	110.60
35	BA	883	C	C1'-O4'-C4'	5.01	113.91	109.90
35	BA	971	G	N1-C2-N3	-5.01	120.90	123.90
35	BA	1436	U	O4'-C1'-N1	5.01	112.20	108.20
36	BB	45	G	O3'-P-O5'	-5.01	94.49	104.00
44	BJ	94	VAL	CA-CB-CG2	5.01	118.41	110.90
2	AB	227	A	O4'-C1'-N9	5.00	112.20	108.20
2	AB	837	C	C6-N1-C2	-5.00	118.30	120.30
2	AB	900	A	N9-C4-C5	-5.00	103.80	105.80
2	AB	1749	A	C5'-C4'-O4'	5.00	115.11	109.10
2	AB	1770	G	C1'-O4'-C4'	-5.00	105.90	109.90
2	AB	2441	U	N1-C2-O2	5.00	126.30	122.80
26	AZ	73	ARG	NE-CZ-NH1	-5.00	117.80	120.30
35	BA	411	A	C5'-C4'-C3'	-5.00	107.99	116.00
35	BA	516	PSU	P-O3'-C3'	5.00	125.71	119.70
35	BA	1241	G	C6-C5-N7	5.00	133.40	130.40
35	BA	1242	G	N9-C4-C5	-5.00	103.40	105.40
49	BO	70	ARG	NE-CZ-NH1	5.00	122.80	120.30
1	AA	84	G	C5'-C4'-C3'	-5.00	108.00	116.00
2	AB	217	A	C5-C6-N6	-5.00	119.70	123.70
2	AB	329	G	C4-C5-C6	5.00	121.80	118.80
2	AB	499	U	O4'-C4'-C3'	5.00	110.10	106.10
2	AB	591	U	C5'-C4'-O4'	-5.00	103.10	109.10
2	AB	1095	A	C5-C6-N6	-5.00	119.70	123.70
2	AB	1571	A	C4-C5-N7	5.00	113.20	110.70
2	AB	2048	G	N1-C6-O6	5.00	122.90	119.90
2	AB	2408	U	P-O3'-C3'	5.00	125.70	119.70
2	AB	2900	A	C8-N9-C4	-5.00	103.80	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BA	119	A	N1-C6-N6	-5.00	115.60	118.60
35	BA	464	U	N3-C4-O4	5.00	122.90	119.40
35	BA	506	G	N9-C4-C5	-5.00	103.40	105.40
35	BA	507	C	C1'-O4'-C4'	-5.00	105.90	109.90
35	BA	685	G	O5'-C5'-C4'	5.00	121.21	111.70
35	BA	969	A	C5'-C4'-O4'	5.00	115.11	109.10
35	BA	1253	G	C2'-C3'-O3'	5.00	121.70	113.70
37	BC	29	C	C5-C6-N1	-5.00	118.50	121.00
39	BE	81	GLU	OE1-CD-OE2	5.00	129.31	123.30
52	BR	38	PHE	CG-CD2-CE2	-5.00	115.30	120.80
1	AA	3	C	C2-N3-C4	5.00	122.40	119.90
2	AB	58	G	P-O3'-C3'	5.00	125.70	119.70
2	AB	763	G	O5'-P-OP2	-5.00	101.20	105.70
2	AB	1123	C	C6-N1-C2	-5.00	118.30	120.30
2	AB	1232	G	C6-N1-C2	-5.00	122.10	125.10
2	AB	1437	C	C6-N1-C1'	-5.00	114.80	120.80
2	AB	1781	U	C4-C5-C6	5.00	122.70	119.70
2	AB	1860	G	N3-C2-N2	5.00	123.40	119.90
2	AB	2131	U	O3'-P-O5'	5.00	113.50	104.00
2	AB	2771	C	N1-C2-O2	-5.00	115.90	118.90
13	AM	123	LEU	CB-CA-C	5.00	119.70	110.20
35	BA	395	C	C4'-C3'-C2'	-5.00	97.60	102.60
39	BE	70	ALA	CB-CA-C	5.00	117.60	110.10

There are no chirality outliers.

All (2857) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
27	A0	29	ARG	Sidechain
27	A0	57	LEU	Peptide
27	A0	6	LEU	Mainchain
27	A0	7	ARG	Sidechain
28	A1	10	ARG	Sidechain
28	A1	29	ARG	Sidechain
28	A1	30	ARG	Peptide
28	A1	44	ARG	Sidechain
29	A2	30	HIS	Peptide
29	A2	33	ASN	Peptide
29	A2	49	ARG	Peptide
30	A3	48	TYR	Sidechain
31	A4	23	THR	Mainchain
31	A4	48	TYR	Sidechain

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Mol	Chain	Res	Type	Group
32	A5	15	SER	Peptide
32	A5	21	ARG	Sidechain
33	A6	39	ARG	Sidechain
33	A6	63	TYR	Sidechain
34	A7	19	ARG	Sidechain
34	A7	36	ARG	Sidechain
1	AA	1	U	Sidechain
1	AA	10	G	Sidechain
1	AA	100	G	Sidechain
1	AA	103	U	Sidechain
1	AA	104	A	Sidechain
1	AA	107	G	Sidechain
1	AA	109	A	Sidechain
1	AA	11	C	Sidechain
1	AA	112	G	Sidechain
1	AA	113	C	Sidechain
1	AA	116	G	Sidechain
1	AA	120	U	Sidechain
1	AA	13	G	Sidechain
1	AA	14	U	Sidechain
1	AA	18	G	Sidechain
1	AA	2	G	Sidechain
1	AA	20	G	Sidechain
1	AA	21	G	Sidechain
1	AA	25	U	Sidechain
1	AA	26	C	Sidechain
1	AA	29	A	Sidechain
1	AA	3	C	Sidechain
1	AA	30	C	Sidechain
1	AA	31	C	Sidechain
1	AA	32	U	Sidechain
1	AA	33	G	Sidechain
1	AA	34	A	Sidechain
1	AA	35	C	Sidechain
1	AA	36	C	Sidechain
1	AA	37	C	Sidechain
1	AA	4	C	Sidechain
1	AA	42	C	Sidechain
1	AA	44	G	Sidechain
1	AA	46	A	Sidechain
1	AA	48	U	Sidechain
1	AA	5	U	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	51	G	Sidechain
1	AA	52	A	Sidechain
1	AA	55	U	Sidechain
1	AA	56	G	Sidechain
1	AA	59	A	Sidechain
1	AA	6	G	Sidechain
1	AA	60	C	Sidechain
1	AA	61	G	Sidechain
1	AA	62	C	Sidechain
1	AA	64	G	Sidechain
1	AA	65	U	Sidechain
1	AA	66	A	Sidechain
1	AA	67	G	Sidechain
1	AA	68	C	Sidechain
1	AA	7	G	Sidechain
1	AA	72	G	Sidechain
1	AA	73	A	Sidechain
1	AA	76	G	Sidechain
1	AA	78	A	Sidechain
1	AA	79	G	Sidechain
1	AA	8	C	Sidechain
1	AA	81	G	Sidechain
1	AA	83	G	Sidechain
1	AA	84	G	Sidechain
1	AA	85	G	Sidechain
1	AA	86	G	Sidechain
1	AA	87	U	Sidechain
1	AA	88	C	Sidechain
1	AA	89	U	Sidechain
1	AA	90	C	Sidechain
1	AA	91	C	Sidechain
1	AA	92	C	Sidechain
1	AA	98	G	Sidechain
2	AB	1	G	Sidechain
2	AB	10	A	Sidechain
2	AB	100	U	Sidechain
2	AB	1000	A	Sidechain
2	AB	1001	A	Sidechain
2	AB	1002	G	Sidechain
2	AB	1003	G	Sidechain
2	AB	1005	C	Sidechain
2	AB	1006	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1007	C	Sidechain
2	AB	1009	A	Sidechain
2	AB	1014	A	Sidechain
2	AB	1015	U	Sidechain
2	AB	1016	G	Sidechain
2	AB	1017	G	Sidechain
2	AB	102	U	Sidechain
2	AB	1020	A	Sidechain
2	AB	1021	A	Sidechain
2	AB	1022	G	Sidechain
2	AB	1023	U	Sidechain
2	AB	1026	G	Sidechain
2	AB	1028	A	Sidechain
2	AB	1029	A	Sidechain
2	AB	103	A	Sidechain
2	AB	1033	U	Sidechain
2	AB	1034	G	Sidechain
2	AB	1035	U	Sidechain
2	AB	1036	G	Sidechain
2	AB	1038	G	Sidechain
2	AB	104	A	Sidechain
2	AB	1040	A	Sidechain
2	AB	1041	G	Sidechain
2	AB	1042	G	Sidechain
2	AB	1043	C	Sidechain
2	AB	1044	C	Sidechain
2	AB	1045	C	Sidechain
2	AB	1046	A	Sidechain
2	AB	1047	G	Sidechain
2	AB	1049	C	Sidechain
2	AB	105	C	Sidechain
2	AB	1050	A	Sidechain
2	AB	1051	G	Sidechain
2	AB	1052	C	Sidechain
2	AB	1053	C	Sidechain
2	AB	1056	G	Sidechain
2	AB	1057	A	Sidechain
2	AB	1058	U	Sidechain
2	AB	1059	G	Sidechain
2	AB	106	C	Sidechain
2	AB	1063	G	Sidechain
2	AB	1064	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1067	A	Sidechain
2	AB	1068	G	Sidechain
2	AB	1069	A	Sidechain
2	AB	1070	A	Sidechain
2	AB	1073	A	Sidechain
2	AB	1074	G	Sidechain
2	AB	1075	C	Sidechain
2	AB	1076	C	Sidechain
2	AB	1077	A	Sidechain
2	AB	1078	U	Sidechain
2	AB	1079	C	Sidechain
2	AB	1080	A	Sidechain
2	AB	1081	U	Sidechain
2	AB	1082	U	Sidechain
2	AB	1083	U	Sidechain
2	AB	1084	A	Sidechain
2	AB	1085	A	Sidechain
2	AB	1086	A	Sidechain
2	AB	1087	G	Sidechain
2	AB	1088	A	Sidechain
2	AB	1089	A	Sidechain
2	AB	1092	C	Sidechain
2	AB	1093	G	Sidechain
2	AB	1094	U	Sidechain
2	AB	1099	G	Sidechain
2	AB	11	C	Sidechain
2	AB	1101	U	Sidechain
2	AB	1102	C	Sidechain
2	AB	1104	C	Sidechain
2	AB	1107	G	Sidechain
2	AB	1108	U	Sidechain
2	AB	1109	C	Sidechain
2	AB	1110	G	Sidechain
2	AB	1111	A	Sidechain
2	AB	1112	G	Sidechain
2	AB	1114	C	Sidechain
2	AB	1117	C	Sidechain
2	AB	1119	U	Sidechain
2	AB	1121	C	Sidechain
2	AB	1122	G	Sidechain
2	AB	1124	G	Sidechain
2	AB	1125	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1129	A	Sidechain
2	AB	113	U	Sidechain
2	AB	1130	U	Sidechain
2	AB	1131	G	Sidechain
2	AB	1135	C	Sidechain
2	AB	1136	G	Sidechain
2	AB	1137	G	Sidechain
2	AB	114	U	Sidechain
2	AB	1141	U	Sidechain
2	AB	1148	U	Sidechain
2	AB	115	C	Sidechain
2	AB	1155	A	Sidechain
2	AB	1158	C	Sidechain
2	AB	1160	G	Sidechain
2	AB	1162	G	Sidechain
2	AB	1163	G	Sidechain
2	AB	1164	C	Sidechain
2	AB	1165	A	Sidechain
2	AB	1166	G	Sidechain
2	AB	1167	C	Sidechain
2	AB	1168	G	Sidechain
2	AB	1169	A	Sidechain
2	AB	1170	C	Sidechain
2	AB	1171	G	Sidechain
2	AB	1173	U	Sidechain
2	AB	1176	U	Sidechain
2	AB	1177	G	Sidechain
2	AB	1178	C	Sidechain
2	AB	1179	G	Sidechain
2	AB	118	A	Sidechain
2	AB	1183	U	Sidechain
2	AB	1184	U	Sidechain
2	AB	1185	G	Sidechain
2	AB	1186	G	Sidechain
2	AB	1187	G	Sidechain
2	AB	1188	U	Sidechain
2	AB	1189	A	Sidechain
2	AB	1190	G	Sidechain
2	AB	1191	G	Sidechain
2	AB	1192	G	Sidechain
2	AB	1193	G	Sidechain
2	AB	1195	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1196	C	Sidechain
2	AB	1197	G	Sidechain
2	AB	1199	U	Sidechain
2	AB	12	U	Sidechain
2	AB	120	U	Sidechain
2	AB	1200	C	Sidechain
2	AB	1202	G	Sidechain
2	AB	1204	A	Sidechain
2	AB	1206	G	Sidechain
2	AB	1207	C	Sidechain
2	AB	1208	C	Sidechain
2	AB	1209	U	Sidechain
2	AB	1212	G	Sidechain
2	AB	1213	A	Sidechain
2	AB	1215	G	Sidechain
2	AB	122	G	Sidechain
2	AB	1220	G	Sidechain
2	AB	1226	A	Sidechain
2	AB	1227	G	Sidechain
2	AB	1228	G	Sidechain
2	AB	1229	C	Sidechain
2	AB	123	G	Sidechain
2	AB	1231	U	Sidechain
2	AB	1234	U	Sidechain
2	AB	1235	G	Sidechain
2	AB	1236	G	Sidechain
2	AB	1237	A	Sidechain
2	AB	1238	G	Sidechain
2	AB	1239	G	Sidechain
2	AB	124	G	Sidechain
2	AB	1243	C	Sidechain
2	AB	1244	A	Sidechain
2	AB	1245	G	Sidechain
2	AB	1246	A	Sidechain
2	AB	1248	G	Sidechain
2	AB	1249	U	Sidechain
2	AB	1250	G	Sidechain
2	AB	1251	C	Sidechain
2	AB	1252	G	Sidechain
2	AB	1254	A	Sidechain
2	AB	1255	U	Sidechain
2	AB	1256	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	126	A	Sidechain
2	AB	1260	A	Sidechain
2	AB	1262	A	Sidechain
2	AB	1263	U	Sidechain
2	AB	1265	A	Sidechain
2	AB	1266	G	Sidechain
2	AB	1267	U	Sidechain
2	AB	1268	A	Sidechain
2	AB	127	A	Sidechain
2	AB	1270	C	Sidechain
2	AB	1271	G	Sidechain
2	AB	1273	U	Sidechain
2	AB	1274	A	Sidechain
2	AB	1277	G	Sidechain
2	AB	1278	C	Sidechain
2	AB	1281	G	Sidechain
2	AB	1284	A	Sidechain
2	AB	1285	A	Sidechain
2	AB	1286	A	Sidechain
2	AB	1287	A	Sidechain
2	AB	1288	G	Sidechain
2	AB	129	C	Sidechain
2	AB	1290	C	Sidechain
2	AB	1291	C	Sidechain
2	AB	1292	G	Sidechain
2	AB	1293	C	Sidechain
2	AB	1296	G	Sidechain
2	AB	1298	C	Sidechain
2	AB	1299	G	Sidechain
2	AB	130	C	Sidechain
2	AB	1301	A	Sidechain
2	AB	1302	A	Sidechain
2	AB	1305	C	Sidechain
2	AB	1306	C	Sidechain
2	AB	1310	G	Sidechain
2	AB	1311	G	Sidechain
2	AB	1313	U	Sidechain
2	AB	1319	C	Sidechain
2	AB	1321	A	Sidechain
2	AB	1322	A	Sidechain
2	AB	1323	C	Sidechain
2	AB	1324	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1325	U	Sidechain
2	AB	1327	A	Sidechain
2	AB	133	U	Sidechain
2	AB	1330	C	Sidechain
2	AB	1331	G	Sidechain
2	AB	1332	G	Sidechain
2	AB	1333	G	Sidechain
2	AB	1337	G	Sidechain
2	AB	1339	G	Sidechain
2	AB	134	G	Sidechain
2	AB	1340	U	Sidechain
2	AB	1342	A	Sidechain
2	AB	1343	G	Sidechain
2	AB	1345	C	Sidechain
2	AB	1346	G	Sidechain
2	AB	1349	C	Sidechain
2	AB	135	U	Sidechain
2	AB	1352	U	Sidechain
2	AB	1353	A	Sidechain
2	AB	1355	G	Sidechain
2	AB	1356	G	Sidechain
2	AB	1357	C	Sidechain
2	AB	1358	G	Sidechain
2	AB	1359	A	Sidechain
2	AB	1360	G	Sidechain
2	AB	1361	G	Sidechain
2	AB	1362	C	Sidechain
2	AB	1365	A	Sidechain
2	AB	1367	A	Sidechain
2	AB	1369	G	Sidechain
2	AB	137	U	Sidechain
2	AB	1371	G	Sidechain
2	AB	1372	U	Sidechain
2	AB	1376	C	Sidechain
2	AB	1379	U	Sidechain
2	AB	1380	G	Sidechain
2	AB	1381	G	Sidechain
2	AB	1382	G	Sidechain
2	AB	1384	A	Sidechain
2	AB	1385	A	Sidechain
2	AB	1386	C	Sidechain
2	AB	1387	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1389	G	Sidechain
2	AB	1391	U	Sidechain
2	AB	1392	A	Sidechain
2	AB	1393	A	Sidechain
2	AB	1394	U	Sidechain
2	AB	1395	A	Sidechain
2	AB	1396	U	Sidechain
2	AB	14	A	Sidechain
2	AB	140	C	Sidechain
2	AB	1400	U	Sidechain
2	AB	1403	A	Sidechain
2	AB	1404	C	Sidechain
2	AB	1406	U	Sidechain
2	AB	1407	G	Sidechain
2	AB	1409	U	Sidechain
2	AB	141	G	Sidechain
2	AB	1410	G	Sidechain
2	AB	1411	U	Sidechain
2	AB	1412	U	Sidechain
2	AB	1414	C	Sidechain
2	AB	1416	G	Sidechain
2	AB	1417	C	Sidechain
2	AB	1418	G	Sidechain
2	AB	1421	G	Sidechain
2	AB	1422	G	Sidechain
2	AB	1423	G	Sidechain
2	AB	1425	G	Sidechain
2	AB	1427	A	Sidechain
2	AB	1428	C	Sidechain
2	AB	1436	G	Sidechain
2	AB	1438	U	Sidechain
2	AB	1439	A	Sidechain
2	AB	144	A	Sidechain
2	AB	1442	U	Sidechain
2	AB	1443	U	Sidechain
2	AB	1444	G	Sidechain
2	AB	1447	C	Sidechain
2	AB	1448	G	Sidechain
2	AB	1451	C	Sidechain
2	AB	1453	A	Sidechain
2	AB	1455	G	Sidechain
2	AB	1456	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1457	U	Sidechain
2	AB	1458	U	Sidechain
2	AB	1459	G	Sidechain
2	AB	1460	U	Sidechain
2	AB	1462	C	Sidechain
2	AB	1463	C	Sidechain
2	AB	1464	G	Sidechain
2	AB	1466	U	Sidechain
2	AB	1468	U	Sidechain
2	AB	147	C	Sidechain
2	AB	1470	A	Sidechain
2	AB	1471	G	Sidechain
2	AB	1474	U	Sidechain
2	AB	1475	G	Sidechain
2	AB	1476	U	Sidechain
2	AB	1478	G	Sidechain
2	AB	1479	G	Sidechain
2	AB	148	U	Sidechain
2	AB	1480	C	Sidechain
2	AB	1481	U	Sidechain
2	AB	1482	G	Sidechain
2	AB	1483	G	Sidechain
2	AB	1484	U	Sidechain
2	AB	1485	U	Sidechain
2	AB	1487	U	Sidechain
2	AB	1488	C	Sidechain
2	AB	1492	G	Sidechain
2	AB	1494	A	Sidechain
2	AB	1496	A	Sidechain
2	AB	1499	C	Sidechain
2	AB	15	G	Sidechain
2	AB	1500	G	Sidechain
2	AB	1501	G	Sidechain
2	AB	1502	A	Sidechain
2	AB	1507	C	Sidechain
2	AB	1508	A	Sidechain
2	AB	1511	G	Sidechain
2	AB	1513	U	Sidechain
2	AB	1515	A	Sidechain
2	AB	1516	G	Sidechain
2	AB	1517	G	Sidechain
2	AB	1519	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1520	U	Sidechain
2	AB	1521	G	Sidechain
2	AB	1522	A	Sidechain
2	AB	1524	G	Sidechain
2	AB	1525	A	Sidechain
2	AB	1527	G	Sidechain
2	AB	153	U	Sidechain
2	AB	1530	G	Sidechain
2	AB	1532	A	Sidechain
2	AB	1534	U	Sidechain
2	AB	1537	G	Sidechain
2	AB	1538	G	Sidechain
2	AB	1540	G	Sidechain
2	AB	1542	U	Sidechain
2	AB	1545	A	Sidechain
2	AB	1546	G	Sidechain
2	AB	1547	C	Sidechain
2	AB	1548	A	Sidechain
2	AB	155	A	Sidechain
2	AB	1554	U	Sidechain
2	AB	1555	G	Sidechain
2	AB	1556	C	Sidechain
2	AB	1559	U	Sidechain
2	AB	1560	G	Sidechain
2	AB	1563	U	Sidechain
2	AB	1565	C	Sidechain
2	AB	1567	G	Sidechain
2	AB	1568	G	Sidechain
2	AB	1569	A	Sidechain
2	AB	157	C	Sidechain
2	AB	1572	A	Sidechain
2	AB	1573	G	Sidechain
2	AB	1575	C	Sidechain
2	AB	1576	U	Sidechain
2	AB	1577	C	Sidechain
2	AB	158	U	Sidechain
2	AB	1581	G	Sidechain
2	AB	1583	A	Sidechain
2	AB	1584	U	Sidechain
2	AB	1585	C	Sidechain
2	AB	1586	A	Sidechain
2	AB	1587	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1588	G	Sidechain
2	AB	1589	U	Sidechain
2	AB	159	G	Sidechain
2	AB	1593	A	Sidechain
2	AB	1595	C	Sidechain
2	AB	1597	A	Sidechain
2	AB	1598	A	Sidechain
2	AB	1599	U	Sidechain
2	AB	1600	C	Sidechain
2	AB	1601	G	Sidechain
2	AB	1602	U	Sidechain
2	AB	1604	C	Sidechain
2	AB	1605	C	Sidechain
2	AB	1608	A	Sidechain
2	AB	161	A	Sidechain
2	AB	1612	C	Sidechain
2	AB	1613	G	Sidechain
2	AB	1614	A	Sidechain
2	AB	1616	A	Sidechain
2	AB	1619	G	Sidechain
2	AB	1621	U	Sidechain
2	AB	1623	G	Sidechain
2	AB	1626	A	Sidechain
2	AB	1631	G	Sidechain
2	AB	1633	G	Sidechain
2	AB	1635	A	Sidechain
2	AB	1637	A	Sidechain
2	AB	1638	C	Sidechain
2	AB	164	C	Sidechain
2	AB	1640	A	Sidechain
2	AB	1641	A	Sidechain
2	AB	1642	G	Sidechain
2	AB	1644	C	Sidechain
2	AB	1645	G	Sidechain
2	AB	1646	C	Sidechain
2	AB	1648	U	Sidechain
2	AB	1649	G	Sidechain
2	AB	1651	G	Sidechain
2	AB	1653	G	Sidechain
2	AB	1655	A	Sidechain
2	AB	1656	C	Sidechain
2	AB	1657	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	166	U	Sidechain
2	AB	1660	G	Sidechain
2	AB	1664	A	Sidechain
2	AB	1665	A	Sidechain
2	AB	1666	G	Sidechain
2	AB	1667	G	Sidechain
2	AB	1671	U	Sidechain
2	AB	1672	A	Sidechain
2	AB	1673	G	Sidechain
2	AB	1675	C	Sidechain
2	AB	1676	A	Sidechain
2	AB	1677	A	Sidechain
2	AB	1678	A	Sidechain
2	AB	168	G	Sidechain
2	AB	1680	U	Sidechain
2	AB	1682	G	Sidechain
2	AB	1683	U	Sidechain
2	AB	1684	G	Sidechain
2	AB	1685	C	Sidechain
2	AB	1687	G	Sidechain
2	AB	1688	U	Sidechain
2	AB	1689	A	Sidechain
2	AB	169	G	Sidechain
2	AB	1690	A	Sidechain
2	AB	1692	U	Sidechain
2	AB	1694	C	Sidechain
2	AB	1695	G	Sidechain
2	AB	1696	G	Sidechain
2	AB	1699	G	Sidechain
2	AB	170	U	Sidechain
2	AB	1703	G	Sidechain
2	AB	1704	C	Sidechain
2	AB	1705	A	Sidechain
2	AB	1706	C	Sidechain
2	AB	1707	G	Sidechain
2	AB	1708	C	Sidechain
2	AB	1709	U	Sidechain
2	AB	171	U	Sidechain
2	AB	1710	G	Sidechain
2	AB	1712	U	Sidechain
2	AB	1715	G	Sidechain
2	AB	1717	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1719	G	Sidechain
2	AB	1720	U	Sidechain
2	AB	1722	A	Sidechain
2	AB	1723	G	Sidechain
2	AB	1724	G	Sidechain
2	AB	1727	C	Sidechain
2	AB	1728	C	Sidechain
2	AB	1729	U	Sidechain
2	AB	1733	G	Sidechain
2	AB	1734	G	Sidechain
2	AB	1736	U	Sidechain
2	AB	1737	G	Sidechain
2	AB	1738	G	Sidechain
2	AB	1740	G	Sidechain
2	AB	1741	C	Sidechain
2	AB	1742	U	Sidechain
2	AB	1745	A	Sidechain
2	AB	1750	G	Sidechain
2	AB	1751	U	Sidechain
2	AB	1752	C	Sidechain
2	AB	1753	G	Sidechain
2	AB	1754	A	Sidechain
2	AB	1756	G	Sidechain
2	AB	1757	A	Sidechain
2	AB	1758	U	Sidechain
2	AB	1759	A	Sidechain
2	AB	176	A	Sidechain
2	AB	1761	C	Sidechain
2	AB	1763	G	Sidechain
2	AB	1764	C	Sidechain
2	AB	1767	G	Sidechain
2	AB	1769	U	Sidechain
2	AB	177	G	Sidechain
2	AB	1771	C	Sidechain
2	AB	1772	A	Sidechain
2	AB	1774	C	Sidechain
2	AB	1775	U	Sidechain
2	AB	1778	U	Sidechain
2	AB	178	G	Sidechain
2	AB	1780	A	Sidechain
2	AB	1782	U	Sidechain
2	AB	1784	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1785	A	Sidechain
2	AB	1786	A	Sidechain
2	AB	1788	C	Sidechain
2	AB	1789	A	Sidechain
2	AB	179	C	Sidechain
2	AB	1792	G	Sidechain
2	AB	1793	C	Sidechain
2	AB	1797	G	Sidechain
2	AB	1799	G	Sidechain
2	AB	180	G	Sidechain
2	AB	1801	A	Sidechain
2	AB	1802	A	Sidechain
2	AB	1808	A	Sidechain
2	AB	1809	A	Sidechain
2	AB	181	A	Sidechain
2	AB	1810	A	Sidechain
2	AB	1814	G	Sidechain
2	AB	1815	A	Sidechain
2	AB	1817	G	Sidechain
2	AB	182	A	Sidechain
2	AB	1820	U	Sidechain
2	AB	1822	C	Sidechain
2	AB	1823	G	Sidechain
2	AB	1826	G	Sidechain
2	AB	1828	G	Sidechain
2	AB	1830	C	Sidechain
2	AB	1832	C	Sidechain
2	AB	1834	U	Sidechain
2	AB	1836	C	Sidechain
2	AB	1837	C	Sidechain
2	AB	1838	C	Sidechain
2	AB	1840	G	Sidechain
2	AB	1841	U	Sidechain
2	AB	1845	G	Sidechain
2	AB	1846	G	Sidechain
2	AB	1847	A	Sidechain
2	AB	1848	A	Sidechain
2	AB	1849	G	Sidechain
2	AB	1851	U	Sidechain
2	AB	1852	U	Sidechain
2	AB	1853	A	Sidechain
2	AB	1857	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1858	A	Sidechain
2	AB	186	G	Sidechain
2	AB	1861	G	Sidechain
2	AB	1862	G	Sidechain
2	AB	1863	G	Sidechain
2	AB	1864	U	Sidechain
2	AB	1866	A	Sidechain
2	AB	1869	G	Sidechain
2	AB	1873	G	Sidechain
2	AB	1874	C	Sidechain
2	AB	1875	G	Sidechain
2	AB	1877	A	Sidechain
2	AB	1879	C	Sidechain
2	AB	188	G	Sidechain
2	AB	1883	U	Sidechain
2	AB	1887	C	Sidechain
2	AB	1889	A	Sidechain
2	AB	1890	A	Sidechain
2	AB	1891	G	Sidechain
2	AB	1892	C	Sidechain
2	AB	1897	G	Sidechain
2	AB	1899	A	Sidechain
2	AB	190	A	Sidechain
2	AB	1900	A	Sidechain
2	AB	1904	G	Sidechain
2	AB	1906	G	Sidechain
2	AB	1907	G	Sidechain
2	AB	1909	C	Sidechain
2	AB	1910	G	Sidechain
2	AB	1912	A	Sidechain
2	AB	1913	A	Sidechain
2	AB	1914	C	Sidechain
2	AB	1916	A	Sidechain
2	AB	1919	A	Sidechain
2	AB	1920	C	Sidechain
2	AB	1921	G	Sidechain
2	AB	1927	A	Sidechain
2	AB	1928	A	Sidechain
2	AB	1929	G	Sidechain
2	AB	1930	G	Sidechain
2	AB	1934	C	Sidechain
2	AB	1935	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	1937	A	Sidechain
2	AB	1938	A	Sidechain
2	AB	194	G	Sidechain
2	AB	1940	U	Sidechain
2	AB	1941	C	Sidechain
2	AB	1945	G	Sidechain
2	AB	1946	U	Sidechain
2	AB	1947	C	Sidechain
2	AB	1948	G	Sidechain
2	AB	195	A	Sidechain
2	AB	1955	U	Sidechain
2	AB	1959	G	Sidechain
2	AB	196	A	Sidechain
2	AB	1960	A	Sidechain
2	AB	1961	C	Sidechain
2	AB	1963	U	Sidechain
2	AB	1966	A	Sidechain
2	AB	1971	U	Sidechain
2	AB	1973	G	Sidechain
2	AB	1974	C	Sidechain
2	AB	1976	U	Sidechain
2	AB	1979	U	Sidechain
2	AB	1980	G	Sidechain
2	AB	1982	U	Sidechain
2	AB	1983	G	Sidechain
2	AB	1984	G	Sidechain
2	AB	1985	C	Sidechain
2	AB	1987	A	Sidechain
2	AB	1988	G	Sidechain
2	AB	199	A	Sidechain
2	AB	1991	U	Sidechain
2	AB	1994	C	Sidechain
2	AB	1995	U	Sidechain
2	AB	1996	C	Sidechain
2	AB	2	G	Sidechain
2	AB	20	C	Sidechain
2	AB	2000	C	Sidechain
2	AB	2002	G	Sidechain
2	AB	2004	G	Sidechain
2	AB	2005	A	Sidechain
2	AB	2006	C	Sidechain
2	AB	2007	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2008	C	Sidechain
2	AB	2009	A	Sidechain
2	AB	2010	G	Sidechain
2	AB	2011	U	Sidechain
2	AB	2014	A	Sidechain
2	AB	2015	A	Sidechain
2	AB	2016	U	Sidechain
2	AB	2018	G	Sidechain
2	AB	2019	A	Sidechain
2	AB	202	U	Sidechain
2	AB	2022	U	Sidechain
2	AB	2026	U	Sidechain
2	AB	2027	G	Sidechain
2	AB	2028	U	Sidechain
2	AB	2029	G	Sidechain
2	AB	2033	A	Sidechain
2	AB	2034	U	Sidechain
2	AB	2035	G	Sidechain
2	AB	2038	G	Sidechain
2	AB	2039	U	Sidechain
2	AB	204	A	Sidechain
2	AB	2040	G	Sidechain
2	AB	2042	A	Sidechain
2	AB	2043	C	Sidechain
2	AB	2044	C	Sidechain
2	AB	2047	C	Sidechain
2	AB	2048	G	Sidechain
2	AB	2049	G	Sidechain
2	AB	205	G	Sidechain
2	AB	2053	G	Sidechain
2	AB	2054	A	Sidechain
2	AB	2055	C	Sidechain
2	AB	2056	G	Sidechain
2	AB	2058	A	Sidechain
2	AB	2059	A	Sidechain
2	AB	206	U	Sidechain
2	AB	2060	A	Sidechain
2	AB	2062	A	Sidechain
2	AB	2066	C	Sidechain
2	AB	2067	G	Sidechain
2	AB	2068	U	Sidechain
2	AB	207	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2072	C	Sidechain
2	AB	2075	U	Sidechain
2	AB	2076	U	Sidechain
2	AB	2079	U	Sidechain
2	AB	208	C	Sidechain
2	AB	2083	G	Sidechain
2	AB	2084	C	Sidechain
2	AB	2085	U	Sidechain
2	AB	2087	G	Sidechain
2	AB	2090	A	Sidechain
2	AB	2092	U	Sidechain
2	AB	2093	G	Sidechain
2	AB	2094	A	Sidechain
2	AB	2097	A	Sidechain
2	AB	2099	U	Sidechain
2	AB	2101	A	Sidechain
2	AB	2102	G	Sidechain
2	AB	2106	U	Sidechain
2	AB	2107	G	Sidechain
2	AB	2109	U	Sidechain
2	AB	2110	G	Sidechain
2	AB	2111	U	Sidechain
2	AB	2112	G	Sidechain
2	AB	2113	U	Sidechain
2	AB	2114	A	Sidechain
2	AB	2115	G	Sidechain
2	AB	2116	G	Sidechain
2	AB	212	G	Sidechain
2	AB	2120	G	Sidechain
2	AB	2122	U	Sidechain
2	AB	2123	G	Sidechain
2	AB	2124	G	Sidechain
2	AB	2125	G	Sidechain
2	AB	2126	A	Sidechain
2	AB	2127	G	Sidechain
2	AB	2128	G	Sidechain
2	AB	2129	C	Sidechain
2	AB	213	A	Sidechain
2	AB	2130	U	Sidechain
2	AB	2133	G	Sidechain
2	AB	2135	A	Sidechain
2	AB	2136	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2137	U	Sidechain
2	AB	2140	G	Sidechain
2	AB	2141	G	Sidechain
2	AB	2144	G	Sidechain
2	AB	2145	C	Sidechain
2	AB	2148	G	Sidechain
2	AB	2149	U	Sidechain
2	AB	215	G	Sidechain
2	AB	2153	C	Sidechain
2	AB	2154	A	Sidechain
2	AB	2155	U	Sidechain
2	AB	2157	G	Sidechain
2	AB	2159	G	Sidechain
2	AB	2160	C	Sidechain
2	AB	2161	C	Sidechain
2	AB	2164	C	Sidechain
2	AB	2165	C	Sidechain
2	AB	2166	U	Sidechain
2	AB	2167	U	Sidechain
2	AB	2168	G	Sidechain
2	AB	2169	A	Sidechain
2	AB	217	A	Sidechain
2	AB	2170	A	Sidechain
2	AB	2171	A	Sidechain
2	AB	2172	U	Sidechain
2	AB	2175	C	Sidechain
2	AB	2176	A	Sidechain
2	AB	2178	C	Sidechain
2	AB	2179	C	Sidechain
2	AB	2184	A	Sidechain
2	AB	2185	U	Sidechain
2	AB	2186	G	Sidechain
2	AB	2187	U	Sidechain
2	AB	219	A	Sidechain
2	AB	2190	G	Sidechain
2	AB	2191	A	Sidechain
2	AB	2194	U	Sidechain
2	AB	2196	C	Sidechain
2	AB	2197	U	Sidechain
2	AB	2198	A	Sidechain
2	AB	220	G	Sidechain
2	AB	2200	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2201	G	Sidechain
2	AB	2203	U	Sidechain
2	AB	2204	G	Sidechain
2	AB	2206	C	Sidechain
2	AB	2209	G	Sidechain
2	AB	2210	U	Sidechain
2	AB	2211	A	Sidechain
2	AB	2212	A	Sidechain
2	AB	2213	U	Sidechain
2	AB	2214	C	Sidechain
2	AB	2218	G	Sidechain
2	AB	222	A	Sidechain
2	AB	2220	U	Sidechain
2	AB	2221	G	Sidechain
2	AB	2222	C	Sidechain
2	AB	2227	A	Sidechain
2	AB	2228	G	Sidechain
2	AB	2230	G	Sidechain
2	AB	2233	U	Sidechain
2	AB	2234	G	Sidechain
2	AB	2235	G	Sidechain
2	AB	2237	G	Sidechain
2	AB	2238	G	Sidechain
2	AB	2239	G	Sidechain
2	AB	2241	A	Sidechain
2	AB	2243	U	Sidechain
2	AB	2244	U	Sidechain
2	AB	2245	U	Sidechain
2	AB	2246	G	Sidechain
2	AB	2249	U	Sidechain
2	AB	2250	G	Sidechain
2	AB	2252	G	Sidechain
2	AB	2253	G	Sidechain
2	AB	2254	C	Sidechain
2	AB	2255	G	Sidechain
2	AB	2256	G	Sidechain
2	AB	2258	C	Sidechain
2	AB	2259	U	Sidechain
2	AB	226	A	Sidechain
2	AB	2260	C	Sidechain
2	AB	2261	C	Sidechain
2	AB	2263	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2264	C	Sidechain
2	AB	2265	U	Sidechain
2	AB	2267	A	Sidechain
2	AB	2268	A	Sidechain
2	AB	2269	G	Sidechain
2	AB	2271	G	Sidechain
2	AB	2272	U	Sidechain
2	AB	2273	A	Sidechain
2	AB	2274	A	Sidechain
2	AB	2276	G	Sidechain
2	AB	228	C	Sidechain
2	AB	2281	A	Sidechain
2	AB	2282	G	Sidechain
2	AB	2285	C	Sidechain
2	AB	2286	G	Sidechain
2	AB	2288	A	Sidechain
2	AB	2292	U	Sidechain
2	AB	2294	G	Sidechain
2	AB	2295	C	Sidechain
2	AB	2296	U	Sidechain
2	AB	2297	A	Sidechain
2	AB	23	G	Sidechain
2	AB	230	G	Sidechain
2	AB	2301	C	Sidechain
2	AB	2302	U	Sidechain
2	AB	2303	G	Sidechain
2	AB	2304	G	Sidechain
2	AB	2305	U	Sidechain
2	AB	2306	C	Sidechain
2	AB	231	A	Sidechain
2	AB	2313	C	Sidechain
2	AB	2315	G	Sidechain
2	AB	2317	A	Sidechain
2	AB	2318	G	Sidechain
2	AB	2319	G	Sidechain
2	AB	232	G	Sidechain
2	AB	2321	U	Sidechain
2	AB	2322	A	Sidechain
2	AB	2323	G	Sidechain
2	AB	2324	U	Sidechain
2	AB	2325	G	Sidechain
2	AB	2326	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2327	A	Sidechain
2	AB	2328	A	Sidechain
2	AB	233	A	Sidechain
2	AB	2331	G	Sidechain
2	AB	2334	U	Sidechain
2	AB	2335	A	Sidechain
2	AB	2337	G	Sidechain
2	AB	2339	C	Sidechain
2	AB	234	U	Sidechain
2	AB	2340	A	Sidechain
2	AB	2342	C	Sidechain
2	AB	2343	U	Sidechain
2	AB	2344	U	Sidechain
2	AB	2345	G	Sidechain
2	AB	2346	A	Sidechain
2	AB	2347	C	Sidechain
2	AB	2348	U	Sidechain
2	AB	2349	G	Sidechain
2	AB	235	U	Sidechain
2	AB	2353	G	Sidechain
2	AB	2355	G	Sidechain
2	AB	2357	G	Sidechain
2	AB	2360	G	Sidechain
2	AB	2361	G	Sidechain
2	AB	2363	G	Sidechain
2	AB	2364	C	Sidechain
2	AB	2365	G	Sidechain
2	AB	2367	G	Sidechain
2	AB	2371	G	Sidechain
2	AB	2372	U	Sidechain
2	AB	2373	G	Sidechain
2	AB	2374	C	Sidechain
2	AB	2375	G	Sidechain
2	AB	2379	G	Sidechain
2	AB	2382	G	Sidechain
2	AB	2383	G	Sidechain
2	AB	2384	U	Sidechain
2	AB	2388	A	Sidechain
2	AB	2389	G	Sidechain
2	AB	2390	U	Sidechain
2	AB	2391	G	Sidechain
2	AB	2393	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2397	G	Sidechain
2	AB	2398	U	Sidechain
2	AB	24	G	Sidechain
2	AB	240	C	Sidechain
2	AB	2401	U	Sidechain
2	AB	2405	G	Sidechain
2	AB	2411	A	Sidechain
2	AB	2412	A	Sidechain
2	AB	2413	G	Sidechain
2	AB	2415	G	Sidechain
2	AB	2416	C	Sidechain
2	AB	2417	C	Sidechain
2	AB	242	G	Sidechain
2	AB	2420	C	Sidechain
2	AB	2421	G	Sidechain
2	AB	2423	U	Sidechain
2	AB	2425	A	Sidechain
2	AB	2426	A	Sidechain
2	AB	2428	G	Sidechain
2	AB	2430	A	Sidechain
2	AB	2431	U	Sidechain
2	AB	2432	A	Sidechain
2	AB	2433	A	Sidechain
2	AB	2434	A	Sidechain
2	AB	2435	A	Sidechain
2	AB	2436	G	Sidechain
2	AB	2439	A	Sidechain
2	AB	2440	C	Sidechain
2	AB	2441	U	Sidechain
2	AB	2442	C	Sidechain
2	AB	2444	G	Sidechain
2	AB	2446	G	Sidechain
2	AB	2453	A	Sidechain
2	AB	2455	G	Sidechain
2	AB	2456	C	Sidechain
2	AB	2458	G	Sidechain
2	AB	2459	A	Sidechain
2	AB	2461	A	Sidechain
2	AB	2462	C	Sidechain
2	AB	2465	C	Sidechain
2	AB	2467	C	Sidechain
2	AB	2469	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	247	G	Sidechain
2	AB	2471	A	Sidechain
2	AB	2472	G	Sidechain
2	AB	2474	U	Sidechain
2	AB	2475	C	Sidechain
2	AB	2476	A	Sidechain
2	AB	2477	U	Sidechain
2	AB	2479	U	Sidechain
2	AB	248	G	Sidechain
2	AB	2482	A	Sidechain
2	AB	2484	G	Sidechain
2	AB	2485	G	Sidechain
2	AB	2487	G	Sidechain
2	AB	2488	G	Sidechain
2	AB	2489	U	Sidechain
2	AB	2490	G	Sidechain
2	AB	2492	U	Sidechain
2	AB	2493	U	Sidechain
2	AB	2495	G	Sidechain
2	AB	25	U	Sidechain
2	AB	250	G	Sidechain
2	AB	2500	U	Sidechain
2	AB	2502	G	Sidechain
2	AB	2505	G	Sidechain
2	AB	2506	U	Sidechain
2	AB	2508	G	Sidechain
2	AB	251	A	Sidechain
2	AB	2511	U	Sidechain
2	AB	2512	C	Sidechain
2	AB	2513	A	Sidechain
2	AB	2515	C	Sidechain
2	AB	2518	A	Sidechain
2	AB	252	G	Sidechain
2	AB	2520	C	Sidechain
2	AB	2522	U	Sidechain
2	AB	2523	G	Sidechain
2	AB	2525	G	Sidechain
2	AB	2528	U	Sidechain
2	AB	2529	G	Sidechain
2	AB	2531	A	Sidechain
2	AB	2532	G	Sidechain
2	AB	2533	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2535	G	Sidechain
2	AB	2536	G	Sidechain
2	AB	2537	U	Sidechain
2	AB	254	G	Sidechain
2	AB	2541	A	Sidechain
2	AB	2545	G	Sidechain
2	AB	255	A	Sidechain
2	AB	2550	G	Sidechain
2	AB	2553	G	Sidechain
2	AB	2555	U	Sidechain
2	AB	2556	C	Sidechain
2	AB	2557	G	Sidechain
2	AB	2559	C	Sidechain
2	AB	256	A	Sidechain
2	AB	2561	U	Sidechain
2	AB	2562	U	Sidechain
2	AB	2563	U	Sidechain
2	AB	2566	A	Sidechain
2	AB	2567	G	Sidechain
2	AB	2568	U	Sidechain
2	AB	257	C	Sidechain
2	AB	2571	U	Sidechain
2	AB	2572	A	Sidechain
2	AB	2573	C	Sidechain
2	AB	2576	G	Sidechain
2	AB	2578	G	Sidechain
2	AB	2579	C	Sidechain
2	AB	258	G	Sidechain
2	AB	2581	G	Sidechain
2	AB	2582	G	Sidechain
2	AB	2583	G	Sidechain
2	AB	2584	U	Sidechain
2	AB	2585	U	Sidechain
2	AB	2586	U	Sidechain
2	AB	2588	G	Sidechain
2	AB	2591	C	Sidechain
2	AB	2592	G	Sidechain
2	AB	2593	U	Sidechain
2	AB	2595	G	Sidechain
2	AB	2596	U	Sidechain
2	AB	2598	A	Sidechain
2	AB	2599	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2600	A	Sidechain
2	AB	2601	C	Sidechain
2	AB	2607	G	Sidechain
2	AB	2608	G	Sidechain
2	AB	2609	U	Sidechain
2	AB	261	G	Sidechain
2	AB	2613	U	Sidechain
2	AB	2614	A	Sidechain
2	AB	2616	C	Sidechain
2	AB	2618	G	Sidechain
2	AB	262	A	Sidechain
2	AB	2621	G	Sidechain
2	AB	2623	G	Sidechain
2	AB	2624	G	Sidechain
2	AB	2625	G	Sidechain
2	AB	2627	G	Sidechain
2	AB	2628	C	Sidechain
2	AB	2629	U	Sidechain
2	AB	263	G	Sidechain
2	AB	2630	G	Sidechain
2	AB	2631	G	Sidechain
2	AB	2632	A	Sidechain
2	AB	2634	A	Sidechain
2	AB	2635	A	Sidechain
2	AB	2637	U	Sidechain
2	AB	2639	A	Sidechain
2	AB	2641	G	Sidechain
2	AB	2644	G	Sidechain
2	AB	2645	G	Sidechain
2	AB	2647	U	Sidechain
2	AB	2655	G	Sidechain
2	AB	2656	U	Sidechain
2	AB	2659	G	Sidechain
2	AB	2661	G	Sidechain
2	AB	2662	A	Sidechain
2	AB	2664	G	Sidechain
2	AB	2665	A	Sidechain
2	AB	2667	C	Sidechain
2	AB	2668	G	Sidechain
2	AB	2669	G	Sidechain
2	AB	2673	G	Sidechain
2	AB	2677	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	268	C	Sidechain
2	AB	2680	U	Sidechain
2	AB	2681	C	Sidechain
2	AB	2682	A	Sidechain
2	AB	2683	C	Sidechain
2	AB	2684	U	Sidechain
2	AB	2685	G	Sidechain
2	AB	2686	G	Sidechain
2	AB	2689	U	Sidechain
2	AB	269	C	Sidechain
2	AB	2690	U	Sidechain
2	AB	2692	G	Sidechain
2	AB	2694	G	Sidechain
2	AB	2698	U	Sidechain
2	AB	27	G	Sidechain
2	AB	270	A	Sidechain
2	AB	2702	G	Sidechain
2	AB	2703	C	Sidechain
2	AB	2704	C	Sidechain
2	AB	2705	A	Sidechain
2	AB	2708	G	Sidechain
2	AB	271	G	Sidechain
2	AB	2710	C	Sidechain
2	AB	2713	U	Sidechain
2	AB	2714	G	Sidechain
2	AB	2715	C	Sidechain
2	AB	2717	C	Sidechain
2	AB	2718	G	Sidechain
2	AB	2719	G	Sidechain
2	AB	2722	G	Sidechain
2	AB	2723	C	Sidechain
2	AB	2724	U	Sidechain
2	AB	2725	A	Sidechain
2	AB	2727	A	Sidechain
2	AB	2728	U	Sidechain
2	AB	2729	G	Sidechain
2	AB	273	G	Sidechain
2	AB	2731	G	Sidechain
2	AB	2732	G	Sidechain
2	AB	2733	A	Sidechain
2	AB	2735	G	Sidechain
2	AB	2737	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2739	U	Sidechain
2	AB	274	C	Sidechain
2	AB	2740	A	Sidechain
2	AB	2741	A	Sidechain
2	AB	2742	G	Sidechain
2	AB	2743	U	Sidechain
2	AB	2746	U	Sidechain
2	AB	2747	G	Sidechain
2	AB	2749	A	Sidechain
2	AB	2752	C	Sidechain
2	AB	2753	A	Sidechain
2	AB	2755	C	Sidechain
2	AB	2759	G	Sidechain
2	AB	276	U	Sidechain
2	AB	2760	C	Sidechain
2	AB	2764	A	Sidechain
2	AB	2765	A	Sidechain
2	AB	2766	A	Sidechain
2	AB	2767	C	Sidechain
2	AB	2768	U	Sidechain
2	AB	2769	U	Sidechain
2	AB	2772	C	Sidechain
2	AB	2774	C	Sidechain
2	AB	2775	G	Sidechain
2	AB	2777	G	Sidechain
2	AB	2779	U	Sidechain
2	AB	2781	A	Sidechain
2	AB	2782	G	Sidechain
2	AB	2783	U	Sidechain
2	AB	2787	C	Sidechain
2	AB	279	A	Sidechain
2	AB	2792	A	Sidechain
2	AB	2793	C	Sidechain
2	AB	2796	U	Sidechain
2	AB	2797	U	Sidechain
2	AB	2798	U	Sidechain
2	AB	2800	A	Sidechain
2	AB	2802	G	Sidechain
2	AB	2808	G	Sidechain
2	AB	2809	A	Sidechain
2	AB	281	C	Sidechain
2	AB	2810	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2811	G	Sidechain
2	AB	2812	G	Sidechain
2	AB	2813	A	Sidechain
2	AB	2814	A	Sidechain
2	AB	2815	C	Sidechain
2	AB	2816	G	Sidechain
2	AB	2818	U	Sidechain
2	AB	2819	G	Sidechain
2	AB	282	A	Sidechain
2	AB	2821	A	Sidechain
2	AB	2824	C	Sidechain
2	AB	2827	C	Sidechain
2	AB	2828	G	Sidechain
2	AB	283	G	Sidechain
2	AB	2830	C	Sidechain
2	AB	2831	G	Sidechain
2	AB	2832	U	Sidechain
2	AB	2834	G	Sidechain
2	AB	2836	U	Sidechain
2	AB	2838	G	Sidechain
2	AB	2839	G	Sidechain
2	AB	2843	G	Sidechain
2	AB	2844	G	Sidechain
2	AB	2845	U	Sidechain
2	AB	2846	G	Sidechain
2	AB	2848	G	Sidechain
2	AB	2849	U	Sidechain
2	AB	285	G	Sidechain
2	AB	2852	G	Sidechain
2	AB	2853	C	Sidechain
2	AB	2854	G	Sidechain
2	AB	2857	G	Sidechain
2	AB	2858	C	Sidechain
2	AB	2859	G	Sidechain
2	AB	286	U	Sidechain
2	AB	2860	A	Sidechain
2	AB	2866	U	Sidechain
2	AB	2868	A	Sidechain
2	AB	2869	G	Sidechain
2	AB	2871	U	Sidechain
2	AB	2874	C	Sidechain
2	AB	2875	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	2876	G	Sidechain
2	AB	2877	G	Sidechain
2	AB	2878	U	Sidechain
2	AB	2879	A	Sidechain
2	AB	288	U	Sidechain
2	AB	2880	C	Sidechain
2	AB	2881	U	Sidechain
2	AB	2885	G	Sidechain
2	AB	2886	A	Sidechain
2	AB	2887	A	Sidechain
2	AB	289	G	Sidechain
2	AB	2890	G	Sidechain
2	AB	2891	U	Sidechain
2	AB	2892	G	Sidechain
2	AB	2893	A	Sidechain
2	AB	2894	G	Sidechain
2	AB	2896	C	Sidechain
2	AB	2899	A	Sidechain
2	AB	29	U	Sidechain
2	AB	2902	C	Sidechain
2	AB	2903	U	Sidechain
2	AB	2904	U	Sidechain
2	AB	291	G	Sidechain
2	AB	293	U	Sidechain
2	AB	295	G	Sidechain
2	AB	296	U	Sidechain
2	AB	297	G	Sidechain
2	AB	299	A	Sidechain
2	AB	3	U	Sidechain
2	AB	30	G	Sidechain
2	AB	300	A	Sidechain
2	AB	301	G	Sidechain
2	AB	303	G	Sidechain
2	AB	307	G	Sidechain
2	AB	310	A	Sidechain
2	AB	311	A	Sidechain
2	AB	315	G	Sidechain
2	AB	316	C	Sidechain
2	AB	317	G	Sidechain
2	AB	318	C	Sidechain
2	AB	319	G	Sidechain
2	AB	320	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	322	A	Sidechain
2	AB	323	C	Sidechain
2	AB	324	A	Sidechain
2	AB	325	G	Sidechain
2	AB	327	G	Sidechain
2	AB	328	U	Sidechain
2	AB	330	A	Sidechain
2	AB	331	C	Sidechain
2	AB	333	G	Sidechain
2	AB	334	C	Sidechain
2	AB	335	C	Sidechain
2	AB	336	C	Sidechain
2	AB	337	C	Sidechain
2	AB	338	G	Sidechain
2	AB	34	U	Sidechain
2	AB	340	A	Sidechain
2	AB	341	C	Sidechain
2	AB	344	A	Sidechain
2	AB	345	A	Sidechain
2	AB	346	A	Sidechain
2	AB	347	A	Sidechain
2	AB	349	U	Sidechain
2	AB	35	G	Sidechain
2	AB	350	G	Sidechain
2	AB	352	A	Sidechain
2	AB	353	C	Sidechain
2	AB	356	G	Sidechain
2	AB	358	U	Sidechain
2	AB	359	G	Sidechain
2	AB	36	G	Sidechain
2	AB	361	G	Sidechain
2	AB	362	A	Sidechain
2	AB	364	C	Sidechain
2	AB	366	C	Sidechain
2	AB	367	G	Sidechain
2	AB	368	A	Sidechain
2	AB	369	U	Sidechain
2	AB	37	C	Sidechain
2	AB	370	G	Sidechain
2	AB	372	G	Sidechain
2	AB	373	U	Sidechain
2	AB	375	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	376	G	Sidechain
2	AB	377	G	Sidechain
2	AB	380	G	Sidechain
2	AB	381	G	Sidechain
2	AB	383	C	Sidechain
2	AB	385	C	Sidechain
2	AB	387	U	Sidechain
2	AB	388	G	Sidechain
2	AB	389	G	Sidechain
2	AB	39	G	Sidechain
2	AB	391	A	Sidechain
2	AB	392	U	Sidechain
2	AB	394	C	Sidechain
2	AB	395	U	Sidechain
2	AB	396	G	Sidechain
2	AB	4	U	Sidechain
2	AB	401	A	Sidechain
2	AB	402	A	Sidechain
2	AB	403	U	Sidechain
2	AB	404	A	Sidechain
2	AB	405	U	Sidechain
2	AB	407	G	Sidechain
2	AB	408	G	Sidechain
2	AB	409	G	Sidechain
2	AB	410	G	Sidechain
2	AB	412	A	Sidechain
2	AB	414	C	Sidechain
2	AB	415	A	Sidechain
2	AB	419	U	Sidechain
2	AB	421	C	Sidechain
2	AB	425	G	Sidechain
2	AB	426	C	Sidechain
2	AB	428	A	Sidechain
2	AB	43	G	Sidechain
2	AB	430	A	Sidechain
2	AB	432	A	Sidechain
2	AB	435	C	Sidechain
2	AB	437	U	Sidechain
2	AB	438	G	Sidechain
2	AB	439	A	Sidechain
2	AB	44	A	Sidechain
2	AB	440	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	441	U	Sidechain
2	AB	442	G	Sidechain
2	AB	443	A	Sidechain
2	AB	448	U	Sidechain
2	AB	45	G	Sidechain
2	AB	450	G	Sidechain
2	AB	451	U	Sidechain
2	AB	453	A	Sidechain
2	AB	454	A	Sidechain
2	AB	455	C	Sidechain
2	AB	457	A	Sidechain
2	AB	458	G	Sidechain
2	AB	459	U	Sidechain
2	AB	46	G	Sidechain
2	AB	460	A	Sidechain
2	AB	462	C	Sidechain
2	AB	463	G	Sidechain
2	AB	464	U	Sidechain
2	AB	465	G	Sidechain
2	AB	466	A	Sidechain
2	AB	467	G	Sidechain
2	AB	468	G	Sidechain
2	AB	469	G	Sidechain
2	AB	472	A	Sidechain
2	AB	474	G	Sidechain
2	AB	475	C	Sidechain
2	AB	477	A	Sidechain
2	AB	48	G	Sidechain
2	AB	480	A	Sidechain
2	AB	481	G	Sidechain
2	AB	486	C	Sidechain
2	AB	487	C	Sidechain
2	AB	488	G	Sidechain
2	AB	489	G	Sidechain
2	AB	49	A	Sidechain
2	AB	491	G	Sidechain
2	AB	494	G	Sidechain
2	AB	496	G	Sidechain
2	AB	498	G	Sidechain
2	AB	499	U	Sidechain
2	AB	501	A	Sidechain
2	AB	503	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	505	A	Sidechain
2	AB	506	G	Sidechain
2	AB	512	G	Sidechain
2	AB	514	A	Sidechain
2	AB	515	A	Sidechain
2	AB	516	C	Sidechain
2	AB	518	G	Sidechain
2	AB	520	G	Sidechain
2	AB	521	U	Sidechain
2	AB	524	G	Sidechain
2	AB	528	A	Sidechain
2	AB	53	A	Sidechain
2	AB	530	G	Sidechain
2	AB	531	C	Sidechain
2	AB	534	U	Sidechain
2	AB	535	G	Sidechain
2	AB	536	G	Sidechain
2	AB	537	G	Sidechain
2	AB	540	C	Sidechain
2	AB	541	A	Sidechain
2	AB	543	G	Sidechain
2	AB	546	U	Sidechain
2	AB	548	G	Sidechain
2	AB	549	G	Sidechain
2	AB	55	G	Sidechain
2	AB	550	C	Sidechain
2	AB	551	G	Sidechain
2	AB	553	G	Sidechain
2	AB	555	G	Sidechain
2	AB	558	U	Sidechain
2	AB	56	A	Sidechain
2	AB	561	G	Sidechain
2	AB	562	U	Sidechain
2	AB	563	A	Sidechain
2	AB	564	C	Sidechain
2	AB	566	U	Sidechain
2	AB	567	U	Sidechain
2	AB	568	U	Sidechain
2	AB	569	U	Sidechain
2	AB	570	G	Sidechain
2	AB	573	U	Sidechain
2	AB	574	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	576	U	Sidechain
2	AB	577	G	Sidechain
2	AB	578	G	Sidechain
2	AB	579	G	Sidechain
2	AB	58	G	Sidechain
2	AB	580	U	Sidechain
2	AB	581	C	Sidechain
2	AB	582	A	Sidechain
2	AB	583	G	Sidechain
2	AB	585	G	Sidechain
2	AB	586	A	Sidechain
2	AB	588	U	Sidechain
2	AB	589	U	Sidechain
2	AB	590	A	Sidechain
2	AB	592	A	Sidechain
2	AB	593	U	Sidechain
2	AB	594	U	Sidechain
2	AB	595	C	Sidechain
2	AB	596	U	Sidechain
2	AB	597	G	Sidechain
2	AB	60	G	Sidechain
2	AB	600	G	Sidechain
2	AB	601	C	Sidechain
2	AB	605	G	Sidechain
2	AB	606	U	Sidechain
2	AB	608	A	Sidechain
2	AB	612	G	Sidechain
2	AB	613	A	Sidechain
2	AB	615	U	Sidechain
2	AB	618	G	Sidechain
2	AB	619	G	Sidechain
2	AB	62	U	Sidechain
2	AB	621	A	Sidechain
2	AB	622	G	Sidechain
2	AB	628	G	Sidechain
2	AB	629	G	Sidechain
2	AB	63	A	Sidechain
2	AB	630	G	Sidechain
2	AB	631	A	Sidechain
2	AB	632	A	Sidechain
2	AB	636	G	Sidechain
2	AB	641	U	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	646	U	Sidechain
2	AB	647	G	Sidechain
2	AB	648	G	Sidechain
2	AB	650	C	Sidechain
2	AB	651	G	Sidechain
2	AB	652	U	Sidechain
2	AB	653	U	Sidechain
2	AB	655	A	Sidechain
2	AB	656	G	Sidechain
2	AB	660	C	Sidechain
2	AB	661	A	Sidechain
2	AB	662	G	Sidechain
2	AB	663	G	Sidechain
2	AB	664	G	Sidechain
2	AB	665	U	Sidechain
2	AB	666	A	Sidechain
2	AB	668	A	Sidechain
2	AB	669	G	Sidechain
2	AB	67	U	Sidechain
2	AB	670	A	Sidechain
2	AB	672	C	Sidechain
2	AB	676	A	Sidechain
2	AB	677	A	Sidechain
2	AB	679	C	Sidechain
2	AB	68	G	Sidechain
2	AB	684	G	Sidechain
2	AB	685	A	Sidechain
2	AB	690	G	Sidechain
2	AB	692	C	Sidechain
2	AB	695	G	Sidechain
2	AB	697	G	Sidechain
2	AB	699	A	Sidechain
2	AB	70	G	Sidechain
2	AB	700	G	Sidechain
2	AB	702	U	Sidechain
2	AB	703	U	Sidechain
2	AB	704	G	Sidechain
2	AB	705	A	Sidechain
2	AB	707	G	Sidechain
2	AB	708	G	Sidechain
2	AB	709	U	Sidechain
2	AB	711	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	712	G	Sidechain
2	AB	713	G	Sidechain
2	AB	715	A	Sidechain
2	AB	716	A	Sidechain
2	AB	717	C	Sidechain
2	AB	719	C	Sidechain
2	AB	720	U	Sidechain
2	AB	721	A	Sidechain
2	AB	722	A	Sidechain
2	AB	727	A	Sidechain
2	AB	729	G	Sidechain
2	AB	73	A	Sidechain
2	AB	732	C	Sidechain
2	AB	735	A	Sidechain
2	AB	738	G	Sidechain
2	AB	74	A	Sidechain
2	AB	740	C	Sidechain
2	AB	741	U	Sidechain
2	AB	743	A	Sidechain
2	AB	744	U	Sidechain
2	AB	750	A	Sidechain
2	AB	751	A	Sidechain
2	AB	752	A	Sidechain
2	AB	757	G	Sidechain
2	AB	759	G	Sidechain
2	AB	760	G	Sidechain
2	AB	764	A	Sidechain
2	AB	766	U	Sidechain
2	AB	767	U	Sidechain
2	AB	768	G	Sidechain
2	AB	77	G	Sidechain
2	AB	771	G	Sidechain
2	AB	773	U	Sidechain
2	AB	774	G	Sidechain
2	AB	776	G	Sidechain
2	AB	777	G	Sidechain
2	AB	778	G	Sidechain
2	AB	78	U	Sidechain
2	AB	781	A	Sidechain
2	AB	784	G	Sidechain
2	AB	785	G	Sidechain
2	AB	787	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	788	A	Sidechain
2	AB	79	C	Sidechain
2	AB	792	A	Sidechain
2	AB	794	A	Sidechain
2	AB	796	C	Sidechain
2	AB	798	G	Sidechain
2	AB	799	G	Sidechain
2	AB	800	A	Sidechain
2	AB	801	G	Sidechain
2	AB	802	A	Sidechain
2	AB	803	U	Sidechain
2	AB	804	A	Sidechain
2	AB	805	G	Sidechain
2	AB	806	C	Sidechain
2	AB	807	U	Sidechain
2	AB	808	G	Sidechain
2	AB	810	U	Sidechain
2	AB	811	U	Sidechain
2	AB	812	C	Sidechain
2	AB	814	C	Sidechain
2	AB	818	G	Sidechain
2	AB	820	A	Sidechain
2	AB	821	A	Sidechain
2	AB	822	G	Sidechain
2	AB	824	U	Sidechain
2	AB	826	U	Sidechain
2	AB	828	U	Sidechain
2	AB	829	A	Sidechain
2	AB	83	A	Sidechain
2	AB	830	G	Sidechain
2	AB	832	U	Sidechain
2	AB	834	G	Sidechain
2	AB	835	C	Sidechain
2	AB	837	C	Sidechain
2	AB	838	C	Sidechain
2	AB	839	U	Sidechain
2	AB	84	A	Sidechain
2	AB	840	C	Sidechain
2	AB	841	G	Sidechain
2	AB	845	A	Sidechain
2	AB	847	U	Sidechain
2	AB	849	A	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	852	U	Sidechain
2	AB	853	C	Sidechain
2	AB	856	G	Sidechain
2	AB	857	G	Sidechain
2	AB	859	G	Sidechain
2	AB	86	G	Sidechain
2	AB	860	U	Sidechain
2	AB	864	G	Sidechain
2	AB	869	G	Sidechain
2	AB	87	U	Sidechain
2	AB	870	U	Sidechain
2	AB	871	U	Sidechain
2	AB	875	G	Sidechain
2	AB	876	C	Sidechain
2	AB	877	A	Sidechain
2	AB	882	G	Sidechain
2	AB	883	G	Sidechain
2	AB	884	U	Sidechain
2	AB	885	C	Sidechain
2	AB	886	A	Sidechain
2	AB	887	U	Sidechain
2	AB	888	C	Sidechain
2	AB	890	C	Sidechain
2	AB	891	G	Sidechain
2	AB	894	U	Sidechain
2	AB	899	A	Sidechain
2	AB	90	U	Sidechain
2	AB	901	C	Sidechain
2	AB	902	C	Sidechain
2	AB	904	G	Sidechain
2	AB	906	U	Sidechain
2	AB	908	C	Sidechain
2	AB	909	A	Sidechain
2	AB	910	A	Sidechain
2	AB	911	A	Sidechain
2	AB	912	C	Sidechain
2	AB	913	U	Sidechain
2	AB	918	A	Sidechain
2	AB	922	C	Sidechain
2	AB	923	G	Sidechain
2	AB	924	G	Sidechain
2	AB	926	G	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	927	A	Sidechain
2	AB	928	A	Sidechain
2	AB	931	U	Sidechain
2	AB	932	U	Sidechain
2	AB	934	U	Sidechain
2	AB	935	C	Sidechain
2	AB	936	A	Sidechain
2	AB	937	C	Sidechain
2	AB	938	G	Sidechain
2	AB	939	G	Sidechain
2	AB	94	A	Sidechain
2	AB	940	G	Sidechain
2	AB	943	A	Sidechain
2	AB	944	C	Sidechain
2	AB	947	A	Sidechain
2	AB	948	C	Sidechain
2	AB	949	G	Sidechain
2	AB	95	A	Sidechain
2	AB	950	G	Sidechain
2	AB	953	G	Sidechain
2	AB	954	G	Sidechain
2	AB	958	U	Sidechain
2	AB	959	A	Sidechain
2	AB	96	C	Sidechain
2	AB	962	G	Sidechain
2	AB	963	U	Sidechain
2	AB	964	C	Sidechain
2	AB	965	C	Sidechain
2	AB	966	G	Sidechain
2	AB	968	C	Sidechain
2	AB	97	C	Sidechain
2	AB	970	U	Sidechain
2	AB	975	A	Sidechain
2	AB	976	G	Sidechain
2	AB	977	G	Sidechain
2	AB	979	A	Sidechain
2	AB	98	G	Sidechain
2	AB	980	A	Sidechain
2	AB	981	A	Sidechain
2	AB	983	A	Sidechain
2	AB	984	A	Sidechain
2	AB	985	C	Sidechain

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Mol	Chain	Res	Type	Group
2	AB	986	C	Sidechain
2	AB	987	C	Sidechain
2	AB	989	G	Sidechain
2	AB	99	U	Sidechain
2	AB	993	G	Sidechain
2	AB	995	C	Sidechain
2	AB	997	G	Sidechain
3	AC	12	ARG	Sidechain
3	AC	134	ARG	Mainchain
3	AC	208	TYR	Sidechain
4	AD	101	ARG	Peptide
4	AD	128	THR	Mainchain
4	AD	157	ALA	Mainchain
4	AD	170	TYR	Sidechain
4	AD	199	HIS	Sidechain
4	AD	240	GLY	Peptide
4	AD	35	LYS	Mainchain
4	AD	5	CYS	Mainchain,Peptide
4	AD	51	ARG	Sidechain
4	AD	82	TYR	Sidechain
5	AE	113	SER	Peptide
5	AE	114	LYS	Peptide
5	AE	119	ALA	Peptide
5	AE	156	PHE	Sidechain
5	AE	40	LEU	Peptide
5	AE	77	ARG	Sidechain
5	AE	82	PHE	Sidechain
6	AF	70	SER	Peptide
6	AF	79	ARG	Sidechain
7	AG	102	LEU	Peptide
8	AH	29	ASN	Peptide
8	AH	69	ALA	Mainchain
9	AI	132	PHE	Sidechain
9	AI	23	ALA	Mainchain
9	AI	70	GLU	Peptide
10	AJ	112	PHE	Sidechain
10	AJ	124	ARG	Sidechain
10	AJ	130	THR	Mainchain,Peptide
10	AJ	152	ARG	Sidechain
10	AJ	30	ARG	Sidechain
10	AJ	50	TYR	Sidechain
10	AJ	92	ALA	Mainchain

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Mol	Chain	Res	Type	Group
11	AK	59	THR	Mainchain
12	AL	46	PRO	Peptide
12	AL	53	TYR	Sidechain
12	AL	98	GLU	Peptide
13	AM	17	ARG	Sidechain
13	AM	29	HIS	Sidechain
13	AM	70	ARG	Sidechain
14	AN	45	GLY	Peptide
14	AN	58	TYR	Sidechain
15	AO	18	ARG	Sidechain
15	AO	40	ARG	Sidechain
15	AO	91	TYR	Sidechain
16	AP	112	TYR	Sidechain
16	AP	125	ALA	Mainchain
16	AP	63	ARG	Sidechain
16	AP	7	GLY	Peptide
16	AP	80	PHE	Sidechain
17	AQ	10	ARG	Sidechain
17	AQ	13	ARG	Sidechain
17	AQ	15	ARG	Sidechain
17	AQ	16	ARG	Sidechain
18	AR	100	ARG	Sidechain
18	AR	19	PHE	Sidechain
18	AR	20	ARG	Sidechain
18	AR	71	ARG	Sidechain
18	AR	96	LEU	Mainchain
18	AR	98	TYR	Sidechain
19	AS	29	ARG	Sidechain
19	AS	56	PHE	Sidechain
19	AS	75	TYR	Sidechain
20	AT	12	HIS	Sidechain
20	AT	78	ARG	Sidechain
20	AT	82	HIS	Sidechain
20	AT	83	TYR	Sidechain
20	AT	90	ARG	Sidechain
21	AU	4	ILE	Peptide
21	AU	57	ASN	Mainchain
21	AU	6	LYS	Peptide
21	AU	8	ARG	Sidechain
21	AU	99	ARG	Sidechain
22	AV	49	LYS	Peptide
24	AX	26	PHE	Sidechain

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Mol	Chain	Res	Type	Group
24	AX	31	TYR	Sidechain
24	AX	44	HIS	Sidechain
24	AX	91	PHE	Sidechain
24	AX	93	ARG	Sidechain
25	AY	12	GLY	Peptide
25	AY	13	ARG	Peptide
25	AY	14	ASP	Peptide
25	AY	16	GLU	Peptide
26	AZ	1	SER	Peptide
26	AZ	28	PHE	Sidechain
35	BA	10	A	Sidechain
35	BA	1002	G	Sidechain
35	BA	1003	G	Sidechain
35	BA	1004	A	Sidechain
35	BA	101	A	Sidechain
35	BA	1012	A	Sidechain
35	BA	1013	G	Sidechain
35	BA	1014	A	Sidechain
35	BA	1016	A	Sidechain
35	BA	1018	G	Sidechain
35	BA	102	G	Sidechain
35	BA	1022	A	Sidechain
35	BA	1024	G	Sidechain
35	BA	103	U	Sidechain
35	BA	1033	G	Sidechain
35	BA	1035	A	Sidechain
35	BA	1039	G	Sidechain
35	BA	104	G	Sidechain
35	BA	1041	G	Sidechain
35	BA	1042	A	Sidechain
35	BA	1043	G	Sidechain
35	BA	1045	C	Sidechain
35	BA	1046	A	Sidechain
35	BA	1048	G	Sidechain
35	BA	105	G	Sidechain
35	BA	1058	G	Sidechain
35	BA	1060	U	Sidechain
35	BA	1063	C	Sidechain
35	BA	1064	G	Sidechain
35	BA	1067	A	Sidechain
35	BA	1068	G	Sidechain
35	BA	107	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1070	U	Sidechain
35	BA	1071	C	Sidechain
35	BA	1072	G	Sidechain
35	BA	1073	U	Sidechain
35	BA	1077	G	Sidechain
35	BA	1079	G	Sidechain
35	BA	108	G	Sidechain
35	BA	1081	A	Sidechain
35	BA	1082	A	Sidechain
35	BA	1083	U	Sidechain
35	BA	1084	G	Sidechain
35	BA	1085	U	Sidechain
35	BA	1087	G	Sidechain
35	BA	1088	G	Sidechain
35	BA	1091	U	Sidechain
35	BA	1092	A	Sidechain
35	BA	1093	A	Sidechain
35	BA	1094	G	Sidechain
35	BA	1095	U	Sidechain
35	BA	1096	C	Sidechain
35	BA	1099	G	Sidechain
35	BA	1101	A	Sidechain
35	BA	1104	G	Sidechain
35	BA	1105	A	Sidechain
35	BA	1106	G	Sidechain
35	BA	1107	C	Sidechain
35	BA	1108	G	Sidechain
35	BA	1109	C	Sidechain
35	BA	111	G	Sidechain
35	BA	1110	A	Sidechain
35	BA	1113	C	Sidechain
35	BA	1114	C	Sidechain
35	BA	1115	U	Sidechain
35	BA	1116	U	Sidechain
35	BA	1117	A	Sidechain
35	BA	1119	C	Sidechain
35	BA	112	G	Sidechain
35	BA	1120	C	Sidechain
35	BA	1121	U	Sidechain
35	BA	1122	U	Sidechain
35	BA	1123	U	Sidechain
35	BA	1124	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1125	U	Sidechain
35	BA	1126	U	Sidechain
35	BA	1129	C	Sidechain
35	BA	113	G	Sidechain
35	BA	1130	A	Sidechain
35	BA	1132	C	Sidechain
35	BA	1133	G	Sidechain
35	BA	1139	G	Sidechain
35	BA	114	U	Sidechain
35	BA	1140	C	Sidechain
35	BA	1141	C	Sidechain
35	BA	1143	G	Sidechain
35	BA	1145	A	Sidechain
35	BA	1146	A	Sidechain
35	BA	1148	U	Sidechain
35	BA	115	G	Sidechain
35	BA	1155	A	Sidechain
35	BA	1159	U	Sidechain
35	BA	116	A	Sidechain
35	BA	1162	C	Sidechain
35	BA	1164	G	Sidechain
35	BA	1165	U	Sidechain
35	BA	1166	G	Sidechain
35	BA	1168	U	Sidechain
35	BA	1169	A	Sidechain
35	BA	117	G	Sidechain
35	BA	1170	A	Sidechain
35	BA	1174	G	Sidechain
35	BA	1175	G	Sidechain
35	BA	1177	G	Sidechain
35	BA	118	U	Sidechain
35	BA	1181	G	Sidechain
35	BA	1183	U	Sidechain
35	BA	1185	G	Sidechain
35	BA	1188	A	Sidechain
35	BA	1189	U	Sidechain
35	BA	119	A	Sidechain
35	BA	1191	A	Sidechain
35	BA	1195	C	Sidechain
35	BA	1196	A	Sidechain
35	BA	1198	G	Sidechain
35	BA	12	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1201	A	Sidechain
35	BA	1202	U	Sidechain
35	BA	1203	C	Sidechain
35	BA	1204	A	Sidechain
35	BA	1206	G	Sidechain
35	BA	1208	C	Sidechain
35	BA	1209	C	Sidechain
35	BA	1211	U	Sidechain
35	BA	1212	U	Sidechain
35	BA	1215	G	Sidechain
35	BA	1216	A	Sidechain
35	BA	1218	C	Sidechain
35	BA	122	G	Sidechain
35	BA	1220	G	Sidechain
35	BA	1221	G	Sidechain
35	BA	1223	C	Sidechain
35	BA	1224	U	Sidechain
35	BA	1227	A	Sidechain
35	BA	1228	C	Sidechain
35	BA	1230	C	Sidechain
35	BA	1231	G	Sidechain
35	BA	1232	U	Sidechain
35	BA	1234	C	Sidechain
35	BA	1237	C	Sidechain
35	BA	1238	A	Sidechain
35	BA	1240	U	Sidechain
35	BA	1241	G	Sidechain
35	BA	1242	G	Sidechain
35	BA	1244	G	Sidechain
35	BA	1249	C	Sidechain
35	BA	1250	A	Sidechain
35	BA	1254	A	Sidechain
35	BA	1255	G	Sidechain
35	BA	1257	A	Sidechain
35	BA	1259	C	Sidechain
35	BA	1260	G	Sidechain
35	BA	1261	A	Sidechain
35	BA	1265	C	Sidechain
35	BA	1266	G	Sidechain
35	BA	1268	G	Sidechain
35	BA	1269	A	Sidechain
35	BA	1270	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1272	G	Sidechain
35	BA	1274	A	Sidechain
35	BA	1275	A	Sidechain
35	BA	1278	G	Sidechain
35	BA	1279	G	Sidechain
35	BA	128	G	Sidechain
35	BA	1280	A	Sidechain
35	BA	1283	U	Sidechain
35	BA	1286	U	Sidechain
35	BA	1287	A	Sidechain
35	BA	1289	A	Sidechain
35	BA	129	A	Sidechain
35	BA	1290	G	Sidechain
35	BA	1291	U	Sidechain
35	BA	1292	G	Sidechain
35	BA	1294	G	Sidechain
35	BA	1295	U	Sidechain
35	BA	1297	G	Sidechain
35	BA	1298	U	Sidechain
35	BA	1299	A	Sidechain
35	BA	13	U	Sidechain
35	BA	1300	G	Sidechain
35	BA	1302	C	Sidechain
35	BA	1304	G	Sidechain
35	BA	1305	G	Sidechain
35	BA	1306	A	Sidechain
35	BA	1309	G	Sidechain
35	BA	1311	A	Sidechain
35	BA	1313	U	Sidechain
35	BA	1314	C	Sidechain
35	BA	1316	G	Sidechain
35	BA	1317	C	Sidechain
35	BA	1320	C	Sidechain
35	BA	1321	U	Sidechain
35	BA	1322	C	Sidechain
35	BA	1326	U	Sidechain
35	BA	1327	C	Sidechain
35	BA	1328	C	Sidechain
35	BA	133	U	Sidechain
35	BA	1330	U	Sidechain
35	BA	1331	G	Sidechain
35	BA	1333	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1336	C	Sidechain
35	BA	1337	G	Sidechain
35	BA	1341	U	Sidechain
35	BA	1343	G	Sidechain
35	BA	1345	U	Sidechain
35	BA	1346	A	Sidechain
35	BA	1348	U	Sidechain
35	BA	1349	A	Sidechain
35	BA	135	C	Sidechain
35	BA	1350	A	Sidechain
35	BA	1352	C	Sidechain
35	BA	1353	G	Sidechain
35	BA	1354	U	Sidechain
35	BA	1358	U	Sidechain
35	BA	1360	A	Sidechain
35	BA	1361	G	Sidechain
35	BA	1365	G	Sidechain
35	BA	137	U	Sidechain
35	BA	1370	G	Sidechain
35	BA	1371	G	Sidechain
35	BA	1372	U	Sidechain
35	BA	1373	G	Sidechain
35	BA	1374	A	Sidechain
35	BA	1375	A	Sidechain
35	BA	1377	A	Sidechain
35	BA	1379	G	Sidechain
35	BA	138	G	Sidechain
35	BA	1380	U	Sidechain
35	BA	1381	U	Sidechain
35	BA	1383	C	Sidechain
35	BA	1384	C	Sidechain
35	BA	1387	G	Sidechain
35	BA	1392	G	Sidechain
35	BA	1393	U	Sidechain
35	BA	1397	C	Sidechain
35	BA	1398	A	Sidechain
35	BA	1399	C	Sidechain
35	BA	140	U	Sidechain
35	BA	1400	C	Sidechain
35	BA	1401	G	Sidechain
35	BA	1404	C	Sidechain
35	BA	1405	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1409	C	Sidechain
35	BA	141	G	Sidechain
35	BA	1410	A	Sidechain
35	BA	1412	C	Sidechain
35	BA	1413	A	Sidechain
35	BA	1415	G	Sidechain
35	BA	1417	G	Sidechain
35	BA	1418	A	Sidechain
35	BA	1419	G	Sidechain
35	BA	142	G	Sidechain
35	BA	1421	G	Sidechain
35	BA	1423	G	Sidechain
35	BA	1424	U	Sidechain
35	BA	1425	U	Sidechain
35	BA	1426	G	Sidechain
35	BA	1428	A	Sidechain
35	BA	1429	A	Sidechain
35	BA	143	A	Sidechain
35	BA	1430	A	Sidechain
35	BA	1431	A	Sidechain
35	BA	1432	G	Sidechain
35	BA	1433	A	Sidechain
35	BA	1435	G	Sidechain
35	BA	1436	U	Sidechain
35	BA	1438	G	Sidechain
35	BA	1439	G	Sidechain
35	BA	1440	U	Sidechain
35	BA	1441	A	Sidechain
35	BA	1442	G	Sidechain
35	BA	1443	C	Sidechain
35	BA	1444	U	Sidechain
35	BA	1445	U	Sidechain
35	BA	1446	A	Sidechain
35	BA	1449	C	Sidechain
35	BA	145	G	Sidechain
35	BA	1450	U	Sidechain
35	BA	1451	U	Sidechain
35	BA	1452	C	Sidechain
35	BA	1453	G	Sidechain
35	BA	1454	G	Sidechain
35	BA	1455	G	Sidechain
35	BA	1456	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1458	G	Sidechain
35	BA	1459	G	Sidechain
35	BA	146	G	Sidechain
35	BA	1461	G	Sidechain
35	BA	1464	U	Sidechain
35	BA	1469	C	Sidechain
35	BA	147	G	Sidechain
35	BA	1470	U	Sidechain
35	BA	1473	G	Sidechain
35	BA	1474	U	Sidechain
35	BA	1476	A	Sidechain
35	BA	1477	U	Sidechain
35	BA	1478	U	Sidechain
35	BA	1479	C	Sidechain
35	BA	148	G	Sidechain
35	BA	1482	G	Sidechain
35	BA	1485	U	Sidechain
35	BA	1486	G	Sidechain
35	BA	1487	G	Sidechain
35	BA	1489	G	Sidechain
35	BA	1492	A	Sidechain
35	BA	1493	A	Sidechain
35	BA	1497	G	Sidechain
35	BA	1499	A	Sidechain
35	BA	15	G	Sidechain
35	BA	1503	A	Sidechain
35	BA	1505	G	Sidechain
35	BA	1506	U	Sidechain
35	BA	1507	A	Sidechain
35	BA	1511	G	Sidechain
35	BA	1512	U	Sidechain
35	BA	1513	A	Sidechain
35	BA	1514	G	Sidechain
35	BA	152	A	Sidechain
35	BA	1521	C	Sidechain
35	BA	1522	U	Sidechain
35	BA	1523	G	Sidechain
35	BA	1524	C	Sidechain
35	BA	1525	G	Sidechain
35	BA	1529	G	Sidechain
35	BA	1532	U	Sidechain
35	BA	1535	C	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	1536	C	Sidechain
35	BA	1537	U	Sidechain
35	BA	1538	C	Sidechain
35	BA	1539	C	Sidechain
35	BA	1540	U	Sidechain
35	BA	156	C	Sidechain
35	BA	157	U	Sidechain
35	BA	158	G	Sidechain
35	BA	159	G	Sidechain
35	BA	16	A	Sidechain
35	BA	160	A	Sidechain
35	BA	163	C	Sidechain
35	BA	166	U	Sidechain
35	BA	167	A	Sidechain
35	BA	168	G	Sidechain
35	BA	169	C	Sidechain
35	BA	17	U	Sidechain
35	BA	171	A	Sidechain
35	BA	173	U	Sidechain
35	BA	176	C	Sidechain
35	BA	179	A	Sidechain
35	BA	183	C	Sidechain
35	BA	185	U	Sidechain
35	BA	187	G	Sidechain
35	BA	188	C	Sidechain
35	BA	189	A	Sidechain
35	BA	190	A	Sidechain
35	BA	192	A	Sidechain
35	BA	196	A	Sidechain
35	BA	197	A	Sidechain
35	BA	2	A	Sidechain
35	BA	20	U	Sidechain
35	BA	202	G	Sidechain
35	BA	203	G	Sidechain
35	BA	204	G	Sidechain
35	BA	207	C	Sidechain
35	BA	208	U	Sidechain
35	BA	21	G	Sidechain
35	BA	211	G	Sidechain
35	BA	213	G	Sidechain
35	BA	214	C	Sidechain
35	BA	22	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	220	G	Sidechain
35	BA	221	C	Sidechain
35	BA	224	U	Sidechain
35	BA	226	G	Sidechain
35	BA	227	G	Sidechain
35	BA	229	U	Sidechain
35	BA	23	C	Sidechain
35	BA	230	G	Sidechain
35	BA	232	G	Sidechain
35	BA	233	C	Sidechain
35	BA	235	C	Sidechain
35	BA	238	A	Sidechain
35	BA	24	U	Sidechain
35	BA	240	G	Sidechain
35	BA	244	U	Sidechain
35	BA	245	U	Sidechain
35	BA	246	A	Sidechain
35	BA	247	G	Sidechain
35	BA	249	U	Sidechain
35	BA	251	G	Sidechain
35	BA	252	U	Sidechain
35	BA	255	G	Sidechain
35	BA	258	G	Sidechain
35	BA	259	G	Sidechain
35	BA	260	G	Sidechain
35	BA	261	U	Sidechain
35	BA	263	A	Sidechain
35	BA	264	C	Sidechain
35	BA	265	G	Sidechain
35	BA	266	G	Sidechain
35	BA	27	G	Sidechain
35	BA	271	C	Sidechain
35	BA	273	U	Sidechain
35	BA	275	G	Sidechain
35	BA	276	G	Sidechain
35	BA	278	G	Sidechain
35	BA	279	A	Sidechain
35	BA	280	C	Sidechain
35	BA	281	G	Sidechain
35	BA	285	C	Sidechain
35	BA	288	A	Sidechain
35	BA	29	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	291	U	Sidechain
35	BA	293	G	Sidechain
35	BA	295	C	Sidechain
35	BA	297	G	Sidechain
35	BA	298	A	Sidechain
35	BA	299	G	Sidechain
35	BA	3	A	Sidechain
35	BA	30	U	Sidechain
35	BA	301	G	Sidechain
35	BA	302	G	Sidechain
35	BA	303	A	Sidechain
35	BA	305	G	Sidechain
35	BA	306	A	Sidechain
35	BA	307	C	Sidechain
35	BA	309	A	Sidechain
35	BA	31	G	Sidechain
35	BA	314	C	Sidechain
35	BA	316	C	Sidechain
35	BA	317	U	Sidechain
35	BA	322	C	Sidechain
35	BA	323	U	Sidechain
35	BA	324	G	Sidechain
35	BA	326	G	Sidechain
35	BA	327	A	Sidechain
35	BA	328	C	Sidechain
35	BA	329	A	Sidechain
35	BA	33	A	Sidechain
35	BA	330	C	Sidechain
35	BA	331	G	Sidechain
35	BA	332	G	Sidechain
35	BA	334	C	Sidechain
35	BA	335	C	Sidechain
35	BA	337	G	Sidechain
35	BA	338	A	Sidechain
35	BA	341	C	Sidechain
35	BA	343	U	Sidechain
35	BA	347	G	Sidechain
35	BA	349	A	Sidechain
35	BA	35	G	Sidechain
35	BA	350	G	Sidechain
35	BA	352	C	Sidechain
35	BA	354	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	355	C	Sidechain
35	BA	356	A	Sidechain
35	BA	357	G	Sidechain
35	BA	359	G	Sidechain
35	BA	36	C	Sidechain
35	BA	360	G	Sidechain
35	BA	366	A	Sidechain
35	BA	367	U	Sidechain
35	BA	368	U	Sidechain
35	BA	369	G	Sidechain
35	BA	37	U	Sidechain
35	BA	370	C	Sidechain
35	BA	371	A	Sidechain
35	BA	373	A	Sidechain
35	BA	375	U	Sidechain
35	BA	378	G	Sidechain
35	BA	38	G	Sidechain
35	BA	380	G	Sidechain
35	BA	381	C	Sidechain
35	BA	382	A	Sidechain
35	BA	384	G	Sidechain
35	BA	385	C	Sidechain
35	BA	386	C	Sidechain
35	BA	387	U	Sidechain
35	BA	388	G	Sidechain
35	BA	390	U	Sidechain
35	BA	391	G	Sidechain
35	BA	392	C	Sidechain
35	BA	396	C	Sidechain
35	BA	397	A	Sidechain
35	BA	399	G	Sidechain
35	BA	40	C	Sidechain
35	BA	400	C	Sidechain
35	BA	401	C	Sidechain
35	BA	403	C	Sidechain
35	BA	404	G	Sidechain
35	BA	406	G	Sidechain
35	BA	408	A	Sidechain
35	BA	409	U	Sidechain
35	BA	41	G	Sidechain
35	BA	410	G	Sidechain
35	BA	412	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	414	A	Sidechain
35	BA	415	A	Sidechain
35	BA	416	G	Sidechain
35	BA	417	G	Sidechain
35	BA	418	C	Sidechain
35	BA	419	C	Sidechain
35	BA	42	G	Sidechain
35	BA	421	U	Sidechain
35	BA	422	C	Sidechain
35	BA	423	G	Sidechain
35	BA	426	U	Sidechain
35	BA	429	U	Sidechain
35	BA	433	G	Sidechain
35	BA	434	U	Sidechain
35	BA	435	A	Sidechain
35	BA	436	C	Sidechain
35	BA	437	U	Sidechain
35	BA	442	G	Sidechain
35	BA	443	C	Sidechain
35	BA	444	G	Sidechain
35	BA	445	G	Sidechain
35	BA	446	G	Sidechain
35	BA	448	A	Sidechain
35	BA	45	G	Sidechain
35	BA	450	G	Sidechain
35	BA	456	A	Sidechain
35	BA	457	G	Sidechain
35	BA	458	U	Sidechain
35	BA	459	A	Sidechain
35	BA	460	A	Sidechain
35	BA	461	A	Sidechain
35	BA	462	G	Sidechain
35	BA	463	U	Sidechain
35	BA	464	U	Sidechain
35	BA	466	A	Sidechain
35	BA	468	A	Sidechain
35	BA	473	U	Sidechain
35	BA	474	G	Sidechain
35	BA	478	A	Sidechain
35	BA	48	C	Sidechain
35	BA	481	G	Sidechain
35	BA	482	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	483	C	Sidechain
35	BA	484	G	Sidechain
35	BA	485	U	Sidechain
35	BA	486	U	Sidechain
35	BA	490	C	Sidechain
35	BA	491	G	Sidechain
35	BA	493	A	Sidechain
35	BA	494	G	Sidechain
35	BA	496	A	Sidechain
35	BA	498	A	Sidechain
35	BA	5	U	Sidechain
35	BA	50	A	Sidechain
35	BA	500	G	Sidechain
35	BA	501	C	Sidechain
35	BA	503	C	Sidechain
35	BA	505	G	Sidechain
35	BA	507	C	Sidechain
35	BA	508	U	Sidechain
35	BA	510	A	Sidechain
35	BA	511	C	Sidechain
35	BA	512	U	Sidechain
35	BA	514	C	Sidechain
35	BA	517	G	Sidechain
35	BA	519	C	Sidechain
35	BA	520	A	Sidechain
35	BA	523	A	Sidechain
35	BA	525	C	Sidechain
35	BA	528	C	Sidechain
35	BA	529	G	Sidechain
35	BA	53	A	Sidechain
35	BA	531	U	Sidechain
35	BA	532	A	Sidechain
35	BA	536	C	Sidechain
35	BA	538	G	Sidechain
35	BA	540	G	Sidechain
35	BA	542	G	Sidechain
35	BA	543	U	Sidechain
35	BA	544	G	Sidechain
35	BA	545	C	Sidechain
35	BA	546	A	Sidechain
35	BA	548	G	Sidechain
35	BA	550	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	552	U	Sidechain
35	BA	553	A	Sidechain
35	BA	555	U	Sidechain
35	BA	556	C	Sidechain
35	BA	558	G	Sidechain
35	BA	562	U	Sidechain
35	BA	563	A	Sidechain
35	BA	565	U	Sidechain
35	BA	566	G	Sidechain
35	BA	567	G	Sidechain
35	BA	57	G	Sidechain
35	BA	570	G	Sidechain
35	BA	571	U	Sidechain
35	BA	573	A	Sidechain
35	BA	575	G	Sidechain
35	BA	576	C	Sidechain
35	BA	577	G	Sidechain
35	BA	579	A	Sidechain
35	BA	58	C	Sidechain
35	BA	580	C	Sidechain
35	BA	581	G	Sidechain
35	BA	583	A	Sidechain
35	BA	584	G	Sidechain
35	BA	587	G	Sidechain
35	BA	592	G	Sidechain
35	BA	593	U	Sidechain
35	BA	596	A	Sidechain
35	BA	597	G	Sidechain
35	BA	598	U	Sidechain
35	BA	599	C	Sidechain
35	BA	6	G	Sidechain
35	BA	60	A	Sidechain
35	BA	600	A	Sidechain
35	BA	603	U	Sidechain
35	BA	608	A	Sidechain
35	BA	609	A	Sidechain
35	BA	61	G	Sidechain
35	BA	610	U	Sidechain
35	BA	611	C	Sidechain
35	BA	613	C	Sidechain
35	BA	615	G	Sidechain
35	BA	616	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	617	G	Sidechain
35	BA	618	C	Sidechain
35	BA	620	C	Sidechain
35	BA	621	A	Sidechain
35	BA	623	C	Sidechain
35	BA	624	C	Sidechain
35	BA	627	G	Sidechain
35	BA	628	G	Sidechain
35	BA	629	A	Sidechain
35	BA	63	C	Sidechain
35	BA	632	U	Sidechain
35	BA	633	G	Sidechain
35	BA	634	C	Sidechain
35	BA	637	C	Sidechain
35	BA	638	U	Sidechain
35	BA	639	G	Sidechain
35	BA	64	G	Sidechain
35	BA	641	U	Sidechain
35	BA	642	A	Sidechain
35	BA	643	C	Sidechain
35	BA	645	G	Sidechain
35	BA	646	G	Sidechain
35	BA	648	A	Sidechain
35	BA	649	A	Sidechain
35	BA	65	A	Sidechain
35	BA	650	G	Sidechain
35	BA	651	C	Sidechain
35	BA	652	U	Sidechain
35	BA	653	U	Sidechain
35	BA	654	G	Sidechain
35	BA	656	G	Sidechain
35	BA	657	U	Sidechain
35	BA	663	A	Sidechain
35	BA	666	G	Sidechain
35	BA	667	G	Sidechain
35	BA	668	G	Sidechain
35	BA	67	C	Sidechain
35	BA	670	G	Sidechain
35	BA	671	G	Sidechain
35	BA	672	U	Sidechain
35	BA	673	A	Sidechain
35	BA	676	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	678	U	Sidechain
35	BA	680	C	Sidechain
35	BA	682	G	Sidechain
35	BA	684	U	Sidechain
35	BA	686	U	Sidechain
35	BA	687	A	Sidechain
35	BA	689	C	Sidechain
35	BA	69	G	Sidechain
35	BA	690	G	Sidechain
35	BA	692	U	Sidechain
35	BA	693	G	Sidechain
35	BA	694	A	Sidechain
35	BA	695	A	Sidechain
35	BA	696	A	Sidechain
35	BA	697	U	Sidechain
35	BA	698	G	Sidechain
35	BA	7	A	Sidechain
35	BA	701	U	Sidechain
35	BA	703	G	Sidechain
35	BA	704	A	Sidechain
35	BA	709	U	Sidechain
35	BA	710	G	Sidechain
35	BA	711	G	Sidechain
35	BA	712	A	Sidechain
35	BA	714	G	Sidechain
35	BA	715	A	Sidechain
35	BA	716	A	Sidechain
35	BA	719	C	Sidechain
35	BA	72	A	Sidechain
35	BA	720	C	Sidechain
35	BA	721	G	Sidechain
35	BA	722	G	Sidechain
35	BA	723	U	Sidechain
35	BA	725	G	Sidechain
35	BA	727	G	Sidechain
35	BA	728	A	Sidechain
35	BA	729	A	Sidechain
35	BA	730	G	Sidechain
35	BA	731	G	Sidechain
35	BA	732	C	Sidechain
35	BA	733	G	Sidechain
35	BA	734	G	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	736	C	Sidechain
35	BA	738	C	Sidechain
35	BA	74	A	Sidechain
35	BA	740	U	Sidechain
35	BA	742	G	Sidechain
35	BA	743	A	Sidechain
35	BA	746	A	Sidechain
35	BA	747	A	Sidechain
35	BA	748	G	Sidechain
35	BA	749	A	Sidechain
35	BA	750	C	Sidechain
35	BA	752	G	Sidechain
35	BA	753	A	Sidechain
35	BA	755	G	Sidechain
35	BA	757	U	Sidechain
35	BA	759	A	Sidechain
35	BA	76	G	Sidechain
35	BA	762	U	Sidechain
35	BA	763	G	Sidechain
35	BA	764	C	Sidechain
35	BA	766	A	Sidechain
35	BA	767	A	Sidechain
35	BA	769	G	Sidechain
35	BA	77	A	Sidechain
35	BA	770	C	Sidechain
35	BA	771	G	Sidechain
35	BA	772	U	Sidechain
35	BA	773	G	Sidechain
35	BA	776	G	Sidechain
35	BA	778	G	Sidechain
35	BA	779	C	Sidechain
35	BA	78	A	Sidechain
35	BA	782	A	Sidechain
35	BA	785	G	Sidechain
35	BA	786	G	Sidechain
35	BA	787	A	Sidechain
35	BA	788	U	Sidechain
35	BA	79	G	Sidechain
35	BA	795	C	Sidechain
35	BA	796	C	Sidechain
35	BA	797	C	Sidechain
35	BA	798	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	799	G	Sidechain
35	BA	80	A	Sidechain
35	BA	800	G	Sidechain
35	BA	802	A	Sidechain
35	BA	803	G	Sidechain
35	BA	805	C	Sidechain
35	BA	806	C	Sidechain
35	BA	808	C	Sidechain
35	BA	809	G	Sidechain
35	BA	812	G	Sidechain
35	BA	813	U	Sidechain
35	BA	814	A	Sidechain
35	BA	816	A	Sidechain
35	BA	817	C	Sidechain
35	BA	818	G	Sidechain
35	BA	819	A	Sidechain
35	BA	82	G	Sidechain
35	BA	820	U	Sidechain
35	BA	821	G	Sidechain
35	BA	822	U	Sidechain
35	BA	826	C	Sidechain
35	BA	827	U	Sidechain
35	BA	83	C	Sidechain
35	BA	830	G	Sidechain
35	BA	832	G	Sidechain
35	BA	834	U	Sidechain
35	BA	835	U	Sidechain
35	BA	837	U	Sidechain
35	BA	838	G	Sidechain
35	BA	839	C	Sidechain
35	BA	84	U	Sidechain
35	BA	840	C	Sidechain
35	BA	841	C	Sidechain
35	BA	846	G	Sidechain
35	BA	847	G	Sidechain
35	BA	849	G	Sidechain
35	BA	85	U	Sidechain
35	BA	850	U	Sidechain
35	BA	851	G	Sidechain
35	BA	852	G	Sidechain
35	BA	854	U	Sidechain
35	BA	857	C	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	858	G	Sidechain
35	BA	859	G	Sidechain
35	BA	860	A	Sidechain
35	BA	861	G	Sidechain
35	BA	862	C	Sidechain
35	BA	863	U	Sidechain
35	BA	864	A	Sidechain
35	BA	865	A	Sidechain
35	BA	867	G	Sidechain
35	BA	868	C	Sidechain
35	BA	869	G	Sidechain
35	BA	87	C	Sidechain
35	BA	870	U	Sidechain
35	BA	873	A	Sidechain
35	BA	875	U	Sidechain
35	BA	879	C	Sidechain
35	BA	881	G	Sidechain
35	BA	882	C	Sidechain
35	BA	884	U	Sidechain
35	BA	885	G	Sidechain
35	BA	886	G	Sidechain
35	BA	887	G	Sidechain
35	BA	888	G	Sidechain
35	BA	889	A	Sidechain
35	BA	89	U	Sidechain
35	BA	890	G	Sidechain
35	BA	892	A	Sidechain
35	BA	894	G	Sidechain
35	BA	898	G	Sidechain
35	BA	899	C	Sidechain
35	BA	9	G	Sidechain
35	BA	90	C	Sidechain
35	BA	900	A	Sidechain
35	BA	901	A	Sidechain
35	BA	902	G	Sidechain
35	BA	903	G	Sidechain
35	BA	905	U	Sidechain
35	BA	906	A	Sidechain
35	BA	907	A	Sidechain
35	BA	91	U	Sidechain
35	BA	913	A	Sidechain
35	BA	914	A	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	915	A	Sidechain
35	BA	916	U	Sidechain
35	BA	917	G	Sidechain
35	BA	92	U	Sidechain
35	BA	920	U	Sidechain
35	BA	921	U	Sidechain
35	BA	924	C	Sidechain
35	BA	925	G	Sidechain
35	BA	926	G	Sidechain
35	BA	927	G	Sidechain
35	BA	928	G	Sidechain
35	BA	929	G	Sidechain
35	BA	93	U	Sidechain
35	BA	930	C	Sidechain
35	BA	933	G	Sidechain
35	BA	934	C	Sidechain
35	BA	938	A	Sidechain
35	BA	939	G	Sidechain
35	BA	94	G	Sidechain
35	BA	940	C	Sidechain
35	BA	941	G	Sidechain
35	BA	945	G	Sidechain
35	BA	95	C	Sidechain
35	BA	950	U	Sidechain
35	BA	951	G	Sidechain
35	BA	952	U	Sidechain
35	BA	955	U	Sidechain
35	BA	957	U	Sidechain
35	BA	959	A	Sidechain
35	BA	960	U	Sidechain
35	BA	961	U	Sidechain
35	BA	963	G	Sidechain
35	BA	964	A	Sidechain
35	BA	965	U	Sidechain
35	BA	968	A	Sidechain
35	BA	97	G	Sidechain
35	BA	972	C	Sidechain
35	BA	973	G	Sidechain
35	BA	975	A	Sidechain
35	BA	976	G	Sidechain
35	BA	980	C	Sidechain
35	BA	982	U	Sidechain

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Mol	Chain	Res	Type	Group
35	BA	983	A	Sidechain
35	BA	984	C	Sidechain
35	BA	986	U	Sidechain
35	BA	987	G	Sidechain
35	BA	988	G	Sidechain
35	BA	989	U	Sidechain
35	BA	994	A	Sidechain
35	BA	995	C	Sidechain
35	BA	997	U	Sidechain
35	BA	998	C	Sidechain
36	BB	13	A	Sidechain
36	BB	14	G	Sidechain
36	BB	15	G	Sidechain
36	BB	16	A	Sidechain
36	BB	17	U	Sidechain
36	BB	18	A	Sidechain
36	BB	20	G	Sidechain
36	BB	23	C	Sidechain
36	BB	25	U	Sidechain
36	BB	29	G	Sidechain
36	BB	30	U	Sidechain
36	BB	33	A	Sidechain
36	BB	34	U	Sidechain
36	BB	35	G	Sidechain
36	BB	36	U	Sidechain
36	BB	37	G	Sidechain
36	BB	38	G	Sidechain
36	BB	39	U	Sidechain
36	BB	40	G	Sidechain
36	BB	42	U	Sidechain
36	BB	43	U	Sidechain
36	BB	44	U	Sidechain
36	BB	45	G	Sidechain
36	BB	46	C	Sidechain
36	BB	47	C	Sidechain
36	BB	49	U	Sidechain
36	BB	53	G	Sidechain
36	BB	54	U	Sidechain
36	BB	56	G	Sidechain
36	BB	59	A	Sidechain
37	BC	12	G	Sidechain
37	BC	14	A	Sidechain

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Mol	Chain	Res	Type	Group
37	BC	15	G	Sidechain
37	BC	16	C	Sidechain
37	BC	17	C	Sidechain
37	BC	2	G	Sidechain
37	BC	20	G	Sidechain
37	BC	25	U	Sidechain
37	BC	29	C	Sidechain
37	BC	3	C	Sidechain
37	BC	30	G	Sidechain
37	BC	31	G	Sidechain
37	BC	32	G	Sidechain
37	BC	35	C	Sidechain
37	BC	37	U	Sidechain
37	BC	38	A	Sidechain
37	BC	40	C	Sidechain
37	BC	41	C	Sidechain
37	BC	43	G	Sidechain
37	BC	44	A	Sidechain
37	BC	46	G	Sidechain
37	BC	47	A	Sidechain
37	BC	48	U	Sidechain
37	BC	49	C	Sidechain
37	BC	5	G	Sidechain
37	BC	50	G	Sidechain
37	BC	51	U	Sidechain
37	BC	53	G	Sidechain
37	BC	58	A	Sidechain
37	BC	59	A	Sidechain
37	BC	60	A	Sidechain
37	BC	63	C	Sidechain
37	BC	64	G	Sidechain
37	BC	65	G	Sidechain
37	BC	67	C	Sidechain
37	BC	7	G	Sidechain
37	BC	71	G	Sidechain
37	BC	72	C	Sidechain
37	BC	73	A	Sidechain
37	BC	77	A	Sidechain
37	BC	9	G	Sidechain
38	BD	112	ARG	Sidechain
38	BD	198	VAL	Peptide
38	BD	21	TYR	Sidechain

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Mol	Chain	Res	Type	Group
38	BD	89	PHE	Sidechain
39	BE	125	ARG	Sidechain
39	BE	131	ARG	Sidechain
39	BE	155	ARG	Sidechain
39	BE	167	TYR	Sidechain
39	BE	171	ARG	Sidechain
39	BE	175	HIS	Sidechain
39	BE	208	GLY	Peptide
39	BE	36	PHE	Sidechain
39	BE	96	VAL	Mainchain
40	BF	145	ARG	Sidechain
40	BF	163	GLN	Peptide
40	BF	64	TYR	Sidechain
41	BG	156	ARG	Mainchain
41	BG	49	TYR	Sidechain
41	BG	73	VAL	Peptide
42	BH	111	GLU	Peptide
42	BH	46	GLN	Peptide
42	BH	49	TYR	Sidechain
42	BH	59	TYR	Sidechain
42	BH	64	VAL	Peptide
42	BH	69	GLU	Mainchain
42	BH	78	PHE	Sidechain
42	BH	79	ARG	Sidechain
42	BH	80	PHE	Sidechain
43	BI	154	ARG	Peptide
43	BI	61	PHE	Sidechain
43	BI	89	GLU	Mainchain
44	BJ	100	ILE	Peptide
44	BJ	113	ARG	Sidechain
44	BJ	12	ARG	Sidechain
44	BJ	127	TYR	Sidechain
44	BJ	20	ASN	Mainchain
44	BJ	44	PHE	Peptide
44	BJ	64	TYR	Sidechain
45	BK	108	ARG	Sidechain
45	BK	122	ARG	Sidechain
45	BK	123	ARG	Sidechain
45	BK	48	ARG	Sidechain
45	BK	84	ARG	Sidechain
46	BL	13	PHE	Sidechain
46	BL	65	TYR	Sidechain

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Mol	Chain	Res	Type	Group
47	BM	126	ARG	Sidechain
48	BN	116	TYR	Peptide
48	BN	120	ARG	Sidechain
48	BN	37	TYR	Peptide
48	BN	42	LYS	Peptide
48	BN	71	HIS	Sidechain
48	BN	94	TYR	Sidechain
49	BO	106	ARG	Sidechain
49	BO	22	TYR	Sidechain
49	BO	78	ARG	Sidechain
49	BO	85	TYR	Sidechain
50	BP	68	ARG	Sidechain
51	BQ	50	HIS	Sidechain
51	BQ	63	ARG	Sidechain
52	BR	17	TYR	Sidechain
52	BR	6	LEU	Peptide
53	BS	33	TYR	Sidechain
54	BT	10	CYS	Peptide
54	BT	50	TYR	Sidechain
55	BU	73	PHE	Sidechain
55	BU	82	HIS	Mainchain,Peptide
55	BU	87	LYS	Peptide
57	BW	11	PHE	Sidechain
57	BW	20	ARG	Sidechain
57	BW	44	ARG	Sidechain
57	BW	68	ARG	Sidechain

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	2566	0	1299	0	0
2	AB	62351	0	31248	0	0
3	AC	1733	0	1824	0	0
4	AD	2092	0	2170	0	0
5	AE	1565	0	1616	0	0
6	AF	1552	0	1619	0	0
7	AG	1420	0	1460	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
8	AH	1323	0	1374	0	0
9	AI	1111	0	1148	0	0
10	AJ	1233	0	1283	0	0
11	AK	1032	0	1088	0	0
12	AL	1129	0	1162	0	0
13	AM	947	0	1023	0	0
14	AN	1053	0	1129	0	0
15	AO	1074	0	1157	0	0
16	AP	1008	0	1045	0	0
17	AQ	900	0	935	0	0
18	AR	917	0	965	0	0
19	AS	947	0	1022	0	0
20	AT	816	0	839	0	0
21	AU	857	0	922	0	0
22	AV	787	0	846	0	0
23	AW	789	0	847	0	0
24	AX	753	0	780	0	0
25	AY	634	0	656	0	0
26	AZ	625	0	655	0	0
27	A0	509	0	543	0	0
28	A1	449	0	491	0	0
29	A2	549	0	552	0	0
30	A3	444	0	461	0	0
31	A4	441	0	485	0	0
32	A5	377	0	418	0	0
33	A6	504	0	574	0	0
34	A7	302	0	343	0	0
35	BA	33089	0	16599	0	0
36	BB	993	0	501	0	0
37	BC	1641	0	841	0	0
38	BD	1872	0	1885	0	0
39	BE	1822	0	1913	0	0
40	BF	1643	0	1710	0	0
41	BG	1225	0	1273	0	0
42	BH	1101	0	1050	0	0
43	BI	1400	0	1449	0	0
44	BJ	979	0	1034	0	0
45	BK	1036	0	1084	0	0
46	BL	825	0	865	0	0
47	BM	965	0	997	0	0
48	BN	955	0	1019	0	0
49	BO	910	0	981	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
50	BP	805	0	847	0	0
51	BQ	716	0	742	0	0
52	BR	649	0	666	0	0
53	BS	672	0	716	0	0
54	BT	626	0	651	0	0
55	BU	727	0	769	0	0
56	BV	670	0	722	0	0
57	BW	590	0	631	0	0
All	All	150700	0	102924	0	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). Clashscore could not be calculated for this entry.

There are no clashes within the asymmetric unit.

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	AC	232/234 (99%)	215 (93%)	12 (5%)	5 (2%)	6	35
4	AD	270/272 (99%)	237 (88%)	24 (9%)	9 (3%)	4	26
5	AE	207/209 (99%)	175 (84%)	24 (12%)	8 (4%)	3	23
6	AF	199/201 (99%)	173 (87%)	16 (8%)	10 (5%)	2	20
7	AG	176/178 (99%)	151 (86%)	15 (8%)	10 (6%)	1	18
8	AH	174/176 (99%)	159 (91%)	11 (6%)	4 (2%)	6	34
9	AI	147/149 (99%)	131 (89%)	12 (8%)	4 (3%)	5	31
10	AJ	162/164 (99%)	155 (96%)	6 (4%)	1 (1%)	25	66
11	AK	139/141 (99%)	134 (96%)	4 (3%)	1 (1%)	22	63
12	AL	140/142 (99%)	120 (86%)	15 (11%)	5 (4%)	3	25

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	AM	121/123 (98%)	105 (87%)	12 (10%)	4 (3%)	4	26
14	AN	142/144 (99%)	125 (88%)	14 (10%)	3 (2%)	7	36
15	AO	134/136 (98%)	124 (92%)	8 (6%)	2 (2%)	10	46
16	AP	125/127 (98%)	115 (92%)	9 (7%)	1 (1%)	19	60
17	AQ	115/117 (98%)	110 (96%)	5 (4%)	0	100	100
18	AR	112/114 (98%)	97 (87%)	13 (12%)	2 (2%)	8	40
19	AS	115/117 (98%)	108 (94%)	3 (3%)	4 (4%)	3	25
20	AT	101/103 (98%)	89 (88%)	9 (9%)	3 (3%)	4	28
21	AU	108/110 (98%)	99 (92%)	5 (5%)	4 (4%)	3	24
22	AV	98/100 (98%)	77 (79%)	18 (18%)	3 (3%)	4	27
23	AW	101/103 (98%)	89 (88%)	9 (9%)	3 (3%)	4	28
24	AX	92/94 (98%)	84 (91%)	7 (8%)	1 (1%)	14	52
25	AY	82/84 (98%)	64 (78%)	14 (17%)	4 (5%)	2	20
26	AZ	75/77 (97%)	68 (91%)	4 (5%)	3 (4%)	3	23
27	A0	61/63 (97%)	56 (92%)	4 (7%)	1 (2%)	9	44
28	A1	56/58 (97%)	54 (96%)	2 (4%)	0	100	100
29	A2	68/70 (97%)	64 (94%)	3 (4%)	1 (2%)	10	46
30	A3	54/56 (96%)	48 (89%)	4 (7%)	2 (4%)	3	24
31	A4	52/54 (96%)	49 (94%)	1 (2%)	2 (4%)	3	24
32	A5	44/46 (96%)	40 (91%)	2 (4%)	2 (4%)	2	22
33	A6	62/64 (97%)	58 (94%)	3 (5%)	1 (2%)	9	44
34	A7	36/38 (95%)	29 (81%)	4 (11%)	3 (8%)	1	12
38	BD	238/240 (99%)	218 (92%)	14 (6%)	6 (2%)	5	32
39	BE	230/232 (99%)	217 (94%)	9 (4%)	4 (2%)	9	42
40	BF	203/205 (99%)	186 (92%)	13 (6%)	4 (2%)	7	38
41	BG	164/166 (99%)	150 (92%)	12 (7%)	2 (1%)	13	50
42	BH	133/135 (98%)	123 (92%)	9 (7%)	1 (1%)	19	60
43	BI	176/178 (99%)	168 (96%)	5 (3%)	3 (2%)	9	42
44	BJ	127/129 (98%)	119 (94%)	7 (6%)	1 (1%)	19	60
45	BK	127/129 (98%)	114 (90%)	10 (8%)	3 (2%)	6	33
46	BL	101/103 (98%)	91 (90%)	4 (4%)	6 (6%)	1	17

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
47	BM	126/128 (98%)	109 (86%)	15 (12%)	2 (2%)	9	44
48	BN	121/123 (98%)	103 (85%)	16 (13%)	2 (2%)	9	42
49	BO	115/117 (98%)	109 (95%)	5 (4%)	1 (1%)	17	57
50	BP	98/100 (98%)	85 (87%)	6 (6%)	7 (7%)	1	14
51	BQ	86/88 (98%)	81 (94%)	4 (5%)	1 (1%)	13	50
52	BR	80/82 (98%)	76 (95%)	4 (5%)	0	100	100
53	BS	81/83 (98%)	73 (90%)	7 (9%)	1 (1%)	13	50
54	BT	72/74 (97%)	62 (86%)	7 (10%)	3 (4%)	3	22
55	BU	89/91 (98%)	82 (92%)	6 (7%)	1 (1%)	14	52
56	BV	84/86 (98%)	79 (94%)	4 (5%)	1 (1%)	13	50
57	BW	68/70 (97%)	61 (90%)	4 (6%)	3 (4%)	2	22
All	All	6319/6423 (98%)	5708 (90%)	453 (7%)	158 (2%)	9	32

All (158) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	AD	94	LEU
6	AF	62	GLN
6	AF	188	MET
7	AG	136	ILE
9	AI	3	VAL
18	AR	25	VAL
19	AS	88	GLU
21	AU	41	LYS
22	AV	39	THR
22	AV	86	THR
23	AW	97	SER
31	A4	35	LEU
41	BG	77	ASN
46	BL	57	VAL
47	BM	52	ARG
50	BP	2	LYS
50	BP	70	HIS
54	BT	11	ARG
3	AC	217	THR
4	AD	35	LYS
4	AD	64	VAL
4	AD	140	VAL

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Mol	Chain	Res	Type
4	AD	142	ASN
5	AE	119	ALA
5	AE	173	GLN
6	AF	44	ARG
6	AF	78	TRP
6	AF	79	ARG
8	AH	61	TRP
9	AI	113	SER
11	AK	93	ASN
12	AL	14	ASP
12	AL	81	ILE
13	AM	6	THR
13	AM	71	ARG
14	AN	19	LEU
15	AO	36	VAL
16	AP	107	ASN
19	AS	87	VAL
21	AU	65	ASP
21	AU	89	ALA
23	AW	74	ALA
26	AZ	18	SER
26	AZ	27	ARG
29	A2	43	PHE
31	A4	52	LYS
34	A7	6	SER
34	A7	16	ILE
38	BD	22	TRP
39	BE	14	VAL
39	BE	163	ARG
39	BE	179	ALA
40	BF	47	LEU
44	BJ	80	PRO
46	BL	62	ARG
46	BL	74	VAL
50	BP	32	ASP
50	BP	61	ASN
55	BU	11	ASP
4	AD	37	SER
4	AD	123	ILE
5	AE	113	SER
6	AF	60	TRP
6	AF	183	PHE

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Mol	Chain	Res	Type
7	AG	99	PHE
7	AG	132	ARG
7	AG	148	VAL
8	AH	170	THR
9	AI	27	ARG
9	AI	122	LEU
12	AL	65	THR
14	AN	3	LEU
20	AT	91	GLN
22	AV	9	LYS
24	AX	71	LYS
27	A0	23	ARG
30	A3	2	VAL
32	A5	7	PRO
45	BK	106	ASP
45	BK	122	ARG
45	BK	128	LYS
50	BP	62	ARG
51	BQ	87	ARG
53	BS	81	ALA
54	BT	18	GLN
57	BW	3	ILE
57	BW	9	GLU
57	BW	24	LYS
3	AC	159	GLY
6	AF	68	ALA
6	AF	96	VAL
7	AG	103	ILE
7	AG	145	VAL
8	AH	9	VAL
8	AH	94	ARG
12	AL	120	ARG
19	AS	5	ARG
25	AY	36	ILE
25	AY	52	CYS
34	A7	4	ARG
39	BE	145	ALA
40	BF	27	ILE
42	BH	54	LEU
46	BL	42	LEU
46	BL	58	ASN
48	BN	23	LEU

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Mol	Chain	Res	Type
50	BP	37	ASP
54	BT	5	ARG
3	AC	55	SER
3	AC	73	VAL
5	AE	43	ASP
5	AE	109	VAL
5	AE	168	GLU
5	AE	170	VAL
7	AG	66	ILE
10	AJ	33	THR
13	AM	17	ARG
13	AM	46	ALA
14	AN	117	THR
20	AT	43	ASN
20	AT	101	ILE
21	AU	28	LYS
26	AZ	53	LYS
30	A3	48	TYR
38	BD	17	HIS
38	BD	35	ASN
38	BD	123	GLY
38	BD	205	ALA
40	BF	37	PRO
41	BG	26	GLY
43	BI	13	PRO
43	BI	84	TYR
48	BN	43	LYS
50	BP	80	ARG
56	BV	67	HIS
4	AD	204	LEU
6	AF	45	ALA
7	AG	88	VAL
12	AL	79	GLY
15	AO	43	ALA
19	AS	91	ARG
25	AY	13	ARG
25	AY	23	LYS
40	BF	21	LYS
43	BI	2	ARG
46	BL	75	ASP
47	BM	118	ASN
7	AG	38	GLY

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Mol	Chain	Res	Type
18	AR	32	VAL
23	AW	15	GLY
5	AE	152	PRO
49	BO	6	ILE
4	AD	240	GLY
7	AG	84	ILE
33	A6	31	ILE
38	BD	13	VAL
32	A5	44	VAL
3	AC	206	GLY

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	AC	181/181 (100%)	176 (97%)	5 (3%)	43	65
4	AD	217/217 (100%)	205 (94%)	12 (6%)	21	47
5	AE	164/164 (100%)	152 (93%)	12 (7%)	14	39
6	AF	165/165 (100%)	160 (97%)	5 (3%)	41	63
7	AG	149/149 (100%)	140 (94%)	9 (6%)	19	44
8	AH	137/137 (100%)	123 (90%)	14 (10%)	7	25
9	AI	114/114 (100%)	109 (96%)	5 (4%)	28	53
10	AJ	122/122 (100%)	115 (94%)	7 (6%)	20	45
11	AK	109/109 (100%)	104 (95%)	5 (5%)	27	52
12	AL	116/116 (100%)	107 (92%)	9 (8%)	12	36
13	AM	104/104 (100%)	98 (94%)	6 (6%)	20	45
14	AN	103/103 (100%)	102 (99%)	1 (1%)	76	86
15	AO	109/109 (100%)	101 (93%)	8 (7%)	14	39
16	AP	103/103 (100%)	99 (96%)	4 (4%)	32	56
17	AQ	87/87 (100%)	79 (91%)	8 (9%)	9	29
18	AR	99/99 (100%)	94 (95%)	5 (5%)	24	48

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
19	AS	89/89 (100%)	86 (97%)	3 (3%)	37	60
20	AT	84/84 (100%)	78 (93%)	6 (7%)	14	39
21	AU	93/93 (100%)	88 (95%)	5 (5%)	22	47
22	AV	84/84 (100%)	78 (93%)	6 (7%)	14	39
23	AW	84/84 (100%)	80 (95%)	4 (5%)	25	51
24	AX	78/78 (100%)	73 (94%)	5 (6%)	17	42
25	AY	62/62 (100%)	57 (92%)	5 (8%)	11	35
26	AZ	67/67 (100%)	60 (90%)	7 (10%)	7	24
27	A0	55/55 (100%)	52 (94%)	3 (6%)	21	47
28	A1	48/48 (100%)	42 (88%)	6 (12%)	4	19
29	A2	62/62 (100%)	61 (98%)	1 (2%)	62	79
30	A3	47/47 (100%)	45 (96%)	2 (4%)	29	53
31	A4	48/48 (100%)	44 (92%)	4 (8%)	11	34
32	A5	38/38 (100%)	35 (92%)	3 (8%)	12	35
33	A6	51/51 (100%)	50 (98%)	1 (2%)	55	74
34	A7	34/34 (100%)	33 (97%)	1 (3%)	42	64
38	BD	198/198 (100%)	188 (95%)	10 (5%)	24	48
39	BE	189/189 (100%)	174 (92%)	15 (8%)	12	35
40	BF	172/172 (100%)	168 (98%)	4 (2%)	50	70
41	BG	125/125 (100%)	118 (94%)	7 (6%)	21	46
42	BH	116/116 (100%)	107 (92%)	9 (8%)	12	36
43	BI	146/146 (100%)	139 (95%)	7 (5%)	25	51
44	BJ	104/104 (100%)	99 (95%)	5 (5%)	25	51
45	BK	106/106 (100%)	100 (94%)	6 (6%)	20	45
46	BL	90/90 (100%)	83 (92%)	7 (8%)	12	36
47	BM	98/98 (100%)	96 (98%)	2 (2%)	55	74
48	BN	103/103 (100%)	99 (96%)	4 (4%)	32	56
49	BO	95/95 (100%)	89 (94%)	6 (6%)	18	43
50	BP	83/83 (100%)	79 (95%)	4 (5%)	25	51
51	BQ	76/76 (100%)	75 (99%)	1 (1%)	69	81
52	BR	65/65 (100%)	57 (88%)	8 (12%)	4	19

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
53	BS	77/77 (100%)	72 (94%)	5 (6%)	17	42
54	BT	64/64 (100%)	61 (95%)	3 (5%)	26	51
55	BU	78/78 (100%)	69 (88%)	9 (12%)	5	21
56	BV	65/65 (100%)	65 (100%)	0	100	100
57	BW	60/60 (100%)	55 (92%)	5 (8%)	11	34
All	All	5213/5213 (100%)	4919 (94%)	294 (6%)	25	46

All (294) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	AC	6	LYS
3	AC	75	VAL
3	AC	130	VAL
3	AC	134	ARG
3	AC	162	ARG
4	AD	50	THR
4	AD	66	PHE
4	AD	68	ARG
4	AD	114	GLN
4	AD	119	VAL
4	AD	146	LYS
4	AD	166	ARG
4	AD	213	ARG
4	AD	235	GLU
4	AD	249	VAL
4	AD	250	GLN
4	AD	263	ASP
5	AE	17	GLU
5	AE	33	ARG
5	AE	39	ASP
5	AE	74	GLU
5	AE	83	ARG
5	AE	99	GLU
5	AE	113	SER
5	AE	114	LYS
5	AE	140	HIS
5	AE	175	LEU
5	AE	197	THR
5	AE	201	LEU
6	AF	7	ASP

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Mol	Chain	Res	Type
6	AF	9	GLN
6	AF	40	ARG
6	AF	88	ARG
6	AF	152	GLU
7	AG	3	LEU
7	AG	10	GLU
7	AG	29	ARG
7	AG	48	LEU
7	AG	84	ILE
7	AG	93	GLU
7	AG	116	LEU
7	AG	160	LYS
7	AG	168	LEU
8	AH	17	LYS
8	AH	28	LYS
8	AH	34	ARG
8	AH	40	VAL
8	AH	42	VAL
8	AH	61	TRP
8	AH	74	MET
8	AH	85	LYS
8	AH	87	GLN
8	AH	88	LEU
8	AH	100	ASN
8	AH	109	SER
8	AH	114	HIS
8	AH	170	THR
9	AI	2	GLN
9	AI	76	GLU
9	AI	98	ASP
9	AI	109	GLU
9	AI	114	GLU
10	AJ	50	TYR
10	AJ	63	VAL
10	AJ	69	GLU
10	AJ	72	LYS
10	AJ	96	LYS
10	AJ	105	PHE
10	AJ	112	PHE
11	AK	2	LYS
11	AK	55	PRO
11	AK	58	ILE

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Mol	Chain	Res	Type
11	AK	101	SER
11	AK	107	GLU
12	AL	5	THR
12	AL	37	ARG
12	AL	43	GLU
12	AL	61	LYS
12	AL	85	LYS
12	AL	106	LYS
12	AL	113	PRO
12	AL	123	LYS
12	AL	129	GLU
13	AM	8	LEU
13	AM	29	HIS
13	AM	39	ILE
13	AM	49	ARG
13	AM	63	VAL
13	AM	123	LEU
14	AN	78	ARG
15	AO	20	LEU
15	AO	31	PHE
15	AO	51	ARG
15	AO	59	ARG
15	AO	93	VAL
15	AO	106	ASP
15	AO	115	GLU
15	AO	136	MET
16	AP	11	ASN
16	AP	39	PRO
16	AP	48	VAL
16	AP	71	ARG
17	AQ	3	LYS
17	AQ	30	ARG
17	AQ	56	LYS
17	AQ	63	LYS
17	AQ	88	LYS
17	AQ	91	SER
17	AQ	100	HIS
17	AQ	112	GLU
18	AR	21	PRO
18	AR	50	ARG
18	AR	98	TYR
18	AR	108	ARG

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Mol	Chain	Res	Type
18	AR	112	ARG
19	AS	4	LYS
19	AS	48	ASP
19	AS	70	GLN
20	AT	10	LYS
20	AT	15	SER
20	AT	21	ARG
20	AT	24	LYS
20	AT	68	ARG
20	AT	83	TYR
21	AU	13	SER
21	AU	27	LYS
21	AU	68	ASP
21	AU	77	ASP
21	AU	95	ARG
22	AV	31	VAL
22	AV	37	ASP
22	AV	42	GLU
22	AV	50	LEU
22	AV	72	GLN
22	AV	85	VAL
23	AW	17	ASP
23	AW	46	LYS
23	AW	87	GLU
23	AW	94	PHE
24	AX	26	PHE
24	AX	34	LYS
24	AX	53	LYS
24	AX	70	ILE
24	AX	71	LYS
25	AY	18	LYS
25	AY	20	LEU
25	AY	49	ASN
25	AY	54	ARG
25	AY	59	PHE
26	AZ	7	THR
26	AZ	17	ARG
26	AZ	19	HIS
26	AZ	32	LEU
26	AZ	58	ILE
26	AZ	75	GLU
26	AZ	76	LYS

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Mol	Chain	Res	Type
27	A0	24	GLU
27	A0	26	PHE
27	A0	48	ARG
28	A1	2	LYS
28	A1	18	LYS
28	A1	33	HIS
28	A1	34	THR
28	A1	36	GLU
28	A1	56	VAL
29	A2	24	ILE
30	A3	2	VAL
30	A3	9	ARG
31	A4	7	LYS
31	A4	16	THR
31	A4	27	ARG
31	A4	47	ILE
32	A5	6	GLN
32	A5	11	LYS
32	A5	14	ARG
33	A6	12	ARG
34	A7	23	ILE
38	BD	18	GLN
38	BD	20	ARG
38	BD	34	ARG
38	BD	38	HIS
38	BD	63	LYS
38	BD	77	GLU
38	BD	113	LEU
38	BD	141	GLU
38	BD	158	ASP
38	BD	173	LYS
39	BE	2	GLN
39	BE	13	ILE
39	BE	48	LYS
39	BE	78	LYS
39	BE	106	ARG
39	BE	110	LEU
39	BE	111	ASP
39	BE	118	SER
39	BE	128	MET
39	BE	166	TRP
39	BE	176	THR

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Mol	Chain	Res	Type
39	BE	192	TYR
39	BE	203	LYS
39	BE	205	GLU
39	BE	226	GLN
40	BF	25	ARG
40	BF	46	ARG
40	BF	191	SER
40	BF	204	SER
41	BG	28	ARG
41	BG	61	LYS
41	BG	82	HIS
41	BG	122	VAL
41	BG	125	LYS
41	BG	146	MET
41	BG	155	LYS
42	BH	9	MET
42	BH	55	HIS
42	BH	76	THR
42	BH	89	VAL
42	BH	98	GLU
42	BH	102	MET
42	BH	106	LYS
42	BH	118	ASN
42	BH	130	GLU
43	BI	1	PRO
43	BI	4	ARG
43	BI	6	ILE
43	BI	14	ASP
43	BI	26	VAL
43	BI	42	VAL
43	BI	88	VAL
44	BJ	55	LYS
44	BJ	59	GLU
44	BJ	68	LYS
44	BJ	104	SER
44	BJ	128	VAL
45	BK	24	ASN
45	BK	31	GLN
45	BK	40	ARG
45	BK	45	MET
45	BK	88	GLU
45	BK	129	ARG

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Mol	Chain	Res	Type
46	BL	5	ARG
46	BL	9	ARG
46	BL	16	ARG
46	BL	48	ARG
46	BL	56	HIS
46	BL	77	VAL
46	BL	92	LEU
47	BM	10	ARG
47	BM	127	ARG
48	BN	28	GLN
48	BN	87	LYS
48	BN	102	ASP
48	BN	122	LYS
49	BO	2	ARG
49	BO	24	VAL
49	BO	68	LEU
49	BO	78	ARG
49	BO	85	TYR
49	BO	106	ARG
50	BP	5	MET
50	BP	66	THR
50	BP	89	ARG
50	BP	95	LEU
51	BQ	17	ASP
52	BR	1	MET
52	BR	4	ILE
52	BR	16	PHE
52	BR	18	GLN
52	BR	23	ASP
52	BR	42	ILE
52	BR	46	LYS
52	BR	47	GLU
53	BS	1	THR
53	BS	10	ARG
53	BS	36	PHE
53	BS	48	GLU
53	BS	49	ASN
54	BT	18	GLN
54	BT	35	SER
54	BT	47	ARG
55	BU	1	PRO
55	BU	4	LEU

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Mol	Chain	Res	Type
55	BU	6	LYS
55	BU	12	LEU
55	BU	35	ARG
55	BU	42	ASN
55	BU	47	THR
55	BU	52	ASN
55	BU	55	GLN
57	BW	1	PRO
57	BW	7	GLU
57	BW	20	ARG
57	BW	39	LYS
57	BW	40	PRO

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	119/120 (99%)	18 (15%)	13 (10%)
2	AB	2898/2904 (99%)	527 (18%)	180 (6%)
35	BA	1538/1542 (99%)	294 (19%)	112 (7%)
36	BB	46/47 (97%)	15 (32%)	6 (13%)
37	BC	76/77 (98%)	14 (18%)	1 (1%)
All	All	4677/4690 (99%)	868 (18%)	312 (6%)

All (868) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	13	G
1	AA	14	U
1	AA	25	U
1	AA	26	C
1	AA	35	C
1	AA	41	G
1	AA	43	C
1	AA	44	G
1	AA	51	G
1	AA	58	A
1	AA	66	A

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Mol	Chain	Res	Type
1	AA	67	G
1	AA	73	A
1	AA	88	C
1	AA	90	C
1	AA	99	A
1	AA	120	U
2	AB	13	A
2	AB	14	A
2	AB	18	U
2	AB	30	G
2	AB	34	U
2	AB	35	G
2	AB	42	A
2	AB	43	G
2	AB	45	G
2	AB	46	G
2	AB	49	A
2	AB	50	U
2	AB	71	A
2	AB	75	G
2	AB	91	A
2	AB	92	U
2	AB	95	A
2	AB	98	G
2	AB	101	A
2	AB	102	U
2	AB	103	A
2	AB	115	C
2	AB	119	A
2	AB	120	U
2	AB	128	C
2	AB	194	G
2	AB	196	A
2	AB	197	A
2	AB	199	A
2	AB	204	A
2	AB	205	G
2	AB	215	G
2	AB	216	A
2	AB	218	A
2	AB	222	A
2	AB	224	U

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Mol	Chain	Res	Type
2	AB	225	C
2	AB	232	G
2	AB	242	G
2	AB	243	U
2	AB	248	G
2	AB	250	G
2	AB	255	A
2	AB	265	A
2	AB	266	G
2	AB	271	G
2	AB	277	G
2	AB	294	A
2	AB	295	G
2	AB	311	A
2	AB	321	U
2	AB	330	A
2	AB	332	A
2	AB	333	G
2	AB	338	G
2	AB	368	A
2	AB	370	G
2	AB	371	A
2	AB	372	G
2	AB	386	G
2	AB	387	U
2	AB	388	G
2	AB	389	G
2	AB	390	U
2	AB	391	A
2	AB	396	G
2	AB	406	G
2	AB	411	G
2	AB	418	C
2	AB	424	G
2	AB	428	A
2	AB	429	A
2	AB	431	U
2	AB	436	C
2	AB	452	G
2	AB	454	A
2	AB	455	C
2	AB	456	C

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Mol	Chain	Res	Type
2	AB	479	A
2	AB	480	A
2	AB	481	G
2	AB	484	C
2	AB	489	G
2	AB	504	A
2	AB	505	A
2	AB	508	A
2	AB	509	C
2	AB	527	C
2	AB	532	A
2	AB	545	U
2	AB	546	U
2	AB	550	C
2	AB	562	U
2	AB	563	A
2	AB	573	U
2	AB	575	A
2	AB	603	A
2	AB	604	G
2	AB	612	G
2	AB	613	A
2	AB	614	A
2	AB	615	U
2	AB	620	G
2	AB	621	A
2	AB	627	A
2	AB	635	C
2	AB	637	A
2	AB	644	A
2	AB	645	C
2	AB	655	A
2	AB	656	G
2	AB	671	C
2	AB	675	A
2	AB	686	U
2	AB	696	G
2	AB	718	A
2	AB	719	C
2	AB	728	G
2	AB	730	A
2	AB	732	C

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Mol	Chain	Res	Type
2	AB	736	C
2	AB	747	5MU
2	AB	751	A
2	AB	753	A
2	AB	758	C
2	AB	762	U
2	AB	763	G
2	AB	764	A
2	AB	775	G
2	AB	776	G
2	AB	782	A
2	AB	784	G
2	AB	786	C
2	AB	789	A
2	AB	790	U
2	AB	793	A
2	AB	802	A
2	AB	805	G
2	AB	806	C
2	AB	812	C
2	AB	846	U
2	AB	847	U
2	AB	848	C
2	AB	859	G
2	AB	870	U
2	AB	888	C
2	AB	889	C
2	AB	894	U
2	AB	896	A
2	AB	897	C
2	AB	901	C
2	AB	911	A
2	AB	915	C
2	AB	925	A
2	AB	932	U
2	AB	933	A
2	AB	938	G
2	AB	941	A
2	AB	945	A
2	AB	946	C
2	AB	961	C
2	AB	973	A

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Mol	Chain	Res	Type
2	AB	974	G
2	AB	979	A
2	AB	980	A
2	AB	981	A
2	AB	983	A
2	AB	984	A
2	AB	985	C
2	AB	986	C
2	AB	990	A
2	AB	995	C
2	AB	996	A
2	AB	1002	G
2	AB	1003	G
2	AB	1005	C
2	AB	1008	A
2	AB	1010	A
2	AB	1011	G
2	AB	1013	C
2	AB	1022	G
2	AB	1025	G
2	AB	1026	G
2	AB	1044	C
2	AB	1045	C
2	AB	1047	G
2	AB	1048	A
2	AB	1060	U
2	AB	1061	U
2	AB	1062	G
2	AB	1070	A
2	AB	1071	G
2	AB	1073	A
2	AB	1078	U
2	AB	1079	C
2	AB	1081	U
2	AB	1083	U
2	AB	1084	A
2	AB	1087	G
2	AB	1094	U
2	AB	1096	A
2	AB	1097	U
2	AB	1098	A
2	AB	1104	C

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Mol	Chain	Res	Type
2	AB	1109	C
2	AB	1110	G
2	AB	1112	G
2	AB	1123	C
2	AB	1128	G
2	AB	1129	A
2	AB	1130	U
2	AB	1132	U
2	AB	1134	A
2	AB	1135	C
2	AB	1142	A
2	AB	1143	A
2	AB	1157	G
2	AB	1158	C
2	AB	1173	U
2	AB	1175	A
2	AB	1177	G
2	AB	1184	U
2	AB	1204	A
2	AB	1211	C
2	AB	1236	G
2	AB	1237	A
2	AB	1238	G
2	AB	1239	G
2	AB	1241	A
2	AB	1253	A
2	AB	1255	U
2	AB	1256	G
2	AB	1266	G
2	AB	1272	A
2	AB	1273	U
2	AB	1274	A
2	AB	1275	A
2	AB	1283	G
2	AB	1300	G
2	AB	1301	A
2	AB	1302	A
2	AB	1303	G
2	AB	1307	A
2	AB	1308	A
2	AB	1318	U
2	AB	1321	A

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Mol	Chain	Res	Type
2	AB	1323	C
2	AB	1329	U
2	AB	1341	G
2	AB	1349	C
2	AB	1362	C
2	AB	1363	C
2	AB	1365	A
2	AB	1368	G
2	AB	1378	A
2	AB	1379	U
2	AB	1385	A
2	AB	1386	C
2	AB	1392	A
2	AB	1395	A
2	AB	1396	U
2	AB	1416	G
2	AB	1417	C
2	AB	1420	A
2	AB	1421	G
2	AB	1453	A
2	AB	1454	C
2	AB	1455	G
2	AB	1459	G
2	AB	1460	U
2	AB	1461	C
2	AB	1482	G
2	AB	1493	C
2	AB	1509	A
2	AB	1514	G
2	AB	1515	A
2	AB	1522	A
2	AB	1523	U
2	AB	1524	G
2	AB	1552	A
2	AB	1558	C
2	AB	1565	C
2	AB	1566	A
2	AB	1567	G
2	AB	1569	A
2	AB	1578	U
2	AB	1584	U
2	AB	1585	C

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Mol	Chain	Res	Type
2	AB	1608	A
2	AB	1609	A
2	AB	1610	A
2	AB	1612	C
2	AB	1616	A
2	AB	1617	C
2	AB	1632	A
2	AB	1635	A
2	AB	1636	U
2	AB	1646	C
2	AB	1648	U
2	AB	1669	A
2	AB	1674	G
2	AB	1676	A
2	AB	1678	A
2	AB	1693	U
2	AB	1713	A
2	AB	1715	G
2	AB	1724	G
2	AB	1730	C
2	AB	1758	U
2	AB	1759	A
2	AB	1760	C
2	AB	1761	C
2	AB	1762	A
2	AB	1763	G
2	AB	1764	C
2	AB	1773	A
2	AB	1780	A
2	AB	1782	U
2	AB	1786	A
2	AB	1787	A
2	AB	1800	C
2	AB	1808	A
2	AB	1809	A
2	AB	1815	A
2	AB	1825	U
2	AB	1830	C
2	AB	1831	G
2	AB	1833	C
2	AB	1851	U
2	AB	1854	A

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Mol	Chain	Res	Type
2	AB	1873	G
2	AB	1900	A
2	AB	1901	A
2	AB	1912	A
2	AB	1913	A
2	AB	1928	A
2	AB	1930	G
2	AB	1937	A
2	AB	1938	A
2	AB	1941	C
2	AB	1943	U
2	AB	1955	U
2	AB	1963	U
2	AB	1964	G
2	AB	1965	C
2	AB	1968	G
2	AB	1970	A
2	AB	1971	U
2	AB	1972	G
2	AB	1982	U
2	AB	1993	U
2	AB	1996	C
2	AB	2004	G
2	AB	2012	G
2	AB	2020	A
2	AB	2023	C
2	AB	2031	A
2	AB	2032	G
2	AB	2034	U
2	AB	2040	G
2	AB	2043	C
2	AB	2055	C
2	AB	2056	G
2	AB	2059	A
2	AB	2061	G
2	AB	2062	A
2	AB	2069	7MG
2	AB	2077	A
2	AB	2084	C
2	AB	2093	G
2	AB	2095	A
2	AB	2107	G

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Mol	Chain	Res	Type
2	AB	2111	U
2	AB	2112	G
2	AB	2118	U
2	AB	2119	A
2	AB	2127	G
2	AB	2128	G
2	AB	2132	U
2	AB	2133	G
2	AB	2134	A
2	AB	2137	U
2	AB	2143	C
2	AB	2147	A
2	AB	2148	G
2	AB	2154	A
2	AB	2158	A
2	AB	2163	A
2	AB	2198	A
2	AB	2199	A
2	AB	2204	G
2	AB	2211	A
2	AB	2212	A
2	AB	2213	U
2	AB	2214	C
2	AB	2215	C
2	AB	2224	G
2	AB	2225	A
2	AB	2237	G
2	AB	2238	G
2	AB	2239	G
2	AB	2246	G
2	AB	2249	U
2	AB	2250	G
2	AB	2253	G
2	AB	2266	A
2	AB	2282	G
2	AB	2283	C
2	AB	2287	A
2	AB	2288	A
2	AB	2307	G
2	AB	2309	A
2	AB	2321	U
2	AB	2322	A

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Mol	Chain	Res	Type
2	AB	2325	G
2	AB	2334	U
2	AB	2335	A
2	AB	2336	A
2	AB	2337	G
2	AB	2340	A
2	AB	2345	G
2	AB	2346	A
2	AB	2347	C
2	AB	2350	C
2	AB	2354	C
2	AB	2358	A
2	AB	2383	G
2	AB	2385	C
2	AB	2389	G
2	AB	2390	U
2	AB	2402	U
2	AB	2406	A
2	AB	2407	A
2	AB	2411	A
2	AB	2426	A
2	AB	2427	C
2	AB	2428	G
2	AB	2429	G
2	AB	2432	A
2	AB	2433	A
2	AB	2435	A
2	AB	2439	A
2	AB	2440	C
2	AB	2441	U
2	AB	2448	A
2	AB	2449	H2U
2	AB	2450	A
2	AB	2452	C
2	AB	2453	A
2	AB	2472	G
2	AB	2476	A
2	AB	2478	A
2	AB	2486	C
2	AB	2491	U
2	AB	2493	U
2	AB	2494	G

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Mol	Chain	Res	Type
2	AB	2501	C
2	AB	2502	G
2	AB	2504	PSU
2	AB	2505	G
2	AB	2515	C
2	AB	2516	A
2	AB	2518	A
2	AB	2519	U
2	AB	2530	A
2	AB	2547	A
2	AB	2554	U
2	AB	2566	A
2	AB	2567	G
2	AB	2572	A
2	AB	2573	C
2	AB	2582	G
2	AB	2585	U
2	AB	2586	U
2	AB	2599	G
2	AB	2602	A
2	AB	2603	G
2	AB	2608	G
2	AB	2609	U
2	AB	2610	C
2	AB	2613	U
2	AB	2616	C
2	AB	2628	C
2	AB	2629	U
2	AB	2639	A
2	AB	2654	A
2	AB	2655	G
2	AB	2656	U
2	AB	2664	G
2	AB	2685	G
2	AB	2689	U
2	AB	2690	U
2	AB	2714	G
2	AB	2737	G
2	AB	2739	U
2	AB	2742	G
2	AB	2744	G
2	AB	2757	A

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Mol	Chain	Res	Type
2	AB	2765	A
2	AB	2766	A
2	AB	2769	U
2	AB	2771	C
2	AB	2774	C
2	AB	2777	G
2	AB	2778	A
2	AB	2779	U
2	AB	2782	G
2	AB	2791	G
2	AB	2800	A
2	AB	2807	U
2	AB	2825	G
2	AB	2832	U
2	AB	2833	U
2	AB	2842	G
2	AB	2849	U
2	AB	2858	C
2	AB	2864	G
2	AB	2867	G
2	AB	2868	A
2	AB	2879	A
2	AB	2880	C
2	AB	2883	A
2	AB	2885	G
2	AB	2889	C
2	AB	2893	A
2	AB	2895	G
2	AB	2903	U
35	BA	2	A
35	BA	3	A
35	BA	4	U
35	BA	5	U
35	BA	7	A
35	BA	8	A
35	BA	9	G
35	BA	32	A
35	BA	36	C
35	BA	48	C
35	BA	52	C
35	BA	53	A
35	BA	54	C

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Mol	Chain	Res	Type
35	BA	60	A
35	BA	61	G
35	BA	83	C
35	BA	98	A
35	BA	108	G
35	BA	121	U
35	BA	122	G
35	BA	123	U
35	BA	129	A
35	BA	153	C
35	BA	164	G
35	BA	166	U
35	BA	171	A
35	BA	174	A
35	BA	182	A
35	BA	184	G
35	BA	188	C
35	BA	189	A
35	BA	197	A
35	BA	204	G
35	BA	205	A
35	BA	206	C
35	BA	209	U
35	BA	210	C
35	BA	211	G
35	BA	212	G
35	BA	225	C
35	BA	228	A
35	BA	240	G
35	BA	244	U
35	BA	245	U
35	BA	247	G
35	BA	249	U
35	BA	250	A
35	BA	251	G
35	BA	252	U
35	BA	262	A
35	BA	266	G
35	BA	267	C
35	BA	272	C
35	BA	280	C
35	BA	289	G

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Mol	Chain	Res	Type
35	BA	293	G
35	BA	306	A
35	BA	307	C
35	BA	316	C
35	BA	317	U
35	BA	319	G
35	BA	328	C
35	BA	329	A
35	BA	332	G
35	BA	344	A
35	BA	352	C
35	BA	353	A
35	BA	354	G
35	BA	365	U
35	BA	367	U
35	BA	372	C
35	BA	373	A
35	BA	374	A
35	BA	381	C
35	BA	382	A
35	BA	384	G
35	BA	389	A
35	BA	390	U
35	BA	392	C
35	BA	395	C
35	BA	398	U
35	BA	406	G
35	BA	411	A
35	BA	412	A
35	BA	413	G
35	BA	415	A
35	BA	421	U
35	BA	422	C
35	BA	429	U
35	BA	444	G
35	BA	463	U
35	BA	464	U
35	BA	465	A
35	BA	467	U
35	BA	468	A
35	BA	476	U
35	BA	479	U

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Mol	Chain	Res	Type
35	BA	481	G
35	BA	482	A
35	BA	485	U
35	BA	496	A
35	BA	498	A
35	BA	505	G
35	BA	508	U
35	BA	510	A
35	BA	518	C
35	BA	528	C
35	BA	531	U
35	BA	532	A
35	BA	533	A
35	BA	534	U
35	BA	535	A
35	BA	547	A
35	BA	552	U
35	BA	560	A
35	BA	561	U
35	BA	566	G
35	BA	572	A
35	BA	573	A
35	BA	575	G
35	BA	576	C
35	BA	577	G
35	BA	578	C
35	BA	583	A
35	BA	588	G
35	BA	611	C
35	BA	615	G
35	BA	620	C
35	BA	631	C
35	BA	632	U
35	BA	633	G
35	BA	636	U
35	BA	642	A
35	BA	650	G
35	BA	653	U
35	BA	687	A
35	BA	688	G
35	BA	702	A
35	BA	718	A

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Mol	Chain	Res	Type
35	BA	721	G
35	BA	724	G
35	BA	729	A
35	BA	755	G
35	BA	760	G
35	BA	765	G
35	BA	766	A
35	BA	777	A
35	BA	783	C
35	BA	790	A
35	BA	793	U
35	BA	794	A
35	BA	805	C
35	BA	810	C
35	BA	812	G
35	BA	816	A
35	BA	817	C
35	BA	819	A
35	BA	821	G
35	BA	828	U
35	BA	829	G
35	BA	841	C
35	BA	842	U
35	BA	843	U
35	BA	870	U
35	BA	873	A
35	BA	876	C
35	BA	899	C
35	BA	900	A
35	BA	910	C
35	BA	914	A
35	BA	926	G
35	BA	927	G
35	BA	938	A
35	BA	939	G
35	BA	945	G
35	BA	960	U
35	BA	961	U
35	BA	962	C
35	BA	968	A
35	BA	969	A
35	BA	970	C

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Mol	Chain	Res	Type
35	BA	973	G
35	BA	974	A
35	BA	975	A
35	BA	978	A
35	BA	979	C
35	BA	980	C
35	BA	982	U
35	BA	983	A
35	BA	984	C
35	BA	992	U
35	BA	993	G
35	BA	994	A
35	BA	995	C
35	BA	1004	A
35	BA	1006	G
35	BA	1015	G
35	BA	1026	G
35	BA	1028	C
35	BA	1030	U
35	BA	1031	C
35	BA	1050	G
35	BA	1064	G
35	BA	1065	U
35	BA	1081	A
35	BA	1094	G
35	BA	1095	U
35	BA	1101	A
35	BA	1118	U
35	BA	1135	U
35	BA	1137	C
35	BA	1139	G
35	BA	1143	G
35	BA	1149	C
35	BA	1152	A
35	BA	1154	G
35	BA	1159	U
35	BA	1168	U
35	BA	1181	G
35	BA	1182	G
35	BA	1183	U
35	BA	1190	G
35	BA	1197	A

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Mol	Chain	Res	Type
35	BA	1198	G
35	BA	1200	C
35	BA	1201	A
35	BA	1202	U
35	BA	1208	C
35	BA	1212	U
35	BA	1214	C
35	BA	1215	G
35	BA	1224	U
35	BA	1226	C
35	BA	1227	A
35	BA	1228	C
35	BA	1238	A
35	BA	1239	A
35	BA	1240	U
35	BA	1250	A
35	BA	1254	A
35	BA	1256	A
35	BA	1257	A
35	BA	1258	G
35	BA	1264	U
35	BA	1270	G
35	BA	1278	G
35	BA	1280	A
35	BA	1281	C
35	BA	1286	U
35	BA	1290	G
35	BA	1297	G
35	BA	1300	G
35	BA	1301	U
35	BA	1303	C
35	BA	1305	G
35	BA	1315	U
35	BA	1317	C
35	BA	1319	A
35	BA	1322	C
35	BA	1340	A
35	BA	1345	U
35	BA	1346	A
35	BA	1347	G
35	BA	1348	U
35	BA	1360	A

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Mol	Chain	Res	Type
35	BA	1363	A
35	BA	1364	U
35	BA	1365	G
35	BA	1368	A
35	BA	1378	C
35	BA	1401	G
35	BA	1431	A
35	BA	1432	G
35	BA	1437	A
35	BA	1446	A
35	BA	1448	C
35	BA	1452	C
35	BA	1454	G
35	BA	1490	U
35	BA	1492	A
35	BA	1493	A
35	BA	1494	G
35	BA	1502	A
35	BA	1503	A
35	BA	1506	U
35	BA	1507	A
35	BA	1529	G
35	BA	1530	G
35	BA	1531	A
35	BA	1534	A
35	BA	1536	C
35	BA	1539	C
35	BA	1540	U
35	BA	1542	A
36	BB	17	U
36	BB	18	A
36	BB	21	U
36	BB	23	C
36	BB	26	U
36	BB	27	A
36	BB	30	U
36	BB	33	A
36	BB	34	U
36	BB	40	G
36	BB	44	U
36	BB	47	C
36	BB	48	C

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Mol	Chain	Res	Type
36	BB	53	G
36	BB	56	G
37	BC	8	4SU
37	BC	9	G
37	BC	10	G
37	BC	18	U
37	BC	19	G
37	BC	20	G
37	BC	22	A
37	BC	38	A
37	BC	48	U
37	BC	49	C
37	BC	50	G
37	BC	75	C
37	BC	76	C
37	BC	77	A

All (312) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	11	C
1	AA	13	G
1	AA	15	A
1	AA	25	U
1	AA	29	A
1	AA	34	A
1	AA	41	G
1	AA	43	C
1	AA	44	G
1	AA	57	A
1	AA	66	A
1	AA	72	G
1	AA	87	U
2	AB	13	A
2	AB	26	G
2	AB	42	A
2	AB	49	A
2	AB	63	A
2	AB	71	A
2	AB	91	A
2	AB	94	A
2	AB	99	U

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Mol	Chain	Res	Type
2	AB	109	C
2	AB	114	U
2	AB	196	A
2	AB	199	A
2	AB	228	C
2	AB	231	A
2	AB	241	A
2	AB	242	G
2	AB	265	A
2	AB	277	G
2	AB	294	A
2	AB	332	A
2	AB	386	G
2	AB	387	U
2	AB	389	G
2	AB	401	A
2	AB	403	U
2	AB	428	A
2	AB	445	C
2	AB	451	U
2	AB	453	A
2	AB	455	C
2	AB	463	G
2	AB	479	A
2	AB	503	A
2	AB	534	U
2	AB	561	G
2	AB	603	A
2	AB	611	C
2	AB	620	G
2	AB	625	G
2	AB	628	G
2	AB	635	C
2	AB	671	C
2	AB	689	A
2	AB	714	U
2	AB	743	A
2	AB	748	G
2	AB	762	U
2	AB	775	G
2	AB	776	G
2	AB	789	A

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Mol	Chain	Res	Type
2	AB	847	U
2	AB	870	U
2	AB	900	A
2	AB	940	G
2	AB	945	A
2	AB	974	G
2	AB	979	A
2	AB	980	A
2	AB	995	C
2	AB	1012	U
2	AB	1040	A
2	AB	1043	C
2	AB	1061	U
2	AB	1069	A
2	AB	1070	A
2	AB	1078	U
2	AB	1083	U
2	AB	1095	A
2	AB	1133	A
2	AB	1134	A
2	AB	1142	A
2	AB	1157	G
2	AB	1163	G
2	AB	1166	G
2	AB	1200	C
2	AB	1210	G
2	AB	1239	G
2	AB	1254	A
2	AB	1255	U
2	AB	1288	G
2	AB	1300	G
2	AB	1329	U
2	AB	1349	C
2	AB	1351	C
2	AB	1386	C
2	AB	1391	U
2	AB	1395	A
2	AB	1416	G
2	AB	1451	C
2	AB	1452	G
2	AB	1454	C
2	AB	1460	U

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Mol	Chain	Res	Type
2	AB	1476	U
2	AB	1567	G
2	AB	1608	A
2	AB	1609	A
2	AB	1616	A
2	AB	1634	A
2	AB	1693	U
2	AB	1697	G
2	AB	1715	G
2	AB	1723	G
2	AB	1759	A
2	AB	1773	A
2	AB	1778	U
2	AB	1783	A
2	AB	1784	A
2	AB	1786	A
2	AB	1807	G
2	AB	1832	C
2	AB	1882	U
2	AB	1889	A
2	AB	1912	A
2	AB	1913	A
2	AB	1927	A
2	AB	1939	5MU
2	AB	1940	U
2	AB	1944	U
2	AB	1955	U
2	AB	1973	G
2	AB	2019	A
2	AB	2021	C
2	AB	2031	A
2	AB	2033	A
2	AB	2042	A
2	AB	2058	A
2	AB	2061	G
2	AB	2068	U
2	AB	2076	U
2	AB	2079	U
2	AB	2106	U
2	AB	2118	U
2	AB	2132	U
2	AB	2133	G

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Mol	Chain	Res	Type
2	AB	2198	A
2	AB	2213	U
2	AB	2223	G
2	AB	2225	A
2	AB	2236	U
2	AB	2238	G
2	AB	2249	U
2	AB	2282	G
2	AB	2287	A
2	AB	2336	A
2	AB	2353	G
2	AB	2385	C
2	AB	2402	U
2	AB	2425	A
2	AB	2432	A
2	AB	2434	A
2	AB	2439	A
2	AB	2440	C
2	AB	2452	C
2	AB	2500	U
2	AB	2504	PSU
2	AB	2515	C
2	AB	2571	U
2	AB	2585	U
2	AB	2602	A
2	AB	2608	G
2	AB	2610	C
2	AB	2613	U
2	AB	2628	C
2	AB	2655	G
2	AB	2663	G
2	AB	2690	U
2	AB	2697	G
2	AB	2756	U
2	AB	2765	A
2	AB	2771	C
2	AB	2777	G
2	AB	2791	G
2	AB	2802	G
2	AB	2806	C
2	AB	2833	U
2	AB	2835	A

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Mol	Chain	Res	Type
2	AB	2842	G
2	AB	2858	C
2	AB	2879	A
35	BA	2	A
35	BA	7	A
35	BA	39	G
35	BA	42	G
35	BA	51	A
35	BA	84	U
35	BA	97	G
35	BA	101	A
35	BA	121	U
35	BA	128	G
35	BA	173	U
35	BA	178	C
35	BA	187	G
35	BA	188	C
35	BA	204	G
35	BA	205	A
35	BA	206	C
35	BA	209	U
35	BA	224	U
35	BA	243	A
35	BA	244	U
35	BA	249	U
35	BA	251	G
35	BA	261	U
35	BA	272	C
35	BA	279	A
35	BA	306	A
35	BA	328	C
35	BA	337	G
35	BA	366	A
35	BA	372	C
35	BA	410	G
35	BA	429	U
35	BA	467	U
35	BA	481	G
35	BA	497	G
35	BA	533	A
35	BA	534	U
35	BA	552	U

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Mol	Chain	Res	Type
35	BA	578	C
35	BA	582	C
35	BA	606	G
35	BA	618	C
35	BA	653	U
35	BA	675	A
35	BA	681	A
35	BA	682	G
35	BA	700	G
35	BA	717	U
35	BA	727	G
35	BA	744	C
35	BA	764	C
35	BA	765	G
35	BA	782	A
35	BA	789	U
35	BA	792	A
35	BA	815	A
35	BA	816	A
35	BA	840	C
35	BA	844	G
35	BA	845	A
35	BA	870	U
35	BA	897	C
35	BA	898	G
35	BA	926	G
35	BA	931	C
35	BA	937	A
35	BA	944	G
35	BA	960	U
35	BA	965	U
35	BA	968	A
35	BA	969	A
35	BA	974	A
35	BA	979	C
35	BA	992	U
35	BA	993	G
35	BA	1014	A
35	BA	1029	U
35	BA	1125	U
35	BA	1129	C
35	BA	1160	G

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Mol	Chain	Res	Type
35	BA	1167	A
35	BA	1201	A
35	BA	1213	A
35	BA	1214	C
35	BA	1224	U
35	BA	1226	C
35	BA	1239	A
35	BA	1253	G
35	BA	1256	A
35	BA	1279	G
35	BA	1281	C
35	BA	1289	A
35	BA	1302	C
35	BA	1310	G
35	BA	1313	U
35	BA	1318	A
35	BA	1323	G
35	BA	1329	A
35	BA	1346	A
35	BA	1347	G
35	BA	1364	U
35	BA	1393	U
35	BA	1404	C
35	BA	1417	G
35	BA	1452	C
35	BA	1461	G
35	BA	1465	A
35	BA	1491	G
35	BA	1492	A
35	BA	1502	A
35	BA	1530	G
36	BB	22	G
36	BB	29	G
36	BB	39	U
36	BB	43	U
36	BB	53	G
36	BB	55	A
37	BC	9	G

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

40 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
2	OMG	AB	2251	2	18,26,27	1.71	5 (27%)	19,38,41	1.37	1 (5%)
35	5MC	BA	967	35	18,22,23	1.05	1 (5%)	26,32,35	1.33	4 (15%)
2	OMU	AB	2552	2	19,22,23	0.82	1 (5%)	26,31,34	1.36	3 (11%)
2	5MC	AB	1962	2	18,22,23	1.31	2 (11%)	26,32,35	1.51	6 (23%)
2	PSU	AB	2457	2	18,21,22	1.56	3 (16%)	22,30,33	2.33	5 (22%)
35	UR3	BA	1498	35	19,22,23	1.23	3 (15%)	26,32,35	1.91	7 (26%)
2	H2U	AB	2449	2	18,21,22	1.23	1 (5%)	21,30,33	2.82	9 (42%)
2	3TD	AB	1915	2	18,22,23	1.38	3 (16%)	22,32,35	2.17	7 (31%)
37	5MU	BC	55	37	19,22,23	1.01	1 (5%)	28,32,35	1.97	8 (28%)
2	CH	AB	2575	2	16,21,22	1.64	2 (12%)	20,30,33	1.55	4 (20%)
37	4SU	BC	8	37	18,21,22	1.95	6 (33%)	26,30,33	1.77	7 (26%)
2	2MG	AB	1835	2	18,26,27	1.79	4 (22%)	16,38,41	1.83	3 (18%)
2	PSU	AB	1917	2	18,21,22	1.39	4 (22%)	22,30,33	1.82	5 (22%)
2	7MG	AB	2069	2	22,26,27	4.67	4 (18%)	29,39,42	1.64	5 (17%)
35	5MC	BA	1407	35	18,22,23	1.58	3 (16%)	26,32,35	1.49	6 (23%)
37	PSU	BC	56	37	18,21,22	2.23	5 (27%)	22,30,33	1.22	1 (4%)
2	PSU	AB	746	2	18,21,22	2.04	5 (27%)	22,30,33	2.03	6 (27%)
2	PSU	AB	2580	2	18,21,22	1.85	5 (27%)	22,30,33	1.48	4 (18%)
35	2MG	BA	966	35	18,26,27	1.87	6 (33%)	16,38,41	1.50	4 (25%)
37	OMC	BC	33	37	19,22,23	1.24	3 (15%)	26,31,34	1.38	5 (19%)
35	4OC	BA	1402	35	20,23,24	1.24	4 (20%)	26,32,35	1.97	8 (30%)
2	5MU	AB	1939	2	19,22,23	1.35	2 (10%)	28,32,35	2.31	9 (32%)
35	2MG	BA	1516	35	18,26,27	1.64	4 (22%)	16,38,41	1.47	3 (18%)
2	PSU	AB	955	2	18,21,22	1.90	3 (16%)	22,30,33	1.56	4 (18%)
2	PSU	AB	2605	2	18,21,22	1.79	3 (16%)	22,30,33	1.92	7 (31%)
2	6MZ	AB	1618	2	18,25,26	1.81	6 (33%)	16,36,39	1.60	4 (25%)
35	7MG	BA	527	35	22,26,27	3.39	7 (31%)	29,39,42	1.61	2 (6%)
35	MA6	BA	1518	35	18,26,27	1.55	2 (11%)	19,38,41	1.30	3 (15%)
2	1MG	AB	745	2	18,26,27	2.01	9 (50%)	19,39,42	1.89	6 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
2	PSU	AB	1911	2	18,21,22	2.38	8 (44%)	22,30,33	1.33	4 (18%)
35	MA6	BA	1519	35	18,26,27	1.50	4 (22%)	19,38,41	2.25	6 (31%)
35	2MG	BA	1207	35	18,26,27	1.59	4 (22%)	16,38,41	1.44	2 (12%)
2	2MA	AB	2503	2	17,25,26	1.22	2 (11%)	17,37,40	1.78	3 (17%)
2	OMC	AB	2498	2	19,22,23	1.30	5 (26%)	26,31,34	1.57	6 (23%)
2	6MZ	AB	2030	2	18,25,26	1.85	3 (16%)	16,36,39	1.95	3 (18%)
2	2MG	AB	2445	2	18,26,27	1.77	4 (22%)	16,38,41	1.76	4 (25%)
35	PSU	BA	516	35	18,21,22	1.67	4 (22%)	22,30,33	2.34	4 (18%)
37	H2U	BC	21	37	18,21,22	1.65	6 (33%)	21,30,33	2.23	9 (42%)
2	5MU	AB	747	2	19,22,23	1.52	3 (15%)	28,32,35	2.79	17 (60%)
2	PSU	AB	2504	2	18,21,22	1.71	3 (16%)	22,30,33	2.17	5 (22%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	OMG	AB	2251	2	-	0/5/27/28	0/3/3/3
35	5MC	BA	967	35	-	1/7/25/26	0/2/2/2
2	OMU	AB	2552	2	-	1/9/27/28	0/2/2/2
2	5MC	AB	1962	2	-	0/7/25/26	0/2/2/2
2	PSU	AB	2457	2	-	0/7/25/26	0/2/2/2
35	UR3	BA	1498	35	-	0/7/25/26	0/2/2/2
2	H2U	AB	2449	2	-	0/7/38/39	0/2/2/2
2	3TD	AB	1915	2	-	0/7/25/26	0/2/2/2
37	5MU	BC	55	37	-	0/7/25/26	0/2/2/2
2	CH	AB	2575	2	-	0/5/25/26	0/2/2/2
37	4SU	BC	8	37	-	0/7/25/26	0/2/2/2
2	2MG	AB	1835	2	-	0/5/27/28	0/3/3/3
2	PSU	AB	1917	2	-	3/7/25/26	0/2/2/2
2	7MG	AB	2069	2	-	0/7/37/38	0/3/3/3
35	5MC	BA	1407	35	-	0/7/25/26	0/2/2/2
37	PSU	BC	56	37	-	0/7/25/26	0/2/2/2
2	PSU	AB	746	2	-	1/7/25/26	0/2/2/2
2	PSU	AB	2580	2	-	3/7/25/26	0/2/2/2
35	2MG	BA	966	35	-	0/5/27/28	0/3/3/3
37	OMC	BC	33	37	-	0/9/27/28	0/2/2/2
35	4OC	BA	1402	35	-	0/9/29/30	0/2/2/2
2	5MU	AB	1939	2	-	0/7/25/26	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	2MG	BA	1516	35	-	0/5/27/28	0/3/3/3
2	PSU	AB	955	2	-	0/7/25/26	0/2/2/2
2	PSU	AB	2605	2	-	0/7/25/26	0/2/2/2
2	6MZ	AB	1618	2	-	1/5/27/28	0/3/3/3
35	7MG	BA	527	35	-	1/7/37/38	0/3/3/3
35	MA6	BA	1518	35	-	0/7/29/30	0/3/3/3
2	1MG	AB	745	2	-	0/3/25/26	0/3/3/3
2	PSU	AB	1911	2	-	2/7/25/26	0/2/2/2
35	MA6	BA	1519	35	-	0/7/29/30	0/3/3/3
35	2MG	BA	1207	35	-	0/5/27/28	0/3/3/3
2	2MA	AB	2503	2	-	0/3/25/26	0/3/3/3
2	OMC	AB	2498	2	-	0/9/27/28	0/2/2/2
2	6MZ	AB	2030	2	-	0/5/27/28	0/3/3/3
2	2MG	AB	2445	2	-	0/5/27/28	0/3/3/3
35	PSU	BA	516	35	-	1/7/25/26	0/2/2/2
37	H2U	BC	21	37	-	0/7/38/39	0/2/2/2
2	5MU	AB	747	2	-	0/7/25/26	0/2/2/2
2	PSU	AB	2504	2	-	2/7/25/26	0/2/2/2

All (153) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	2069	7MG	C8-N9	-20.69	1.34	1.46
35	BA	527	7MG	C8-N9	-14.00	1.38	1.46
2	AB	2030	6MZ	C6-N1	5.79	1.42	1.34
2	AB	1911	PSU	C2'-C1'	-5.36	1.46	1.53
2	AB	955	PSU	C2'-C1'	-5.26	1.46	1.53
2	AB	1835	2MG	C8-N7	-5.15	1.26	1.35
37	BC	56	PSU	C1'-C5	5.02	1.61	1.50
2	AB	2575	CH	C2'-C1'	4.80	1.61	1.53
2	AB	2445	2MG	C6-N1	4.75	1.44	1.37
37	BC	56	PSU	C6-N1	4.69	1.44	1.36
2	AB	746	PSU	O4'-C4'	-4.62	1.34	1.45
37	BC	8	4SU	C5-C4	-4.58	1.36	1.42
2	AB	2069	7MG	C5-N7	4.48	1.40	1.35
2	AB	2580	PSU	C2-N1	4.43	1.42	1.36
2	AB	1911	PSU	C4-N3	4.28	1.46	1.38
2	AB	2605	PSU	C2-N1	4.27	1.42	1.36
35	BA	1407	5MC	C6-C5	4.23	1.41	1.34
35	BA	1518	MA6	O4'-C1'	4.18	1.46	1.41
2	AB	1618	6MZ	C2'-C1'	-4.05	1.47	1.53
37	BC	56	PSU	C2'-C1'	3.94	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1207	2MG	C8-N7	-3.91	1.28	1.35
2	AB	2504	PSU	C6-N1	3.80	1.42	1.36
2	AB	747	5MU	C2-N1	3.75	1.44	1.38
2	AB	2605	PSU	C6-C5	3.74	1.39	1.35
35	BA	966	2MG	C8-N7	-3.70	1.28	1.35
2	AB	2580	PSU	O4'-C1'	3.66	1.48	1.43
37	BC	8	4SU	C4-N3	3.55	1.41	1.37
2	AB	1939	5MU	C2-N3	3.54	1.44	1.38
2	AB	2504	PSU	C6-C5	3.45	1.39	1.35
2	AB	745	1MG	O3'-C3'	-3.45	1.34	1.43
35	BA	1518	MA6	C2'-C1'	3.44	1.59	1.53
35	BA	1516	2MG	C2'-C1'	-3.40	1.48	1.53
2	AB	746	PSU	C6-N1	3.35	1.41	1.36
2	AB	746	PSU	C2-N1	3.35	1.41	1.36
2	AB	2251	OMG	O4'-C1'	-3.32	1.36	1.41
2	AB	2457	PSU	C6-C5	3.30	1.39	1.35
35	BA	527	7MG	O3'-C3'	-3.21	1.35	1.43
35	BA	516	PSU	C3'-C4'	3.20	1.61	1.53
37	BC	21	H2U	C2-N1	3.10	1.40	1.35
2	AB	1911	PSU	C2-N1	3.01	1.40	1.36
2	AB	2504	PSU	C2'-C1'	-3.01	1.49	1.53
2	AB	955	PSU	C3'-C4'	2.98	1.60	1.53
2	AB	745	1MG	C8-N7	-2.96	1.30	1.35
37	BC	21	H2U	C2'-C3'	2.96	1.61	1.53
2	AB	745	1MG	CM1-N1	2.94	1.52	1.47
35	BA	516	PSU	C2-N1	2.90	1.40	1.36
2	AB	746	PSU	C4-C5	2.90	1.52	1.44
37	BC	8	4SU	C3'-C4'	-2.88	1.45	1.53
2	AB	2251	OMG	O4'-C4'	-2.84	1.38	1.45
2	AB	955	PSU	C6-C5	2.82	1.38	1.35
35	BA	516	PSU	C2-N3	2.82	1.42	1.37
2	AB	745	1MG	C5-C4	-2.80	1.35	1.43
2	AB	2030	6MZ	C4-N3	2.80	1.39	1.35
2	AB	2445	2MG	O4'-C4'	-2.78	1.38	1.45
2	AB	1618	6MZ	O4'-C1'	2.77	1.45	1.41
35	BA	1207	2MG	CM2-N2	2.76	1.50	1.45
35	BA	966	2MG	O4'-C1'	2.76	1.44	1.41
2	AB	1911	PSU	C1'-C5	2.74	1.56	1.50
2	AB	1917	PSU	C2-N1	2.72	1.40	1.36
2	AB	2251	OMG	C2-N3	2.71	1.39	1.33
2	AB	1962	5MC	O5'-C5'	-2.70	1.38	1.44
37	BC	33	OMC	C2-N1	2.70	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	BA	1516	2MG	O3'-C3'	-2.70	1.36	1.43
35	BA	967	5MC	O5'-C5'	-2.69	1.38	1.44
35	BA	1402	4OC	O5'-C5'	-2.68	1.38	1.44
35	BA	527	7MG	C5'-C4'	2.68	1.60	1.51
37	BC	56	PSU	O4'-C4'	-2.68	1.39	1.45
35	BA	1519	MA6	C2-N3	2.68	1.36	1.32
2	AB	2457	PSU	O4'-C1'	2.65	1.47	1.43
35	BA	966	2MG	C4-N3	-2.65	1.30	1.37
2	AB	2030	6MZ	C6-N6	2.63	1.39	1.35
2	AB	1835	2MG	C5-C6	-2.62	1.42	1.47
35	BA	527	7MG	O5'-C5'	-2.61	1.38	1.44
2	AB	1618	6MZ	C6-N1	2.60	1.37	1.34
2	AB	746	PSU	C2'-C1'	-2.56	1.50	1.53
35	BA	1516	2MG	O2'-C2'	-2.55	1.37	1.43
37	BC	21	H2U	C5-C4	2.55	1.55	1.50
2	AB	1911	PSU	C5'-C4'	2.54	1.59	1.51
35	BA	1498	UR3	C3U-N3	2.53	1.51	1.47
35	BA	1519	MA6	O4'-C4'	-2.51	1.39	1.45
35	BA	516	PSU	C4-N3	-2.50	1.34	1.38
35	BA	1519	MA6	O2'-C2'	-2.50	1.37	1.43
35	BA	527	7MG	C1'-N9	2.49	1.51	1.46
2	AB	1911	PSU	C2-N3	2.49	1.41	1.37
2	AB	2580	PSU	O5'-C5'	-2.46	1.38	1.44
2	AB	2069	7MG	O5'-C5'	-2.46	1.38	1.44
2	AB	2580	PSU	C6-C5	2.45	1.38	1.35
2	AB	745	1MG	C2'-C3'	2.45	1.60	1.53
2	AB	2449	H2U	C2-N1	2.43	1.39	1.35
2	AB	1911	PSU	O3'-C3'	-2.43	1.37	1.43
2	AB	1618	6MZ	O5'-C5'	-2.41	1.38	1.44
2	AB	2251	OMG	O5'-C5'	-2.40	1.38	1.44
2	AB	2069	7MG	C2-N3	2.40	1.38	1.33
2	AB	1911	PSU	O4'-C1'	2.40	1.47	1.43
2	AB	2580	PSU	O3'-C3'	2.39	1.48	1.43
2	AB	2445	2MG	C8-N7	-2.38	1.31	1.35
35	BA	1207	2MG	C2-N1	2.38	1.40	1.36
2	AB	745	1MG	O2'-C2'	2.38	1.48	1.43
2	AB	1618	6MZ	C8-N7	-2.38	1.30	1.34
2	AB	2575	CH	O2'-C2'	-2.37	1.37	1.43
2	AB	1618	6MZ	C9-N6	2.36	1.49	1.45
35	BA	966	2MG	C2-N1	2.34	1.40	1.36
2	AB	2445	2MG	C2'-C1'	-2.33	1.50	1.53
2	AB	2498	OMC	O2'-C2'	2.33	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	BC	56	PSU	C2-N1	2.33	1.39	1.36
2	AB	2457	PSU	C6-N1	-2.32	1.32	1.36
37	BC	21	H2U	C5'-C4'	2.32	1.58	1.51
2	AB	1917	PSU	O5'-C5'	-2.31	1.39	1.44
2	AB	1915	3TD	O5'-C5'	-2.30	1.39	1.44
35	BA	1407	5MC	C3'-C4'	-2.29	1.47	1.53
2	AB	2605	PSU	C3'-C2'	2.29	1.59	1.53
2	AB	2503	2MA	O4'-C1'	2.29	1.44	1.41
2	AB	1917	PSU	C5'-C4'	2.29	1.58	1.51
35	BA	1498	UR3	C3'-C2'	-2.28	1.47	1.53
37	BC	33	OMC	C3'-C4'	2.27	1.58	1.53
2	AB	1962	5MC	CM5-C5	2.26	1.56	1.50
37	BC	8	4SU	C2-N1	2.25	1.42	1.38
2	AB	745	1MG	O4'-C1'	-2.25	1.37	1.41
2	AB	747	5MU	C2-N3	2.25	1.42	1.38
2	AB	2503	2MA	C8-N7	-2.24	1.31	1.35
35	BA	1516	2MG	O5'-C5'	-2.23	1.39	1.44
2	AB	1915	3TD	O4'-C1'	2.21	1.46	1.43
2	AB	2498	OMC	O4'-C4'	-2.21	1.40	1.45
37	BC	8	4SU	C6-C5	2.19	1.40	1.35
2	AB	1835	2MG	O4'-C1'	2.18	1.44	1.41
2	AB	1939	5MU	O5'-C5'	-2.18	1.39	1.44
35	BA	966	2MG	O6-C6	2.18	1.27	1.23
2	AB	1915	3TD	C10-N3	2.17	1.51	1.47
35	BA	1402	4OC	CM4-N4	2.17	1.49	1.45
35	BA	1402	4OC	O3'-C3'	2.16	1.48	1.43
35	BA	1519	MA6	C3'-C2'	-2.15	1.47	1.53
35	BA	1402	4OC	O2'-CM2	2.13	1.49	1.42
2	AB	745	1MG	C6-N1	2.13	1.43	1.39
2	AB	2498	OMC	C1'-N1	2.13	1.53	1.47
2	AB	2552	OMU	C4-N3	2.13	1.42	1.38
2	AB	747	5MU	O3'-C3'	2.13	1.48	1.43
37	BC	33	OMC	O3'-C3'	2.11	1.48	1.43
37	BC	21	H2U	O2'-C2'	-2.11	1.38	1.43
37	BC	55	5MU	O2'-C2'	-2.11	1.38	1.43
37	BC	8	4SU	O4'-C4'	-2.11	1.40	1.45
2	AB	2498	OMC	C5'-C4'	2.10	1.58	1.51
35	BA	527	7MG	O4'-C1'	-2.09	1.37	1.42
35	BA	527	7MG	O2'-C2'	2.09	1.47	1.43
2	AB	2251	OMG	C2-N2	-2.08	1.29	1.34
35	BA	1407	5MC	C1'-N1	2.08	1.53	1.47
35	BA	1207	2MG	C4-N3	-2.06	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AB	745	1MG	C5-C6	-2.04	1.41	1.47
35	BA	1498	UR3	C2'-C1'	2.04	1.60	1.53
35	BA	966	2MG	C5-C4	-2.02	1.37	1.43
37	BC	21	H2U	C2-N3	-2.02	1.34	1.38
2	AB	2498	OMC	O5'-C5'	-2.01	1.39	1.44
2	AB	1835	2MG	C6-N1	2.01	1.40	1.37
2	AB	1917	PSU	O4'-C4'	-2.01	1.40	1.45

All (209) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	2457	PSU	C6-C5-C4	7.75	123.62	118.20
35	BA	516	PSU	C3'-C2'-C1'	7.65	110.55	101.64
2	AB	2449	H2U	O2-C2-N1	-7.16	114.12	123.11
2	AB	1939	5MU	C5M-C5-C4	6.70	126.14	118.77
2	AB	2504	PSU	C6-C5-C4	6.64	122.84	118.20
2	AB	747	5MU	C5-C4-N3	6.63	120.97	115.31
35	BA	527	7MG	N9-C8-N7	6.00	111.95	103.38
35	BA	1519	MA6	C4-C5-N7	-5.91	103.24	109.40
2	AB	747	5MU	O4-C4-C5	-5.79	118.19	124.90
2	AB	2030	6MZ	C9-N6-C6	5.71	127.79	122.87
2	AB	1917	PSU	C6-C5-C4	5.61	122.12	118.20
2	AB	2449	H2U	O2-C2-N3	5.46	131.67	121.50
2	AB	1835	2MG	O6-C6-N1	5.45	127.08	120.65
35	BA	516	PSU	C6-C5-C4	5.20	121.84	118.20
2	AB	2069	7MG	N9-C8-N7	5.17	110.77	103.38
37	BC	55	5MU	C5M-C5-C4	5.02	124.30	118.77
37	BC	21	H2U	C4-N3-C2	4.80	129.77	125.79
2	AB	1915	3TD	C6-C5-C4	4.77	121.52	118.22
2	AB	1939	5MU	C5M-C5-C6	-4.69	116.58	122.85
2	AB	1915	3TD	C3'-C2'-C1'	4.68	107.09	101.64
35	BA	1402	4OC	C6-C5-C4	-4.66	111.26	116.96
2	AB	2498	OMC	O4'-C1'-N1	4.56	118.78	108.36
35	BA	1519	MA6	N1-C6-N6	4.50	121.80	117.06
37	BC	55	5MU	C5M-C5-C6	-4.46	116.89	122.85
35	BA	1498	UR3	O4-C4-N3	4.46	125.85	119.66
2	AB	1915	3TD	C5-C6-N1	-4.43	115.47	122.11
2	AB	747	5MU	C4-N3-C2	-4.33	121.75	127.35
2	AB	2605	PSU	O2-C2-N1	-4.27	118.09	122.79
2	AB	2449	H2U	O4'-C1'-N1	4.25	115.09	109.30
2	AB	747	5MU	C1'-N1-C6	-4.20	114.13	121.12
2	AB	746	PSU	O4'-C4'-C3'	4.18	113.39	105.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	55	5MU	O2-C2-N1	4.18	128.34	122.79
2	AB	2449	H2U	O4'-C4'-C3'	4.12	113.27	105.11
2	AB	747	5MU	O2-C2-N1	-4.12	117.32	122.79
35	BA	1402	4OC	C5-C4-N3	4.08	129.16	122.59
2	AB	2504	PSU	O4'-C1'-C2'	4.05	110.86	105.14
2	AB	1939	5MU	C4-N3-C2	-3.97	122.22	127.35
2	AB	2503	2MA	N1-C2-N3	3.96	129.63	123.06
2	AB	2449	H2U	C2'-C3'-C4'	-3.94	94.99	102.64
2	AB	2030	6MZ	C3'-C2'-C1'	3.87	106.80	100.98
2	AB	746	PSU	C3'-C2'-C1'	3.86	106.14	101.64
2	AB	745	1MG	CM1-N1-C6	-3.85	112.27	117.55
2	AB	2503	2MA	O4'-C4'-C3'	-3.80	97.59	105.11
2	AB	747	5MU	C5M-C5-C4	3.79	122.94	118.77
2	AB	2575	CH	C5-C4-N3	3.74	120.17	118.04
2	AB	2445	2MG	O6-C6-N1	3.73	125.05	120.65
35	BA	1402	4OC	CM4-N4-C4	3.72	129.72	122.45
37	BC	8	4SU	O4'-C4'-C3'	3.67	112.38	105.11
2	AB	2552	OMU	O4'-C1'-N1	3.67	116.75	108.36
37	BC	21	H2U	C2'-C3'-C4'	-3.66	95.53	102.64
35	BA	1516	2MG	O3'-C3'-C4'	3.66	121.63	111.05
35	BA	1498	UR3	O4'-C1'-N1	3.64	116.67	108.36
2	AB	745	1MG	O5'-C5'-C4'	3.57	121.15	108.99
2	AB	1618	6MZ	C1'-N9-C4	-3.55	120.40	126.64
2	AB	746	PSU	C2'-C3'-C4'	-3.55	95.74	102.64
2	AB	2457	PSU	O2-C2-N1	3.52	126.67	122.79
2	AB	2251	OMG	O2'-C2'-C1'	-3.49	102.18	109.09
2	AB	1939	5MU	C5-C4-N3	3.48	118.28	115.31
37	BC	21	H2U	C5-C4-N3	-3.48	112.74	116.65
35	BA	527	7MG	C5-C4-N9	3.47	110.85	106.35
2	AB	2605	PSU	C6-C5-C4	3.44	120.60	118.20
35	BA	966	2MG	O3'-C3'-C4'	3.42	120.93	111.05
35	BA	1407	5MC	C5-C4-N3	-3.42	117.99	121.67
35	BA	1498	UR3	C2'-C1'-N1	-3.41	103.56	113.22
37	BC	8	4SU	O4'-C1'-N1	3.41	116.15	108.36
2	AB	2457	PSU	C6-N1-C2	3.40	126.16	122.68
2	AB	1939	5MU	O4-C4-C5	-3.38	120.99	124.90
2	AB	2504	PSU	C5-C6-N1	-3.38	117.05	122.11
37	BC	56	PSU	C2'-C3'-C4'	-3.37	96.10	102.64
2	AB	747	5MU	O2-C2-N3	3.34	127.73	121.50
2	AB	2504	PSU	N1-C2-N3	3.34	118.92	115.13
2	AB	2457	PSU	C5-C6-N1	-3.34	117.10	122.11
2	AB	2445	2MG	C2'-C3'-C4'	-3.31	96.21	102.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	955	PSU	O2-C2-N1	3.27	126.39	122.79
2	AB	746	PSU	N1-C2-N3	3.24	118.81	115.13
35	BA	967	5MC	C5-C6-N1	-3.21	120.04	123.34
2	AB	746	PSU	O5'-C5'-C4'	-3.20	98.12	108.99
35	BA	1519	MA6	O3'-C3'-C4'	3.18	120.24	111.05
37	BC	55	5MU	O4-C4-C5	3.17	128.57	124.90
37	BC	8	4SU	C5-C4-S4	3.12	128.48	124.47
2	AB	1939	5MU	O3'-C3'-C2'	3.07	121.74	111.82
2	AB	2445	2MG	C5-C6-N1	-3.06	108.55	113.95
37	BC	8	4SU	C6-N1-C2	-3.04	117.10	120.99
2	AB	2605	PSU	C3'-C2'-C1'	3.04	105.18	101.64
37	BC	21	H2U	N3-C2-N1	-3.03	113.45	116.65
2	AB	1962	5MC	C5-C4-N3	3.03	124.94	121.67
35	BA	1518	MA6	C4-C5-N7	-2.97	106.30	109.40
2	AB	745	1MG	CM1-N1-C2	2.97	123.80	120.72
37	BC	33	OMC	O2'-C2'-C1'	2.95	114.83	109.08
35	BA	1498	UR3	O4'-C1'-C2'	-2.95	100.22	106.64
2	AB	2575	CH	O5'-C5'-C4'	2.93	118.95	108.99
2	AB	2552	OMU	C4-N3-C2	-2.92	122.72	126.58
2	AB	2498	OMC	O4'-C4'-C5'	2.92	118.97	109.37
2	AB	2552	OMU	N3-C2-N1	2.91	118.76	114.89
35	BA	1402	4OC	C5-C4-N4	-2.91	116.68	122.61
2	AB	2605	PSU	C4'-O4'-C1'	2.89	115.81	108.55
37	BC	21	H2U	O4'-C1'-C2'	-2.84	100.45	106.64
2	AB	1915	3TD	C6-N1-C2	2.84	129.46	121.68
2	AB	1618	6MZ	C4-C5-N7	2.80	112.31	109.40
35	BA	516	PSU	C5-C6-N1	-2.78	117.95	122.11
35	BA	1518	MA6	N1-C6-N6	2.75	119.94	117.06
2	AB	2580	PSU	O5'-C5'-C4'	2.74	118.31	108.99
2	AB	745	1MG	C2-N1-C6	2.73	123.17	120.95
37	BC	21	H2U	O4'-C1'-N1	2.73	113.01	109.30
37	BC	33	OMC	C2'-C1'-N1	-2.70	108.98	114.22
2	AB	1917	PSU	O2-C2-N1	2.69	125.75	122.79
2	AB	747	5MU	O4'-C4'-C5'	2.69	118.21	109.37
2	AB	2069	7MG	C2'-C3'-C4'	-2.68	97.43	102.64
35	BA	1498	UR3	C6-C5-C4	2.68	126.08	120.78
35	BA	1498	UR3	C6-N1-C2	-2.67	119.40	121.79
35	BA	1207	2MG	C2'-C3'-C4'	-2.66	97.47	102.64
2	AB	2580	PSU	O4'-C1'-C2'	2.66	108.89	105.14
2	AB	1911	PSU	C4-N3-C2	-2.64	122.54	126.34
2	AB	1917	PSU	C5-C6-N1	-2.64	118.16	122.11
2	AB	1911	PSU	O3'-C3'-C4'	2.61	118.60	111.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AB	1618	6MZ	C2-N1-C6	2.61	118.83	116.59
35	BA	1402	4OC	O4'-C4'-C3'	-2.60	99.97	105.11
2	AB	1962	5MC	C1'-N1-C6	2.58	125.43	121.12
2	AB	2069	7MG	N2-C2-N3	-2.57	114.72	119.73
2	AB	2605	PSU	C5-C6-N1	-2.57	118.25	122.11
35	BA	1407	5MC	C5-C6-N1	-2.56	120.70	123.34
2	AB	747	5MU	O4'-C1'-N1	2.56	114.21	108.36
2	AB	1962	5MC	O4'-C1'-N1	2.55	114.19	108.36
37	BC	21	H2U	C4'-O4'-C1'	2.54	115.08	109.47
35	BA	1407	5MC	O4'-C4'-C3'	-2.53	100.11	105.11
37	BC	33	OMC	O4'-C1'-N1	2.53	114.14	108.36
2	AB	2069	7MG	C3'-C2'-C1'	2.52	106.22	101.43
2	AB	1835	2MG	C5-C6-N1	-2.51	109.52	113.95
2	AB	2605	PSU	C2'-C3'-C4'	-2.51	97.77	102.64
2	AB	2575	CH	C3'-C2'-C1'	-2.50	97.22	100.98
35	BA	967	5MC	O2-C2-N3	-2.50	118.27	122.33
35	BA	1519	MA6	C5-C6-N1	-2.49	111.91	118.92
2	AB	2580	PSU	O4'-C4'-C3'	2.49	110.03	105.11
2	AB	2445	2MG	O3'-C3'-C4'	2.48	118.22	111.05
37	BC	8	4SU	O2-C2-N1	2.48	126.08	122.79
2	AB	1911	PSU	O2'-C2'-C1'	-2.47	105.35	111.23
2	AB	2504	PSU	O4'-C4'-C3'	2.46	109.99	105.11
2	AB	2498	OMC	C4-N3-C2	2.46	124.23	120.25
2	AB	1939	5MU	O3'-C3'-C4'	-2.45	103.97	111.05
2	AB	1915	3TD	C4-N3-C2	-2.45	121.95	124.61
2	AB	1618	6MZ	O4'-C1'-C2'	-2.45	103.35	106.93
2	AB	1917	PSU	O4'-C1'-C2'	2.44	108.58	105.14
2	AB	2449	H2U	N3-C2-N1	-2.44	114.08	116.65
2	AB	2503	2MA	C5-C6-N1	2.42	118.20	114.02
37	BC	21	H2U	O4-C4-N3	2.41	124.11	120.28
2	AB	745	1MG	C5-C6-N1	-2.41	110.27	113.90
35	BA	1518	MA6	C5-C6-N1	-2.41	112.15	118.92
2	AB	747	5MU	C3'-C2'-C1'	2.41	106.00	101.43
2	AB	747	5MU	C6-N1-C2	2.40	123.73	121.30
35	BA	1402	4OC	O3'-C3'-C2'	-2.40	104.34	111.17
2	AB	1962	5MC	O2-C2-N3	-2.40	118.42	122.33
35	BA	1402	4OC	O4'-C1'-N1	2.40	113.85	108.36
2	AB	2449	H2U	C3'-C2'-C1'	2.39	105.96	101.43
2	AB	1917	PSU	C5'-C4'-C3'	2.39	124.13	115.18
2	AB	2580	PSU	C4'-O4'-C1'	-2.38	102.58	108.55
35	BA	966	2MG	O3'-C3'-C2'	-2.35	104.21	111.82
2	AB	747	5MU	C1'-N1-C2	2.35	121.83	117.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	21	H2U	O2-C2-N1	2.35	126.06	123.11
2	AB	2605	PSU	O4'-C1'-C2'	-2.35	101.83	105.14
35	BA	1519	MA6	C9-N6-C6	2.35	126.61	119.51
2	AB	1939	5MU	O2'-C2'-C3'	-2.34	104.25	111.82
2	AB	1962	5MC	C5-C4-N4	-2.34	117.98	121.48
35	BA	1407	5MC	O2-C2-N3	-2.33	118.54	122.33
37	BC	8	4SU	S4-C4-N3	-2.33	117.92	120.21
35	BA	1519	MA6	O5'-C5'-C4'	2.33	116.90	108.99
35	BA	1207	2MG	O2'-C2'-C3'	2.32	119.32	111.82
35	BA	966	2MG	O6-C6-N1	-2.30	117.93	120.65
2	AB	747	5MU	C5-C6-N1	-2.30	120.97	123.34
2	AB	2030	6MZ	O4'-C4'-C3'	2.29	109.64	105.11
35	BA	1516	2MG	O4'-C1'-C2'	2.29	110.27	106.93
2	AB	1915	3TD	O5'-C5'-C4'	2.28	116.75	108.99
35	BA	1402	4OC	N1-C2-N3	-2.28	114.66	118.81
2	AB	746	PSU	C6-N1-C2	-2.27	120.36	122.68
35	BA	1498	UR3	C1'-N1-C6	2.25	125.75	120.84
2	AB	1911	PSU	O4'-C1'-C2'	2.25	108.32	105.14
2	AB	2498	OMC	C2'-C1'-N1	-2.25	109.85	114.22
2	AB	1835	2MG	O4'-C4'-C3'	-2.22	100.72	105.11
2	AB	745	1MG	O6-C6-C5	2.22	128.13	124.19
37	BC	8	4SU	O2-C2-N3	-2.20	117.40	121.50
35	BA	516	PSU	C4'-O4'-C1'	2.18	114.04	108.55
2	AB	747	5MU	C5M-C5-C6	-2.18	119.94	122.85
2	AB	1915	3TD	O2'-C2'-C1'	2.18	116.42	111.23
2	AB	2457	PSU	O2-C2-N3	-2.17	117.72	121.82
2	AB	1962	5MC	O2-C2-N1	2.17	123.37	118.89
35	BA	967	5MC	CM5-C5-C6	-2.17	119.95	122.85
37	BC	55	5MU	O4'-C1'-N1	2.16	113.30	108.36
37	BC	33	OMC	C5-C4-N3	-2.16	117.66	121.33
35	BA	967	5MC	O4'-C1'-N1	2.15	113.27	108.36
2	AB	1939	5MU	O4'-C4'-C5'	2.14	116.41	109.37
2	AB	747	5MU	O4'-C1'-C2'	-2.12	102.02	106.64
2	AB	955	PSU	O4'-C1'-C2'	2.12	108.13	105.14
37	BC	55	5MU	C6-N1-C2	2.11	123.43	121.30
2	AB	2575	CH	C2'-C3'-C4'	2.11	106.74	102.64
2	AB	2449	H2U	C4-N3-C2	2.11	127.54	125.79
37	BC	33	OMC	C1'-N1-C6	2.10	125.43	120.84
2	AB	747	5MU	O3'-C3'-C2'	2.10	118.62	111.82
2	AB	2449	H2U	O4'-C1'-C2'	-2.10	102.07	106.64
37	BC	55	5MU	O4-C4-N3	-2.10	116.10	120.12
2	AB	955	PSU	O2'-C2'-C3'	-2.09	105.05	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BC	55	5MU	O5'-C5'-C4'	2.08	116.06	108.99
2	AB	2498	OMC	C3'-C2'-C1'	-2.07	99.00	102.89
2	AB	2069	7MG	O3'-C3'-C2'	2.07	118.51	111.82
2	AB	747	5MU	C2'-C3'-C4'	-2.06	98.64	102.64
35	BA	1407	5MC	O2'-C2'-C3'	-2.03	105.24	111.82
2	AB	955	PSU	C2'-C3'-C4'	-2.03	98.70	102.64
35	BA	1407	5MC	C2'-C1'-N1	-2.03	107.47	113.22
35	BA	966	2MG	O4'-C4'-C3'	-2.02	101.11	105.11
2	AB	2498	OMC	O3'-C3'-C2'	-2.01	105.46	111.17
35	BA	1516	2MG	O2'-C2'-C1'	-2.00	103.46	110.85

There are no chirality outliers.

All (16) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	AB	746	PSU	C2'-C1'-C5-C4
2	AB	2552	OMU	C1'-C2'-O2'-CM2
2	AB	1917	PSU	O4'-C4'-C5'-O5'
2	AB	1917	PSU	C3'-C4'-C5'-O5'
35	BA	527	7MG	C4'-C5'-O5'-P
2	AB	2580	PSU	C3'-C4'-C5'-O5'
2	AB	2580	PSU	C4'-C5'-O5'-P
2	AB	1911	PSU	O4'-C1'-C5-C4
2	AB	2504	PSU	O4'-C1'-C5-C4
35	BA	516	PSU	O4'-C1'-C5-C4
35	BA	967	5MC	O4'-C4'-C5'-O5'
2	AB	1618	6MZ	O4'-C4'-C5'-O5'
2	AB	1911	PSU	O4'-C1'-C5-C6
2	AB	1917	PSU	O4'-C1'-C5-C6
2	AB	2504	PSU	O4'-C1'-C5-C6
2	AB	2580	PSU	O4'-C4'-C5'-O5'

There are no ring outliers.

No monomer is involved in short contacts.

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
2	AB	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AB	2831:G	O3'	2832:U	P	1.76

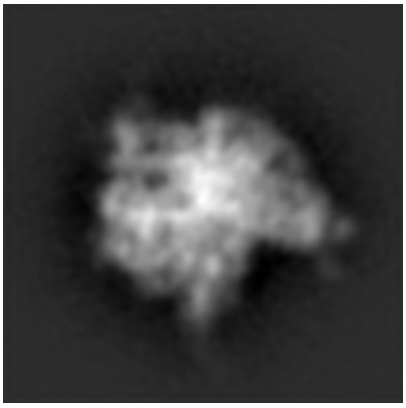
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-5360. These allow visual inspection of the internal detail of the map and identification of artifacts.

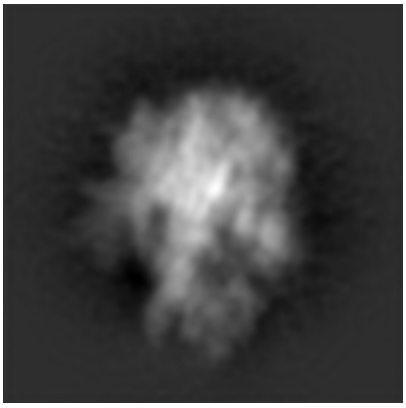
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

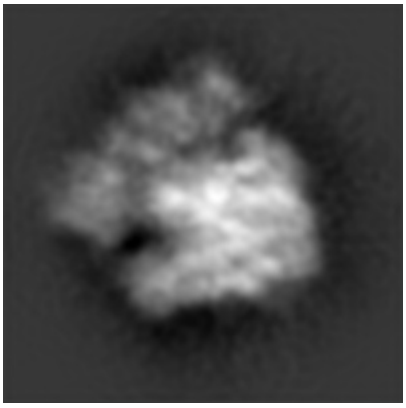
6.1.1 Primary map



X



Y

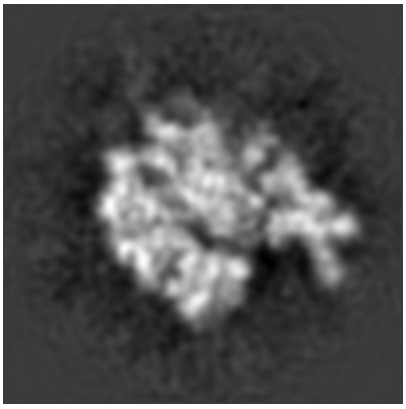


Z

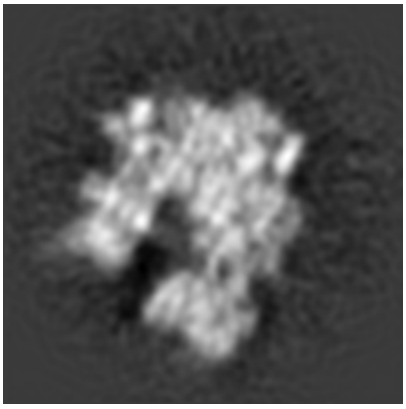
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

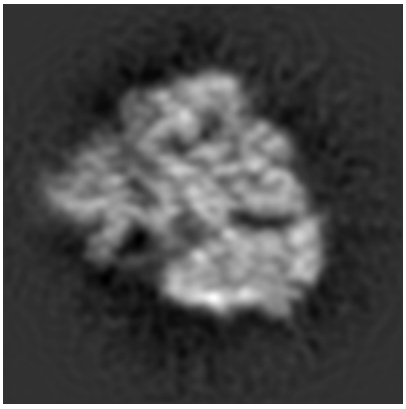
6.2.1 Primary map



X Index: 125



Y Index: 125

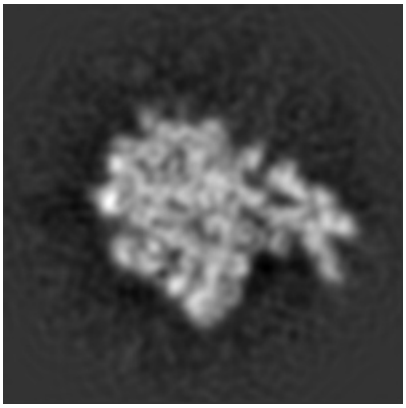


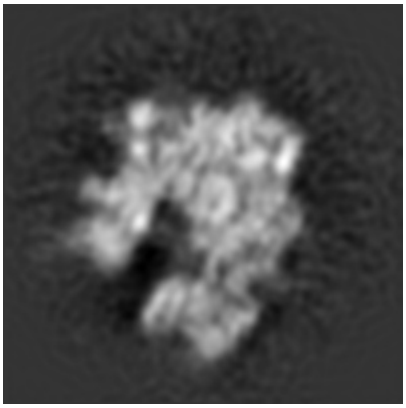
Z Index: 125

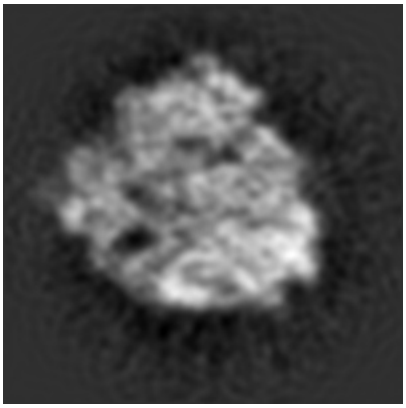
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map


X Index: 131

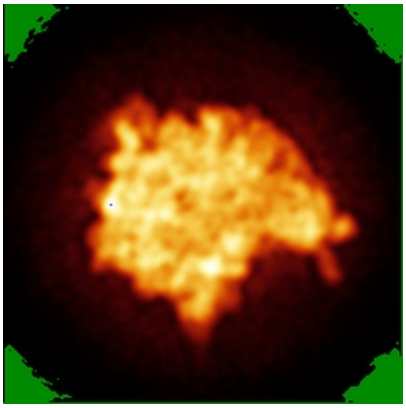

Y Index: 128

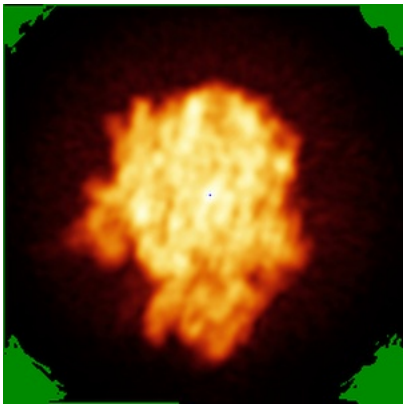

Z Index: 118

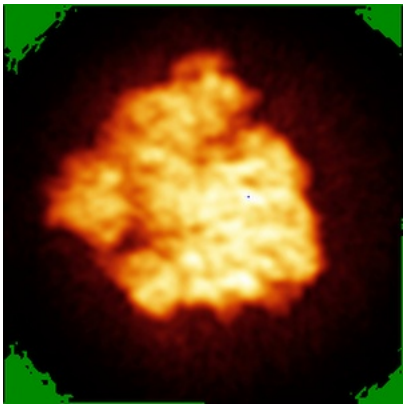
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

6.4.1 Primary map


X


Y


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

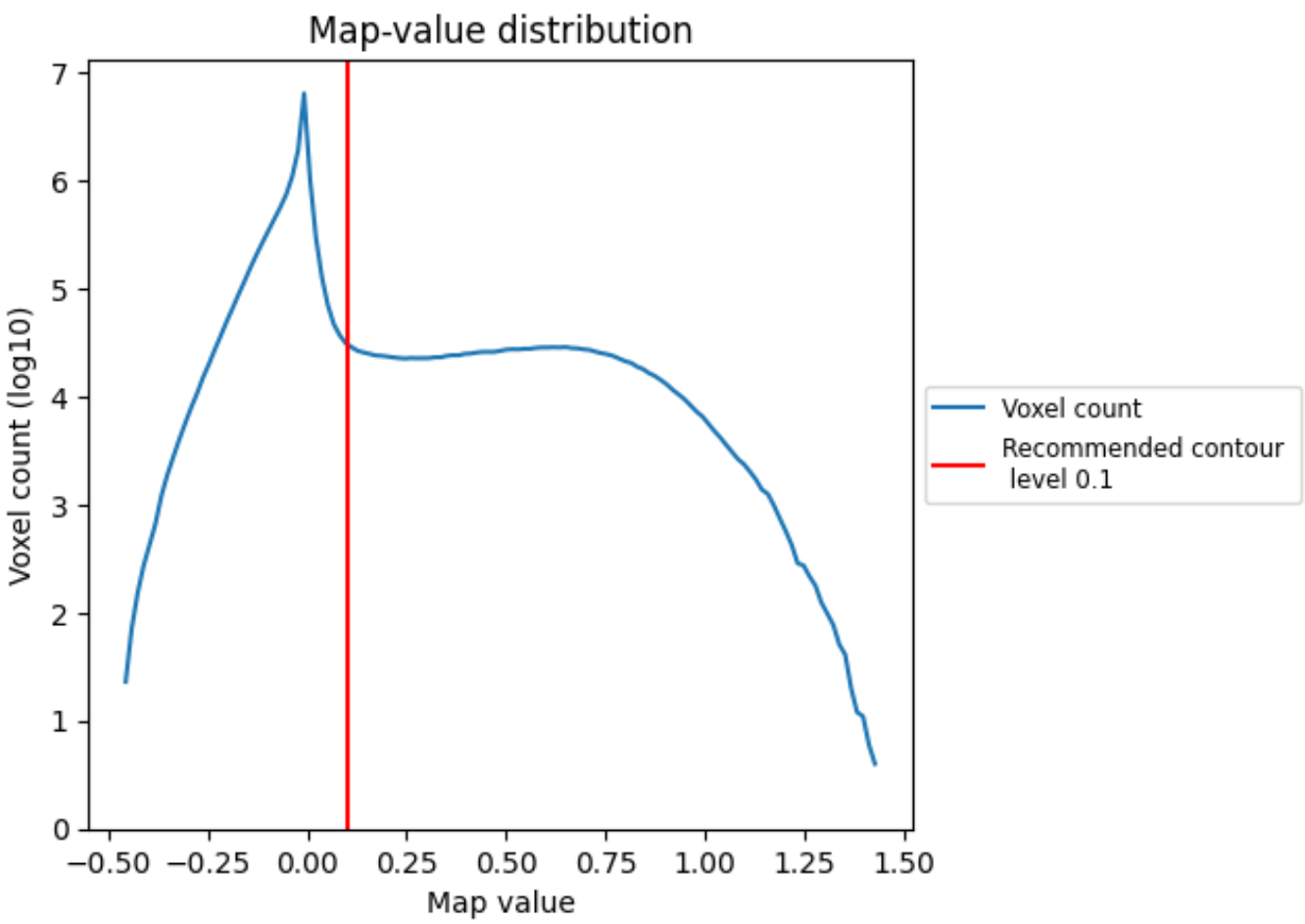
6.6 Mask visualisation (i)

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

7 Map analysis (i)

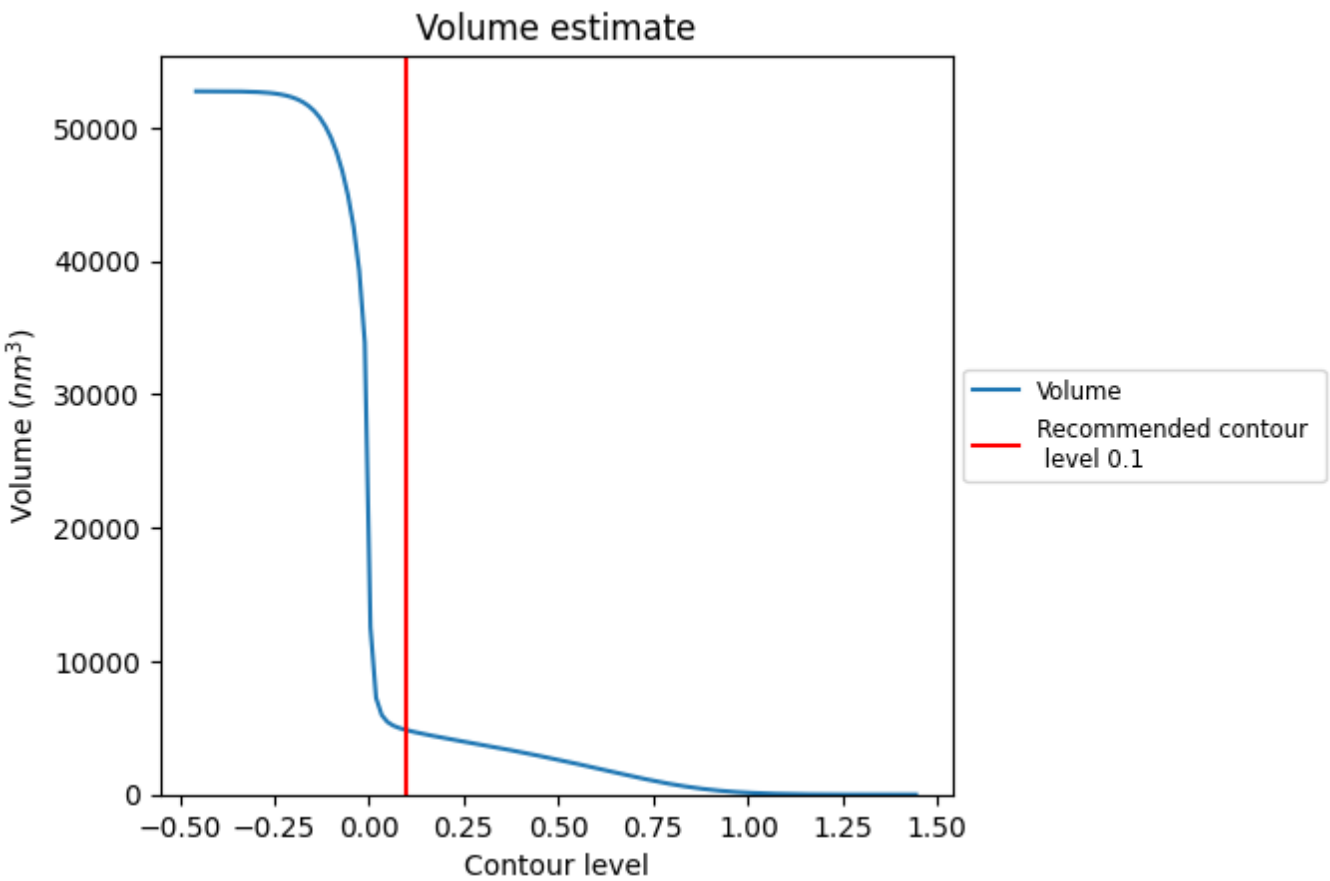
This section contains the results of statistical analysis of the map.

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.

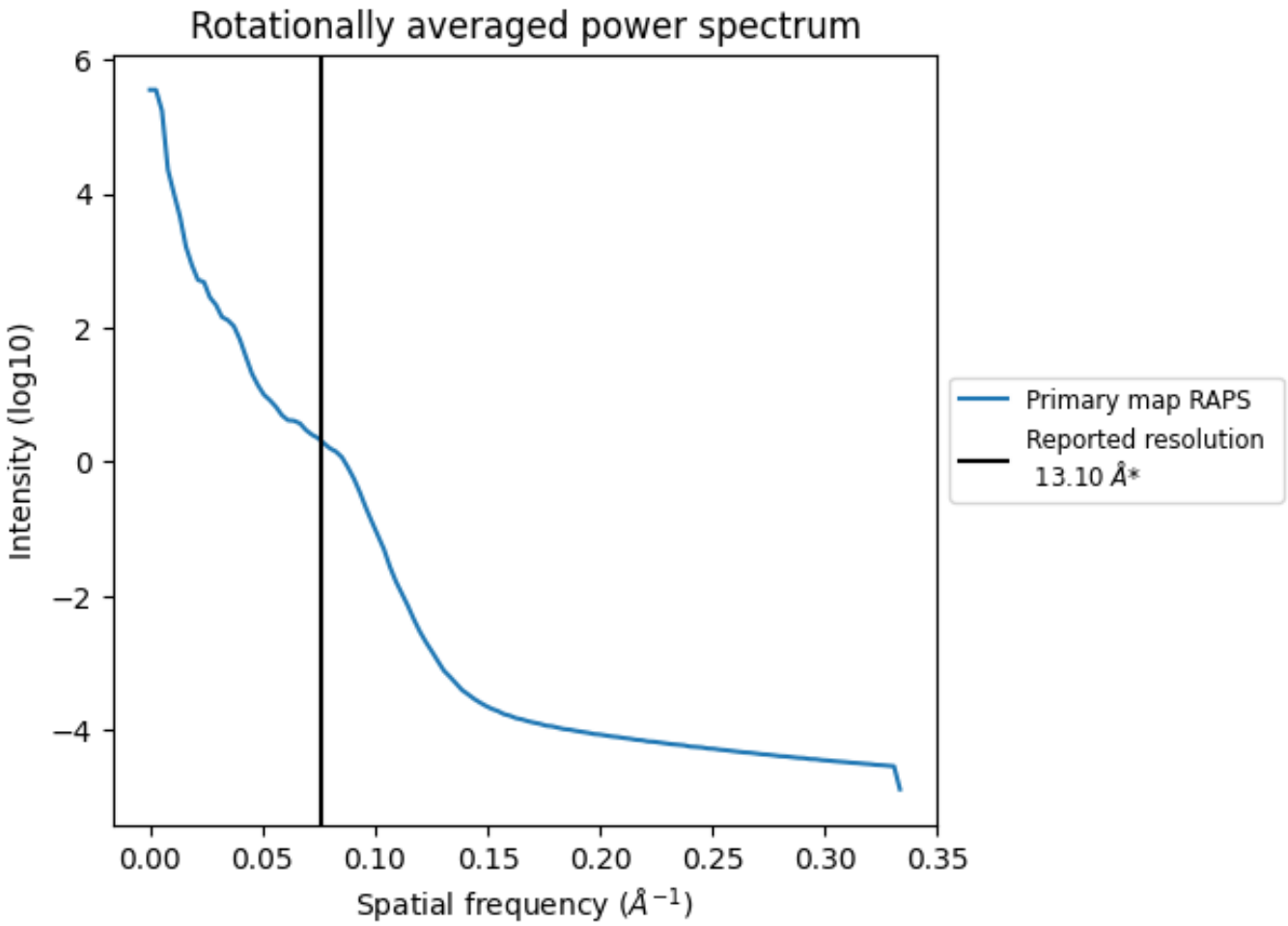
7.2 Volume estimate (i)



The volume at the recommended contour level is 4825 nm^3; this corresponds to an approximate mass of 4359 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 0.076 Å^{-1}

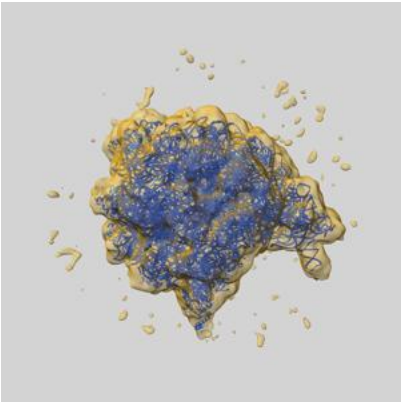
8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

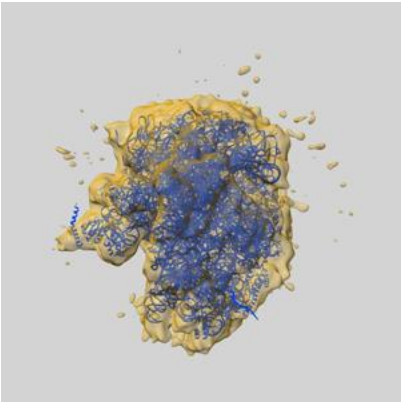
9 Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-5360 and PDB model 4V6S. Per-residue inclusion information can be found in section 3 on page 14.

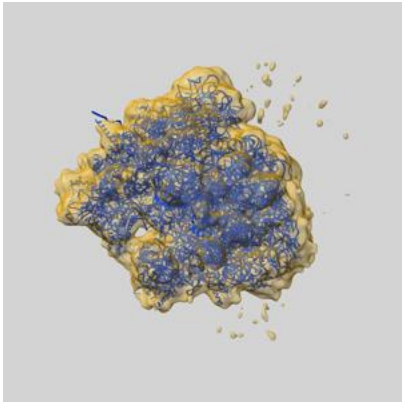
9.1 Map-model overlay (i)



X



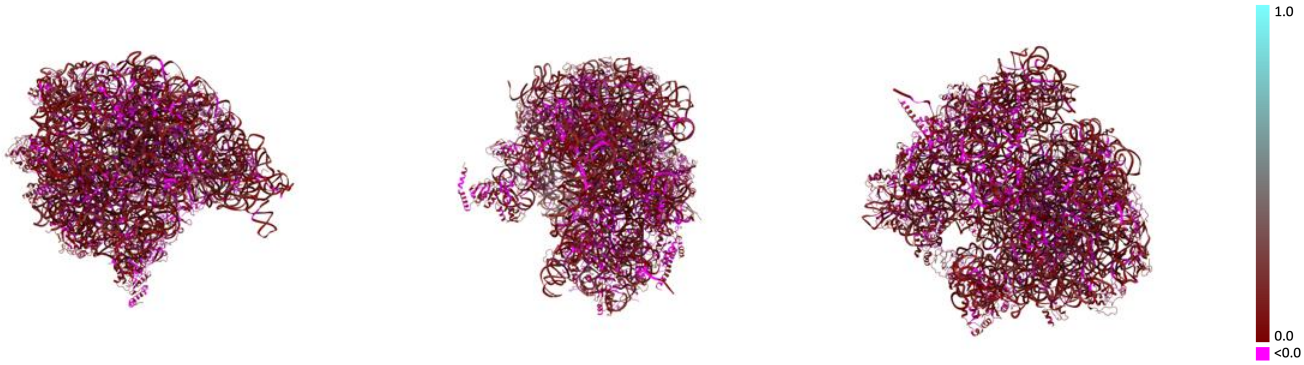
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.1 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.

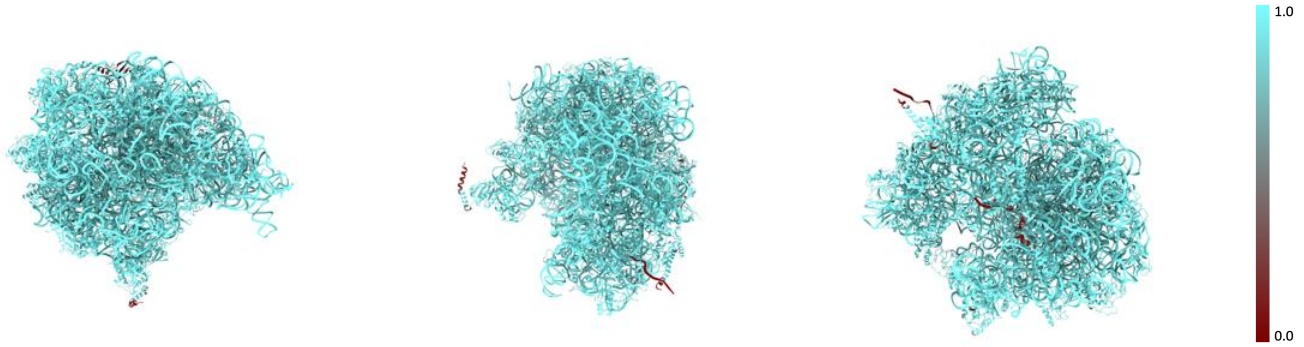
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

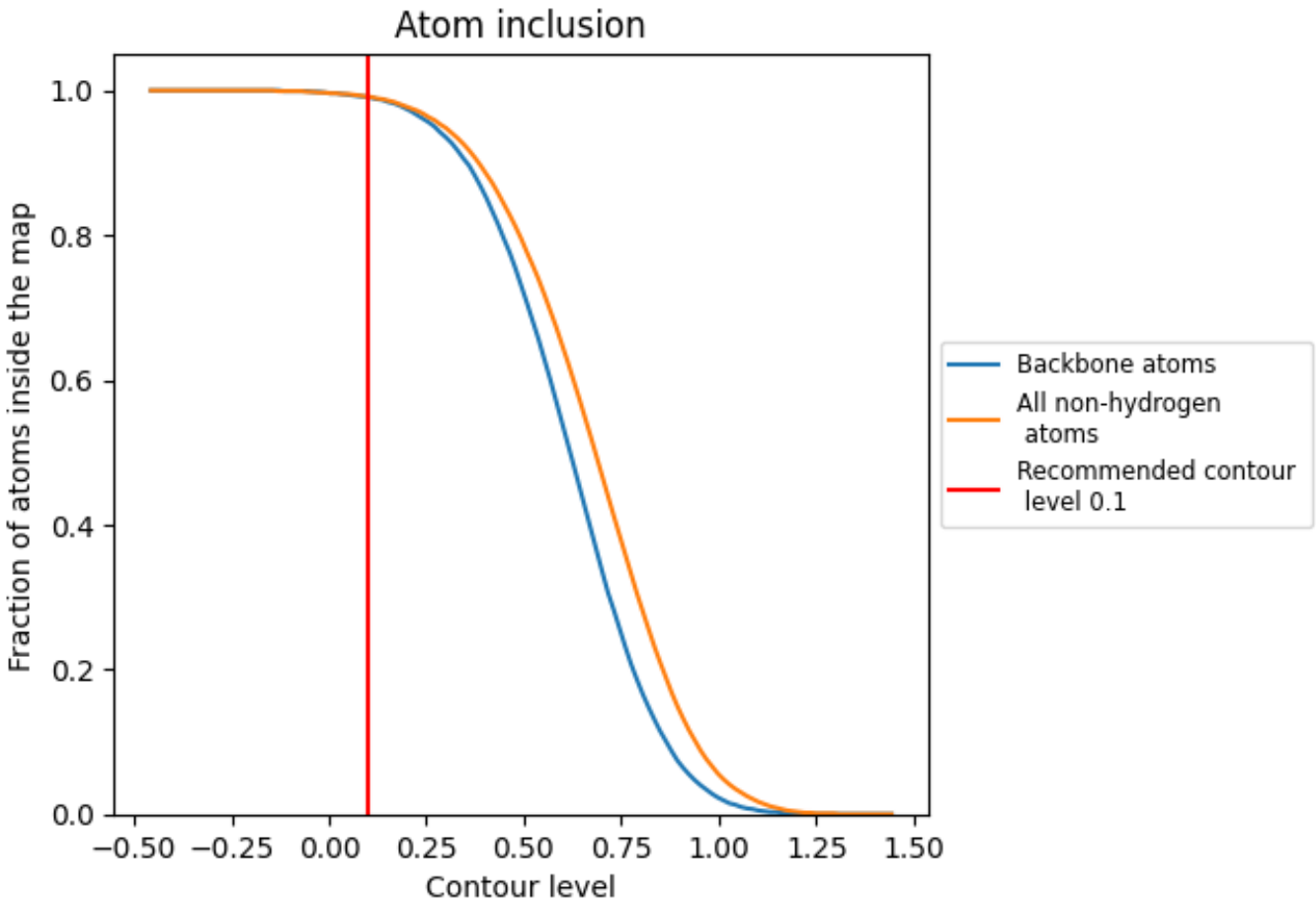
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.1).

9.4 Atom inclusion (i)



At the recommended contour level, 99% of all backbone atoms, 99% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9910	0.0680
A0	1.0000	0.0510
A1	0.9950	0.0290
A2	0.9110	0.0270
A3	1.0000	0.0260
A4	1.0000	0.0490
A5	1.0000	-0.0180
A6	1.0000	-0.0250
A7	1.0000	0.0160
AA	1.0000	0.0850
AB	0.9990	0.0850
AC	0.9610	0.0370
AD	1.0000	0.0210
AE	0.9960	0.0150
AF	0.9970	0.0470
AG	0.9980	0.0730
AH	0.9990	0.0210
AI	0.7900	0.0310
AJ	0.8700	0.0350
AK	0.9800	0.0440
AL	0.9990	0.0250
AM	0.9900	0.0340
AN	0.9940	0.0100
AO	1.0000	0.0310
AP	1.0000	0.0080
AQ	0.9930	0.0550
AR	0.9790	0.0230
AS	0.9980	0.0170
AT	1.0000	0.0470
AU	1.0000	0.0140
AV	1.0000	0.0310
AW	1.0000	0.0770
AX	1.0000	0.0740
AY	0.9980	0.0080
AZ	1.0000	0.0600

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Chain	Atom inclusion	Q-score
BA	0.9990	0.0840
BB	0.7340	-0.0130
BC	1.0000	0.0980
BD	0.9090	0.0220
BE	0.9980	0.0640
BF	1.0000	0.0460
BG	0.9970	0.0420
BH	0.9620	0.0290
BI	0.9930	0.0680
BJ	0.9730	0.0280
BK	0.9880	0.0480
BL	1.0000	0.0400
BM	0.9370	0.0550
BN	0.9770	0.0330
BO	0.9720	0.0480
BP	1.0000	0.0270
BQ	1.0000	0.0410
BR	1.0000	0.0480
BS	1.0000	0.0660
BT	1.0000	0.0540
BU	0.9820	0.0270
BV	1.0000	0.0460
BW	0.9960	0.0570