

Supplementary Material**Magnetic field induced residual dipolar couplings of imino groups in nucleic acids from measurements at a single magnetic field**

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Supplementary Table 1S. tRNA^{Val} imino group ¹H chemical shifts and ¹J_{NH} at 800 MHz and 500 MHz.

	δ_{H} ppm	¹ J _{NH} (500) Hz	¹ J _{NH} (800) Hz	¹ J _{NH, exp} (0) Hz ^a	¹ J _{NH, calc} (0) Hz ^b	¹ D _{NH, exp} (800) Hz ^a	¹ D _{NH, calc} (800) Hz ^b
G1	12.05	-87.5	-86.3	-88.3	-88.9	2.0	2.6
G2	12.68	-87.7	-88.0	-87.5	-88.2	-0.4	0.2
U4	13.57	-87.4	-88.2	-86.8	-87.1	-1.4	-1.1
G5	11.81	-87.6	-86.7	-88.2	-89.2	1.5	2.5
U7	12.62	-88.2	-86.9	-89.1	-88.2	2.2	1.3
s ⁴ U8	14.97	-89.3	-88.6	-89.9	na ^c	1.2	na ^c
U12	13.88	-87.7	-86.9	-88.1	-86.7	1.2	-0.2
G15	12.22	-88.7	-87.1	-89.6	-88.7	2.5	1.6
G24	13.69	-86.9	-86.0	-87.5	-86.9	1.5	1.0
U29	13.85	-85.9	-84.8	-86.6	-86.7	1.9	2.0
G40	12.31	-88.1	-85.3	-89.9	-88.6	4.6	3.3
m ⁷ G46	13.39	-85.1	-83.8	-85.9	-87.3	2.1	3.5
G49	12.09	-88.8	-89.0	-88.6	-88.9	-0.3	-0.1
G50	11.37	-90.1	-90.3	-90.0	-89.7	-0.4	-0.6
G52	12.37	-87.3	-85.3	-88.5	-88.5	3.1	3.2
T54	13.73	-87.3	-87.0	-87.6	-86.9	0.6	-0.1
Ψ55 (N3)	11.51	-91.8	-93.0	-91.1	na ^c	-1.9	na ^c
G63	12.78	-88.2	-88.7	-87.9	-88.0	-0.8	-0.7
U64	11.92	-89.9	-90.9	-89.3	-89.1	-1.6	-1.8
U67	14.37	-85.0	-83.8	-85.8	-86.1	2.0	2.3

^a ¹J_{NH} extrapolated from the ¹J_{NH}(800) and ¹J_{NH}(500)

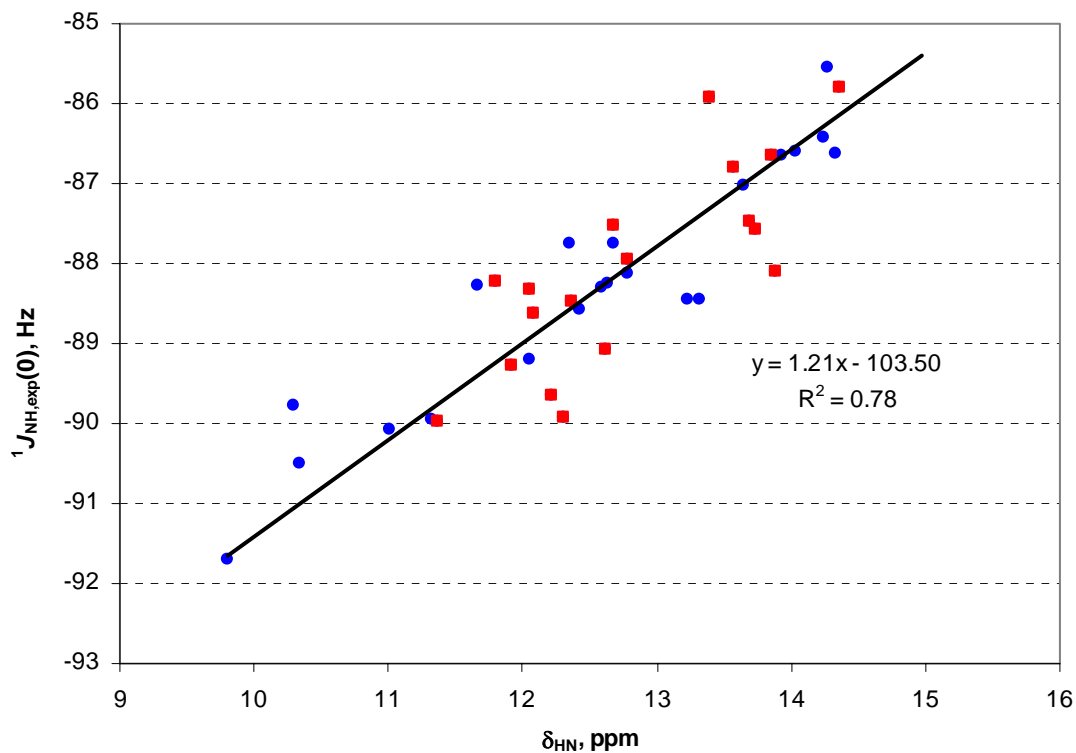
^b ¹J_{NH} calculated from the δ_{H} using eq 2

^c eq 2 does not apply due to the modified nature of the nucleobase

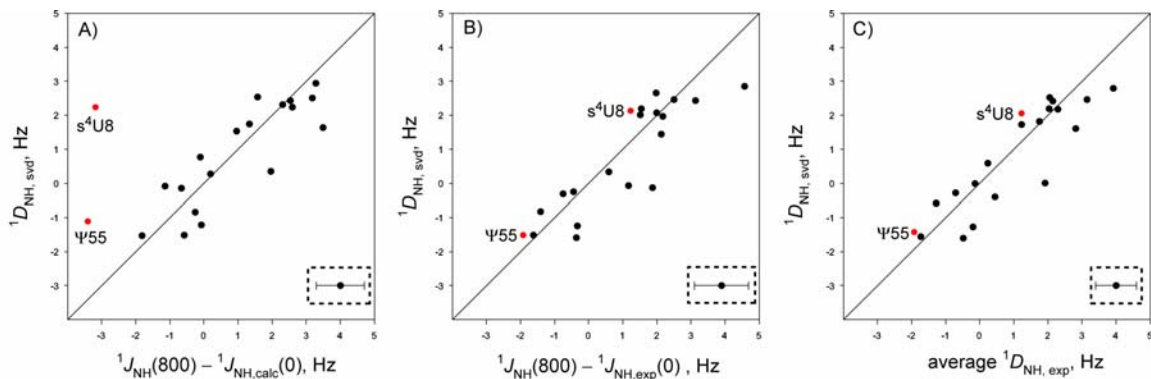
Supplementary Table 2S. Characteristics of the alignment tensors for tRNA^{Val} induced by molecular susceptibility anisotropy, and by liquid crystalline Pf1 fitted to the structural model of Vermeulen et al. (2005).

Method	Base MSA-prediction	SVD fit to $^1D_{\text{NH,exp}}$	SVD fit to $^1D_{\text{NH,calc}}$	SVD fit to $^1D_{\text{NH,ave}}$	SVD fit to Pf1-induced RDCs ^a
Da^{NH} , Hz	1.42	1.64	1.62	1.60	-17.7
Rhombicity	0.25	0.12	0.43	0.24	0.58
Q-factor		0.55	0.55	0.54	0.36

^a Excluding the RDCs for s⁴U8 and ψ 55



Supplementary Figure 1S. Correlation plot of $^1J_{\text{NH,exp}}(0)$ and the ^1H chemical shifts of the imino groups in tRNA^{Val} (red squares) and 73-nt U2-U6 (blue circles).



Supplementary Figure 2S. Plots, analogous to figure 2B,C,D of the main text, but SVD fitting to the rigid-body RDC-refined model of tRNA^{Val} (Vermeulen et al., 2005).

Supplementary Table 3S. Coordinates of the tRNA^{Phe}-based structural homology model used in the paper (PDB format).

ATOM	1	H5T	GUA	1	-2.822	-19.095	-22.758	1.00	0.00
ATOM	2	O5'	GUA	1	-2.174	-19.615	-23.239	1.00	1.00
ATOM	3	C5'	GUA	1	-2.188	-20.931	-22.685	1.00	1.00
ATOM	4	H5'	GUA	1	-2.555	-21.636	-23.432	1.00	0.00
ATOM	5	H5''	GUA	1	-2.855	-20.957	-21.824	1.00	0.00
ATOM	6	C4'	GUA	1	-0.810	-21.360	-22.239	1.00	1.00
ATOM	7	H4'	GUA	1	-0.915	-22.313	-21.716	1.00	0.00
ATOM	8	O4'	GUA	1	0.062	-21.432	-23.401	1.00	1.00
ATOM	9	C1'	GUA	1	1.356	-20.969	-23.061	1.00	1.00
ATOM	10	H1'	GUA	1	2.065	-21.730	-23.388	1.00	0.00
ATOM	11	N9	GUA	1	1.620	-19.745	-23.809	1.00	1.00
ATOM	12	C4	GUA	1	2.843	-19.138	-23.980	1.00	1.00
ATOM	13	N3	GUA	1	4.018	-19.570	-23.485	1.00	1.00
ATOM	14	C2	GUA	1	5.020	-18.775	-23.819	1.00	1.00
ATOM	15	N2	GUA	1	6.262	-19.063	-23.405	1.00	1.00
ATOM	16	H22	GUA	1	6.429	-19.884	-22.842	1.00	0.00
ATOM	17	H21	GUA	1	7.032	-18.459	-23.657	1.00	0.00
ATOM	18	N1	GUA	1	4.886	-17.637	-24.582	1.00	1.00
ATOM	19	H1	GUA	1	5.719	-17.099	-24.780	1.00	0.00
ATOM	20	C6	GUA	1	3.677	-17.177	-25.102	1.00	1.00
ATOM	21	O6	GUA	1	3.653	-16.142	-25.778	1.00	1.00
ATOM	22	C5	GUA	1	2.593	-18.024	-24.751	1.00	1.00
ATOM	23	N7	GUA	1	1.242	-17.929	-25.057	1.00	1.00
ATOM	24	C8	GUA	1	0.707	-18.970	-24.479	1.00	1.00
ATOM	25	H8	GUA	1	-0.348	-19.198	-24.524	1.00	0.00
ATOM	26	C2'	GUA	1	1.372	-20.775	-21.547	1.00	1.00
ATOM	27	H2'	GUA	1	2.023	-19.945	-21.265	1.00	0.00
ATOM	28	O2'	GUA	1	1.739	-21.989	-20.917	1.00	1.00
ATOM	29	HO2'	GUA	1	1.143	-22.666	-21.237	1.00	0.00
ATOM	30	C3'	GUA	1	-0.085	-20.409	-21.292	1.00	1.00
ATOM	31	H3'	GUA	1	-0.307	-19.366	-21.509	1.00	0.00
ATOM	32	O3'	GUA	1	-0.448	-20.622	-19.932	1.00	1.00
ATOM	33	P	GUA	2	-0.369	-19.405	-18.883	1.00	1.00
ATOM	34	O1P	GUA	2	-0.956	-19.879	-17.605	1.00	1.00
ATOM	35	O2P	GUA	2	-0.922	-18.191	-19.539	1.00	1.00

ATOM	36	O5'	GUA	2	1.192	-19.186	-18.661	1.00	1.00
ATOM	37	C5'	GUA	2	1.985	-20.181	-18.020	1.00	1.00
ATOM	38	H5'	GUA	2	1.938	-21.113	-18.587	1.00	0.00
ATOM	39	H5''	GUA	2	1.607	-20.360	-17.013	1.00	0.00
ATOM	40	C4'	GUA	2	3.422	-19.726	-17.933	1.00	1.00
ATOM	41	H4'	GUA	2	3.963	-20.455	-17.329	1.00	0.00
ATOM	42	O4'	GUA	2	3.955	-19.578	-19.276	1.00	1.00
ATOM	43	C1'	GUA	2	4.905	-18.525	-19.304	1.00	1.00
ATOM	44	H1'	GUA	2	5.839	-18.948	-19.676	1.00	0.00
ATOM	45	N9	GUA	2	4.452	-17.517	-20.258	1.00	0.00
ATOM	46	C4	GUA	2	5.228	-16.561	-20.868	1.00	0.00
ATOM	47	N3	GUA	2	6.550	-16.383	-20.691	1.00	0.00
ATOM	48	C2	GUA	2	7.017	-15.379	-21.414	1.00	0.00
ATOM	49	N2	GUA	2	8.322	-15.067	-21.355	1.00	0.00
ATOM	50	H22	GUA	2	8.940	-15.600	-20.759	1.00	0.00
ATOM	51	H21	GUA	2	8.684	-14.301	-21.904	1.00	0.00
ATOM	52	N1	GUA	2	6.249	-14.600	-22.252	1.00	0.00
ATOM	53	H1	GUA	2	6.708	-13.859	-22.760	1.00	0.00
ATOM	54	C6	GUA	2	4.879	-14.773	-22.443	1.00	0.00
ATOM	55	O6	GUA	2	4.270	-14.024	-23.218	1.00	0.00
ATOM	56	C5	GUA	2	4.366	-15.849	-21.671	1.00	0.00
ATOM	57	N7	GUA	2	3.074	-16.347	-21.573	1.00	0.00
ATOM	58	C8	GUA	2	3.175	-17.334	-20.725	1.00	0.00
ATOM	59	H8	GUA	2	2.335	-17.941	-20.419	1.00	0.00
ATOM	60	C2'	GUA	2	5.035	-17.999	-17.877	1.00	1.00
ATOM	61	H2'	GUA	2	5.177	-16.916	-17.867	1.00	0.00
ATOM	62	O2'	GUA	2	6.081	-18.682	-17.214	1.00	1.00
ATOM	63	HO2'	GUA	2	6.158	-19.547	-17.618	1.00	0.00
ATOM	64	C3'	GUA	2	3.666	-18.353	-17.310	1.00	1.00
ATOM	65	H3'	GUA	2	2.894	-17.635	-17.584	1.00	0.00
ATOM	66	O3'	GUA	2	3.683	-18.401	-15.889	1.00	1.00
ATOM	67	P	GUA	3	3.226	-17.113	-15.045	1.00	1.00
ATOM	68	O1P	GUA	3	3.168	-17.517	-13.616	1.00	1.00
ATOM	69	O2P	GUA	3	2.022	-16.533	-15.692	1.00	1.00
ATOM	70	O5'	GUA	3	4.432	-16.090	-15.221	1.00	1.00
ATOM	71	C5'	GUA	3	5.706	-16.355	-14.648	1.00	1.00
ATOM	72	H5'	GUA	3	6.067	-17.328	-14.988	1.00	0.00
ATOM	73	H5''	GUA	3	5.627	-16.368	-13.562	1.00	0.00
ATOM	74	C4'	GUA	3	6.694	-15.290	-15.056	1.00	1.00
ATOM	75	H4'	GUA	3	7.621	-15.475	-14.509	1.00	0.00
ATOM	76	O4'	GUA	3	6.859	-15.326	-16.502	1.00	1.00
ATOM	77	C1'	GUA	3	7.146	-14.025	-16.981	1.00	1.00
ATOM	78	H1'	GUA	3	8.091	-14.083	-17.523	1.00	0.00
ATOM	79	N9	GUA	3	6.102	-13.640	-17.925	1.00	1.00
ATOM	80	C4	GUA	3	6.195	-12.677	-18.902	1.00	1.00
ATOM	81	N3	GUA	3	7.272	-11.917	-19.164	1.00	1.00
ATOM	82	C2	GUA	3	7.057	-11.079	-20.167	1.00	1.00
ATOM	83	N2	GUA	3	8.033	-10.244	-20.558	1.00	1.00
ATOM	84	H22	GUA	3	8.926	-10.257	-20.088	1.00	0.00
ATOM	85	H21	GUA	3	7.872	-9.605	-21.323	1.00	0.00
ATOM	86	N1	GUA	3	5.873	-10.989	-20.863	1.00	1.00
ATOM	87	H1	GUA	3	5.815	-10.312	-21.612	1.00	0.00
ATOM	88	C6	GUA	3	4.750	-11.772	-20.600	1.00	1.00
ATOM	89	O6	GUA	3	3.725	-11.620	-21.280	1.00	1.00
ATOM	90	C5	GUA	3	4.968	-12.673	-19.530	1.00	1.00
ATOM	91	N7	GUA	3	4.120	-13.615	-18.959	1.00	1.00
ATOM	92	C8	GUA	3	4.834	-14.160	-18.015	1.00	1.00

ATOM	93	H8	GUA	3	4.467	-14.941	-17.367	1.00	0.00
ATOM	94	C2'	GUA	3	7.234	-13.111	-15.759	1.00	1.00
ATOM	95	H2'	GUA	3	6.843	-12.115	-15.984	1.00	0.00
ATOM	96	O2'	GUA	3	8.569	-13.073	-15.290	1.00	1.00
ATOM	97	HO2'	GUA	3	9.080	-13.671	-15.838	1.00	0.00
ATOM	98	C3'	GUA	3	6.304	-13.836	-14.796	1.00	1.00
ATOM	99	H3'	GUA	3	5.251	-13.647	-15.004	1.00	0.00
ATOM	100	O3'	GUA	3	6.537	-13.446	-13.444	1.00	1.00
ATOM	101	P	URI	4	5.676	-12.257	-12.782	1.00	1.00
ATOM	102	O1P	URI	4	6.026	-12.204	-11.339	1.00	1.00
ATOM	103	O2P	URI	4	4.255	-12.426	-13.185	1.00	1.00
ATOM	104	O5'	URI	4	6.241	-10.940	-13.476	1.00	1.00
ATOM	105	C5'	URI	4	7.583	-10.520	-13.255	1.00	1.00
ATOM	106	H5'	URI	4	8.264	-11.352	-13.431	1.00	0.00
ATOM	107	H5''	URI	4	7.697	-10.178	-12.226	1.00	0.00
ATOM	108	C4'	URI	4	7.935	-9.384	-14.188	1.00	1.00
ATOM	109	H4'	URI	4	8.940	-9.048	-13.932	1.00	0.00
ATOM	110	O4'	URI	4	7.807	-9.840	-15.560	1.00	1.00
ATOM	111	C1'	URI	4	7.395	-8.762	-16.385	1.00	1.00
ATOM	112	H1'	URI	4	8.138	-8.665	-17.179	1.00	0.00
ATOM	113	N1	URI	4	6.106	-9.109	-17.005	1.00	0.00
ATOM	114	C6	URI	4	5.270	-10.047	-16.441	1.00	0.00
ATOM	115	H6	URI	4	5.578	-10.538	-15.520	1.00	0.00
ATOM	116	C2	URI	4	5.760	-8.458	-18.176	1.00	0.00
ATOM	117	O2	URI	4	6.474	-7.621	-18.702	1.00	0.00
ATOM	118	N3	URI	4	4.547	-8.822	-18.706	1.00	0.00
ATOM	119	H3	URI	4	4.270	-8.358	-19.561	1.00	0.00
ATOM	120	C4	URI	4	3.663	-9.749	-18.197	1.00	0.00
ATOM	121	O4	URI	4	2.607	-9.970	-18.791	1.00	0.00
ATOM	122	C5	URI	4	4.094	-10.377	-16.988	1.00	0.00
ATOM	123	H5	URI	4	3.463	-11.127	-16.508	1.00	0.00
ATOM	124	C2'	URI	4	7.328	-7.514	-15.501	1.00	1.00
ATOM	125	H2'	URI	4	6.503	-6.865	-15.801	1.00	0.00
ATOM	126	O2'	URI	4	8.577	-6.849	-15.529	1.00	1.00
ATOM	127	HO2'	URI	4	8.901	-6.815	-14.631	1.00	0.00
ATOM	128	C3'	URI	4	7.038	-8.139	-14.143	1.00	1.00
ATOM	129	H3'	URI	4	5.988	-8.394	-14.005	1.00	0.00
ATOM	130	O3'	URI	4	7.385	-7.262	-13.077	1.00	1.00
ATOM	131	P	GUA	5	6.278	-6.266	-12.471	1.00	1.00
ATOM	132	O1P	GUA	5	6.892	-5.568	-11.315	1.00	1.00
ATOM	133	O2P	GUA	5	5.017	-7.030	-12.284	1.00	1.00
ATOM	134	O5'	GUA	5	6.046	-5.198	-13.630	1.00	1.00
ATOM	135	C5'	GUA	5	7.088	-4.310	-14.022	1.00	1.00
ATOM	136	H5'	GUA	5	7.976	-4.882	-14.290	1.00	0.00
ATOM	137	H5''	GUA	5	7.332	-3.642	-13.197	1.00	0.00
ATOM	138	C4'	GUA	5	6.648	-3.486	-15.211	1.00	1.00
ATOM	139	H4'	GUA	5	7.428	-2.749	-15.407	1.00	0.00
ATOM	140	O4'	GUA	5	6.391	-4.370	-16.334	1.00	1.00
ATOM	141	C1'	GUA	5	5.346	-3.838	-17.132	1.00	1.00
ATOM	142	H1'	GUA	5	5.739	-3.725	-18.143	1.00	0.00
ATOM	143	N9	GUA	5	4.254	-4.808	-17.175	1.00	0.00
ATOM	144	C4	GUA	5	3.265	-4.885	-18.125	1.00	0.00
ATOM	145	N3	GUA	5	3.127	-4.072	-19.189	1.00	0.00
ATOM	146	C2	GUA	5	2.074	-4.394	-19.924	1.00	0.00
ATOM	147	N2	GUA	5	1.789	-3.682	-21.023	1.00	0.00
ATOM	148	H22	GUA	5	2.378	-2.903	-21.287	1.00	0.00
ATOM	149	H21	GUA	5	0.988	-3.924	-21.589	1.00	0.00

ATOM	150	N1	GUA	5	1.215	-5.432	-19.639	1.00	0.00
ATOM	151	H1	GUA	5	0.440	-5.592	-20.267	1.00	0.00
ATOM	152	C6	GUA	5	1.349	-6.281	-18.541	1.00	0.00
ATOM	153	O6	GUA	5	0.529	-7.190	-18.366	1.00	0.00
ATOM	154	C5	GUA	5	2.475	-5.945	-17.746	1.00	0.00
ATOM	155	N7	GUA	5	2.958	-6.528	-16.581	1.00	0.00
ATOM	156	C8	GUA	5	4.013	-5.821	-16.282	1.00	0.00
ATOM	157	H8	GUA	5	4.629	-6.012	-15.417	1.00	0.00
ATOM	158	C2'	GUA	5	4.944	-2.500	-16.513	1.00	1.00
ATOM	159	H2'	GUA	5	3.868	-2.337	-16.591	1.00	0.00
ATOM	160	O2'	GUA	5	5.692	-1.458	-17.113	1.00	1.00
ATOM	161	HO2'	GUA	5	6.459	-1.308	-16.562	1.00	0.00
ATOM	162	C3'	GUA	5	5.337	-2.728	-15.060	1.00	1.00
ATOM	163	H3'	GUA	5	4.598	-3.302	-14.503	1.00	0.00
ATOM	164	O3'	GUA	5	5.501	-1.503	-14.361	1.00	1.00
ATOM	165	P	ADE	6	4.269	-0.885	-13.540	1.00	1.00
ATOM	166	O1P	ADE	6	4.744	0.366	-12.895	1.00	1.00
ATOM	167	O2P	ADE	6	3.677	-1.962	-12.705	1.00	1.00
ATOM	168	O5'	ADE	6	3.212	-0.489	-14.666	1.00	1.00
ATOM	169	C5'	ADE	6	3.521	0.501	-15.644	1.00	1.00
ATOM	170	H5'	ADE	6	4.470	0.261	-16.123	1.00	0.00
ATOM	171	H5''	ADE	6	3.598	1.478	-15.169	1.00	0.00
ATOM	172	C4'	ADE	6	2.435	0.548	-16.692	1.00	1.00
ATOM	173	H4'	ADE	6	2.680	1.359	-17.381	1.00	0.00
ATOM	174	O4'	ADE	6	2.344	-0.752	-17.335	1.00	1.00
ATOM	175	C1'	ADE	6	1.031	-0.959	-17.822	1.00	1.00
ATOM	176	H1'	ADE	6	1.101	-1.044	-18.907	1.00	0.00
ATOM	177	N9	ADE	6	0.535	-2.229	-17.296	1.00	0.00
ATOM	178	C4	ADE	6	-0.498	-2.976	-17.809	1.00	0.00
ATOM	179	N3	ADE	6	-1.254	-2.694	-18.883	1.00	0.00
ATOM	180	C2	ADE	6	-2.161	-3.647	-19.083	1.00	0.00
ATOM	181	H2	ADE	6	-2.821	-3.492	-19.937	1.00	0.00
ATOM	182	N1	ADE	6	-2.382	-4.766	-18.382	1.00	0.00
ATOM	183	C6	ADE	6	-1.603	-5.019	-17.308	1.00	0.00
ATOM	184	N6	ADE	6	-1.822	-6.137	-16.610	1.00	0.00
ATOM	185	H62	ADE	6	-1.251	-6.350	-15.804	1.00	0.00
ATOM	186	H61	ADE	6	-2.558	-6.771	-16.888	1.00	0.00
ATOM	187	C5	ADE	6	-0.602	-4.086	-16.992	1.00	0.00
ATOM	188	N7	ADE	6	0.348	-4.041	-15.979	1.00	0.00
ATOM	189	C8	ADE	6	0.994	-2.924	-16.205	1.00	0.00
ATOM	190	H8	ADE	6	1.812	-2.581	-15.588	1.00	0.00
ATOM	191	C2'	ADE	6	0.200	0.248	-17.389	1.00	1.00
ATOM	192	H2'	ADE	6	-0.793	-0.058	-17.050	1.00	0.00
ATOM	193	O2'	ADE	6	0.140	1.188	-18.446	1.00	1.00
ATOM	194	HO2'	ADE	6	1.039	1.441	-18.652	1.00	0.00
ATOM	195	C3'	ADE	6	1.020	0.758	-16.210	1.00	1.00
ATOM	196	H3'	ADE	6	0.812	0.219	-15.287	1.00	0.00
ATOM	197	O3'	ADE	6	0.756	2.135	-15.952	1.00	1.00
ATOM	198	P	URI	7	-0.413	2.557	-14.927	1.00	1.00
ATOM	199	O1P	URI	7	-0.376	4.033	-14.794	1.00	1.00
ATOM	200	O2P	URI	7	-0.307	1.708	-13.713	1.00	1.00
ATOM	201	O5'	URI	7	-1.755	2.163	-15.694	1.00	1.00
ATOM	202	C5'	URI	7	-2.042	2.684	-16.992	1.00	1.00
ATOM	203	H5'	URI	7	-1.278	2.352	-17.696	1.00	0.00
ATOM	204	H5''	URI	7	-2.043	3.773	-16.960	1.00	0.00
ATOM	205	C4'	URI	7	-3.405	2.207	-17.454	1.00	1.00
ATOM	206	H4'	URI	7	-3.621	2.708	-18.398	1.00	0.00

ATOM	207	O4'	URI	7	-3.379	0.756	-17.561	1.00	1.00
ATOM	208	C1'	URI	7	-4.474	0.202	-16.854	1.00	1.00
ATOM	209	H1'	URI	7	-5.277	0.051	-17.575	1.00	0.00
ATOM	210	N1	URI	7	-4.075	-1.110	-16.320	1.00	1.00
ATOM	211	C6	URI	7	-2.971	-1.245	-15.508	1.00	1.00
ATOM	212	H6	URI	7	-2.385	-0.361	-15.265	1.00	0.00
ATOM	213	C2	URI	7	-4.849	-2.204	-16.659	1.00	1.00
ATOM	214	O2	URI	7	-5.834	-2.123	-17.373	1.00	1.00
ATOM	215	N3	URI	7	-4.429	-3.399	-16.128	1.00	1.00
ATOM	216	H3	URI	7	-4.977	-4.213	-16.362	1.00	0.00
ATOM	217	C4	URI	7	-3.338	-3.605	-15.313	1.00	1.00
ATOM	218	O4	URI	7	-3.086	-4.745	-14.914	1.00	1.00
ATOM	219	C5	URI	7	-2.589	-2.427	-15.009	1.00	1.00
ATOM	220	H5	URI	7	-1.710	-2.488	-14.367	1.00	0.00
ATOM	221	C2'	URI	7	-4.850	1.214	-15.774	1.00	1.00
ATOM	222	H2'	URI	7	-4.198	1.119	-14.902	1.00	0.00
ATOM	223	O2'	URI	7	-6.217	1.066	-15.442	1.00	1.00
ATOM	224	HO2'	URI	7	-6.701	0.961	-16.261	1.00	0.00
ATOM	225	C3'	URI	7	-4.571	2.520	-16.502	1.00	1.00
ATOM	226	H3'	URI	7	-4.312	3.336	-15.827	1.00	0.00
ATOM	227	O3'	URI	7	-5.706	2.953	-17.246	1.00	1.00
ATOM	228	P	URI	8	-5.965	4.526	-17.473	1.00	1.00
ATOM	229	O1P	URI	8	-7.157	4.658	-18.349	1.00	1.00
ATOM	230	O2P	URI	8	-4.684	5.157	-17.878	1.00	1.00
ATOM	231	O5'	URI	8	-6.353	5.067	-16.023	1.00	1.00
ATOM	232	C5'	URI	8	-7.592	4.711	-15.414	1.00	1.00
ATOM	233	H5'	URI	8	-7.467	3.797	-14.829	1.00	0.00
ATOM	234	H5''	URI	8	-8.347	4.540	-16.180	1.00	0.00
ATOM	235	C4'	URI	8	-8.057	5.822	-14.504	1.00	1.00
ATOM	236	H4'	URI	8	-9.093	5.608	-14.230	1.00	0.00
ATOM	237	O4'	URI	8	-7.162	5.905	-13.362	1.00	1.00
ATOM	238	C1'	URI	8	-6.928	7.260	-13.032	1.00	1.00
ATOM	239	H1'	URI	8	-7.116	7.367	-11.961	1.00	0.00
ATOM	240	N1	URI	8	-5.514	7.574	-13.282	1.00	1.00
ATOM	241	C6	URI	8	-4.739	6.779	-14.098	1.00	1.00
ATOM	242	H6	URI	8	-5.191	5.903	-14.562	1.00	0.00
ATOM	243	C2	URI	8	-4.986	8.695	-12.669	1.00	1.00
ATOM	244	O2	URI	8	-5.643	9.419	-11.940	1.00	1.00
ATOM	245	N3	URI	8	-3.664	8.937	-12.939	1.00	1.00
ATOM	246	H3	URI	8	-3.255	9.751	-12.503	1.00	0.00
ATOM	247	C4	URI	8	-2.831	8.186	-13.744	1.00	1.00
ATOM	248	O4	URI	8	-1.657	8.533	-13.892	1.00	1.00
ATOM	249	C5	URI	8	-3.451	7.045	-14.341	1.00	1.00
ATOM	250	H5	URI	8	-2.872	6.390	-14.994	1.00	0.00
ATOM	251	C2'	URI	8	-7.896	8.089	-13.873	1.00	1.00
ATOM	252	H2'	URI	8	-7.460	9.056	-14.133	1.00	0.00
ATOM	253	O2'	URI	8	-9.127	8.219	-13.187	1.00	1.00
ATOM	254	HO2'	URI	8	-8.926	8.349	-12.260	1.00	0.00
ATOM	255	C3'	URI	8	-8.016	7.213	-15.113	1.00	1.00
ATOM	256	H3'	URI	8	-7.174	7.326	-15.794	1.00	0.00
ATOM	257	O3'	URI	8	-9.187	7.522	-15.861	1.00	1.00
ATOM	258	P	ADE	9	-9.106	8.572	-17.081	1.00	1.00
ATOM	259	O1P	ADE	9	-9.860	7.988	-18.218	1.00	1.00
ATOM	260	O2P	ADE	9	-7.686	8.965	-17.266	1.00	1.00
ATOM	261	O5'	ADE	9	-9.912	9.841	-16.551	1.00	1.00
ATOM	262	C5'	ADE	9	-11.327	9.800	-16.377	1.00	1.00
ATOM	263	H5'	ADE	9	-11.564	9.695	-15.318	1.00	0.00

ATOM	264	H5 ' ' ADE	9	-11.745	8.952	-16.918	1.00	0.00
ATOM	265	C4' ADE	9	-11.951	11.071	-16.903	1.00	1.00
ATOM	266	H4' ADE	9	-13.031	10.922	-16.921	1.00	0.00
ATOM	267	O4' ADE	9	-11.532	12.187	-16.063	1.00	1.00
ATOM	268	C1' ADE	9	-10.928	13.180	-16.867	1.00	1.00
ATOM	269	H1' ADE	9	-11.697	13.915	-17.099	1.00	0.00
ATOM	270	N9 ADE	9	-9.879	13.840	-16.088	1.00	1.00
ATOM	271	C4 ADE	9	-10.075	14.723	-15.052	1.00	1.00
ATOM	272	N3 ADE	9	-11.246	15.148	-14.550	1.00	1.00
ATOM	273	C2 ADE	9	-11.047	16.000	-13.548	1.00	1.00
ATOM	274	H2 ADE	9	-11.950	16.395	-13.084	1.00	0.00
ATOM	275	N1 ADE	9	-9.895	16.443	-13.029	1.00	1.00
ATOM	276	C6 ADE	9	-8.735	15.996	-13.555	1.00	1.00
ATOM	277	N6 ADE	9	-7.585	16.437	-13.038	1.00	1.00
ATOM	278	H62 ADE	9	-6.706	16.116	-13.416	1.00	0.00
ATOM	279	H61 ADE	9	-7.596	17.091	-12.270	1.00	0.00
ATOM	280	C5 ADE	9	-8.809	15.087	-14.624	1.00	1.00
ATOM	281	N7 ADE	9	-7.834	14.449	-15.378	1.00	1.00
ATOM	282	C8 ADE	9	-8.518	13.723	-16.229	1.00	1.00
ATOM	283	H8 ADE	9	-8.051	13.098	-16.976	1.00	0.00
ATOM	284	C2' ADE	9	-10.418	12.465	-18.112	1.00	1.00
ATOM	285	H2' ADE	9	-9.479	11.939	-17.913	1.00	0.00
ATOM	286	O2' ADE	9	-10.308	13.387	-19.181	1.00	1.00
ATOM	287	HO2' ADE	9	-10.006	12.899	-19.944	1.00	0.00
ATOM	288	C3' ADE	9	-11.541	11.462	-18.326	1.00	1.00
ATOM	289	H3' ADE	9	-11.231	10.593	-18.904	1.00	0.00
ATOM	290	O3' ADE	9	-12.637	12.047	-19.026	1.00	1.00
ATOM	291	P GUA	10	-13.511	11.156	-20.037	1.00	1.00
ATOM	292	O1P GUA	10	-13.290	9.732	-19.679	1.00	1.00
ATOM	293	O2P GUA	10	-14.892	11.700	-20.064	1.00	1.00
ATOM	294	O5' GUA	10	-12.841	11.420	-21.457	1.00	1.00
ATOM	295	C5' GUA	10	-13.402	10.878	-22.650	1.00	1.00
ATOM	296	H5' GUA	10	-14.463	11.125	-22.704	1.00	0.00
ATOM	297	H5 ' ' GUA	10	-13.290	9.794	-22.649	1.00	0.00
ATOM	298	C4' GUA	10	-12.697	11.449	-23.861	1.00	1.00
ATOM	299	H4' GUA	10	-13.036	10.893	-24.735	1.00	0.00
ATOM	300	O4' GUA	10	-12.972	12.875	-23.937	1.00	1.00
ATOM	301	C1' GUA	10	-11.775	13.584	-24.196	1.00	1.00
ATOM	302	H1' GUA	10	-11.993	14.305	-24.985	1.00	0.00
ATOM	303	N9 GUA	10	-11.405	14.324	-22.993	1.00	1.00
ATOM	304	C4 GUA	10	-10.346	15.191	-22.856	1.00	1.00
ATOM	305	N3 GUA	10	-9.455	15.510	-23.813	1.00	1.00
ATOM	306	C2 GUA	10	-8.548	16.372	-23.379	1.00	1.00
ATOM	307	N2 GUA	10	-7.587	16.798	-24.211	1.00	1.00
ATOM	308	H22 GUA	10	-7.556	16.463	-25.163	1.00	0.00
ATOM	309	H21 GUA	10	-6.891	17.455	-23.884	1.00	0.00
ATOM	310	N1 GUA	10	-8.513	16.886	-22.104	1.00	1.00
ATOM	311	H1 GUA	10	-7.775	17.538	-21.875	1.00	0.00
ATOM	312	C6 GUA	10	-9.428	16.563	-21.102	1.00	1.00
ATOM	313	O6 GUA	10	-9.317	17.075	-19.981	1.00	1.00
ATOM	314	C5 GUA	10	-10.406	15.638	-21.556	1.00	1.00
ATOM	315	N7 GUA	10	-11.480	15.067	-20.886	1.00	1.00
ATOM	316	C8 GUA	10	-12.041	14.297	-21.777	1.00	1.00
ATOM	317	H8 GUA	10	-12.918	13.699	-21.577	1.00	0.00
ATOM	318	C2' GUA	10	-10.729	12.556	-24.627	1.00	1.00
ATOM	319	H2' GUA	10	-9.727	12.859	-24.312	1.00	0.00
ATOM	320	O2' GUA	10	-10.814	12.352	-26.025	1.00	1.00

ATOM	321	HO2'	GUA	10	-11.034	11.432	-26.164	1.00	0.00
ATOM	322	C3'	GUA	10	-11.178	11.334	-23.838	1.00	1.00
ATOM	323	H3'	GUA	10	-10.784	11.315	-22.822	1.00	0.00
ATOM	324	O3'	GUA	10	-10.757	10.122	-24.459	1.00	1.00
ATOM	325	P	CYT	11	-9.464	9.345	-23.905	1.00	1.00
ATOM	326	O1P	CYT	11	-9.393	8.041	-24.615	1.00	1.00
ATOM	327	O2P	CYT	11	-9.503	9.371	-22.421	1.00	1.00
ATOM	328	O5'	CYT	11	-8.238	10.240	-24.390	1.00	1.00
ATOM	329	C5'	CYT	11	-7.911	10.340	-25.772	1.00	1.00
ATOM	330	H5'	CYT	11	-8.746	10.774	-26.319	1.00	0.00
ATOM	331	H5''	CYT	11	-7.699	9.350	-26.174	1.00	0.00
ATOM	332	C4'	CYT	11	-6.692	11.213	-25.953	1.00	1.00
ATOM	333	H4'	CYT	11	-6.386	11.137	-26.997	1.00	0.00
ATOM	334	O4'	CYT	11	-7.016	12.569	-25.542	1.00	1.00
ATOM	335	C1'	CYT	11	-5.907	13.143	-24.868	1.00	1.00
ATOM	336	H1'	CYT	11	-5.700	14.098	-25.353	1.00	0.00
ATOM	337	N1	CYT	11	-6.292	13.405	-23.471	1.00	1.00
ATOM	338	C6	CYT	11	-7.324	12.722	-22.889	1.00	1.00
ATOM	339	H6	CYT	11	-7.867	11.974	-23.467	1.00	0.00
ATOM	340	C2	CYT	11	-5.580	14.364	-22.742	1.00	1.00
ATOM	341	O2	CYT	11	-4.648	14.966	-23.295	1.00	1.00
ATOM	342	N3	CYT	11	-5.927	14.607	-21.458	1.00	1.00
ATOM	343	C4	CYT	11	-6.937	13.935	-20.900	1.00	1.00
ATOM	344	N4	CYT	11	-7.244	14.209	-19.629	1.00	1.00
ATOM	345	H42	CYT	11	-8.002	13.720	-19.175	1.00	0.00
ATOM	346	H41	CYT	11	-6.716	14.906	-19.121	1.00	0.00
ATOM	347	C5	CYT	11	-7.678	12.953	-21.618	1.00	1.00
ATOM	348	H5	CYT	11	-8.500	12.410	-21.153	1.00	0.00
ATOM	349	C2'	CYT	11	-4.745	12.161	-25.008	1.00	1.00
ATOM	350	H2'	CYT	11	-4.111	12.174	-24.119	1.00	0.00
ATOM	351	O2'	CYT	11	-4.019	12.449	-26.189	1.00	1.00
ATOM	352	HO2'	CYT	11	-4.412	11.940	-26.898	1.00	0.00
ATOM	353	C3'	CYT	11	-5.494	10.840	-25.099	1.00	1.00
ATOM	354	H3'	CYT	11	-5.794	10.450	-24.126	1.00	0.00
ATOM	355	O3'	CYT	11	-4.706	9.827	-25.718	1.00	1.00
ATOM	356	P	URI	12	-3.933	8.746	-24.812	1.00	1.00
ATOM	357	O1P	URI	12	-3.306	7.763	-25.729	1.00	1.00
ATOM	358	O2P	URI	12	-4.861	8.276	-23.754	1.00	1.00
ATOM	359	O5'	URI	12	-2.770	9.587	-24.118	1.00	1.00
ATOM	360	C5'	URI	12	-1.707	10.136	-24.888	1.00	1.00
ATOM	361	H5'	URI	12	-2.114	10.739	-25.701	1.00	0.00
ATOM	362	H5''	URI	12	-1.105	9.333	-25.312	1.00	0.00
ATOM	363	C4'	URI	12	-0.825	11.002	-24.020	1.00	1.00
ATOM	364	H4'	URI	12	0.033	11.305	-24.620	1.00	0.00
ATOM	365	O4'	URI	12	-1.605	12.119	-23.517	1.00	1.00
ATOM	366	C1'	URI	12	-1.089	12.539	-22.264	1.00	1.00
ATOM	367	H1'	URI	12	-0.745	13.569	-22.392	1.00	0.00
ATOM	368	N1	URI	12	-2.185	12.534	-21.283	1.00	1.00
ATOM	369	C6	URI	12	-3.297	11.742	-21.466	1.00	1.00
ATOM	370	H6	URI	12	-3.355	11.112	-22.352	1.00	0.00
ATOM	371	C2	URI	12	-2.063	13.349	-20.167	1.00	1.00
ATOM	372	O2	URI	12	-1.094	14.060	-19.972	1.00	1.00
ATOM	373	N3	URI	12	-3.119	13.294	-19.291	1.00	1.00
ATOM	374	H3	URI	12	-3.054	13.877	-18.469	1.00	0.00
ATOM	375	C4	URI	12	-4.259	12.528	-19.412	1.00	1.00
ATOM	376	O4	URI	12	-5.125	12.588	-18.537	1.00	1.00
ATOM	377	C5	URI	12	-4.308	11.716	-20.590	1.00	1.00

ATOM	378	H5	URI	12	-5.171	11.075	-20.772	1.00	0.00
ATOM	379	C2'	URI	12	0.055	11.590	-21.905	1.00	1.00
ATOM	380	H2'	URI	12	0.031	11.330	-20.844	1.00	0.00
ATOM	381	O2'	URI	12	1.288	12.167	-22.291	1.00	1.00
ATOM	382	HO2'	URI	12	1.159	12.567	-23.151	1.00	0.00
ATOM	383	C3'	URI	12	-0.302	10.375	-22.749	1.00	1.00
ATOM	384	H3'	URI	12	-1.049	9.735	-22.282	1.00	0.00
ATOM	385	O3'	URI	12	0.832	9.554	-22.991	1.00	1.00
ATOM	386	P	CYT	13	1.229	8.417	-21.929	1.00	1.00
ATOM	387	O1P	CYT	13	2.388	7.672	-22.482	1.00	1.00
ATOM	388	O2P	CYT	13	-0.004	7.679	-21.551	1.00	1.00
ATOM	389	O5'	CYT	13	1.729	9.240	-20.656	1.00	1.00
ATOM	390	C5'	CYT	13	1.420	8.814	-19.330	1.00	1.00
ATOM	391	H5'	CYT	13	2.076	7.990	-19.041	1.00	0.00
ATOM	392	H5''	CYT	13	0.387	8.472	-19.284	1.00	0.00
ATOM	393	C4'	CYT	13	1.602	9.958	-18.363	1.00	1.00
ATOM	394	H4'	CYT	13	2.595	10.374	-18.528	1.00	0.00
ATOM	395	O4'	CYT	13	0.531	10.920	-18.562	1.00	1.00
ATOM	396	C1'	CYT	13	0.178	11.513	-17.322	1.00	1.00
ATOM	397	H1'	CYT	13	0.292	12.591	-17.440	1.00	0.00
ATOM	398	N1	CYT	13	-1.241	11.233	-17.046	1.00	1.00
ATOM	399	C6	CYT	13	-1.935	10.315	-17.789	1.00	1.00
ATOM	400	H6	CYT	13	-1.429	9.786	-18.596	1.00	0.00
ATOM	401	C2	CYT	13	-1.875	11.923	-16.009	1.00	1.00
ATOM	402	O2	CYT	13	-1.221	12.746	-15.353	1.00	1.00
ATOM	403	N3	CYT	13	-3.179	11.672	-15.749	1.00	1.00
ATOM	404	C4	CYT	13	-3.846	10.777	-16.479	1.00	1.00
ATOM	405	N4	CYT	13	-5.131	10.563	-16.187	1.00	1.00
ATOM	406	H42	CYT	13	-5.667	9.894	-16.719	1.00	0.00
ATOM	407	H41	CYT	13	-5.569	11.073	-15.433	1.00	0.00
ATOM	408	C5	CYT	13	-3.226	10.059	-17.543	1.00	1.00
ATOM	409	H5	CYT	13	-3.780	9.329	-18.133	1.00	0.00
ATOM	410	C2'	CYT	13	1.130	10.951	-16.261	1.00	1.00
ATOM	411	H2'	CYT	13	0.609	10.788	-15.316	1.00	0.00
ATOM	412	O2'	CYT	13	2.245	11.811	-16.121	1.00	1.00
ATOM	413	HO2'	CYT	13	1.924	12.637	-15.762	1.00	0.00
ATOM	414	C3'	CYT	13	1.508	9.613	-16.887	1.00	1.00
ATOM	415	H3'	CYT	13	0.779	8.830	-16.692	1.00	0.00
ATOM	416	O3'	CYT	13	2.753	9.137	-16.388	1.00	1.00
ATOM	417	P	ADE	14	2.809	8.400	-14.960	1.00	1.00
ATOM	418	O1P	ADE	14	4.168	7.823	-14.811	1.00	1.00
ATOM	419	O2P	ADE	14	1.621	7.517	-14.843	1.00	1.00
ATOM	420	O5'	ADE	14	2.657	9.588	-13.910	1.00	1.00
ATOM	421	C5'	ADE	14	3.649	10.604	-13.808	1.00	1.00
ATOM	422	H5'	ADE	14	3.645	11.213	-14.712	1.00	0.00
ATOM	423	H5''	ADE	14	4.633	10.149	-13.692	1.00	0.00
ATOM	424	C4'	ADE	14	3.370	11.482	-12.611	1.00	1.00
ATOM	425	H4'	ADE	14	4.212	12.166	-12.503	1.00	0.00
ATOM	426	O4'	ADE	14	2.099	12.160	-12.813	1.00	1.00
ATOM	427	C1'	ADE	14	1.553	12.542	-11.567	1.00	1.00
ATOM	428	H1'	ADE	14	1.576	13.631	-11.525	1.00	0.00
ATOM	429	N9	ADE	14	0.158	12.110	-11.519	1.00	1.00
ATOM	430	C4	ADE	14	-0.807	12.560	-10.648	1.00	1.00
ATOM	431	N3	ADE	14	-0.665	13.474	-9.675	1.00	1.00
ATOM	432	C2	ADE	14	-1.814	13.658	-9.030	1.00	1.00
ATOM	433	H2	ADE	14	-1.788	14.388	-8.222	1.00	0.00
ATOM	434	N1	ADE	14	-3.003	13.072	-9.236	1.00	1.00

ATOM	435	C6	ADE	14	-3.112	12.159	-10.222	1.00	1.00
ATOM	436	N6	ADE	14	-4.295	11.575	-10.426	1.00	1.00
ATOM	437	H62	ADE	14	-4.400	10.885	-11.157	1.00	0.00
ATOM	438	H61	ADE	14	-5.086	11.821	-9.847	1.00	0.00
ATOM	439	C5	ADE	14	-1.963	11.872	-10.978	1.00	1.00
ATOM	440	N7	ADE	14	-1.732	11.008	-12.038	1.00	1.00
ATOM	441	C8	ADE	14	-0.465	11.186	-12.322	1.00	1.00
ATOM	442	H8	ADE	14	0.044	10.654	-13.113	1.00	0.00
ATOM	443	C2'	ADE	14	2.427	11.902	-10.491	1.00	1.00
ATOM	444	H2'	ADE	14	1.818	11.465	-9.698	1.00	0.00
ATOM	445	O2'	ADE	14	3.348	12.859	-10.001	1.00	1.00
ATOM	446	HO2'	ADE	14	2.849	13.507	-9.504	1.00	0.00
ATOM	447	C3'	ADE	14	3.112	10.803	-11.295	1.00	1.00
ATOM	448	H3'	ADE	14	2.491	9.916	-11.412	1.00	0.00
ATOM	449	O3'	ADE	14	4.324	10.377	-10.669	1.00	1.00
ATOM	450	P	GUA	15	4.343	9.046	-9.763	1.00	1.00
ATOM	451	O1P	GUA	15	5.666	8.986	-9.089	1.00	1.00
ATOM	452	O2P	GUA	15	3.893	7.904	-10.596	1.00	1.00
ATOM	453	O5'	GUA	15	3.233	9.321	-8.655	1.00	1.00
ATOM	454	C5'	GUA	15	3.389	10.381	-7.718	1.00	1.00
ATOM	455	H5'	GUA	15	3.595	11.313	-8.245	1.00	0.00
ATOM	456	H5''	GUA	15	4.219	10.164	-7.048	1.00	0.00
ATOM	457	C4'	GUA	15	2.125	10.539	-6.903	1.00	1.00
ATOM	458	H4'	GUA	15	2.324	11.280	-6.127	1.00	0.00
ATOM	459	O4'	GUA	15	1.034	10.905	-7.789	1.00	1.00
ATOM	460	C1'	GUA	15	-0.188	10.389	-7.282	1.00	1.00
ATOM	461	H1'	GUA	15	-0.844	11.242	-7.100	1.00	0.00
ATOM	462	N9	GUA	15	-0.799	9.555	-8.311	1.00	1.00
ATOM	463	C4	GUA	15	-2.122	9.196	-8.395	1.00	1.00
ATOM	464	N3	GUA	15	-3.097	9.555	-7.537	1.00	1.00
ATOM	465	C2	GUA	15	-4.274	9.055	-7.882	1.00	1.00
ATOM	466	N2	GUA	15	-5.352	9.317	-7.133	1.00	1.00
ATOM	467	H22	GUA	15	-5.267	9.894	-6.309	1.00	0.00
ATOM	468	H21	GUA	15	-6.252	8.936	-7.391	1.00	0.00
ATOM	469	N1	GUA	15	-4.484	8.259	-8.985	1.00	1.00
ATOM	470	H1	GUA	15	-5.422	7.929	-9.159	1.00	0.00
ATOM	471	C6	GUA	15	-3.484	7.880	-9.883	1.00	1.00
ATOM	472	O6	GUA	15	-3.769	7.161	-10.847	1.00	1.00
ATOM	473	C5	GUA	15	-2.219	8.411	-9.523	1.00	1.00
ATOM	474	N7	GUA	15	-0.982	8.278	-10.137	1.00	1.00
ATOM	475	C8	GUA	15	-0.173	8.972	-9.385	1.00	1.00
ATOM	476	H8	GUA	15	0.884	9.076	-9.584	1.00	0.00
ATOM	477	C2'	GUA	15	0.144	9.630	-5.997	1.00	1.00
ATOM	478	H2'	GUA	15	-0.452	8.719	-5.914	1.00	0.00
ATOM	479	O2'	GUA	15	-0.027	10.485	-4.883	1.00	1.00
ATOM	480	HO2'	GUA	15	0.845	10.734	-4.578	1.00	0.00
ATOM	481	C3'	GUA	15	1.605	9.278	-6.236	1.00	1.00
ATOM	482	H3'	GUA	15	1.736	8.399	-6.867	1.00	0.00
ATOM	483	O3'	GUA	15	2.290	9.007	-5.018	1.00	1.00
ATOM	484	P	CYT	16	2.462	7.488	-4.519	1.00	1.00
ATOM	485	O1P	CYT	16	1.709	6.622	-5.460	1.00	1.00
ATOM	486	O2P	CYT	16	3.907	7.235	-4.286	1.00	1.00
ATOM	487	O5'	CYT	16	1.715	7.460	-3.113	1.00	1.00
ATOM	488	C5'	CYT	16	2.064	8.384	-2.086	1.00	1.00
ATOM	489	H5'	CYT	16	2.828	9.070	-2.455	1.00	0.00
ATOM	490	H5''	CYT	16	2.457	7.845	-1.225	1.00	0.00
ATOM	491	C4'	CYT	16	0.846	9.173	-1.663	1.00	1.00

ATOM	492	H4'	CYT	16	1.195	10.098	-1.199	1.00	0.00
ATOM	493	O4'	CYT	16	0.005	9.388	-2.818	1.00	1.00
ATOM	494	C1'	CYT	16	-1.256	8.766	-2.619	1.00	1.00
ATOM	495	H1'	CYT	16	-1.976	9.570	-2.457	1.00	0.00
ATOM	496	N1	CYT	16	-1.627	8.051	-3.859	1.00	0.00
ATOM	497	C6	CYT	16	-0.938	6.939	-4.271	1.00	0.00
ATOM	498	H6	CYT	16	-0.100	6.573	-3.676	1.00	0.00
ATOM	499	C2	CYT	16	-2.704	8.529	-4.615	1.00	0.00
ATOM	500	O2	CYT	16	-3.310	9.535	-4.225	1.00	0.00
ATOM	501	N3	CYT	16	-3.054	7.883	-5.751	1.00	0.00
ATOM	502	C4	CYT	16	-2.376	6.802	-6.140	1.00	0.00
ATOM	503	N4	CYT	16	-2.757	6.196	-7.267	1.00	0.00
ATOM	504	H42	CYT	16	-2.266	5.376	-7.592	1.00	0.00
ATOM	505	H41	CYT	16	-3.537	6.560	-7.796	1.00	0.00
ATOM	506	C5	CYT	16	-1.275	6.291	-5.393	1.00	0.00
ATOM	507	H5	CYT	16	-0.730	5.406	-5.719	1.00	0.00
ATOM	508	C2'	CYT	16	-1.138	7.852	-1.393	1.00	1.00
ATOM	509	H2'	CYT	16	-0.840	6.843	-1.687	1.00	0.00
ATOM	510	O2'	CYT	16	-2.362	7.858	-0.683	1.00	1.00
ATOM	511	HO2'	CYT	16	-2.647	8.771	-0.616	1.00	0.00
ATOM	512	C3'	CYT	16	-0.012	8.512	-0.601	1.00	1.00
ATOM	513	H3'	CYT	16	0.557	7.803	-0.001	1.00	0.00
ATOM	514	O3'	CYT	16	-0.517	9.491	0.302	1.00	1.00
ATOM	515	P	URI	17	0.473	10.212	1.345	1.00	1.00
ATOM	516	O1P	URI	17	0.163	11.663	1.319	1.00	1.00
ATOM	517	O2P	URI	17	1.860	9.753	1.072	1.00	1.00
ATOM	518	O5'	URI	17	0.029	9.634	2.760	1.00	1.00
ATOM	519	C5'	URI	17	-0.414	8.288	2.892	1.00	1.00
ATOM	520	H5'	URI	17	-0.682	7.890	1.912	1.00	0.00
ATOM	521	H5''	URI	17	-1.288	8.247	3.542	1.00	0.00
ATOM	522	C4'	URI	17	0.681	7.436	3.493	1.00	1.00
ATOM	523	H4'	URI	17	1.470	7.343	2.745	1.00	0.00
ATOM	524	O4'	URI	17	1.125	8.044	4.733	1.00	1.00
ATOM	525	C1'	URI	17	1.377	7.039	5.700	1.00	1.00
ATOM	526	H1'	URI	17	2.386	7.209	6.078	1.00	0.00
ATOM	527	N1	URI	17	0.431	7.214	6.813	1.00	0.00
ATOM	528	C6	URI	17	0.832	7.075	8.126	1.00	0.00
ATOM	529	H6	URI	17	1.875	6.832	8.334	1.00	0.00
ATOM	530	C2	URI	17	-0.878	7.525	6.499	1.00	0.00
ATOM	531	O2	URI	17	-1.271	7.655	5.356	1.00	0.00
ATOM	532	N3	URI	17	-1.715	7.674	7.580	1.00	0.00
ATOM	533	H3	URI	17	-2.678	7.900	7.376	1.00	0.00
ATOM	534	C4	URI	17	-1.381	7.550	8.912	1.00	0.00
ATOM	535	O4	URI	17	-2.248	7.714	9.773	1.00	0.00
ATOM	536	C5	URI	17	-0.010	7.229	9.152	1.00	0.00
ATOM	537	H5	URI	17	0.352	7.110	10.174	1.00	0.00
ATOM	538	C2'	URI	17	1.247	5.685	4.995	1.00	1.00
ATOM	539	H2'	URI	17	0.808	4.938	5.661	1.00	0.00
ATOM	540	O2'	URI	17	2.511	5.288	4.503	1.00	1.00
ATOM	541	HO2'	URI	17	3.054	5.065	5.260	1.00	0.00
ATOM	542	C3'	URI	17	0.272	6.021	3.875	1.00	1.00
ATOM	543	H3'	URI	17	-0.771	5.969	4.185	1.00	0.00
ATOM	544	O3'	URI	17	0.410	5.130	2.775	1.00	1.00
ATOM	545	P	GUA	18	-0.302	3.690	2.823	1.00	1.00
ATOM	546	O1P	GUA	18	0.121	3.028	4.082	1.00	1.00
ATOM	547	O2P	GUA	18	-0.068	3.011	1.523	1.00	1.00
ATOM	548	O5'	GUA	18	-1.854	4.030	2.938	1.00	1.00

ATOM	549	C5'	GUA	18	-2.557	4.610	1.842	1.00	1.00
ATOM	550	H5'	GUA	18	-2.617	3.892	1.024	1.00	0.00
ATOM	551	H5''	GUA	18	-2.032	5.499	1.496	1.00	0.00
ATOM	552	C4'	GUA	18	-3.952	4.996	2.268	1.00	1.00
ATOM	553	H4'	GUA	18	-4.360	5.645	1.493	1.00	0.00
ATOM	554	O4'	GUA	18	-4.734	3.786	2.477	1.00	1.00
ATOM	555	C1'	GUA	18	-5.296	3.801	3.770	1.00	1.00
ATOM	556	H1'	GUA	18	-6.305	4.206	3.676	1.00	0.00
ATOM	557	N9	GUA	18	-5.395	2.428	4.257	1.00	1.00
ATOM	558	C4	GUA	18	-6.538	1.669	4.342	1.00	1.00
ATOM	559	N3	GUA	18	-7.776	2.062	3.992	1.00	1.00
ATOM	560	C2	GUA	18	-8.674	1.110	4.192	1.00	1.00
ATOM	561	N2	GUA	18	-9.962	1.340	3.892	1.00	1.00
ATOM	562	H22	GUA	18	-10.242	2.233	3.517	1.00	0.00
ATOM	563	H21	GUA	18	-10.651	0.616	4.046	1.00	0.00
ATOM	564	N1	GUA	18	-8.385	-0.138	4.695	1.00	1.00
ATOM	565	H1	GUA	18	-9.148	-0.790	4.805	1.00	0.00
ATOM	566	C6	GUA	18	-7.107	-0.556	5.065	1.00	1.00
ATOM	567	O6	GUA	18	-6.941	-1.698	5.511	1.00	1.00
ATOM	568	C5	GUA	18	-6.135	0.456	4.856	1.00	1.00
ATOM	569	N7	GUA	18	-4.766	0.449	5.085	1.00	1.00
ATOM	570	C8	GUA	18	-4.372	1.636	4.717	1.00	1.00
ATOM	571	H8	GUA	18	-3.342	1.963	4.763	1.00	0.00
ATOM	572	C2'	GUA	18	-4.396	4.693	4.618	1.00	1.00
ATOM	573	H2'	GUA	18	-3.493	4.162	4.927	1.00	0.00
ATOM	574	O2'	GUA	18	-5.128	5.198	5.719	1.00	1.00
ATOM	575	HO2'	GUA	18	-4.542	5.196	6.477	1.00	0.00
ATOM	576	C3'	GUA	18	-4.047	5.778	3.608	1.00	1.00
ATOM	577	H3'	GUA	18	-3.125	6.302	3.854	1.00	0.00
ATOM	578	O3'	GUA	18	-5.066	6.769	3.540	1.00	1.00
ATOM	579	P	GUA	19	-4.701	8.263	3.064	1.00	1.00
ATOM	580	O1P	GUA	19	-4.171	8.171	1.679	1.00	1.00
ATOM	581	O2P	GUA	19	-3.879	8.901	4.121	1.00	1.00
ATOM	582	O5'	GUA	19	-6.109	9.003	3.006	1.00	1.00
ATOM	583	C5'	GUA	19	-7.143	8.543	2.140	1.00	1.00
ATOM	584	H5'	GUA	19	-7.051	7.466	2.000	1.00	0.00
ATOM	585	H5''	GUA	19	-7.059	9.034	1.173	1.00	0.00
ATOM	586	C4'	GUA	19	-8.495	8.856	2.734	1.00	1.00
ATOM	587	H4'	GUA	19	-9.243	8.643	1.970	1.00	0.00
ATOM	588	O4'	GUA	19	-8.670	8.070	3.948	1.00	1.00
ATOM	589	C1'	GUA	19	-8.958	8.928	5.031	1.00	1.00
ATOM	590	H1'	GUA	19	-10.040	8.931	5.160	1.00	0.00
ATOM	591	N9	GUA	19	-8.352	8.371	6.237	1.00	1.00
ATOM	592	C4	GUA	19	-9.010	7.752	7.274	1.00	1.00
ATOM	593	N3	GUA	19	-10.338	7.550	7.361	1.00	1.00
ATOM	594	C2	GUA	19	-10.676	6.928	8.479	1.00	1.00
ATOM	595	N2	GUA	19	-11.963	6.650	8.724	1.00	1.00
ATOM	596	H22	GUA	19	-12.673	6.915	8.055	1.00	0.00
ATOM	597	H21	GUA	19	-12.226	6.176	9.575	1.00	0.00
ATOM	598	N1	GUA	19	-9.780	6.528	9.447	1.00	1.00
ATOM	599	H1	GUA	19	-10.144	6.058	10.263	1.00	0.00
ATOM	600	C6	GUA	19	-8.402	6.731	9.368	1.00	1.00
ATOM	601	O6	GUA	19	-7.673	6.336	10.288	1.00	1.00
ATOM	602	C5	GUA	19	-8.028	7.399	8.173	1.00	1.00
ATOM	603	N7	GUA	19	-6.776	7.784	7.713	1.00	1.00
ATOM	604	C8	GUA	19	-7.019	8.354	6.564	1.00	1.00
ATOM	605	H8	GUA	19	-6.246	8.771	5.934	1.00	0.00

ATOM	606	C2'	GUA	19	-8.416	10.300	4.647	1.00	1.00
ATOM	607	H2'	GUA	19	-7.337	10.360	4.817	1.00	0.00
ATOM	608	O2'	GUA	19	-9.130	11.304	5.342	1.00	1.00
ATOM	609	HO2'	GUA	19	-9.921	10.898	5.697	1.00	0.00
ATOM	610	C3'	GUA	19	-8.710	10.311	3.152	1.00	1.00
ATOM	611	H3'	GUA	19	-8.074	11.004	2.601	1.00	0.00
ATOM	612	O3'	GUA	19	-10.051	10.706	2.890	1.00	1.00
ATOM	613	P	GUA	20	-10.464	11.209	1.418	1.00	1.00
ATOM	614	O1P	GUA	20	-11.943	11.325	1.388	1.00	1.00
ATOM	615	O2P	GUA	20	-9.775	10.351	0.421	1.00	1.00
ATOM	616	O5'	GUA	20	-9.849	12.678	1.327	1.00	1.00
ATOM	617	C5'	GUA	20	-10.498	13.791	1.941	1.00	1.00
ATOM	618	H5'	GUA	20	-10.035	14.001	2.905	1.00	0.00
ATOM	619	H5''	GUA	20	-11.555	13.565	2.097	1.00	0.00
ATOM	620	C4'	GUA	20	-10.381	15.010	1.056	1.00	1.00
ATOM	621	H4'	GUA	20	-11.039	15.780	1.460	1.00	0.00
ATOM	622	O4'	GUA	20	-8.987	15.416	0.997	1.00	1.00
ATOM	623	C1'	GUA	20	-8.628	15.721	-0.340	1.00	1.00
ATOM	624	H1'	GUA	20	-8.115	16.683	-0.321	1.00	0.00
ATOM	625	N9	GUA	20	-7.683	14.711	-0.805	1.00	1.00
ATOM	626	C4	GUA	20	-6.964	14.743	-1.976	1.00	1.00
ATOM	627	N3	GUA	20	-7.002	15.716	-2.905	1.00	1.00
ATOM	628	C2	GUA	20	-6.197	15.464	-3.923	1.00	1.00
ATOM	629	N2	GUA	20	-6.114	16.338	-4.939	1.00	1.00
ATOM	630	H22	GUA	20	-6.666	17.183	-4.923	1.00	0.00
ATOM	631	H21	GUA	20	-5.502	16.148	-5.719	1.00	0.00
ATOM	632	N1	GUA	20	-5.408	14.339	-4.031	1.00	1.00
ATOM	633	H1	GUA	20	-4.827	14.247	-4.851	1.00	0.00
ATOM	634	C6	GUA	20	-5.358	13.325	-3.077	1.00	1.00
ATOM	635	O6	GUA	20	-4.617	12.349	-3.258	1.00	1.00
ATOM	636	C5	GUA	20	-6.217	13.584	-1.979	1.00	1.00
ATOM	637	N7	GUA	20	-6.464	12.839	-0.833	1.00	1.00
ATOM	638	C8	GUA	20	-7.336	13.546	-0.171	1.00	1.00
ATOM	639	H8	GUA	20	-7.746	13.244	0.784	1.00	0.00
ATOM	640	C2'	GUA	20	-9.921	15.771	-1.152	1.00	1.00
ATOM	641	H2'	GUA	20	-9.756	15.422	-2.174	1.00	0.00
ATOM	642	O2'	GUA	20	-10.454	17.082	-1.113	1.00	1.00
ATOM	643	HO2'	GUA	20	-11.015	17.183	-1.882	1.00	0.00
ATOM	644	C3'	GUA	20	-10.786	14.775	-0.394	1.00	1.00
ATOM	645	H3'	GUA	20	-10.607	13.742	-0.689	1.00	0.00
ATOM	646	O3'	GUA	20	-12.172	15.019	-0.599	1.00	1.00
ATOM	647	P	ADE	21	-13.007	14.081	-1.603	1.00	1.00
ATOM	648	O1P	ADE	21	-14.412	14.565	-1.598	1.00	1.00
ATOM	649	O2P	ADE	21	-12.717	12.665	-1.268	1.00	1.00
ATOM	650	O5'	ADE	21	-12.380	14.396	-3.033	1.00	1.00
ATOM	651	C5'	ADE	21	-12.188	13.361	-3.995	1.00	1.00
ATOM	652	H5'	ADE	21	-12.891	13.487	-4.818	1.00	0.00
ATOM	653	H5''	ADE	21	-12.358	12.391	-3.531	1.00	0.00
ATOM	654	C4'	ADE	21	-10.776	13.408	-4.533	1.00	1.00
ATOM	655	H4'	ADE	21	-10.135	13.791	-3.738	1.00	0.00
ATOM	656	O4'	ADE	21	-10.401	12.081	-4.989	1.00	1.00
ATOM	657	C1'	ADE	21	-9.625	12.177	-6.172	1.00	1.00
ATOM	658	H1'	ADE	21	-8.705	11.621	-5.997	1.00	0.00
ATOM	659	N9	ADE	21	-10.354	11.521	-7.258	1.00	1.00
ATOM	660	C4	ADE	21	-9.801	10.948	-8.379	1.00	1.00
ATOM	661	N3	ADE	21	-8.500	10.876	-8.701	1.00	1.00
ATOM	662	C2	ADE	21	-8.337	10.247	-9.865	1.00	1.00

ATOM	663	H2	ADE	21	-7.305	10.145	-10.201	1.00	0.00
ATOM	664	N1	ADE	21	-9.261	9.721	-10.680	1.00	1.00
ATOM	665	C6	ADE	21	-10.561	9.811	-10.323	1.00	1.00
ATOM	666	N6	ADE	21	-11.484	9.288	-11.135	1.00	1.00
ATOM	667	H62	ADE	21	-12.461	9.344	-10.892	1.00	0.00
ATOM	668	H61	ADE	21	-11.201	8.836	-11.995	1.00	0.00
ATOM	669	C5	ADE	21	-10.866	10.457	-9.113	1.00	1.00
ATOM	670	N7	ADE	21	-12.069	10.714	-8.469	1.00	1.00
ATOM	671	C8	ADE	21	-11.710	11.346	-7.375	1.00	1.00
ATOM	672	H8	ADE	21	-12.419	11.695	-6.639	1.00	0.00
ATOM	673	C2'	ADE	21	-9.360	13.663	-6.420	1.00	1.00
ATOM	674	H2'	ADE	21	-9.379	13.891	-7.488	1.00	0.00
ATOM	675	O2'	ADE	21	-8.137	14.035	-5.813	1.00	1.00
ATOM	676	HO2'	ADE	21	-8.058	14.986	-5.894	1.00	0.00
ATOM	677	C3'	ADE	21	-10.562	14.299	-5.731	1.00	1.00
ATOM	678	H3'	ADE	21	-11.438	14.363	-6.375	1.00	0.00
ATOM	679	O3'	ADE	21	-10.280	15.626	-5.306	1.00	1.00
ATOM	680	P	GUA	22	-10.196	16.810	-6.390	1.00	1.00
ATOM	681	O1P	GUA	22	-10.451	18.085	-5.673	1.00	1.00
ATOM	682	O2P	GUA	22	-11.042	16.438	-7.551	1.00	1.00
ATOM	683	O5'	GUA	22	-8.672	16.799	-6.854	1.00	1.00
ATOM	684	C5'	GUA	22	-8.305	17.238	-8.158	1.00	1.00
ATOM	685	H5'	GUA	22	-8.768	18.204	-8.365	1.00	0.00
ATOM	686	H5''	GUA	22	-8.645	16.516	-8.900	1.00	0.00
ATOM	687	C4'	GUA	22	-6.805	17.376	-8.256	1.00	1.00
ATOM	688	H4'	GUA	22	-6.489	18.068	-7.475	1.00	0.00
ATOM	689	O4'	GUA	22	-6.204	16.055	-8.139	1.00	1.00
ATOM	690	C1'	GUA	22	-5.185	15.904	-9.110	1.00	1.00
ATOM	691	H1'	GUA	22	-4.316	15.485	-8.602	1.00	0.00
ATOM	692	N9	GUA	22	-5.641	14.941	-10.107	1.00	1.00
ATOM	693	C4	GUA	22	-4.918	14.463	-11.177	1.00	1.00
ATOM	694	N3	GUA	22	-3.654	14.801	-11.491	1.00	1.00
ATOM	695	C2	GUA	22	-3.227	14.174	-12.576	1.00	1.00
ATOM	696	N2	GUA	22	-1.986	14.398	-13.030	1.00	1.00
ATOM	697	H22	GUA	22	-1.379	15.043	-12.545	1.00	0.00
ATOM	698	H21	GUA	22	-1.657	13.919	-13.856	1.00	0.00
ATOM	699	N1	GUA	22	-3.983	13.278	-13.302	1.00	1.00
ATOM	700	H1	GUA	22	-3.561	12.855	-14.117	1.00	0.00
ATOM	701	C6	GUA	22	-5.293	12.921	-12.986	1.00	1.00
ATOM	702	O6	GUA	22	-5.894	12.107	-13.698	1.00	1.00
ATOM	703	C5	GUA	22	-5.760	13.588	-11.824	1.00	1.00
ATOM	704	N7	GUA	22	-6.987	13.515	-11.179	1.00	1.00
ATOM	705	C8	GUA	22	-6.869	14.332	-10.171	1.00	1.00
ATOM	706	H8	GUA	22	-7.659	14.514	-9.456	1.00	0.00
ATOM	707	C2'	GUA	22	-4.910	17.292	-9.679	1.00	1.00
ATOM	708	H2'	GUA	22	-4.605	17.234	-10.724	1.00	0.00
ATOM	709	O2'	GUA	22	-3.951	17.953	-8.873	1.00	1.00
ATOM	710	HO2'	GUA	22	-4.430	18.436	-8.199	1.00	0.00
ATOM	711	C3'	GUA	22	-6.291	17.924	-9.569	1.00	1.00
ATOM	712	H3'	GUA	22	-6.939	17.681	-10.410	1.00	0.00
ATOM	713	O3'	GUA	22	-6.216	19.345	-9.523	1.00	1.00
ATOM	714	P	ADE	23	-6.362	20.196	-10.880	1.00	1.00
ATOM	715	O1P	ADE	23	-6.537	21.619	-10.494	1.00	1.00
ATOM	716	O2P	ADE	23	-7.378	19.536	-11.738	1.00	1.00
ATOM	717	O5'	ADE	23	-4.940	20.046	-11.583	1.00	1.00
ATOM	718	C5'	ADE	23	-3.764	20.567	-10.971	1.00	1.00
ATOM	719	H5'	ADE	23	-3.617	20.100	-9.997	1.00	0.00

ATOM	720	H5 ' '	ADE	23	-3.864	21.644	-10.837	1.00	0.00
ATOM	721	C4 ' '	ADE	23	-2.560	20.290	-11.842	1.00	1.00
ATOM	722	H4 ' '	ADE	23	-1.707	20.809	-11.404	1.00	0.00
ATOM	723	O4 ' '	ADE	23	-2.371	18.852	-11.944	1.00	1.00
ATOM	724	C1 ' '	ADE	23	-1.920	18.519	-13.247	1.00	1.00
ATOM	725	H1 ' '	ADE	23	-1.005	17.936	-13.131	1.00	0.00
ATOM	726	N9	ADE	23	-2.926	17.667	-13.884	1.00	1.00
ATOM	727	C4	ADE	23	-2.717	16.814	-14.940	1.00	1.00
ATOM	728	N3	ADE	23	-1.565	16.588	-15.594	1.00	1.00
ATOM	729	C2	ADE	23	-1.744	15.696	-16.564	1.00	1.00
ATOM	730	H2	ADE	23	-0.853	15.455	-17.148	1.00	0.00
ATOM	731	N1	ADE	23	-2.859	15.050	-16.929	1.00	1.00
ATOM	732	C6	ADE	23	-4.000	15.299	-16.250	1.00	1.00
ATOM	733	N6	ADE	23	-5.113	14.656	-16.615	1.00	1.00
ATOM	734	H62	ADE	23	-5.979	14.828	-16.122	1.00	0.00
ATOM	735	H61	ADE	23	-5.088	13.998	-17.379	1.00	0.00
ATOM	736	C5	ADE	23	-3.944	16.228	-15.196	1.00	1.00
ATOM	737	N7	ADE	23	-4.908	16.702	-14.318	1.00	1.00
ATOM	738	C8	ADE	23	-4.254	17.551	-13.562	1.00	1.00
ATOM	739	H8	ADE	23	-4.719	18.108	-12.762	1.00	0.00
ATOM	740	C2 ' '	ADE	23	-1.676	19.834	-13.987	1.00	1.00
ATOM	741	H2 ' '	ADE	23	-1.927	19.742	-15.046	1.00	0.00
ATOM	742	O2 ' '	ADE	23	-0.340	20.251	-13.785	1.00	1.00
ATOM	743	HO2 ' '	ADE	23	-0.193	20.290	-12.839	1.00	0.00
ATOM	744	C3 ' '	ADE	23	-2.676	20.746	-13.288	1.00	1.00
ATOM	745	H3 ' '	ADE	23	-3.689	20.641	-13.673	1.00	0.00
ATOM	746	O3 ' '	ADE	23	-2.328	22.118	-13.431	1.00	1.00
ATOM	747	P	GUA	24	-3.007	22.994	-14.597	1.00	1.00
ATOM	748	O1P	GUA	24	-2.572	24.400	-14.405	1.00	1.00
ATOM	749	O2P	GUA	24	-4.457	22.672	-14.635	1.00	1.00
ATOM	750	O5 ' '	GUA	24	-2.337	22.447	-15.933	1.00	1.00
ATOM	751	C5 ' '	GUA	24	-0.951	22.649	-16.192	1.00	1.00
ATOM	752	H5 ' '	GUA	24	-0.362	22.277	-15.352	1.00	0.00
ATOM	753	H5 ' ' ' '	GUA	24	-0.753	23.712	-16.319	1.00	0.00
ATOM	754	C4 ' '	GUA	24	-0.542	21.918	-17.449	1.00	1.00
ATOM	755	H4 ' '	GUA	24	0.481	22.214	-17.683	1.00	0.00
ATOM	756	O4 ' '	GUA	24	-0.699	20.489	-17.242	1.00	1.00
ATOM	757	C1 ' '	GUA	24	-1.105	19.874	-18.455	1.00	1.00
ATOM	758	H1 ' '	GUA	24	-0.387	19.082	-18.669	1.00	0.00
ATOM	759	N9	GUA	24	-2.413	19.257	-18.252	1.00	1.00
ATOM	760	C4	GUA	24	-2.956	18.228	-18.982	1.00	1.00
ATOM	761	N3	GUA	24	-2.372	17.599	-20.020	1.00	1.00
ATOM	762	C2	GUA	24	-3.145	16.648	-20.522	1.00	1.00
ATOM	763	N2	GUA	24	-2.713	15.922	-21.564	1.00	1.00
ATOM	764	H22	GUA	24	-1.802	16.103	-21.960	1.00	0.00
ATOM	765	H21	GUA	24	-3.300	15.198	-21.954	1.00	0.00
ATOM	766	N1	GUA	24	-4.397	16.333	-20.044	1.00	1.00
ATOM	767	H1	GUA	24	-4.901	15.588	-20.502	1.00	0.00
ATOM	768	C6	GUA	24	-5.011	16.977	-18.970	1.00	1.00
ATOM	769	O6	GUA	24	-6.142	16.624	-18.612	1.00	1.00
ATOM	770	C5	GUA	24	-4.194	17.998	-18.426	1.00	1.00
ATOM	771	N7	GUA	24	-4.426	18.864	-17.364	1.00	1.00
ATOM	772	C8	GUA	24	-3.345	19.590	-17.300	1.00	1.00
ATOM	773	H8	GUA	24	-3.201	20.378	-16.575	1.00	0.00
ATOM	774	C2 ' '	GUA	24	-1.107	20.961	-19.531	1.00	1.00
ATOM	775	H2 ' '	GUA	24	-1.914	20.799	-20.251	1.00	0.00
ATOM	776	O2 ' '	GUA	24	0.164	21.018	-20.152	1.00	1.00

ATOM	777	HO2'	GUA	24	0.661	21.713	-19.720	1.00	0.00
ATOM	778	C3'	GUA	24	-1.394	22.195	-18.689	1.00	1.00
ATOM	779	H3'	GUA	24	-2.447	22.307	-18.440	1.00	0.00
ATOM	780	O3'	GUA	24	-1.007	23.389	-19.358	1.00	1.00
ATOM	781	P	CYT	25	-2.118	24.272	-20.115	1.00	1.00
ATOM	782	O1P	CYT	25	-1.434	25.471	-20.666	1.00	1.00
ATOM	783	O2P	CYT	25	-3.278	24.444	-19.204	1.00	1.00
ATOM	784	O5'	CYT	25	-2.571	23.357	-21.337	1.00	1.00
ATOM	785	C5'	CYT	25	-1.661	23.037	-22.385	1.00	1.00
ATOM	786	H5'	CYT	25	-0.734	22.650	-21.962	1.00	0.00
ATOM	787	H5''	CYT	25	-1.440	23.932	-22.966	1.00	0.00
ATOM	788	C4'	CYT	25	-2.263	21.995	-23.299	1.00	1.00
ATOM	789	H4'	CYT	25	-1.586	21.868	-24.145	1.00	0.00
ATOM	790	O4'	CYT	25	-2.488	20.779	-22.549	1.00	1.00
ATOM	791	C1'	CYT	25	-3.599	20.082	-23.098	1.00	1.00
ATOM	792	H1'	CYT	25	-3.226	19.116	-23.441	1.00	0.00
ATOM	793	N1	CYT	25	-4.580	19.844	-22.023	1.00	1.00
ATOM	794	C6	CYT	25	-4.590	20.623	-20.900	1.00	1.00
ATOM	795	H6	CYT	25	-3.865	21.431	-20.798	1.00	0.00
ATOM	796	C2	CYT	25	-5.510	18.806	-22.170	1.00	1.00
ATOM	797	O2	CYT	25	-5.479	18.116	-23.200	1.00	1.00
ATOM	798	N3	CYT	25	-6.414	18.585	-21.189	1.00	1.00
ATOM	799	C4	CYT	25	-6.414	19.351	-20.096	1.00	1.00
ATOM	800	N4	CYT	25	-7.324	19.094	-19.154	1.00	1.00
ATOM	801	H42	CYT	25	-7.352	19.654	-18.312	1.00	0.00
ATOM	802	H41	CYT	25	-7.986	18.343	-19.282	1.00	0.00
ATOM	803	C5	CYT	25	-5.479	20.414	-19.920	1.00	1.00
ATOM	804	H5	CYT	25	-5.489	21.033	-19.023	1.00	0.00
ATOM	805	C2'	CYT	25	-4.150	20.927	-24.252	1.00	1.00
ATOM	806	H2'	CYT	25	-5.242	20.913	-24.261	1.00	0.00
ATOM	807	O2'	CYT	25	-3.600	20.471	-25.474	1.00	1.00
ATOM	808	HO2'	CYT	25	-3.336	19.559	-25.347	1.00	0.00
ATOM	809	C3'	CYT	25	-3.648	22.317	-23.881	1.00	1.00
ATOM	810	H3'	CYT	25	-4.283	22.820	-23.150	1.00	0.00
ATOM	811	O3'	CYT	25	-3.585	23.174	-25.012	1.00	1.00
ATOM	812	P	ADE	26	-4.814	24.155	-25.342	1.00	1.00
ATOM	813	O1P	ADE	26	-5.124	24.911	-24.101	1.00	1.00
ATOM	814	O2P	ADE	26	-4.506	24.890	-26.593	1.00	1.00
ATOM	815	O5'	ADE	26	-6.028	23.163	-25.629	1.00	1.00
ATOM	816	C5'	ADE	26	-6.010	22.294	-26.757	1.00	1.00
ATOM	817	H5'	ADE	26	-5.099	21.697	-26.746	1.00	0.00
ATOM	818	H5''	ADE	26	-6.039	22.881	-27.675	1.00	0.00
ATOM	819	C4'	ADE	26	-7.208	21.377	-26.724	1.00	1.00
ATOM	820	H4'	ADE	26	-7.221	20.825	-27.664	1.00	0.00
ATOM	821	O4'	ADE	26	-7.115	20.522	-25.550	1.00	1.00
ATOM	822	C1'	ADE	26	-8.412	20.238	-25.060	1.00	1.00
ATOM	823	H1'	ADE	26	-8.518	19.153	-25.038	1.00	0.00
ATOM	824	N9	ADE	26	-8.506	20.733	-23.686	1.00	0.00
ATOM	825	C4	ADE	26	-9.401	20.320	-22.729	1.00	0.00
ATOM	826	N3	ADE	26	-10.358	19.386	-22.857	1.00	0.00
ATOM	827	C2	ADE	26	-11.035	19.248	-21.718	1.00	0.00
ATOM	828	H2	ADE	26	-11.836	18.506	-21.736	1.00	0.00
ATOM	829	N1	ADE	26	-10.874	19.891	-20.554	1.00	0.00
ATOM	830	C6	ADE	26	-9.902	20.822	-20.460	1.00	0.00
ATOM	831	N6	ADE	26	-9.743	21.464	-19.301	1.00	0.00
ATOM	832	H62	ADE	26	-9.022	22.169	-19.207	1.00	0.00
ATOM	833	H61	ADE	26	-10.339	21.246	-18.515	1.00	0.00

ATOM	834	C5	ADE	26	-9.114	21.063	-21.598	1.00	0.00
ATOM	835	N7	ADE	26	-8.056	21.931	-21.837	1.00	0.00
ATOM	836	C8	ADE	26	-7.735	21.697	-23.085	1.00	0.00
ATOM	837	H8	ADE	26	-6.933	22.213	-23.595	1.00	0.00
ATOM	838	C2'	ADE	26	-9.400	20.899	-26.017	1.00	1.00
ATOM	839	H2'	ADE	26	-10.268	21.289	-25.480	1.00	0.00
ATOM	840	O2'	ADE	26	-9.761	19.983	-27.033	1.00	1.00
ATOM	841	HO2'	ADE	26	-9.425	19.123	-26.777	1.00	0.00
ATOM	842	C3'	ADE	26	-8.554	22.047	-26.552	1.00	1.00
ATOM	843	H3'	ADE	26	-8.510	22.894	-25.867	1.00	0.00
ATOM	844	O3'	ADE	26	-9.062	22.542	-27.788	1.00	1.00
ATOM	845	P	CYT	27	-9.898	23.919	-27.824	1.00	1.00
ATOM	846	O1P	CYT	27	-10.231	24.200	-29.246	1.00	1.00
ATOM	847	O2P	CYT	27	-9.162	24.933	-27.028	1.00	1.00
ATOM	848	O5'	CYT	27	-11.250	23.565	-27.060	1.00	1.00
ATOM	849	C5'	CYT	27	-12.200	22.671	-27.631	1.00	1.00
ATOM	850	H5'	CYT	27	-11.732	21.698	-27.797	1.00	0.00
ATOM	851	H5''	CYT	27	-12.544	23.064	-28.588	1.00	0.00
ATOM	852	C4'	CYT	27	-13.383	22.502	-26.702	1.00	1.00
ATOM	853	H4'	CYT	27	-14.155	21.948	-27.240	1.00	0.00
ATOM	854	O4'	CYT	27	-12.938	21.842	-25.488	1.00	1.00
ATOM	855	C1'	CYT	27	-13.687	22.324	-24.381	1.00	1.00
ATOM	856	H1'	CYT	27	-14.163	21.460	-23.917	1.00	0.00
ATOM	857	N1	CYT	27	-12.760	22.918	-23.403	1.00	1.00
ATOM	858	C6	CYT	27	-11.508	23.319	-23.777	1.00	1.00
ATOM	859	H6	CYT	27	-11.191	23.199	-24.813	1.00	0.00
ATOM	860	C2	CYT	27	-13.184	23.067	-22.080	1.00	1.00
ATOM	861	O2	CYT	27	-14.326	22.692	-21.771	1.00	1.00
ATOM	862	N3	CYT	27	-12.341	23.613	-21.173	1.00	1.00
ATOM	863	C4	CYT	27	-11.121	24.004	-21.548	1.00	1.00
ATOM	864	N4	CYT	27	-10.323	24.536	-20.618	1.00	1.00
ATOM	865	H42	CYT	27	-9.392	24.839	-20.866	1.00	0.00
ATOM	866	H41	CYT	27	-10.651	24.638	-19.668	1.00	0.00
ATOM	867	C5	CYT	27	-10.663	23.862	-22.890	1.00	1.00
ATOM	868	H5	CYT	27	-9.663	24.185	-23.183	1.00	0.00
ATOM	869	C2'	CYT	27	-14.713	23.321	-24.929	1.00	1.00
ATOM	870	H2'	CYT	27	-14.854	24.156	-24.242	1.00	0.00
ATOM	871	O2'	CYT	27	-15.926	22.646	-25.210	1.00	1.00
ATOM	872	HO2'	CYT	27	-15.779	22.106	-25.988	1.00	0.00
ATOM	873	C3'	CYT	27	-14.013	23.795	-26.196	1.00	1.00
ATOM	874	H3'	CYT	27	-13.264	24.563	-26.007	1.00	0.00
ATOM	875	O3'	CYT	27	-14.932	24.344	-27.133	1.00	1.00
ATOM	876	P	CYT	28	-15.091	25.939	-27.258	1.00	1.00
ATOM	877	O1P	CYT	28	-15.983	26.208	-28.415	1.00	1.00
ATOM	878	O2P	CYT	28	-13.736	26.545	-27.219	1.00	1.00
ATOM	879	O5'	CYT	28	-15.864	26.355	-25.926	1.00	1.00
ATOM	880	C5'	CYT	28	-17.232	26.008	-25.740	1.00	1.00
ATOM	881	H5'	CYT	28	-17.350	24.927	-25.805	1.00	0.00
ATOM	882	H5''	CYT	28	-17.840	26.479	-26.513	1.00	0.00
ATOM	883	C4'	CYT	28	-17.708	26.480	-24.385	1.00	1.00
ATOM	884	H4'	CYT	28	-18.788	26.329	-24.346	1.00	0.00
ATOM	885	O4'	CYT	28	-16.984	25.761	-23.353	1.00	1.00
ATOM	886	C1'	CYT	28	-16.820	26.592	-22.213	1.00	1.00
ATOM	887	H1'	CYT	28	-17.272	26.065	-21.371	1.00	0.00
ATOM	888	N1	CYT	28	-15.379	26.741	-21.949	1.00	1.00
ATOM	889	C6	CYT	28	-14.463	26.547	-22.944	1.00	1.00
ATOM	890	H6	CYT	28	-14.801	26.280	-23.944	1.00	0.00

ATOM	891	C2	CYT	28	-14.957	27.088	-20.659	1.00	1.00
ATOM	892	O2	CYT	28	-15.810	27.258	-19.777	1.00	1.00
ATOM	893	N3	CYT	28	-13.635	27.228	-20.412	1.00	1.00
ATOM	894	C4	CYT	28	-12.749	27.037	-21.392	1.00	1.00
ATOM	895	N4	CYT	28	-11.454	27.186	-21.101	1.00	1.00
ATOM	896	H42	CYT	28	-10.757	27.048	-21.818	1.00	0.00
ATOM	897	H41	CYT	28	-11.172	27.439	-20.162	1.00	0.00
ATOM	898	C5	CYT	28	-13.150	26.683	-22.712	1.00	1.00
ATOM	899	H5	CYT	28	-12.415	26.527	-23.504	1.00	0.00
ATOM	900	C2'	CYT	28	-17.527	27.915	-22.514	1.00	1.00
ATOM	901	H2'	CYT	28	-16.979	28.758	-22.088	1.00	0.00
ATOM	902	O2'	CYT	28	-18.862	27.855	-22.048	1.00	1.00
ATOM	903	HO2'	CYT	28	-19.381	27.419	-22.724	1.00	0.00
ATOM	904	C3'	CYT	28	-17.448	27.956	-24.033	1.00	1.00
ATOM	905	H3'	CYT	28	-16.480	28.289	-24.403	1.00	0.00
ATOM	906	O3'	CYT	28	-18.415	28.838	-24.587	1.00	1.00
ATOM	907	P	URI	29	-18.006	30.355	-24.919	1.00	1.00
ATOM	908	O1P	URI	29	-19.173	30.997	-25.577	1.00	1.00
ATOM	909	O2P	URI	29	-16.690	30.344	-25.607	1.00	1.00
ATOM	910	O5'	URI	29	-17.815	31.024	-23.486	1.00	1.00
ATOM	911	C5'	URI	29	-18.916	31.178	-22.598	1.00	1.00
ATOM	912	H5'	URI	29	-19.431	30.225	-22.482	1.00	0.00
ATOM	913	H5''	URI	29	-19.614	31.911	-22.999	1.00	0.00
ATOM	914	C4'	URI	29	-18.430	31.648	-21.249	1.00	1.00
ATOM	915	H4'	URI	29	-19.308	31.816	-20.622	1.00	0.00
ATOM	916	O4'	URI	29	-17.512	30.663	-20.704	1.00	1.00
ATOM	917	C1'	URI	29	-16.591	31.296	-19.831	1.00	1.00
ATOM	918	H1'	URI	29	-16.737	30.858	-18.842	1.00	0.00
ATOM	919	N1	URI	29	-15.225	30.979	-20.273	1.00	0.00
ATOM	920	C6	URI	29	-14.963	30.586	-21.567	1.00	0.00
ATOM	921	H6	URI	29	-15.793	30.512	-22.272	1.00	0.00
ATOM	922	C2	URI	29	-14.207	31.088	-19.342	1.00	0.00
ATOM	923	O2	URI	29	-14.401	31.433	-18.189	1.00	0.00
ATOM	924	N3	URI	29	-12.954	30.780	-19.813	1.00	0.00
ATOM	925	H3	URI	29	-12.194	30.853	-19.153	1.00	0.00
ATOM	926	C4	URI	29	-12.623	30.382	-21.092	1.00	0.00
ATOM	927	O4	URI	29	-11.446	30.140	-21.365	1.00	0.00
ATOM	928	C5	URI	29	-13.730	30.295	-21.992	1.00	0.00
ATOM	929	H5	URI	29	-13.569	29.986	-23.025	1.00	0.00
ATOM	930	C2'	URI	29	-16.906	32.793	-19.849	1.00	1.00
ATOM	931	H2'	URI	29	-15.987	33.387	-19.833	1.00	0.00
ATOM	932	O2'	URI	29	-17.766	33.108	-18.772	1.00	1.00
ATOM	933	HO2'	URI	29	-17.808	32.338	-18.204	1.00	0.00
ATOM	934	C3'	URI	29	-17.596	32.933	-21.197	1.00	1.00
ATOM	935	H3'	URI	29	-16.897	32.996	-22.032	1.00	0.00
ATOM	936	O3'	URI	29	-18.407	34.103	-21.256	1.00	1.00
ATOM	937	P	CYT	30	-17.769	35.499	-21.742	1.00	1.00
ATOM	938	O1P	CYT	30	-18.873	36.488	-21.824	1.00	1.00
ATOM	939	O2P	CYT	30	-16.929	35.235	-22.939	1.00	1.00
ATOM	940	O5'	CYT	30	-16.811	35.921	-20.542	1.00	1.00
ATOM	941	C5'	CYT	30	-17.337	36.196	-19.247	1.00	1.00
ATOM	942	H5'	CYT	30	-17.940	35.350	-18.907	1.00	0.00
ATOM	943	H5''	CYT	30	-17.967	37.084	-19.286	1.00	0.00
ATOM	944	C4'	CYT	30	-16.213	36.430	-18.271	1.00	1.00
ATOM	945	H4'	CYT	30	-16.658	36.702	-17.311	1.00	0.00
ATOM	946	O4'	CYT	30	-15.384	35.240	-18.206	1.00	1.00
ATOM	947	C1'	CYT	30	-14.043	35.600	-17.917	1.00	1.00

ATOM	948	H1'	CYT	30	-13.774	35.103	-16.984	1.00	0.00
ATOM	949	N1	CYT	30	-13.175	35.071	-18.985	1.00	0.00
ATOM	950	C6	CYT	30	-13.680	34.795	-20.226	1.00	0.00
ATOM	951	H6	CYT	30	-14.737	34.972	-20.427	1.00	0.00
ATOM	952	C2	CYT	30	-11.821	34.855	-18.711	1.00	0.00
ATOM	953	O2	CYT	30	-11.390	35.114	-17.578	1.00	0.00
ATOM	954	N3	CYT	30	-11.018	34.368	-19.687	1.00	0.00
ATOM	955	C4	CYT	30	-11.522	34.102	-20.893	1.00	0.00
ATOM	956	N4	CYT	30	-10.692	33.624	-21.825	1.00	0.00
ATOM	957	H42	CYT	30	-11.039	33.413	-22.750	1.00	0.00
ATOM	958	H41	CYT	30	-9.718	33.472	-21.604	1.00	0.00
ATOM	959	C5	CYT	30	-12.898	34.316	-21.201	1.00	0.00
ATOM	960	H5	CYT	30	-13.297	34.096	-22.191	1.00	0.00
ATOM	961	C2'	CYT	30	-14.002	37.122	-17.794	1.00	1.00
ATOM	962	H2'	CYT	30	-13.089	37.529	-18.238	1.00	0.00
ATOM	963	O2'	CYT	30	-14.150	37.492	-16.435	1.00	1.00
ATOM	964	HO2'	CYT	30	-14.863	38.128	-16.389	1.00	0.00
ATOM	965	C3'	CYT	30	-15.210	37.517	-18.633	1.00	1.00
ATOM	966	H3'	CYT	30	-15.000	37.540	-19.701	1.00	0.00
ATOM	967	O3'	CYT	30	-15.686	38.812	-18.291	1.00	1.00
ATOM	968	P	CYT	31	-15.209	40.086	-19.146	1.00	1.00
ATOM	969	O1P	CYT	31	-15.876	41.282	-18.572	1.00	1.00
ATOM	970	O2P	CYT	31	-15.381	39.770	-20.587	1.00	1.00
ATOM	971	O5'	CYT	31	-13.651	40.191	-18.840	1.00	1.00
ATOM	972	C5'	CYT	31	-13.182	40.540	-17.542	1.00	1.00
ATOM	973	H5'	CYT	31	-13.557	39.822	-16.811	1.00	0.00
ATOM	974	H5''	CYT	31	-13.539	41.533	-17.275	1.00	0.00
ATOM	975	C4'	CYT	31	-11.674	40.535	-17.515	1.00	1.00
ATOM	976	H4'	CYT	31	-11.360	40.913	-16.542	1.00	0.00
ATOM	977	O4'	CYT	31	-11.200	39.190	-17.796	1.00	1.00
ATOM	978	C1'	CYT	31	-9.887	39.245	-18.332	1.00	1.00
ATOM	979	H1'	CYT	31	-9.219	38.823	-17.580	1.00	0.00
ATOM	980	N1	CYT	31	-9.825	38.387	-19.529	1.00	0.00
ATOM	981	C6	CYT	31	-10.956	38.081	-20.236	1.00	0.00
ATOM	982	H6	CYT	31	-11.918	38.475	-19.909	1.00	0.00
ATOM	983	C2	CYT	31	-8.586	37.890	-19.933	1.00	0.00
ATOM	984	O2	CYT	31	-7.578	38.184	-19.272	1.00	0.00
ATOM	985	N3	CYT	31	-8.514	37.102	-21.030	1.00	0.00
ATOM	986	C4	CYT	31	-9.623	36.808	-21.713	1.00	0.00
ATOM	987	N4	CYT	31	-9.506	36.027	-22.790	1.00	0.00
ATOM	988	H42	CYT	31	-10.324	35.786	-23.330	1.00	0.00
ATOM	989	H41	CYT	31	-8.599	35.676	-23.062	1.00	0.00
ATOM	990	C5	CYT	31	-10.902	37.303	-21.325	1.00	0.00
ATOM	991	H5	CYT	31	-11.800	37.056	-21.890	1.00	0.00
ATOM	992	C2'	CYT	31	-9.580	40.713	-18.620	1.00	1.00
ATOM	993	H2'	CYT	31	-9.136	40.836	-19.609	1.00	0.00
ATOM	994	O2'	CYT	31	-8.758	41.235	-17.592	1.00	1.00
ATOM	995	HO2'	CYT	31	-9.254	41.186	-16.777	1.00	0.00
ATOM	996	C3'	CYT	31	-10.980	41.312	-18.597	1.00	1.00
ATOM	997	H3'	CYT	31	-11.497	41.217	-19.550	1.00	0.00
ATOM	998	O3'	CYT	31	-10.951	42.704	-18.284	1.00	1.00
ATOM	999	P	CYT	32	-11.095	43.796	-19.456	1.00	1.00
ATOM	1000	O1P	CYT	32	-12.339	43.485	-20.205	1.00	1.00
ATOM	1001	O2P	CYT	32	-10.914	45.144	-18.862	1.00	1.00
ATOM	1002	O5'	CYT	32	-9.856	43.499	-20.413	1.00	1.00
ATOM	1003	C5'	CYT	32	-8.521	43.715	-19.962	1.00	1.00
ATOM	1004	H5'	CYT	32	-8.351	43.161	-19.038	1.00	0.00

ATOM	1005	H5'	CYT	32	-8.366	44.777	-19.770	1.00	0.00
ATOM	1006	C4'	CYT	32	-7.536	43.250	-21.014	1.00	1.00
ATOM	1007	H4'	CYT	32	-6.538	43.557	-20.695	1.00	0.00
ATOM	1008	O4'	CYT	32	-7.671	41.814	-21.183	1.00	1.00
ATOM	1009	C1'	CYT	32	-7.392	41.463	-22.531	1.00	1.00
ATOM	1010	H1'	CYT	32	-6.549	40.768	-22.509	1.00	0.00
ATOM	1011	N1	CYT	32	-8.560	40.756	-23.079	1.00	1.00
ATOM	1012	C6	CYT	32	-9.802	40.933	-22.536	1.00	1.00
ATOM	1013	H6	CYT	32	-9.925	41.603	-21.685	1.00	0.00
ATOM	1014	C2	CYT	32	-8.383	39.901	-24.174	1.00	1.00
ATOM	1015	O2	CYT	32	-7.245	39.759	-24.646	1.00	1.00
ATOM	1016	N3	CYT	32	-9.455	39.254	-24.685	1.00	1.00
ATOM	1017	C4	CYT	32	-10.664	39.432	-24.145	1.00	1.00
ATOM	1018	N4	CYT	32	-11.692	38.772	-24.682	1.00	1.00
ATOM	1019	H42	CYT	32	-12.618	38.886	-24.300	1.00	0.00
ATOM	1020	H41	CYT	32	-11.542	38.161	-25.472	1.00	0.00
ATOM	1021	C5	CYT	32	-10.873	40.298	-23.031	1.00	1.00
ATOM	1022	H5	CYT	32	-11.863	40.436	-22.601	1.00	0.00
ATOM	1023	C2'	CYT	32	-7.055	42.756	-23.274	1.00	1.00
ATOM	1024	H2'	CYT	32	-7.479	42.751	-24.281	1.00	0.00
ATOM	1025	O2'	CYT	32	-5.652	42.946	-23.283	1.00	1.00
ATOM	1026	HO2'	CYT	32	-5.276	42.320	-22.663	1.00	0.00
ATOM	1027	C3'	CYT	32	-7.769	43.786	-22.408	1.00	1.00
ATOM	1028	H3'	CYT	32	-8.828	43.878	-22.640	1.00	0.00
ATOM	1029	O3'	CYT	32	-7.206	45.085	-22.564	1.00	1.00
ATOM	1030	P	URI	33	-7.949	46.172	-23.486	1.00	1.00
ATOM	1031	O1P	URI	33	-7.204	47.451	-23.354	1.00	1.00
ATOM	1032	O2P	URI	33	-9.401	46.134	-23.180	1.00	1.00
ATOM	1033	O5'	URI	33	-7.735	45.630	-24.969	1.00	1.00
ATOM	1034	C5'	URI	33	-6.445	45.631	-25.569	1.00	1.00
ATOM	1035	H5'	URI	33	-5.765	45.005	-24.986	1.00	0.00
ATOM	1036	H5''	URI	33	-6.053	46.647	-25.596	1.00	0.00
ATOM	1037	C4'	URI	33	-6.524	45.099	-26.979	1.00	1.00
ATOM	1038	H4'	URI	33	-5.550	45.261	-27.448	1.00	0.00
ATOM	1039	O4'	URI	33	-6.921	43.704	-26.938	1.00	1.00
ATOM	1040	C1'	URI	33	-7.695	43.390	-28.083	1.00	1.00
ATOM	1041	H1'	URI	33	-7.174	42.588	-28.611	1.00	0.00
ATOM	1042	N1	URI	33	-9.001	42.878	-27.640	1.00	1.00
ATOM	1043	C6	URI	33	-9.503	43.188	-26.397	1.00	1.00
ATOM	1044	H6	URI	33	-8.916	43.825	-25.736	1.00	0.00
ATOM	1045	C2	URI	33	-9.709	42.073	-28.518	1.00	1.00
ATOM	1046	O2	URI	33	-9.295	41.778	-29.626	1.00	1.00
ATOM	1047	N3	URI	33	-10.921	41.627	-28.045	1.00	1.00
ATOM	1048	H3	URI	33	-11.458	41.037	-28.667	1.00	0.00
ATOM	1049	C4	URI	33	-11.483	41.899	-26.816	1.00	1.00
ATOM	1050	O4	URI	33	-12.584	41.423	-26.535	1.00	1.00
ATOM	1051	C5	URI	33	-10.688	42.735	-25.971	1.00	1.00
ATOM	1052	H5	URI	33	-11.049	43.004	-24.979	1.00	0.00
ATOM	1053	C2'	URI	33	-7.793	44.666	-28.922	1.00	1.00
ATOM	1054	H2'	URI	33	-8.786	44.770	-29.364	1.00	0.00
ATOM	1055	O2'	URI	33	-6.767	44.670	-29.898	1.00	1.00
ATOM	1056	HO2'	URI	33	-7.165	44.412	-30.730	1.00	0.00
ATOM	1057	C3'	URI	33	-7.579	45.732	-27.858	1.00	1.00
ATOM	1058	H3'	URI	33	-8.486	45.968	-27.302	1.00	0.00
ATOM	1059	O3'	URI	33	-7.111	46.956	-28.426	1.00	1.00
ATOM	1060	P	URI	34	-8.128	48.184	-28.653	1.00	1.00
ATOM	1061	O1P	URI	34	-8.958	48.304	-27.423	1.00	1.00

ATOM	1062	O2P	URI	34	-7.349	49.353	-29.129	1.00	1.00
ATOM	1063	O5'	URI	34	-9.070	47.692	-29.838	1.00	1.00
ATOM	1064	C5'	URI	34	-10.332	48.313	-30.073	1.00	1.00
ATOM	1065	H5'	URI	34	-10.197	49.389	-30.183	1.00	0.00
ATOM	1066	H5''	URI	34	-10.997	48.122	-29.232	1.00	0.00
ATOM	1067	C4'	URI	34	-10.956	47.759	-31.333	1.00	1.00
ATOM	1068	H4'	URI	34	-11.975	48.150	-31.393	1.00	0.00
ATOM	1069	O4'	URI	34	-10.129	48.131	-32.471	1.00	1.00
ATOM	1070	C1'	URI	34	-10.022	47.043	-33.359	1.00	1.00
ATOM	1071	H1'	URI	34	-10.240	47.421	-34.358	1.00	0.00
ATOM	1072	N1	URI	34	-8.639	46.549	-33.342	1.00	0.00
ATOM	1073	C6	URI	34	-7.781	46.849	-32.307	1.00	0.00
ATOM	1074	H6	URI	34	-8.145	47.469	-31.487	1.00	0.00
ATOM	1075	C2	URI	34	-8.225	45.768	-34.406	1.00	0.00
ATOM	1076	O2	URI	34	-8.955	45.483	-35.341	1.00	0.00
ATOM	1077	N3	URI	34	-6.924	45.336	-34.338	1.00	0.00
ATOM	1078	H3	URI	34	-6.597	44.765	-35.104	1.00	0.00
ATOM	1079	C4	URI	34	-6.013	45.599	-33.336	1.00	0.00
ATOM	1080	O4	URI	34	-4.875	45.136	-33.414	1.00	0.00
ATOM	1081	C5	URI	34	-6.518	46.411	-32.272	1.00	0.00
ATOM	1082	H5	URI	34	-5.874	46.673	-31.433	1.00	0.00
ATOM	1083	C2'	URI	34	-11.046	46.014	-32.895	1.00	1.00
ATOM	1084	H2'	URI	34	-10.706	44.997	-33.109	1.00	0.00
ATOM	1085	O2'	URI	34	-12.301	46.296	-33.489	1.00	1.00
ATOM	1086	HO2'	URI	34	-12.975	45.972	-32.892	1.00	0.00
ATOM	1087	C3'	URI	34	-11.048	46.263	-31.391	1.00	1.00
ATOM	1088	H3'	URI	34	-10.226	45.766	-30.881	1.00	0.00
ATOM	1089	O3'	URI	34	-12.245	45.782	-30.779	1.00	1.00
ATOM	1090	P	ADE	35	-12.239	44.377	-29.993	1.00	1.00
ATOM	1091	O1P	ADE	35	-13.615	44.157	-29.474	1.00	1.00
ATOM	1092	O2P	ADE	35	-11.093	44.365	-29.052	1.00	1.00
ATOM	1093	O5'	ADE	35	-11.965	43.297	-31.131	1.00	1.00
ATOM	1094	C5'	ADE	35	-12.914	43.074	-32.169	1.00	1.00
ATOM	1095	H5'	ADE	35	-13.164	44.021	-32.648	1.00	0.00
ATOM	1096	H5''	ADE	35	-13.821	42.638	-31.750	1.00	0.00
ATOM	1097	C4'	ADE	35	-12.339	42.131	-33.202	1.00	1.00
ATOM	1098	H4'	ADE	35	-13.137	41.878	-33.906	1.00	0.00
ATOM	1099	O4'	ADE	35	-11.193	42.759	-33.829	1.00	1.00
ATOM	1100	C1'	ADE	35	-10.269	41.767	-34.247	1.00	1.00
ATOM	1101	H1'	ADE	35	-10.223	41.814	-35.337	1.00	0.00
ATOM	1102	N9	ADE	35	-8.949	42.116	-33.722	1.00	0.00
ATOM	1103	C4	ADE	35	-7.737	41.690	-34.216	1.00	0.00
ATOM	1104	N3	ADE	35	-7.523	40.878	-35.265	1.00	0.00
ATOM	1105	C2	ADE	35	-6.219	40.686	-35.451	1.00	0.00
ATOM	1106	H2	ADE	35	-5.957	40.035	-36.285	1.00	0.00
ATOM	1107	N1	ADE	35	-5.183	41.178	-34.760	1.00	0.00
ATOM	1108	C6	ADE	35	-5.433	41.993	-33.712	1.00	0.00
ATOM	1109	N6	ADE	35	-4.400	42.482	-33.022	1.00	0.00
ATOM	1110	H62	ADE	35	-4.565	43.091	-32.233	1.00	0.00
ATOM	1111	H61	ADE	35	-3.456	42.243	-33.291	1.00	0.00
ATOM	1112	C5	ADE	35	-6.778	42.274	-33.410	1.00	0.00
ATOM	1113	N7	ADE	35	-7.370	43.054	-32.426	1.00	0.00
ATOM	1114	C8	ADE	35	-8.654	42.925	-32.654	1.00	0.00
ATOM	1115	H8	ADE	35	-9.410	43.413	-32.057	1.00	0.00
ATOM	1116	C2'	ADE	35	-10.789	40.415	-33.751	1.00	1.00
ATOM	1117	H2'	ADE	35	-9.982	39.821	-33.316	1.00	0.00
ATOM	1118	O2'	ADE	35	-11.432	39.739	-34.815	1.00	1.00

ATOM	1119	HO2'	ADE	35	-11.557	38.829	-34.539	1.00	0.00
ATOM	1120	C3'	ADE	35	-11.765	40.844	-32.665	1.00	1.00
ATOM	1121	H3'	ADE	35	-11.289	40.996	-31.696	1.00	0.00
ATOM	1122	O3'	ADE	35	-12.784	39.872	-32.461	1.00	1.00
ATOM	1123	P	CYT	36	-12.582	38.722	-31.356	1.00	1.00
ATOM	1124	O1P	CYT	36	-13.810	37.887	-31.353	1.00	1.00
ATOM	1125	O2P	CYT	36	-12.126	39.362	-30.096	1.00	1.00
ATOM	1126	O5'	CYT	36	-11.388	37.841	-31.935	1.00	1.00
ATOM	1127	C5'	CYT	36	-10.160	37.719	-31.224	1.00	1.00
ATOM	1128	H5'	CYT	36	-10.311	37.103	-30.336	1.00	0.00
ATOM	1129	H5''	CYT	36	-9.811	38.704	-30.918	1.00	0.00
ATOM	1130	C4'	CYT	36	-9.113	37.080	-32.108	1.00	1.00
ATOM	1131	H4'	CYT	36	-9.630	36.422	-32.807	1.00	0.00
ATOM	1132	O4'	CYT	36	-8.341	38.117	-32.755	1.00	1.00
ATOM	1133	C1'	CYT	36	-7.004	37.680	-32.937	1.00	1.00
ATOM	1134	H1'	CYT	36	-6.816	37.681	-34.010	1.00	0.00
ATOM	1135	N1	CYT	36	-6.099	38.661	-32.314	1.00	0.00
ATOM	1136	C6	CYT	36	-6.561	39.560	-31.393	1.00	0.00
ATOM	1137	H6	CYT	36	-7.613	39.547	-31.110	1.00	0.00
ATOM	1138	C2	CYT	36	-4.751	38.662	-32.687	1.00	0.00
ATOM	1139	O2	CYT	36	-4.359	37.837	-33.526	1.00	0.00
ATOM	1140	N3	CYT	36	-3.911	39.565	-32.127	1.00	0.00
ATOM	1141	C4	CYT	36	-4.373	40.436	-31.229	1.00	0.00
ATOM	1142	N4	CYT	36	-3.506	41.307	-30.701	1.00	0.00
ATOM	1143	H42	CYT	36	-3.823	41.980	-30.018	1.00	0.00
ATOM	1144	H41	CYT	36	-2.539	41.293	-30.988	1.00	0.00
ATOM	1145	C5	CYT	36	-5.741	40.457	-30.830	1.00	0.00
ATOM	1146	H5	CYT	36	-6.107	41.172	-30.095	1.00	0.00
ATOM	1147	C2'	CYT	36	-6.888	36.271	-32.338	1.00	1.00
ATOM	1148	H2'	CYT	36	-5.957	36.162	-31.776	1.00	0.00
ATOM	1149	O2'	CYT	36	-7.000	35.309	-33.370	1.00	1.00
ATOM	1150	HO2'	CYT	36	-6.886	35.771	-34.202	1.00	0.00
ATOM	1151	C3'	CYT	36	-8.078	36.234	-31.383	1.00	1.00
ATOM	1152	H3'	CYT	36	-7.848	36.631	-30.397	1.00	0.00
ATOM	1153	O3'	CYT	36	-8.551	34.905	-31.186	1.00	1.00
ATOM	1154	P	ADE	37	-8.093	34.078	-29.886	1.00	1.00
ATOM	1155	O1P	ADE	37	-8.286	34.962	-28.708	1.00	1.00
ATOM	1156	O2P	ADE	37	-8.755	32.749	-29.922	1.00	1.00
ATOM	1157	O5'	ADE	37	-6.530	33.865	-30.096	1.00	1.00
ATOM	1158	C5'	ADE	37	-6.037	33.089	-31.183	1.00	1.00
ATOM	1159	H5'	ADE	37	-6.506	33.414	-32.113	1.00	0.00
ATOM	1160	H5''	ADE	37	-6.271	32.036	-31.018	1.00	0.00
ATOM	1161	C4'	ADE	37	-4.540	33.250	-31.300	1.00	1.00
ATOM	1162	H4'	ADE	37	-4.186	32.547	-32.055	1.00	0.00
ATOM	1163	O4'	ADE	37	-4.241	34.639	-31.610	1.00	1.00
ATOM	1164	C1'	ADE	37	-3.017	35.015	-31.003	1.00	1.00
ATOM	1165	H1'	ADE	37	-2.355	35.354	-31.801	1.00	0.00
ATOM	1166	N9	ADE	37	-3.272	36.146	-30.112	1.00	0.00
ATOM	1167	C4	ADE	37	-2.351	37.075	-29.690	1.00	0.00
ATOM	1168	N3	ADE	37	-1.045	37.131	-30.008	1.00	0.00
ATOM	1169	C2	ADE	37	-0.463	38.171	-29.414	1.00	0.00
ATOM	1170	H2	ADE	37	0.603	38.289	-29.620	1.00	0.00
ATOM	1171	N1	ADE	37	-0.996	39.090	-28.600	1.00	0.00
ATOM	1172	C6	ADE	37	-2.311	39.003	-28.301	1.00	0.00
ATOM	1173	N6	ADE	37	-2.843	39.920	-27.491	1.00	0.00
ATOM	1174	H62	ADE	37	-3.824	39.877	-27.255	1.00	0.00
ATOM	1175	H61	ADE	37	-2.265	40.658	-27.114	1.00	0.00

ATOM	1176	C5	ADE	37	-3.042	37.945	-28.869	1.00	0.00
ATOM	1177	N7	ADE	37	-4.375	37.574	-28.774	1.00	0.00
ATOM	1178	C8	ADE	37	-4.460	36.505	-29.526	1.00	0.00
ATOM	1179	H8	ADE	37	-5.379	35.956	-29.671	1.00	0.00
ATOM	1180	C2'	ADE	37	-2.473	33.781	-30.287	1.00	1.00
ATOM	1181	H2'	ADE	37	-1.999	34.054	-29.340	1.00	0.00
ATOM	1182	O2'	ADE	37	-1.590	33.083	-31.147	1.00	1.00
ATOM	1183	HO2'	ADE	37	-1.067	33.739	-31.609	1.00	0.00
ATOM	1184	C3'	ADE	37	-3.757	33.004	-30.026	1.00	1.00
ATOM	1185	H3'	ADE	37	-4.293	33.355	-29.144	1.00	0.00
ATOM	1186	O3'	ADE	37	-3.500	31.621	-29.818	1.00	1.00
ATOM	1187	P	ADE	38	-3.458	31.029	-28.324	1.00	1.00
ATOM	1188	O1P	ADE	38	-3.108	29.590	-28.424	1.00	1.00
ATOM	1189	O2P	ADE	38	-4.706	31.435	-27.628	1.00	1.00
ATOM	1190	O5'	ADE	38	-2.236	31.790	-27.645	1.00	1.00
ATOM	1191	C5'	ADE	38	-0.902	31.582	-28.098	1.00	1.00
ATOM	1192	H5'	ADE	38	-0.841	31.782	-29.168	1.00	0.00
ATOM	1193	H5''	ADE	38	-0.605	30.551	-27.913	1.00	0.00
ATOM	1194	C4'	ADE	38	0.044	32.502	-27.364	1.00	1.00
ATOM	1195	H4'	ADE	38	1.060	32.192	-27.611	1.00	0.00
ATOM	1196	O4'	ADE	38	-0.248	33.877	-27.738	1.00	1.00
ATOM	1197	C1'	ADE	38	-0.148	34.713	-26.599	1.00	1.00
ATOM	1198	H1'	ADE	38	0.503	35.546	-26.867	1.00	0.00
ATOM	1199	N9	ADE	38	-1.475	35.244	-26.293	1.00	1.00
ATOM	1200	C4	ADE	38	-1.754	36.371	-25.559	1.00	1.00
ATOM	1201	N3	ADE	38	-0.874	37.207	-24.981	1.00	1.00
ATOM	1202	C2	ADE	38	-1.507	38.193	-24.349	1.00	1.00
ATOM	1203	H2	ADE	38	-0.864	38.919	-23.852	1.00	0.00
ATOM	1204	N1	ADE	38	-2.822	38.419	-24.238	1.00	1.00
ATOM	1205	C6	ADE	38	-3.680	37.560	-24.829	1.00	1.00
ATOM	1206	N6	ADE	38	-4.992	37.788	-24.717	1.00	1.00
ATOM	1207	H62	ADE	38	-5.651	37.157	-25.152	1.00	0.00
ATOM	1208	H61	ADE	38	-5.323	38.587	-24.198	1.00	0.00
ATOM	1209	C5	ADE	38	-3.131	36.472	-25.533	1.00	1.00
ATOM	1210	N7	ADE	38	-3.715	35.428	-26.238	1.00	1.00
ATOM	1211	C8	ADE	38	-2.692	34.731	-26.668	1.00	1.00
ATOM	1212	H8	ADE	38	-2.796	33.834	-27.263	1.00	0.00
ATOM	1213	C2'	ADE	38	0.437	33.856	-25.480	1.00	1.00
ATOM	1214	H2'	ADE	38	0.047	34.158	-24.507	1.00	0.00
ATOM	1215	O2'	ADE	38	1.852	33.905	-25.532	1.00	1.00
ATOM	1216	HO2'	ADE	38	2.089	34.404	-26.313	1.00	0.00
ATOM	1217	C3'	ADE	38	-0.107	32.488	-25.865	1.00	1.00
ATOM	1218	H3'	ADE	38	-1.144	32.343	-25.563	1.00	0.00
ATOM	1219	O3'	ADE	38	0.645	31.432	-25.269	1.00	1.00
ATOM	1220	P	GUA	39	0.087	30.690	-23.954	1.00	1.00
ATOM	1221	O1P	GUA	39	1.071	29.642	-23.584	1.00	1.00
ATOM	1222	O2P	GUA	39	-1.328	30.314	-24.194	1.00	1.00
ATOM	1223	O5'	GUA	39	0.121	31.819	-22.830	1.00	1.00
ATOM	1224	C5'	GUA	39	1.355	32.403	-22.419	1.00	1.00
ATOM	1225	H5'	GUA	39	1.897	32.768	-23.292	1.00	0.00
ATOM	1226	H5''	GUA	39	1.962	31.658	-21.910	1.00	0.00
ATOM	1227	C4'	GUA	39	1.095	33.557	-21.477	1.00	1.00
ATOM	1228	H4'	GUA	39	2.056	33.889	-21.084	1.00	0.00
ATOM	1229	O4'	GUA	39	0.370	34.597	-22.190	1.00	1.00
ATOM	1230	C1'	GUA	39	-0.569	35.206	-21.314	1.00	1.00
ATOM	1231	H1'	GUA	39	-0.379	36.280	-21.339	1.00	0.00
ATOM	1232	N9	GUA	39	-1.911	34.968	-21.839	1.00	0.00

ATOM	1233	C4	GUA	39	-3.054	35.656	-21.506	1.00	0.00
ATOM	1234	N3	GUA	39	-3.139	36.680	-20.636	1.00	0.00
ATOM	1235	C2	GUA	39	-4.375	37.137	-20.525	1.00	0.00
ATOM	1236	N2	GUA	39	-4.635	38.159	-19.696	1.00	0.00
ATOM	1237	H22	GUA	39	-3.887	38.577	-19.159	1.00	0.00
ATOM	1238	H21	GUA	39	-5.577	38.511	-19.609	1.00	0.00
ATOM	1239	N1	GUA	39	-5.454	36.633	-21.215	1.00	0.00
ATOM	1240	H1	GUA	39	-6.357	37.056	-21.056	1.00	0.00
ATOM	1241	C6	GUA	39	-5.380	35.574	-22.119	1.00	0.00
ATOM	1242	O6	GUA	39	-6.405	35.187	-22.695	1.00	0.00
ATOM	1243	C5	GUA	39	-4.058	35.074	-22.246	1.00	0.00
ATOM	1244	N7	GUA	39	-3.561	34.042	-23.028	1.00	0.00
ATOM	1245	C8	GUA	39	-2.286	34.017	-22.753	1.00	0.00
ATOM	1246	H8	GUA	39	-1.597	33.315	-23.197	1.00	0.00
ATOM	1247	C2'	GUA	39	-0.342	34.608	-19.927	1.00	1.00
ATOM	1248	H2'	GUA	39	-1.284	34.509	-19.383	1.00	0.00
ATOM	1249	O2'	GUA	39	0.608	35.385	-19.224	1.00	1.00
ATOM	1250	HO2'	GUA	39	1.436	34.905	-19.240	1.00	0.00
ATOM	1251	C3'	GUA	39	0.198	33.232	-20.295	1.00	1.00
ATOM	1252	H3'	GUA	39	-0.584	32.523	-20.564	1.00	0.00
ATOM	1253	O3'	GUA	39	0.925	32.646	-19.223	1.00	1.00
ATOM	1254	P	GUA	40	0.192	31.617	-18.229	1.00	1.00
ATOM	1255	O1P	GUA	40	-0.564	30.653	-19.067	1.00	1.00
ATOM	1256	O2P	GUA	40	1.195	31.116	-17.253	1.00	1.00
ATOM	1257	O5'	GUA	40	-0.858	32.523	-17.444	1.00	1.00
ATOM	1258	C5'	GUA	40	-0.445	33.599	-16.606	1.00	1.00
ATOM	1259	H5'	GUA	40	0.202	34.275	-17.169	1.00	0.00
ATOM	1260	H5''	GUA	40	0.105	33.210	-15.749	1.00	0.00
ATOM	1261	C4'	GUA	40	-1.647	34.364	-16.108	1.00	1.00
ATOM	1262	H4'	GUA	40	-1.294	35.097	-15.382	1.00	0.00
ATOM	1263	O4'	GUA	40	-2.341	34.955	-17.232	1.00	1.00
ATOM	1264	C1'	GUA	40	-3.725	35.066	-16.926	1.00	1.00
ATOM	1265	H1'	GUA	40	-3.969	36.127	-16.944	1.00	0.00
ATOM	1266	N9	GUA	40	-4.493	34.408	-17.978	1.00	0.00
ATOM	1267	C4	GUA	40	-5.828	34.586	-18.245	1.00	0.00
ATOM	1268	N3	GUA	40	-6.665	35.404	-17.580	1.00	0.00
ATOM	1269	C2	GUA	40	-7.894	35.363	-18.069	1.00	0.00
ATOM	1270	N2	GUA	40	-8.855	36.118	-17.518	1.00	0.00
ATOM	1271	H22	GUA	40	-8.641	36.716	-16.734	1.00	0.00
ATOM	1272	H21	GUA	40	-9.796	36.089	-17.889	1.00	0.00
ATOM	1273	N1	GUA	40	-8.281	34.576	-19.133	1.00	0.00
ATOM	1274	H1	GUA	40	-9.246	34.620	-19.426	1.00	0.00
ATOM	1275	C6	GUA	40	-7.423	33.726	-19.831	1.00	0.00
ATOM	1276	O6	GUA	40	-7.862	33.057	-20.775	1.00	0.00
ATOM	1277	C5	GUA	40	-6.101	33.763	-19.315	1.00	0.00
ATOM	1278	N7	GUA	40	-4.961	33.080	-19.714	1.00	0.00
ATOM	1279	C8	GUA	40	-4.035	33.494	-18.895	1.00	0.00
ATOM	1280	H8	GUA	40	-3.014	33.147	-18.928	1.00	0.00
ATOM	1281	C2'	GUA	40	-3.941	34.447	-15.539	1.00	1.00
ATOM	1282	H2'	GUA	40	-4.858	33.853	-15.516	1.00	0.00
ATOM	1283	O2'	GUA	40	-3.940	35.471	-14.562	1.00	1.00
ATOM	1284	HO2'	GUA	40	-3.677	36.280	-14.998	1.00	0.00
ATOM	1285	C3'	GUA	40	-2.728	33.535	-15.419	1.00	1.00
ATOM	1286	H3'	GUA	40	-2.868	32.569	-15.904	1.00	0.00
ATOM	1287	O3'	GUA	40	-2.408	33.261	-14.061	1.00	1.00
ATOM	1288	P	ADE	41	-3.086	32.005	-13.324	1.00	1.00
ATOM	1289	O1P	ADE	41	-2.471	31.894	-11.978	1.00	1.00

ATOM	1290	O2P	ADE	41	-3.046	30.844	-14.248	1.00	1.00
ATOM	1291	O5'	ADE	41	-4.607	32.444	-13.138	1.00	1.00
ATOM	1292	C5'	ADE	41	-4.948	33.579	-12.347	1.00	1.00
ATOM	1293	H5'	ADE	41	-4.442	34.464	-12.736	1.00	0.00
ATOM	1294	H5''	ADE	41	-4.634	33.416	-11.317	1.00	0.00
ATOM	1295	C4'	ADE	41	-6.442	33.806	-12.378	1.00	1.00
ATOM	1296	H4'	ADE	41	-6.669	34.606	-11.672	1.00	0.00
ATOM	1297	O4'	ADE	41	-6.848	34.105	-13.738	1.00	1.00
ATOM	1298	C1'	ADE	41	-8.187	33.677	-13.942	1.00	1.00
ATOM	1299	H1'	ADE	41	-8.778	34.566	-14.157	1.00	0.00
ATOM	1300	N9	ADE	41	-8.225	32.810	-15.120	1.00	0.00
ATOM	1301	C4	ADE	41	-9.323	32.553	-15.906	1.00	0.00
ATOM	1302	N3	ADE	41	-10.566	33.040	-15.755	1.00	0.00
ATOM	1303	C2	ADE	41	-11.370	32.571	-16.706	1.00	0.00
ATOM	1304	H2	ADE	41	-12.403	32.918	-16.657	1.00	0.00
ATOM	1305	N1	ADE	41	-11.094	31.734	-17.714	1.00	0.00
ATOM	1306	C6	ADE	41	-9.834	31.263	-17.836	1.00	0.00
ATOM	1307	N6	ADE	41	-9.558	30.428	-18.841	1.00	0.00
ATOM	1308	H62	ADE	41	-8.623	30.063	-18.952	1.00	0.00
ATOM	1309	H61	ADE	41	-10.283	30.162	-19.490	1.00	0.00
ATOM	1310	C5	ADE	41	-8.884	31.684	-16.889	1.00	0.00
ATOM	1311	N7	ADE	41	-7.536	31.402	-16.729	1.00	0.00
ATOM	1312	C8	ADE	41	-7.192	32.091	-15.667	1.00	0.00
ATOM	1313	H8	ADE	41	-6.192	32.089	-15.262	1.00	0.00
ATOM	1314	C2'	ADE	41	-8.644	32.980	-12.657	1.00	1.00
ATOM	1315	H2'	ADE	41	-9.207	32.072	-12.882	1.00	0.00
ATOM	1316	O2'	ADE	41	-9.383	33.888	-11.864	1.00	1.00
ATOM	1317	HO2'	ADE	41	-10.216	33.469	-11.654	1.00	0.00
ATOM	1318	C3'	ADE	41	-7.304	32.619	-12.024	1.00	1.00
ATOM	1319	H3'	ADE	41	-6.888	31.689	-12.404	1.00	0.00
ATOM	1320	O3'	ADE	41	-7.414	32.466	-10.613	1.00	1.00
ATOM	1321	P	GUA	42	-7.896	31.060	-10.003	1.00	1.00
ATOM	1322	O1P	GUA	42	-7.690	31.119	-8.534	1.00	1.00
ATOM	1323	O2P	GUA	42	-7.266	29.969	-10.790	1.00	1.00
ATOM	1324	O5'	GUA	42	-9.464	31.035	-10.282	1.00	1.00
ATOM	1325	C5'	GUA	42	-10.124	29.829	-10.641	1.00	1.00
ATOM	1326	H5'	GUA	42	-10.157	29.159	-9.781	1.00	0.00
ATOM	1327	H5''	GUA	42	-9.584	29.338	-11.450	1.00	0.00
ATOM	1328	C4'	GUA	42	-11.533	30.125	-11.098	1.00	1.00
ATOM	1329	H4'	GUA	42	-12.038	30.649	-10.285	1.00	0.00
ATOM	1330	O4'	GUA	42	-11.480	30.887	-12.332	1.00	1.00
ATOM	1331	C1'	GUA	42	-12.439	30.389	-13.249	1.00	1.00
ATOM	1332	H1'	GUA	42	-12.997	31.248	-13.628	1.00	0.00
ATOM	1333	N9	GUA	42	-11.736	29.775	-14.370	1.00	1.00
ATOM	1334	C4	GUA	42	-12.300	29.297	-15.528	1.00	1.00
ATOM	1335	N3	GUA	42	-13.610	29.313	-15.836	1.00	1.00
ATOM	1336	C2	GUA	42	-13.849	28.781	-17.024	1.00	1.00
ATOM	1337	N2	GUA	42	-15.104	28.719	-17.484	1.00	1.00
ATOM	1338	H22	GUA	42	-15.867	29.077	-16.926	1.00	0.00
ATOM	1339	H21	GUA	42	-15.292	28.314	-18.393	1.00	0.00
ATOM	1340	N1	GUA	42	-12.876	28.269	-17.855	1.00	1.00
ATOM	1341	H1	GUA	42	-13.167	27.886	-18.742	1.00	0.00
ATOM	1342	C6	GUA	42	-11.515	28.247	-17.548	1.00	1.00
ATOM	1343	O6	GUA	42	-10.714	27.765	-18.357	1.00	1.00
ATOM	1344	C5	GUA	42	-11.249	28.815	-16.275	1.00	1.00
ATOM	1345	N7	GUA	42	-10.046	28.985	-15.603	1.00	1.00
ATOM	1346	C8	GUA	42	-10.385	29.558	-14.481	1.00	1.00

ATOM	1347	H8	GUA	42	-9.673	29.834	-13.716	1.00	0.00
ATOM	1348	C2'	GUA	42	-13.332	29.416	-12.479	1.00	1.00
ATOM	1349	H2'	GUA	42	-13.660	28.594	-13.119	1.00	0.00
ATOM	1350	O2'	GUA	42	-14.420	30.120	-11.908	1.00	1.00
ATOM	1351	HO2'	GUA	42	-15.079	30.230	-12.595	1.00	0.00
ATOM	1352	C3'	GUA	42	-12.362	28.902	-11.425	1.00	1.00
ATOM	1353	H3'	GUA	42	-11.750	28.071	-11.776	1.00	0.00
ATOM	1354	O3'	GUA	42	-13.042	28.440	-10.263	1.00	1.00
ATOM	1355	P	GUA	43	-13.318	26.868	-10.070	1.00	1.00
ATOM	1356	O1P	GUA	43	-13.920	26.686	-8.724	1.00	1.00
ATOM	1357	O2P	GUA	43	-12.080	26.129	-10.425	1.00	1.00
ATOM	1358	O5'	GUA	43	-14.429	26.535	-11.159	1.00	1.00
ATOM	1359	C5'	GUA	43	-15.720	27.133	-11.092	1.00	1.00
ATOM	1360	H5'	GUA	43	-15.621	28.219	-11.057	1.00	0.00
ATOM	1361	H5''	GUA	43	-16.235	26.797	-10.192	1.00	0.00
ATOM	1362	C4'	GUA	43	-16.537	26.747	-12.301	1.00	1.00
ATOM	1363	H4'	GUA	43	-17.550	27.119	-12.148	1.00	0.00
ATOM	1364	O4'	GUA	43	-15.898	27.278	-13.493	1.00	1.00
ATOM	1365	C1'	GUA	43	-16.108	26.398	-14.583	1.00	1.00
ATOM	1366	H1'	GUA	43	-16.612	26.971	-15.365	1.00	0.00
ATOM	1367	N9	GUA	43	-14.809	25.974	-15.095	1.00	1.00
ATOM	1368	C4	GUA	43	-14.552	25.451	-16.340	1.00	1.00
ATOM	1369	N3	GUA	43	-15.458	25.235	-17.314	1.00	1.00
ATOM	1370	C2	GUA	43	-14.906	24.720	-18.401	1.00	1.00
ATOM	1371	N2	GUA	43	-15.669	24.445	-19.467	1.00	1.00
ATOM	1372	H22	GUA	43	-16.663	24.631	-19.439	1.00	0.00
ATOM	1373	H21	GUA	43	-15.254	24.051	-20.299	1.00	0.00
ATOM	1374	N1	GUA	43	-13.563	24.435	-18.530	1.00	1.00
ATOM	1375	H1	GUA	43	-13.247	24.043	-19.406	1.00	0.00
ATOM	1376	C6	GUA	43	-12.615	24.653	-17.531	1.00	1.00
ATOM	1377	O6	GUA	43	-11.430	24.364	-17.738	1.00	1.00
ATOM	1378	C5	GUA	43	-13.196	25.205	-16.359	1.00	1.00
ATOM	1379	N7	GUA	43	-12.612	25.567	-15.153	1.00	1.00
ATOM	1380	C8	GUA	43	-13.606	26.015	-14.438	1.00	1.00
ATOM	1381	H8	GUA	43	-13.494	26.384	-13.428	1.00	0.00
ATOM	1382	C2'	GUA	43	-16.970	25.245	-14.070	1.00	1.00
ATOM	1383	H2'	GUA	43	-16.661	24.295	-14.512	1.00	0.00
ATOM	1384	O2'	GUA	43	-18.337	25.530	-14.309	1.00	1.00
ATOM	1385	HO2'	GUA	43	-18.414	26.478	-14.419	1.00	0.00
ATOM	1386	C3'	GUA	43	-16.629	25.268	-12.586	1.00	1.00
ATOM	1387	H3'	GUA	43	-15.702	24.745	-12.353	1.00	0.00
ATOM	1388	O3'	GUA	43	-17.642	24.652	-11.803	1.00	1.00
ATOM	1389	P	GUA	44	-17.557	23.083	-11.481	1.00	1.00
ATOM	1390	O1P	GUA	44	-18.654	22.763	-10.533	1.00	1.00
ATOM	1391	O2P	GUA	44	-16.153	22.756	-11.114	1.00	1.00
ATOM	1392	O5'	GUA	44	-17.889	22.387	-12.874	1.00	1.00
ATOM	1393	C5'	GUA	44	-19.152	22.573	-13.508	1.00	1.00
ATOM	1394	H5'	GUA	44	-19.373	23.636	-13.584	1.00	0.00
ATOM	1395	H5''	GUA	44	-19.934	22.089	-12.925	1.00	0.00
ATOM	1396	C4'	GUA	44	-19.129	21.970	-14.891	1.00	1.00
ATOM	1397	H4'	GUA	44	-20.132	22.071	-15.309	1.00	0.00
ATOM	1398	O4'	GUA	44	-18.102	22.633	-15.680	1.00	1.00
ATOM	1399	C1'	GUA	44	-17.580	21.735	-16.640	1.00	1.00
ATOM	1400	H1'	GUA	44	-17.789	22.162	-17.622	1.00	0.00
ATOM	1401	N9	GUA	44	-16.132	21.665	-16.471	1.00	0.00
ATOM	1402	C4	GUA	44	-15.214	21.299	-17.426	1.00	0.00
ATOM	1403	N3	GUA	44	-15.489	20.939	-18.694	1.00	0.00

ATOM	1404	C2	GUA	44	-14.395	20.642	-19.374	1.00	0.00
ATOM	1405	N2	GUA	44	-14.492	20.263	-20.657	1.00	0.00
ATOM	1406	H22	GUA	44	-15.397	20.205	-21.101	1.00	0.00
ATOM	1407	H21	GUA	44	-13.658	20.040	-21.182	1.00	0.00
ATOM	1408	N1	GUA	44	-13.119	20.691	-18.855	1.00	0.00
ATOM	1409	H1	GUA	44	-12.350	20.441	-19.462	1.00	0.00
ATOM	1410	C6	GUA	44	-12.820	21.060	-17.543	1.00	0.00
ATOM	1411	O6	GUA	44	-11.643	21.073	-17.165	1.00	0.00
ATOM	1412	C5	GUA	44	-13.986	21.383	-16.805	1.00	0.00
ATOM	1413	N7	GUA	44	-14.130	21.794	-15.486	1.00	0.00
ATOM	1414	C8	GUA	44	-15.416	21.948	-15.335	1.00	0.00
ATOM	1415	H8	GUA	44	-15.871	22.267	-14.410	1.00	0.00
ATOM	1416	C2'	GUA	44	-18.285	20.399	-16.429	1.00	1.00
ATOM	1417	H2'	GUA	44	-17.588	19.564	-16.535	1.00	0.00
ATOM	1418	O2'	GUA	44	-19.386	20.296	-17.311	1.00	1.00
ATOM	1419	HO2'	GUA	44	-20.175	20.486	-16.803	1.00	0.00
ATOM	1420	C3'	GUA	44	-18.722	20.533	-14.975	1.00	1.00
ATOM	1421	H3'	GUA	44	-17.930	20.285	-14.270	1.00	0.00
ATOM	1422	O3'	GUA	44	-19.825	19.680	-14.676	1.00	1.00
ATOM	1423	P	GUA	45	-19.576	18.268	-13.939	1.00	1.00
ATOM	1424	O1P	GUA	45	-20.876	17.549	-13.904	1.00	1.00
ATOM	1425	O2P	GUA	45	-18.846	18.525	-12.672	1.00	1.00
ATOM	1426	O5'	GUA	45	-18.604	17.485	-14.926	1.00	1.00
ATOM	1427	C5'	GUA	45	-19.038	17.104	-16.229	1.00	1.00
ATOM	1428	H5'	GUA	45	-19.410	17.979	-16.764	1.00	0.00
ATOM	1429	H5''	GUA	45	-19.840	16.369	-16.150	1.00	0.00
ATOM	1430	C4'	GUA	45	-17.891	16.498	-17.003	1.00	1.00
ATOM	1431	H4'	GUA	45	-18.299	16.077	-17.925	1.00	0.00
ATOM	1432	O4'	GUA	45	-16.883	17.517	-17.228	1.00	1.00
ATOM	1433	C1'	GUA	45	-15.590	16.937	-17.160	1.00	1.00
ATOM	1434	H1'	GUA	45	-15.091	17.150	-18.108	1.00	0.00
ATOM	1435	N9	GUA	45	-14.842	17.598	-16.097	1.00	1.00
ATOM	1436	C4	GUA	45	-13.475	17.711	-16.004	1.00	1.00
ATOM	1437	N3	GUA	45	-12.581	17.228	-16.886	1.00	1.00
ATOM	1438	C2	GUA	45	-11.335	17.495	-16.526	1.00	1.00
ATOM	1439	N2	GUA	45	-10.318	17.083	-17.296	1.00	1.00
ATOM	1440	H22	GUA	45	-10.504	16.571	-18.149	1.00	0.00
ATOM	1441	H21	GUA	45	-9.366	17.285	-17.026	1.00	0.00
ATOM	1442	N1	GUA	45	-10.986	18.185	-15.386	1.00	1.00
ATOM	1443	H1	GUA	45	-10.004	18.335	-15.204	1.00	0.00
ATOM	1444	C6	GUA	45	-11.904	18.689	-14.465	1.00	1.00
ATOM	1445	O6	GUA	45	-11.497	19.296	-13.466	1.00	1.00
ATOM	1446	C5	GUA	45	-13.244	18.408	-14.840	1.00	1.00
ATOM	1447	N7	GUA	45	-14.439	18.728	-14.212	1.00	1.00
ATOM	1448	C8	GUA	45	-15.357	18.229	-14.991	1.00	1.00
ATOM	1449	H8	GUA	45	-16.415	18.302	-14.787	1.00	0.00
ATOM	1450	C2'	GUA	45	-15.778	15.437	-16.933	1.00	1.00
ATOM	1451	H2'	GUA	45	-15.025	15.046	-16.244	1.00	0.00
ATOM	1452	O2'	GUA	45	-15.763	14.764	-18.178	1.00	1.00
ATOM	1453	HO2'	GUA	45	-14.896	14.374	-18.282	1.00	0.00
ATOM	1454	C3'	GUA	45	-17.153	15.404	-16.280	1.00	1.00
ATOM	1455	H3'	GUA	45	-17.117	15.571	-15.205	1.00	0.00
ATOM	1456	O3'	GUA	45	-17.801	14.154	-16.478	1.00	1.00
ATOM	1457	P	GUA	46	-17.855	13.080	-15.281	1.00	1.00
ATOM	1458	O1P	GUA	46	-18.156	13.823	-14.031	1.00	1.00
ATOM	1459	O2P	GUA	46	-18.736	11.961	-15.700	1.00	1.00
ATOM	1460	O5'	GUA	46	-16.360	12.534	-15.186	1.00	1.00

ATOM	1461	C5'	GUA	46	-15.816	11.684	-16.193	1.00	1.00
ATOM	1462	H5'	GUA	46	-15.038	12.215	-16.741	1.00	0.00
ATOM	1463	H5''	GUA	46	-16.600	11.386	-16.892	1.00	0.00
ATOM	1464	C4'	GUA	46	-15.222	10.444	-15.564	1.00	1.00
ATOM	1465	H4'	GUA	46	-14.986	9.748	-16.370	1.00	0.00
ATOM	1466	O4'	GUA	46	-14.062	10.830	-14.773	1.00	1.00
ATOM	1467	C1'	GUA	46	-14.221	10.371	-13.445	1.00	1.00
ATOM	1468	H1'	GUA	46	-13.687	9.423	-13.368	1.00	0.00
ATOM	1469	N9	GUA	46	-13.589	11.328	-12.541	1.00	1.00
ATOM	1470	C4	GUA	46	-12.263	11.695	-12.535	1.00	1.00
ATOM	1471	N3	GUA	46	-11.309	11.235	-13.367	1.00	1.00
ATOM	1472	C2	GUA	46	-10.129	11.774	-13.114	1.00	1.00
ATOM	1473	N2	GUA	46	-9.066	11.424	-13.853	1.00	1.00
ATOM	1474	H22	GUA	46	-9.170	10.753	-14.601	1.00	0.00
ATOM	1475	H21	GUA	46	-8.161	11.831	-13.661	1.00	0.00
ATOM	1476	N1	GUA	46	-9.893	12.698	-12.121	1.00	1.00
ATOM	1477	H1	GUA	46	-8.952	13.045	-12.014	1.00	0.00
ATOM	1478	C6	GUA	46	-10.871	13.183	-11.253	1.00	1.00
ATOM	1479	O6	GUA	46	-10.564	14.012	-10.388	1.00	1.00
ATOM	1480	C5	GUA	46	-12.142	12.612	-11.514	1.00	1.00
ATOM	1481	N7	GUA	46	-13.366	12.818	-10.888	1.00	1.00
ATOM	1482	C8	GUA	46	-14.189	12.039	-11.531	1.00	1.00
ATOM	1483	H8	GUA	46	-15.241	11.956	-11.289	1.00	0.00
ATOM	1484	C2'	GUA	46	-15.719	10.210	-13.225	1.00	1.00
ATOM	1485	H2'	GUA	46	-16.196	11.172	-13.024	1.00	0.00
ATOM	1486	O2'	GUA	46	-15.951	9.265	-12.199	1.00	1.00
ATOM	1487	HO2'	GUA	46	-15.169	8.717	-12.134	1.00	0.00
ATOM	1488	C3'	GUA	46	-16.144	9.693	-14.595	1.00	1.00
ATOM	1489	H3'	GUA	46	-17.197	9.874	-14.809	1.00	0.00
ATOM	1490	O3'	GUA	46	-15.949	8.287	-14.701	1.00	1.00
ATOM	1491	P	URI	47	-16.973	7.401	-15.568	1.00	1.00
ATOM	1492	O1P	URI	47	-16.360	7.191	-16.904	1.00	1.00
ATOM	1493	O2P	URI	47	-18.322	8.013	-15.469	1.00	1.00
ATOM	1494	O5'	URI	47	-17.003	5.999	-14.812	1.00	1.00
ATOM	1495	C5'	URI	47	-17.537	5.890	-13.495	1.00	1.00
ATOM	1496	H5'	URI	47	-18.626	5.930	-13.538	1.00	0.00
ATOM	1497	H5''	URI	47	-17.174	6.712	-12.880	1.00	0.00
ATOM	1498	C4'	URI	47	-17.111	4.583	-12.870	1.00	1.00
ATOM	1499	H4'	URI	47	-17.369	4.631	-11.811	1.00	0.00
ATOM	1500	O4'	URI	47	-17.758	3.488	-13.576	1.00	1.00
ATOM	1501	C1'	URI	47	-16.785	2.585	-14.063	1.00	1.00
ATOM	1502	H1'	URI	47	-16.740	1.752	-13.360	1.00	0.00
ATOM	1503	N1	URI	47	-17.230	2.063	-15.364	1.00	0.00
ATOM	1504	C6	URI	47	-18.135	2.755	-16.143	1.00	0.00
ATOM	1505	H6	URI	47	-18.523	3.705	-15.778	1.00	0.00
ATOM	1506	C2	URI	47	-16.708	0.855	-15.781	1.00	0.00
ATOM	1507	O2	URI	47	-15.907	0.217	-15.119	1.00	0.00
ATOM	1508	N3	URI	47	-17.159	0.416	-17.003	1.00	0.00
ATOM	1509	H3	URI	47	-16.790	-0.464	-17.330	1.00	0.00
ATOM	1510	C4	URI	47	-18.058	1.053	-17.831	1.00	0.00
ATOM	1511	O4	URI	47	-18.367	0.533	-18.905	1.00	0.00
ATOM	1512	C5	URI	47	-18.553	2.298	-17.327	1.00	0.00
ATOM	1513	H5	URI	47	-19.270	2.874	-17.911	1.00	0.00
ATOM	1514	C2'	URI	47	-15.467	3.354	-14.135	1.00	1.00
ATOM	1515	H2'	URI	47	-15.400	3.933	-15.060	1.00	0.00
ATOM	1516	O2'	URI	47	-14.385	2.453	-13.987	1.00	1.00
ATOM	1517	HO2'	URI	47	-14.467	1.794	-14.676	1.00	0.00

ATOM	1518	C3'	URI	47	-15.610	4.286	-12.940	1.00	1.00
ATOM	1519	H3'	URI	47	-15.030	5.202	-13.045	1.00	0.00
ATOM	1520	O3'	URI	47	-15.169	3.666	-11.737	1.00	1.00
ATOM	1521	P	CYT	48	-14.511	4.559	-10.573	1.00	1.00
ATOM	1522	O1P	CYT	48	-14.484	3.734	-9.340	1.00	1.00
ATOM	1523	O2P	CYT	48	-15.191	5.881	-10.556	1.00	1.00
ATOM	1524	O5'	CYT	48	-13.009	4.778	-11.057	1.00	1.00
ATOM	1525	C5'	CYT	48	-12.088	3.691	-11.094	1.00	1.00
ATOM	1526	H5'	CYT	48	-12.461	2.917	-11.766	1.00	0.00
ATOM	1527	H5''	CYT	48	-11.973	3.271	-10.096	1.00	0.00
ATOM	1528	C4'	CYT	48	-10.741	4.169	-11.583	1.00	1.00
ATOM	1529	H4'	CYT	48	-10.780	4.190	-12.674	1.00	0.00
ATOM	1530	O4'	CYT	48	-10.458	5.465	-10.987	1.00	1.00
ATOM	1531	C1'	CYT	48	-9.206	5.425	-10.329	1.00	1.00
ATOM	1532	H1'	CYT	48	-8.466	5.823	-11.023	1.00	0.00
ATOM	1533	N1	CYT	48	-9.262	6.309	-9.153	1.00	1.00
ATOM	1534	C6	CYT	48	-10.435	6.501	-8.475	1.00	1.00
ATOM	1535	H6	CYT	48	-11.340	5.990	-8.809	1.00	0.00
ATOM	1536	C2	CYT	48	-8.094	6.954	-8.736	1.00	1.00
ATOM	1537	O2	CYT	48	-7.045	6.761	-9.370	1.00	1.00
ATOM	1538	N3	CYT	48	-8.137	7.767	-7.657	1.00	1.00
ATOM	1539	C4	CYT	48	-9.287	7.948	-7.002	1.00	1.00
ATOM	1540	N4	CYT	48	-9.283	8.760	-5.943	1.00	1.00
ATOM	1541	H42	CYT	48	-10.134	8.919	-5.424	1.00	0.00
ATOM	1542	H41	CYT	48	-8.427	9.213	-5.659	1.00	0.00
ATOM	1543	C5	CYT	48	-10.493	7.302	-7.405	1.00	1.00
ATOM	1544	H5	CYT	48	-11.426	7.457	-6.863	1.00	0.00
ATOM	1545	C2'	CYT	48	-8.947	3.962	-9.983	1.00	1.00
ATOM	1546	H2'	CYT	48	-9.491	3.668	-9.082	1.00	0.00
ATOM	1547	O2'	CYT	48	-7.555	3.738	-9.870	1.00	1.00
ATOM	1548	HO2'	CYT	48	-7.322	3.064	-10.508	1.00	0.00
ATOM	1549	C3'	CYT	48	-9.546	3.276	-11.203	1.00	1.00
ATOM	1550	H3'	CYT	48	-9.860	2.250	-11.003	1.00	0.00
ATOM	1551	O3'	CYT	48	-8.611	3.206	-12.274	1.00	1.00
ATOM	1552	P	GUA	49	-7.782	1.852	-12.522	1.00	1.00
ATOM	1553	O1P	GUA	49	-6.583	2.207	-13.325	1.00	1.00
ATOM	1554	O2P	GUA	49	-7.612	1.160	-11.220	1.00	1.00
ATOM	1555	O5'	GUA	49	-8.746	0.973	-13.437	1.00	1.00
ATOM	1556	C5'	GUA	49	-9.529	1.576	-14.463	1.00	1.00
ATOM	1557	H5'	GUA	49	-8.871	2.021	-15.214	1.00	0.00
ATOM	1558	H5''	GUA	49	-10.157	2.356	-14.037	1.00	0.00
ATOM	1559	C4'	GUA	49	-10.406	0.538	-15.123	1.00	1.00
ATOM	1560	H4'	GUA	49	-11.111	1.065	-15.769	1.00	0.00
ATOM	1561	O4'	GUA	49	-9.563	-0.407	-15.839	1.00	1.00
ATOM	1562	C1'	GUA	49	-10.108	-1.710	-15.738	1.00	1.00
ATOM	1563	H1'	GUA	49	-10.204	-2.096	-16.753	1.00	0.00
ATOM	1564	N9	GUA	49	-9.159	-2.552	-15.018	1.00	0.00
ATOM	1565	C4	GUA	49	-9.175	-3.923	-14.942	1.00	0.00
ATOM	1566	N3	GUA	49	-10.078	-4.738	-15.523	1.00	0.00
ATOM	1567	C2	GUA	49	-9.829	-6.014	-15.269	1.00	0.00
ATOM	1568	N2	GUA	49	-10.637	-6.960	-15.773	1.00	0.00
ATOM	1569	H22	GUA	49	-11.427	-6.698	-16.342	1.00	0.00
ATOM	1570	H21	GUA	49	-10.451	-7.935	-15.585	1.00	0.00
ATOM	1571	N1	GUA	49	-8.779	-6.463	-14.500	1.00	0.00
ATOM	1572	H1	GUA	49	-8.683	-7.461	-14.367	1.00	0.00
ATOM	1573	C6	GUA	49	-7.840	-5.631	-13.892	1.00	0.00
ATOM	1574	O6	GUA	49	-6.928	-6.127	-13.219	1.00	0.00

ATOM	1575	C5	GUA	49	-8.093	-4.261	-14.159	1.00	0.00
ATOM	1576	N7	GUA	49	-7.407	-3.125	-13.751	1.00	0.00
ATOM	1577	C8	GUA	49	-8.076	-2.138	-14.284	1.00	0.00
ATOM	1578	H8	GUA	49	-7.803	-1.101	-14.159	1.00	0.00
ATOM	1579	C2'	GUA	49	-11.458	-1.573	-15.038	1.00	1.00
ATOM	1580	H2'	GUA	49	-11.661	-2.438	-14.401	1.00	0.00
ATOM	1581	O2'	GUA	49	-12.473	-1.363	-16.002	1.00	1.00
ATOM	1582	HO2'	GUA	49	-12.150	-0.703	-16.616	1.00	0.00
ATOM	1583	C3'	GUA	49	-11.212	-0.337	-14.181	1.00	1.00
ATOM	1584	H3'	GUA	49	-10.673	-0.558	-13.262	1.00	0.00
ATOM	1585	O3'	GUA	49	-12.432	0.281	-13.790	1.00	1.00
ATOM	1586	P	GUA	50	-13.087	-0.080	-12.369	1.00	1.00
ATOM	1587	O1P	GUA	50	-14.203	0.872	-12.140	1.00	1.00
ATOM	1588	O2P	GUA	50	-11.997	-0.185	-11.366	1.00	1.00
ATOM	1589	O5'	GUA	50	-13.707	-1.531	-12.588	1.00	1.00
ATOM	1590	C5'	GUA	50	-14.780	-1.734	-13.504	1.00	1.00
ATOM	1591	H5'	GUA	50	-14.475	-1.414	-14.501	1.00	0.00
ATOM	1592	H5''	GUA	50	-15.645	-1.149	-13.192	1.00	0.00
ATOM	1593	C4'	GUA	50	-15.158	-3.195	-13.542	1.00	1.00
ATOM	1594	H4'	GUA	50	-16.045	-3.292	-14.172	1.00	0.00
ATOM	1595	O4'	GUA	50	-14.025	-3.967	-14.018	1.00	1.00
ATOM	1596	C1'	GUA	50	-14.066	-5.274	-13.463	1.00	1.00
ATOM	1597	H1'	GUA	50	-14.150	-5.971	-14.298	1.00	0.00
ATOM	1598	N9	GUA	50	-12.800	-5.527	-12.786	1.00	0.00
ATOM	1599	C4	GUA	50	-12.292	-6.758	-12.437	1.00	0.00
ATOM	1600	N3	GUA	50	-12.877	-7.948	-12.660	1.00	0.00
ATOM	1601	C2	GUA	50	-12.145	-8.952	-12.210	1.00	0.00
ATOM	1602	N2	GUA	50	-12.587	-10.213	-12.352	1.00	0.00
ATOM	1603	H22	GUA	50	-13.474	-10.389	-12.800	1.00	0.00
ATOM	1604	H21	GUA	50	-12.031	-10.983	-12.011	1.00	0.00
ATOM	1605	N1	GUA	50	-10.926	-8.808	-11.585	1.00	0.00
ATOM	1606	H1	GUA	50	-10.450	-9.644	-11.279	1.00	0.00
ATOM	1607	C6	GUA	50	-10.308	-7.580	-11.349	1.00	0.00
ATOM	1608	O6	GUA	50	-9.209	-7.547	-10.781	1.00	0.00
ATOM	1609	C5	GUA	50	-11.086	-6.494	-11.828	1.00	0.00
ATOM	1610	N7	GUA	50	-10.838	-5.128	-11.792	1.00	0.00
ATOM	1611	C8	GUA	50	-11.880	-4.597	-12.371	1.00	0.00
ATOM	1612	H8	GUA	50	-12.007	-3.535	-12.509	1.00	0.00
ATOM	1613	C2'	GUA	50	-15.282	-5.335	-12.534	1.00	1.00
ATOM	1614	H2'	GUA	50	-15.053	-5.898	-11.627	1.00	0.00
ATOM	1615	O2'	GUA	50	-16.386	-5.872	-13.239	1.00	1.00
ATOM	1616	HO2'	GUA	50	-16.107	-6.006	-14.145	1.00	0.00
ATOM	1617	C3'	GUA	50	-15.472	-3.862	-12.201	1.00	1.00
ATOM	1618	H3'	GUA	50	-14.814	-3.515	-11.406	1.00	0.00
ATOM	1619	O3'	GUA	50	-16.799	-3.589	-11.770	1.00	1.00
ATOM	1620	P	CYT	51	-17.125	-3.518	-10.199	1.00	1.00
ATOM	1621	O1P	CYT	51	-18.541	-3.092	-10.060	1.00	1.00
ATOM	1622	O2P	CYT	51	-16.054	-2.732	-9.536	1.00	1.00
ATOM	1623	O5'	CYT	51	-17.009	-5.029	-9.718	1.00	1.00
ATOM	1624	C5'	CYT	51	-17.940	-6.011	-10.164	1.00	1.00
ATOM	1625	H5'	CYT	51	-17.943	-6.047	-11.254	1.00	0.00
ATOM	1626	H5''	CYT	51	-18.941	-5.753	-9.817	1.00	0.00
ATOM	1627	C4'	CYT	51	-17.564	-7.366	-9.618	1.00	1.00
ATOM	1628	H4'	CYT	51	-18.372	-8.056	-9.868	1.00	0.00
ATOM	1629	O4'	CYT	51	-16.275	-7.758	-10.172	1.00	1.00
ATOM	1630	C1'	CYT	51	-15.565	-8.537	-9.227	1.00	1.00
ATOM	1631	H1'	CYT	51	-15.324	-9.486	-9.707	1.00	0.00

ATOM	1632	N1	CYT	51	-14.301	-7.851	-8.899	1.00	0.00
ATOM	1633	C6	CYT	51	-14.166	-6.503	-9.078	1.00	0.00
ATOM	1634	H6	CYT	51	-15.003	-5.926	-9.473	1.00	0.00
ATOM	1635	C2	CYT	51	-13.238	-8.606	-8.396	1.00	0.00
ATOM	1636	O2	CYT	51	-13.391	-9.829	-8.246	1.00	0.00
ATOM	1637	N3	CYT	51	-12.075	-7.987	-8.090	1.00	0.00
ATOM	1638	C4	CYT	51	-11.953	-6.669	-8.272	1.00	0.00
ATOM	1639	N4	CYT	51	-10.788	-6.102	-7.954	1.00	0.00
ATOM	1640	H42	CYT	51	-10.663	-5.106	-8.076	1.00	0.00
ATOM	1641	H41	CYT	51	-10.033	-6.666	-7.593	1.00	0.00
ATOM	1642	C5	CYT	51	-13.020	-5.876	-8.781	1.00	0.00
ATOM	1643	H5	CYT	51	-12.908	-4.802	-8.924	1.00	0.00
ATOM	1644	C2'	CYT	51	-16.490	-8.716	-8.025	1.00	1.00
ATOM	1645	H2'	CYT	51	-15.926	-8.725	-7.090	1.00	0.00
ATOM	1646	O2'	CYT	51	-17.267	-9.888	-8.194	1.00	1.00
ATOM	1647	HO2'	CYT	51	-18.068	-9.636	-8.653	1.00	0.00
ATOM	1648	C3'	CYT	51	-17.330	-7.449	-8.123	1.00	1.00
ATOM	1649	H3'	CYT	51	-16.816	-6.571	-7.736	1.00	0.00
ATOM	1650	O3'	CYT	51	-18.553	-7.570	-7.396	1.00	1.00
ATOM	1651	P	GUA	52	-18.651	-7.018	-5.886	1.00	1.00
ATOM	1652	O1P	GUA	52	-20.069	-7.136	-5.462	1.00	1.00
ATOM	1653	O2P	GUA	52	-17.973	-5.697	-5.824	1.00	1.00
ATOM	1654	O5'	GUA	52	-17.794	-8.060	-5.041	1.00	1.00
ATOM	1655	C5'	GUA	52	-18.214	-9.414	-4.917	1.00	1.00
ATOM	1656	H5'	GUA	52	-18.394	-9.835	-5.907	1.00	0.00
ATOM	1657	H5''	GUA	52	-19.139	-9.460	-4.338	1.00	0.00
ATOM	1658	C4'	GUA	52	-17.148	-10.230	-4.215	1.00	1.00
ATOM	1659	H4'	GUA	52	-17.542	-11.236	-4.057	1.00	0.00
ATOM	1660	O4'	GUA	52	-15.934	-10.208	-5.011	1.00	1.00
ATOM	1661	C1'	GUA	52	-14.804	-10.347	-4.162	1.00	1.00
ATOM	1662	H1'	GUA	52	-14.282	-11.252	-4.473	1.00	0.00
ATOM	1663	N9	GUA	52	-13.916	-9.211	-4.380	1.00	0.00
ATOM	1664	C4	GUA	52	-12.588	-9.136	-4.041	1.00	0.00
ATOM	1665	N3	GUA	52	-11.864	-10.106	-3.449	1.00	0.00
ATOM	1666	C2	GUA	52	-10.610	-9.739	-3.248	1.00	0.00
ATOM	1667	N2	GUA	52	-9.753	-10.590	-2.664	1.00	0.00
ATOM	1668	H22	GUA	52	-10.066	-11.507	-2.381	1.00	0.00
ATOM	1669	H21	GUA	52	-8.793	-10.315	-2.509	1.00	0.00
ATOM	1670	N1	GUA	52	-10.093	-8.511	-3.599	1.00	0.00
ATOM	1671	H1	GUA	52	-9.119	-8.332	-3.401	1.00	0.00
ATOM	1672	C6	GUA	52	-10.830	-7.498	-4.212	1.00	0.00
ATOM	1673	O6	GUA	52	-10.281	-6.425	-4.492	1.00	0.00
ATOM	1674	C5	GUA	52	-12.178	-7.881	-4.433	1.00	0.00
ATOM	1675	N7	GUA	52	-13.230	-7.178	-5.010	1.00	0.00
ATOM	1676	C8	GUA	52	-14.236	-8.007	-4.956	1.00	0.00
ATOM	1677	H8	GUA	52	-15.223	-7.767	-5.322	1.00	0.00
ATOM	1678	C2'	GUA	52	-15.330	-10.443	-2.729	1.00	1.00
ATOM	1679	H2'	GUA	52	-14.677	-9.907	-2.035	1.00	0.00
ATOM	1680	O2'	GUA	52	-15.490	-11.805	-2.374	1.00	1.00
ATOM	1681	HO2'	GUA	52	-16.393	-12.046	-2.575	1.00	0.00
ATOM	1682	C3'	GUA	52	-16.660	-9.720	-2.862	1.00	1.00
ATOM	1683	H3'	GUA	52	-16.564	-8.637	-2.848	1.00	0.00
ATOM	1684	O3'	GUA	52	-17.552	-10.060	-1.806	1.00	1.00
ATOM	1685	P	GUA	53	-17.549	-9.192	-0.454	1.00	1.00
ATOM	1686	O1P	GUA	53	-18.611	-9.740	0.430	1.00	1.00
ATOM	1687	O2P	GUA	53	-17.568	-7.754	-0.821	1.00	1.00
ATOM	1688	O5'	GUA	53	-16.138	-9.519	0.210	1.00	1.00

ATOM	1689	C5'	GUA	53	-15.801	-10.850	0.588	1.00	1.00
ATOM	1690	H5'	GUA	53	-15.974	-11.525	-0.255	1.00	0.00
ATOM	1691	H5''	GUA	53	-16.423	-11.164	1.424	1.00	0.00
ATOM	1692	C4'	GUA	53	-14.348	-10.927	0.998	1.00	1.00
ATOM	1693	H4'	GUA	53	-14.145	-11.950	1.317	1.00	0.00
ATOM	1694	O4'	GUA	53	-13.515	-10.489	-0.106	1.00	1.00
ATOM	1695	C1'	GUA	53	-12.315	-9.926	0.397	1.00	1.00
ATOM	1696	H1'	GUA	53	-11.490	-10.529	0.015	1.00	0.00
ATOM	1697	N9	GUA	53	-12.173	-8.574	-0.137	1.00	1.00
ATOM	1698	C4	GUA	53	-11.027	-7.815	-0.148	1.00	1.00
ATOM	1699	N3	GUA	53	-9.826	-8.187	0.335	1.00	1.00
ATOM	1700	C2	GUA	53	-8.914	-7.241	0.182	1.00	1.00
ATOM	1701	N2	GUA	53	-7.661	-7.449	0.611	1.00	1.00
ATOM	1702	H22	GUA	53	-7.417	-8.326	1.050	1.00	0.00
ATOM	1703	H21	GUA	53	-6.961	-6.732	0.497	1.00	0.00
ATOM	1704	N1	GUA	53	-9.154	-6.016	-0.402	1.00	1.00
ATOM	1705	H1	GUA	53	-8.386	-5.365	-0.468	1.00	0.00
ATOM	1706	C6	GUA	53	-10.393	-5.620	-0.906	1.00	1.00
ATOM	1707	O6	GUA	53	-10.516	-4.497	-1.414	1.00	1.00
ATOM	1708	C5	GUA	53	-11.380	-6.627	-0.747	1.00	1.00
ATOM	1709	N7	GUA	53	-12.721	-6.636	-1.108	1.00	1.00
ATOM	1710	C8	GUA	53	-13.147	-7.808	-0.727	1.00	1.00
ATOM	1711	H8	GUA	53	-14.168	-8.142	-0.857	1.00	0.00
ATOM	1712	C2'	GUA	53	-12.400	-9.968	1.926	1.00	1.00
ATOM	1713	H2'	GUA	53	-11.986	-9.058	2.367	1.00	0.00
ATOM	1714	O2'	GUA	53	-11.761	-11.138	2.403	1.00	1.00
ATOM	1715	HO2'	GUA	53	-12.138	-11.880	1.930	1.00	0.00
ATOM	1716	C3'	GUA	53	-13.907	-10.010	2.131	1.00	1.00
ATOM	1717	H3'	GUA	53	-14.377	-9.027	2.070	1.00	0.00
ATOM	1718	O3'	GUA	53	-14.251	-10.546	3.405	1.00	1.00
ATOM	1719	P	URI	54	-14.445	-9.562	4.662	1.00	1.00
ATOM	1720	O1P	URI	54	-15.311	-8.440	4.219	1.00	1.00
ATOM	1721	O2P	URI	54	-14.846	-10.379	5.835	1.00	1.00
ATOM	1722	O5'	URI	54	-12.986	-8.985	4.929	1.00	1.00
ATOM	1723	C5'	URI	54	-11.927	-9.843	5.349	1.00	1.00
ATOM	1724	H5'	URI	54	-11.778	-10.631	4.611	1.00	0.00
ATOM	1725	H5''	URI	54	-12.181	-10.296	6.307	1.00	0.00
ATOM	1726	C4'	URI	54	-10.646	-9.054	5.497	1.00	1.00
ATOM	1727	H4'	URI	54	-9.895	-9.717	5.936	1.00	0.00
ATOM	1728	O4'	URI	54	-10.260	-8.523	4.205	1.00	1.00
ATOM	1729	C1'	URI	54	-9.560	-7.300	4.380	1.00	1.00
ATOM	1730	H1'	URI	54	-8.554	-7.451	3.980	1.00	0.00
ATOM	1731	N1	URI	54	-10.225	-6.262	3.576	1.00	1.00
ATOM	1732	C6	URI	54	-11.555	-6.371	3.240	1.00	1.00
ATOM	1733	H6	URI	54	-12.115	-7.240	3.579	1.00	0.00
ATOM	1734	C2	URI	54	-9.474	-5.171	3.174	1.00	1.00
ATOM	1735	O2	URI	54	-8.296	-5.044	3.455	1.00	1.00
ATOM	1736	N3	URI	54	-10.154	-4.239	2.431	1.00	1.00
ATOM	1737	H3	URI	54	-9.628	-3.433	2.126	1.00	0.00
ATOM	1738	C4	URI	54	-11.480	-4.285	2.056	1.00	1.00
ATOM	1739	O4	URI	54	-11.952	-3.368	1.383	1.00	1.00
ATOM	1740	C5	URI	54	-12.188	-5.442	2.511	1.00	1.00
ATOM	1741	H5	URI	54	-13.242	-5.568	2.266	1.00	0.00
ATOM	1742	C2'	URI	54	-9.544	-6.994	5.879	1.00	1.00
ATOM	1743	H2'	URI	54	-9.722	-5.932	6.065	1.00	0.00
ATOM	1744	O2'	URI	54	-8.323	-7.440	6.440	1.00	1.00
ATOM	1745	HO2'	URI	54	-7.944	-6.703	6.916	1.00	0.00

ATOM	1746	C3'	URI	54	-10.733	-7.815	6.364	1.00	1.00
ATOM	1747	H3'	URI	54	-11.686	-7.301	6.239	1.00	0.00
ATOM	1748	O3'	URI	54	-10.623	-8.141	7.744	1.00	1.00
ATOM	1749	P	URI	55	-11.628	-7.471	8.807	1.00	1.00
ATOM	1750	O1P	URI	55	-13.002	-7.602	8.260	1.00	1.00
ATOM	1751	O2P	URI	55	-11.318	-8.019	10.152	1.00	1.00
ATOM	1752	O5'	URI	55	-11.233	-5.926	8.791	1.00	1.00
ATOM	1753	C5'	URI	55	-9.968	-5.492	9.283	1.00	1.00
ATOM	1754	H5'	URI	55	-9.172	-6.048	8.788	1.00	0.00
ATOM	1755	H5''	URI	55	-9.909	-5.668	10.357	1.00	0.00
ATOM	1756	C4'	URI	55	-9.785	-4.017	9.016	1.00	1.00
ATOM	1757	H4'	URI	55	-8.884	-3.699	9.542	1.00	0.00
ATOM	1758	O4'	URI	55	-9.726	-3.801	7.582	1.00	1.00
ATOM	1759	C1'	URI	55	-10.313	-2.549	7.262	1.00	1.00
ATOM	1760	H1'	URI	55	-9.549	-1.963	6.749	1.00	0.00
ATOM	1761	N1	URI	55	-11.424	-2.783	6.326	1.00	1.00
ATOM	1762	C6	URI	55	-12.062	-3.999	6.266	1.00	1.00
ATOM	1763	H6	URI	55	-11.732	-4.799	6.930	1.00	0.00
ATOM	1764	C2	URI	55	-11.809	-1.733	5.504	1.00	1.00
ATOM	1765	O2	URI	55	-11.269	-0.643	5.530	1.00	1.00
ATOM	1766	N3	URI	55	-12.851	-2.014	4.655	1.00	1.00
ATOM	1767	H3	URI	55	-13.151	-1.268	4.045	1.00	0.00
ATOM	1768	C4	URI	55	-13.532	-3.208	4.545	1.00	1.00
ATOM	1769	O4	URI	55	-14.451	-3.308	3.729	1.00	1.00
ATOM	1770	C5	URI	55	-13.075	-4.238	5.426	1.00	1.00
ATOM	1771	H5	URI	55	-13.549	-5.218	5.412	1.00	0.00
ATOM	1772	C2'	URI	55	-10.750	-1.901	8.578	1.00	1.00
ATOM	1773	H2'	URI	55	-11.702	-1.379	8.462	1.00	0.00
ATOM	1774	O2'	URI	55	-9.724	-1.046	9.048	1.00	1.00
ATOM	1775	HO2'	URI	55	-9.939	-0.160	8.763	1.00	0.00
ATOM	1776	C3'	URI	55	-10.930	-3.125	9.465	1.00	1.00
ATOM	1777	H3'	URI	55	-11.898	-3.610	9.332	1.00	0.00
ATOM	1778	O3'	URI	55	-10.818	-2.794	10.849	1.00	1.00
ATOM	1779	P	CYT	56	-12.134	-2.704	11.771	1.00	1.00
ATOM	1780	O1P	CYT	56	-11.684	-2.455	13.165	1.00	1.00
ATOM	1781	O2P	CYT	56	-12.992	-3.880	11.477	1.00	1.00
ATOM	1782	O5'	CYT	56	-12.881	-1.397	11.253	1.00	1.00
ATOM	1783	C5'	CYT	56	-14.260	-1.182	11.538	1.00	1.00
ATOM	1784	H5'	CYT	56	-14.426	-1.240	12.617	1.00	0.00
ATOM	1785	H5''	CYT	56	-14.863	-1.945	11.046	1.00	0.00
ATOM	1786	C4'	CYT	56	-14.688	0.181	11.044	1.00	1.00
ATOM	1787	H4'	CYT	56	-15.769	0.256	11.172	1.00	0.00
ATOM	1788	O4'	CYT	56	-13.950	1.198	11.768	1.00	1.00
ATOM	1789	C1'	CYT	56	-13.688	2.304	10.916	1.00	1.00
ATOM	1790	H1'	CYT	56	-14.129	3.183	11.392	1.00	0.00
ATOM	1791	N1	CYT	56	-12.233	2.509	10.839	1.00	1.00
ATOM	1792	C6	CYT	56	-11.365	1.496	11.142	1.00	1.00
ATOM	1793	H6	CYT	56	-11.755	0.525	11.445	1.00	0.00
ATOM	1794	C2	CYT	56	-11.748	3.760	10.452	1.00	1.00
ATOM	1795	O2	CYT	56	-12.560	4.658	10.181	1.00	1.00
ATOM	1796	N3	CYT	56	-10.413	3.958	10.378	1.00	1.00
ATOM	1797	C4	CYT	56	-9.573	2.966	10.676	1.00	1.00
ATOM	1798	N4	CYT	56	-8.264	3.206	10.592	1.00	1.00
ATOM	1799	H42	CYT	56	-7.599	2.477	10.810	1.00	0.00
ATOM	1800	H41	CYT	56	-7.935	4.120	10.308	1.00	0.00
ATOM	1801	C5	CYT	56	-10.037	1.679	11.075	1.00	1.00
ATOM	1802	H5	CYT	56	-9.343	0.875	11.316	1.00	0.00

ATOM	1803	C2'	CYT	56	-14.335	1.997	9.564	1.00	1.00
ATOM	1804	H2'	CYT	56	-13.703	2.338	8.741	1.00	0.00
ATOM	1805	O2'	CYT	56	-15.629	2.567	9.517	1.00	1.00
ATOM	1806	HO2'	CYT	56	-15.615	3.256	8.851	1.00	0.00
ATOM	1807	C3'	CYT	56	-14.378	0.474	9.593	1.00	1.00
ATOM	1808	H3'	CYT	56	-13.443	0.015	9.274	1.00	0.00
ATOM	1809	O3'	CYT	56	-15.392	-0.038	8.737	1.00	1.00
ATOM	1810	P	GUA	57	-15.000	-0.617	7.290	1.00	1.00
ATOM	1811	O1P	GUA	57	-16.252	-1.083	6.642	1.00	1.00
ATOM	1812	O2P	GUA	57	-13.863	-1.559	7.455	1.00	1.00
ATOM	1813	O5'	GUA	57	-14.478	0.663	6.494	1.00	1.00
ATOM	1814	C5'	GUA	57	-15.360	1.735	6.180	1.00	1.00
ATOM	1815	H5'	GUA	57	-15.875	2.066	7.082	1.00	0.00
ATOM	1816	H5''	GUA	57	-16.101	1.405	5.451	1.00	0.00
ATOM	1817	C4'	GUA	57	-14.582	2.892	5.601	1.00	1.00
ATOM	1818	H4'	GUA	57	-15.304	3.651	5.289	1.00	0.00
ATOM	1819	O4'	GUA	57	-13.635	3.367	6.598	1.00	1.00
ATOM	1820	C1'	GUA	57	-12.471	3.854	5.961	1.00	1.00
ATOM	1821	H1'	GUA	57	-12.345	4.894	6.268	1.00	0.00
ATOM	1822	N9	GUA	57	-11.325	3.094	6.448	1.00	1.00
ATOM	1823	C4	GUA	57	-10.007	3.483	6.411	1.00	1.00
ATOM	1824	N3	GUA	57	-9.538	4.642	5.916	1.00	1.00
ATOM	1825	C2	GUA	57	-8.222	4.730	6.022	1.00	1.00
ATOM	1826	N2	GUA	57	-7.592	5.828	5.578	1.00	1.00
ATOM	1827	H22	GUA	57	-8.122	6.582	5.164	1.00	0.00
ATOM	1828	H21	GUA	57	-6.588	5.898	5.652	1.00	0.00
ATOM	1829	N1	GUA	57	-7.420	3.755	6.571	1.00	1.00
ATOM	1830	H1	GUA	57	-6.426	3.925	6.602	1.00	0.00
ATOM	1831	C6	GUA	57	-7.894	2.548	7.086	1.00	1.00
ATOM	1832	O6	GUA	57	-7.097	1.731	7.559	1.00	1.00
ATOM	1833	C5	GUA	57	-9.305	2.443	6.977	1.00	1.00
ATOM	1834	N7	GUA	57	-10.160	1.420	7.365	1.00	1.00
ATOM	1835	C8	GUA	57	-11.346	1.849	7.029	1.00	1.00
ATOM	1836	H8	GUA	57	-12.252	1.284	7.195	1.00	0.00
ATOM	1837	C2'	GUA	57	-12.705	3.717	4.460	1.00	1.00
ATOM	1838	H2'	GUA	57	-11.785	3.423	3.944	1.00	0.00
ATOM	1839	O2'	GUA	57	-13.248	4.921	3.952	1.00	1.00
ATOM	1840	HO2'	GUA	57	-14.169	4.951	4.215	1.00	0.00
ATOM	1841	C3'	GUA	57	-13.709	2.573	4.433	1.00	1.00
ATOM	1842	H3'	GUA	57	-13.235	1.594	4.502	1.00	0.00
ATOM	1843	O3'	GUA	57	-14.469	2.572	3.228	1.00	1.00
ATOM	1844	P	ADE	58	-14.077	1.579	2.024	1.00	1.00
ATOM	1845	O1P	ADE	58	-13.841	0.237	2.615	1.00	1.00
ATOM	1846	O2P	ADE	58	-15.079	1.737	0.941	1.00	1.00
ATOM	1847	O5'	ADE	58	-12.682	2.143	1.501	1.00	1.00
ATOM	1848	C5'	ADE	58	-12.560	3.489	1.054	1.00	1.00
ATOM	1849	H5'	ADE	58	-12.538	4.160	1.914	1.00	0.00
ATOM	1850	H5''	ADE	58	-13.411	3.747	0.424	1.00	0.00
ATOM	1851	C4'	ADE	58	-11.289	3.659	0.256	1.00	1.00
ATOM	1852	H4'	ADE	58	-11.064	4.726	0.226	1.00	0.00
ATOM	1853	O4'	ADE	58	-10.238	2.860	0.871	1.00	1.00
ATOM	1854	C1'	ADE	58	-9.667	2.007	-0.101	1.00	1.00
ATOM	1855	H1'	ADE	58	-8.785	2.514	-0.494	1.00	0.00
ATOM	1856	N9	ADE	58	-9.234	0.773	0.557	1.00	1.00
ATOM	1857	C4	ADE	58	-7.939	0.417	0.846	1.00	1.00
ATOM	1858	N3	ADE	58	-6.821	1.117	0.586	1.00	1.00
ATOM	1859	C2	ADE	58	-5.743	0.459	1.007	1.00	1.00

ATOM	1860	H2	ADE	58	-4.793	0.960	0.834	1.00	0.00
ATOM	1861	N1	ADE	58	-5.663	-0.734	1.611	1.00	1.00
ATOM	1862	C6	ADE	58	-6.804	-1.412	1.858	1.00	1.00
ATOM	1863	N6	ADE	58	-6.723	-2.600	2.460	1.00	1.00
ATOM	1864	H62	ADE	58	-7.563	-3.128	2.653	1.00	0.00
ATOM	1865	H61	ADE	58	-5.822	-2.971	2.724	1.00	0.00
ATOM	1866	C5	ADE	58	-8.016	-0.821	1.460	1.00	1.00
ATOM	1867	N7	ADE	58	-9.335	-1.237	1.560	1.00	1.00
ATOM	1868	C8	ADE	58	-10.017	-0.260	1.012	1.00	1.00
ATOM	1869	H8	ADE	58	-11.093	-0.266	0.929	1.00	0.00
ATOM	1870	C2'	ADE	58	-10.734	1.796	-1.167	1.00	1.00
ATOM	1871	H2'	ADE	58	-11.472	1.053	-0.849	1.00	0.00
ATOM	1872	O2'	ADE	58	-10.120	1.456	-2.396	1.00	1.00
ATOM	1873	HO2'	ADE	58	-10.819	1.301	-3.033	1.00	0.00
ATOM	1874	C3'	ADE	58	-11.363	3.180	-1.200	1.00	1.00
ATOM	1875	H3'	ADE	58	-12.383	3.179	-1.581	1.00	0.00
ATOM	1876	O3'	ADE	58	-10.625	4.066	-2.032	1.00	1.00
ATOM	1877	P	URI	59	-11.115	4.349	-3.534	1.00	1.00
ATOM	1878	O1P	URI	59	-11.273	5.817	-3.684	1.00	1.00
ATOM	1879	O2P	URI	59	-12.266	3.455	-3.825	1.00	1.00
ATOM	1880	O5'	URI	59	-9.884	3.888	-4.434	1.00	1.00
ATOM	1881	C5'	URI	59	-10.092	3.219	-5.675	1.00	1.00
ATOM	1882	H5'	URI	59	-10.760	3.809	-6.304	1.00	0.00
ATOM	1883	H5''	URI	59	-10.547	2.245	-5.496	1.00	0.00
ATOM	1884	C4'	URI	59	-8.778	3.024	-6.390	1.00	1.00
ATOM	1885	H4'	URI	59	-8.965	2.372	-7.245	1.00	0.00
ATOM	1886	O4'	URI	59	-8.245	4.326	-6.760	1.00	1.00
ATOM	1887	C1'	URI	59	-6.835	4.329	-6.613	1.00	1.00
ATOM	1888	H1'	URI	59	-6.417	4.656	-7.566	1.00	0.00
ATOM	1889	N1	URI	59	-6.469	5.318	-5.589	1.00	1.00
ATOM	1890	C6	URI	59	-7.424	6.084	-4.956	1.00	1.00
ATOM	1891	H6	URI	59	-8.470	5.944	-5.225	1.00	0.00
ATOM	1892	C2	URI	59	-5.126	5.454	-5.281	1.00	1.00
ATOM	1893	O2	URI	59	-4.255	4.795	-5.819	1.00	1.00
ATOM	1894	N3	URI	59	-4.845	6.393	-4.319	1.00	1.00
ATOM	1895	H3	URI	59	-3.872	6.512	-4.077	1.00	0.00
ATOM	1896	C4	URI	59	-5.748	7.190	-3.648	1.00	1.00
ATOM	1897	O4	URI	59	-5.338	7.990	-2.805	1.00	1.00
ATOM	1898	C5	URI	59	-7.111	6.989	-4.022	1.00	1.00
ATOM	1899	H5	URI	59	-7.901	7.572	-3.546	1.00	0.00
ATOM	1900	C2'	URI	59	-6.422	2.901	-6.263	1.00	1.00
ATOM	1901	H2'	URI	59	-5.581	2.897	-5.565	1.00	0.00
ATOM	1902	O2'	URI	59	-6.137	2.185	-7.449	1.00	1.00
ATOM	1903	HO2'	URI	59	-6.625	1.361	-7.409	1.00	0.00
ATOM	1904	C3'	URI	59	-7.680	2.396	-5.571	1.00	1.00
ATOM	1905	H3'	URI	59	-7.732	2.678	-4.520	1.00	0.00
ATOM	1906	O3'	URI	59	-7.764	0.977	-5.610	1.00	1.00
ATOM	1907	P	CYT	60	-7.364	0.116	-4.312	1.00	1.00
ATOM	1908	O1P	CYT	60	-7.404	-1.317	-4.698	1.00	1.00
ATOM	1909	O2P	CYT	60	-8.181	0.591	-3.168	1.00	1.00
ATOM	1910	O5'	CYT	60	-5.846	0.517	-4.036	1.00	1.00
ATOM	1911	C5'	CYT	60	-4.819	0.215	-4.978	1.00	1.00
ATOM	1912	H5'	CYT	60	-5.033	0.710	-5.926	1.00	0.00
ATOM	1913	H5''	CYT	60	-4.770	-0.859	-5.144	1.00	0.00
ATOM	1914	C4'	CYT	60	-3.484	0.692	-4.460	1.00	1.00
ATOM	1915	H4'	CYT	60	-2.737	0.458	-5.220	1.00	0.00
ATOM	1916	O4'	CYT	60	-3.577	2.112	-4.155	1.00	1.00

ATOM	1917	C1'	CYT	60	-3.230	2.336	-2.804	1.00	1.00
ATOM	1918	H1'	CYT	60	-2.185	2.653	-2.789	1.00	0.00
ATOM	1919	N1	CYT	60	-4.064	3.437	-2.284	1.00	1.00
ATOM	1920	C6	CYT	60	-5.426	3.342	-2.292	1.00	1.00
ATOM	1921	H6	CYT	60	-5.900	2.444	-2.686	1.00	0.00
ATOM	1922	C2	CYT	60	-3.439	4.586	-1.778	1.00	1.00
ATOM	1923	O2	CYT	60	-2.199	4.645	-1.783	1.00	1.00
ATOM	1924	N3	CYT	60	-4.199	5.596	-1.300	1.00	1.00
ATOM	1925	C4	CYT	60	-5.530	5.493	-1.313	1.00	1.00
ATOM	1926	N4	CYT	60	-6.242	6.514	-0.830	1.00	1.00
ATOM	1927	H42	CYT	60	-7.251	6.466	-0.825	1.00	0.00
ATOM	1928	H41	CYT	60	-5.772	7.331	-0.474	1.00	0.00
ATOM	1929	C5	CYT	60	-6.191	4.336	-1.821	1.00	1.00
ATOM	1930	H5	CYT	60	-7.279	4.261	-1.826	1.00	0.00
ATOM	1931	C2'	CYT	60	-3.442	1.013	-2.077	1.00	1.00
ATOM	1932	H2'	CYT	60	-4.494	0.870	-1.820	1.00	0.00
ATOM	1933	O2'	CYT	60	-2.597	0.954	-0.942	1.00	1.00
ATOM	1934	HO2'	CYT	60	-3.014	0.373	-0.307	1.00	0.00
ATOM	1935	C3'	CYT	60	-3.024	0.026	-3.160	1.00	1.00
ATOM	1936	H3'	CYT	60	-3.477	-0.957	-3.032	1.00	0.00
ATOM	1937	O3'	CYT	60	-1.616	-0.178	-3.161	1.00	1.00
ATOM	1938	P	CYT	61	-1.014	-1.601	-3.614	1.00	1.00
ATOM	1939	O1P	CYT	61	0.464	-1.456	-3.679	1.00	1.00
ATOM	1940	O2P	CYT	61	-1.759	-2.065	-4.809	1.00	1.00
ATOM	1941	O5'	CYT	61	-1.364	-2.567	-2.397	1.00	1.00
ATOM	1942	C5'	CYT	61	-0.708	-2.428	-1.140	1.00	1.00
ATOM	1943	H5'	CYT	61	-0.906	-1.436	-0.733	1.00	0.00
ATOM	1944	H5''	CYT	61	0.369	-2.546	-1.274	1.00	0.00
ATOM	1945	C4'	CYT	61	-1.212	-3.476	-0.172	1.00	1.00
ATOM	1946	H4'	CYT	61	-0.400	-3.715	0.518	1.00	0.00
ATOM	1947	O4'	CYT	61	-2.403	-2.975	0.489	1.00	1.00
ATOM	1948	C1'	CYT	61	-3.320	-4.038	0.700	1.00	1.00
ATOM	1949	H1'	CYT	61	-3.541	-4.062	1.768	1.00	0.00
ATOM	1950	N1	CYT	61	-4.571	-3.734	-0.015	1.00	1.00
ATOM	1951	C6	CYT	61	-4.635	-2.711	-0.918	1.00	1.00
ATOM	1952	H6	CYT	61	-3.747	-2.109	-1.112	1.00	0.00
ATOM	1953	C2	CYT	61	-5.701	-4.515	0.245	1.00	1.00
ATOM	1954	O2	CYT	61	-5.614	-5.439	1.069	1.00	1.00
ATOM	1955	N3	CYT	61	-6.855	-4.246	-0.405	1.00	1.00
ATOM	1956	C4	CYT	61	-6.907	-3.244	-1.286	1.00	1.00
ATOM	1957	N4	CYT	61	-8.068	-3.016	-1.906	1.00	1.00
ATOM	1958	H42	CYT	61	-8.142	-2.268	-2.580	1.00	0.00
ATOM	1959	H41	CYT	61	-8.873	-3.592	-1.698	1.00	0.00
ATOM	1960	C5	CYT	61	-5.771	-2.433	-1.571	1.00	1.00
ATOM	1961	H5	CYT	61	-5.825	-1.617	-2.292	1.00	0.00
ATOM	1962	C2'	CYT	61	-2.640	-5.324	0.223	1.00	1.00
ATOM	1963	H2'	CYT	61	-3.360	-5.991	-0.258	1.00	0.00
ATOM	1964	O2'	CYT	61	-1.980	-5.941	1.312	1.00	1.00
ATOM	1965	HO2'	CYT	61	-2.655	-6.321	1.875	1.00	0.00
ATOM	1966	C3'	CYT	61	-1.663	-4.777	-0.807	1.00	1.00
ATOM	1967	H3'	CYT	61	-2.118	-4.617	-1.785	1.00	0.00
ATOM	1968	O3'	CYT	61	-0.568	-5.662	-1.015	1.00	1.00
ATOM	1969	P	CYT	62	-0.588	-6.672	-2.263	1.00	1.00
ATOM	1970	O1P	CYT	62	0.750	-7.315	-2.334	1.00	1.00
ATOM	1971	O2P	CYT	62	-1.115	-5.944	-3.445	1.00	1.00
ATOM	1972	O5'	CYT	62	-1.648	-7.783	-1.844	1.00	1.00
ATOM	1973	C5'	CYT	62	-1.392	-8.665	-0.753	1.00	1.00

ATOM	1974	H5'	CYT	62	-1.249	-8.088	0.161	1.00	0.00
ATOM	1975	H5''	CYT	62	-0.492	-9.243	-0.953	1.00	0.00
ATOM	1976	C4'	CYT	62	-2.551	-9.615	-0.568	1.00	1.00
ATOM	1977	H4'	CYT	62	-2.252	-10.356	0.172	1.00	0.00
ATOM	1978	O4'	CYT	62	-3.729	-8.857	-0.186	1.00	1.00
ATOM	1979	C1'	CYT	62	-4.889	-9.465	-0.733	1.00	1.00
ATOM	1980	H1'	CYT	62	-5.557	-9.683	0.103	1.00	0.00
ATOM	1981	N1	CYT	62	-5.553	-8.492	-1.617	1.00	0.00
ATOM	1982	C6	CYT	62	-4.856	-7.448	-2.154	1.00	0.00
ATOM	1983	H6	CYT	62	-3.797	-7.335	-1.928	1.00	0.00
ATOM	1984	C2	CYT	62	-6.916	-8.653	-1.900	1.00	0.00
ATOM	1985	O2	CYT	62	-7.523	-9.610	-1.398	1.00	0.00
ATOM	1986	N3	CYT	62	-7.530	-7.764	-2.712	1.00	0.00
ATOM	1987	C4	CYT	62	-6.839	-6.747	-3.233	1.00	0.00
ATOM	1988	N4	CYT	62	-7.487	-5.895	-4.029	1.00	0.00
ATOM	1989	H42	CYT	62	-6.995	-5.115	-4.439	1.00	0.00
ATOM	1990	H41	CYT	62	-8.470	-6.029	-4.220	1.00	0.00
ATOM	1991	C5	CYT	62	-5.454	-6.560	-2.960	1.00	0.00
ATOM	1992	H5	CYT	62	-4.899	-5.724	-3.391	1.00	0.00
ATOM	1993	C2'	CYT	62	-4.437	-10.735	-1.455	1.00	1.00
ATOM	1994	H2'	CYT	62	-5.019	-10.899	-2.366	1.00	0.00
ATOM	1995	O2'	CYT	62	-4.502	-11.836	-0.567	1.00	1.00
ATOM	1996	HO2'	CYT	62	-4.873	-11.511	0.255	1.00	0.00
ATOM	1997	C3'	CYT	62	-3.002	-10.371	-1.814	1.00	1.00
ATOM	1998	H3'	CYT	62	-2.928	-9.755	-2.709	1.00	0.00
ATOM	1999	O3'	CYT	62	-2.208	-11.526	-2.052	1.00	1.00
ATOM	2000	P	GUA	63	-2.018	-12.065	-3.555	1.00	1.00
ATOM	2001	O1P	GUA	63	-1.035	-13.176	-3.510	1.00	1.00
ATOM	2002	O2P	GUA	63	-1.766	-10.898	-4.440	1.00	1.00
ATOM	2003	O5'	GUA	63	-3.440	-12.679	-3.929	1.00	1.00
ATOM	2004	C5'	GUA	63	-3.938	-13.827	-3.253	1.00	1.00
ATOM	2005	H5'	GUA	63	-3.945	-13.647	-2.176	1.00	0.00
ATOM	2006	H5''	GUA	63	-3.301	-14.685	-3.460	1.00	0.00
ATOM	2007	C4'	GUA	63	-5.342	-14.132	-3.713	1.00	1.00
ATOM	2008	H4'	GUA	63	-5.638	-15.076	-3.256	1.00	0.00
ATOM	2009	O4'	GUA	63	-6.210	-13.019	-3.359	1.00	1.00
ATOM	2010	C1'	GUA	63	-7.276	-12.930	-4.287	1.00	1.00
ATOM	2011	H1'	GUA	63	-8.202	-13.057	-3.726	1.00	0.00
ATOM	2012	N9	GUA	63	-7.272	-11.591	-4.867	1.00	0.00
ATOM	2013	C4	GUA	63	-8.333	-10.954	-5.468	1.00	0.00
ATOM	2014	N3	GUA	63	-9.574	-11.457	-5.626	1.00	0.00
ATOM	2015	C2	GUA	63	-10.378	-10.608	-6.242	1.00	0.00
ATOM	2016	N2	GUA	63	-11.653	-10.951	-6.477	1.00	0.00
ATOM	2017	H22	GUA	63	-11.994	-11.855	-6.184	1.00	0.00
ATOM	2018	H21	GUA	63	-12.273	-10.306	-6.947	1.00	0.00
ATOM	2019	N1	GUA	63	-10.002	-9.356	-6.674	1.00	0.00
ATOM	2020	H1	GUA	63	-10.697	-8.784	-7.134	1.00	0.00
ATOM	2021	C6	GUA	63	-8.723	-8.824	-6.517	1.00	0.00
ATOM	2022	O6	GUA	63	-8.476	-7.688	-6.940	1.00	0.00
ATOM	2023	C5	GUA	63	-7.851	-9.726	-5.858	1.00	0.00
ATOM	2024	N7	GUA	63	-6.514	-9.589	-5.510	1.00	0.00
ATOM	2025	C8	GUA	63	-6.216	-10.717	-4.926	1.00	0.00
ATOM	2026	H8	GUA	63	-5.237	-10.939	-4.527	1.00	0.00
ATOM	2027	C2'	GUA	63	-7.066	-14.042	-5.311	1.00	1.00
ATOM	2028	H2'	GUA	63	-7.331	-13.708	-6.319	1.00	0.00
ATOM	2029	O2'	GUA	63	-7.790	-15.194	-4.922	1.00	1.00
ATOM	2030	HO2'	GUA	63	-8.036	-15.078	-4.004	1.00	0.00

ATOM	2031	C3'	GUA	63	-5.560	-14.243	-5.206	1.00	1.00
ATOM	2032	H3'	GUA	63	-4.993	-13.497	-5.762	1.00	0.00
ATOM	2033	O3'	GUA	63	-5.162	-15.520	-5.704	1.00	1.00
ATOM	2034	P	URI	64	-4.630	-15.667	-7.216	1.00	1.00
ATOM	2035	O1P	URI	64	-4.230	-17.085	-7.409	1.00	1.00
ATOM	2036	O2P	URI	64	-3.644	-14.587	-7.473	1.00	1.00
ATOM	2037	O5'	URI	64	-5.920	-15.391	-8.106	1.00	1.00
ATOM	2038	C5'	URI	64	-7.033	-16.278	-8.070	1.00	1.00
ATOM	2039	H5'	URI	64	-7.344	-16.437	-7.036	1.00	0.00
ATOM	2040	H5''	URI	64	-6.756	-17.236	-8.508	1.00	0.00
ATOM	2041	C4'	URI	64	-8.189	-15.693	-8.851	1.00	1.00
ATOM	2042	H4'	URI	64	-8.975	-16.445	-8.897	1.00	0.00
ATOM	2043	O4'	URI	64	-8.611	-14.455	-8.216	1.00	1.00
ATOM	2044	C1'	URI	64	-9.079	-13.547	-9.200	1.00	1.00
ATOM	2045	H1'	URI	64	-10.097	-13.267	-8.920	1.00	0.00
ATOM	2046	N1	URI	64	-8.237	-12.339	-9.160	1.00	0.00
ATOM	2047	C6	URI	64	-6.964	-12.376	-8.639	1.00	0.00
ATOM	2048	H6	URI	64	-6.580	-13.319	-8.254	1.00	0.00
ATOM	2049	C2	URI	64	-8.768	-11.164	-9.669	1.00	0.00
ATOM	2050	O2	URI	64	-9.891	-11.095	-10.136	1.00	0.00
ATOM	2051	N3	URI	64	-7.933	-10.075	-9.603	1.00	0.00
ATOM	2052	H3	URI	64	-8.298	-9.206	-9.966	1.00	0.00
ATOM	2053	C4	URI	64	-6.653	-10.042	-9.096	1.00	0.00
ATOM	2054	O4	URI	64	-6.025	-8.981	-9.107	1.00	0.00
ATOM	2055	C5	URI	64	-6.179	-11.293	-8.593	1.00	0.00
ATOM	2056	H5	URI	64	-5.177	-11.366	-8.169	1.00	0.00
ATOM	2057	C2'	URI	64	-9.029	-14.279	-10.543	1.00	1.00
ATOM	2058	H2'	URI	64	-8.765	-13.597	-11.355	1.00	0.00
ATOM	2059	O2'	URI	64	-10.261	-14.937	-10.770	1.00	1.00
ATOM	2060	HO2'	URI	64	-10.324	-15.650	-10.133	1.00	0.00
ATOM	2061	C3'	URI	64	-7.890	-15.256	-10.289	1.00	1.00
ATOM	2062	H3'	URI	64	-6.907	-14.798	-10.371	1.00	0.00
ATOM	2063	O3'	URI	64	-7.910	-16.338	-11.214	1.00	1.00
ATOM	2064	P	CYT	65	-7.154	-16.193	-12.624	1.00	1.00
ATOM	2065	O1P	CYT	65	-7.150	-17.532	-13.268	1.00	1.00
ATOM	2066	O2P	CYT	65	-5.868	-15.486	-12.395	1.00	1.00
ATOM	2067	O5'	CYT	65	-8.105	-15.239	-13.473	1.00	1.00
ATOM	2068	C5'	CYT	65	-9.428	-15.636	-13.824	1.00	1.00
ATOM	2069	H5'	CYT	65	-9.958	-15.991	-12.936	1.00	0.00
ATOM	2070	H5''	CYT	65	-9.384	-16.443	-14.554	1.00	0.00
ATOM	2071	C4'	CYT	65	-10.180	-14.469	-14.423	1.00	1.00
ATOM	2072	H4'	CYT	65	-11.163	-14.832	-14.726	1.00	0.00
ATOM	2073	O4'	CYT	65	-10.236	-13.393	-13.446	1.00	1.00
ATOM	2074	C1'	CYT	65	-10.331	-12.146	-14.111	1.00	1.00
ATOM	2075	H1'	CYT	65	-11.264	-11.680	-13.788	1.00	0.00
ATOM	2076	N1	CYT	65	-9.215	-11.287	-13.673	1.00	0.00
ATOM	2077	C6	CYT	65	-8.060	-11.830	-13.178	1.00	0.00
ATOM	2078	H6	CYT	65	-7.966	-12.914	-13.102	1.00	0.00
ATOM	2079	C2	CYT	65	-9.356	-9.901	-13.773	1.00	0.00
ATOM	2080	O2	CYT	65	-10.412	-9.438	-14.225	1.00	0.00
ATOM	2081	N3	CYT	65	-8.337	-9.104	-13.377	1.00	0.00
ATOM	2082	C4	CYT	65	-7.217	-9.642	-12.895	1.00	0.00
ATOM	2083	N4	CYT	65	-6.238	-8.818	-12.516	1.00	0.00
ATOM	2084	H42	CYT	65	-5.374	-9.193	-12.147	1.00	0.00
ATOM	2085	H41	CYT	65	-6.361	-7.819	-12.596	1.00	0.00
ATOM	2086	C5	CYT	65	-7.046	-11.053	-12.779	1.00	0.00
ATOM	2087	H5	CYT	65	-6.125	-11.483	-12.385	1.00	0.00

ATOM	2088	C2'	CYT	65	-10.321	-12.446	-15.607	1.00	1.00
ATOM	2089	H2'	CYT	65	-9.763	-11.684	-16.158	1.00	0.00
ATOM	2090	O2'	CYT	65	-11.650	-12.584	-16.074	1.00	1.00
ATOM	2091	HO2'	CYT	65	-11.837	-13.521	-16.125	1.00	0.00
ATOM	2092	C3'	CYT	65	-9.561	-13.767	-15.625	1.00	1.00
ATOM	2093	H3'	CYT	65	-8.485	-13.636	-15.519	1.00	0.00
ATOM	2094	O3'	CYT	65	-9.769	-14.476	-16.843	1.00	1.00
ATOM	2095	P	ADE	66	-8.802	-14.210	-18.105	1.00	1.00
ATOM	2096	O1P	ADE	66	-9.194	-15.163	-19.174	1.00	1.00
ATOM	2097	O2P	ADE	66	-7.400	-14.187	-17.617	1.00	1.00
ATOM	2098	O5'	ADE	66	-9.189	-12.741	-18.582	1.00	1.00
ATOM	2099	C5'	ADE	66	-10.505	-12.445	-19.040	1.00	1.00
ATOM	2100	H5'	ADE	66	-11.232	-12.730	-18.279	1.00	0.00
ATOM	2101	H5''	ADE	66	-10.708	-13.006	-19.953	1.00	0.00
ATOM	2102	C4'	ADE	66	-10.633	-10.966	-19.324	1.00	1.00
ATOM	2103	H4'	ADE	66	-11.621	-10.795	-19.755	1.00	0.00
ATOM	2104	O4'	ADE	66	-10.405	-10.230	-18.092	1.00	1.00
ATOM	2105	C1'	ADE	66	-9.868	-8.954	-18.386	1.00	1.00
ATOM	2106	H1'	ADE	66	-10.574	-8.213	-18.011	1.00	0.00
ATOM	2107	N9	ADE	66	-8.613	-8.797	-17.654	1.00	1.00
ATOM	2108	C4	ADE	66	-7.994	-7.610	-17.344	1.00	1.00
ATOM	2109	N3	ADE	66	-8.409	-6.370	-17.649	1.00	1.00
ATOM	2110	C2	ADE	66	-7.555	-5.461	-17.185	1.00	1.00
ATOM	2111	H2	ADE	66	-7.820	-4.424	-17.392	1.00	0.00
ATOM	2112	N1	ADE	66	-6.415	-5.639	-16.507	1.00	1.00
ATOM	2113	C6	ADE	66	-6.024	-6.899	-16.218	1.00	1.00
ATOM	2114	N6	ADE	66	-4.890	-7.076	-15.539	1.00	1.00
ATOM	2115	H62	ADE	66	-4.578	-8.010	-15.309	1.00	0.00
ATOM	2116	H61	ADE	66	-4.340	-6.279	-15.256	1.00	0.00
ATOM	2117	C5	ADE	66	-6.848	-7.954	-16.652	1.00	1.00
ATOM	2118	N7	ADE	66	-6.745	-9.332	-16.527	1.00	1.00
ATOM	2119	C8	ADE	66	-7.813	-9.785	-17.134	1.00	1.00
ATOM	2120	H8	ADE	66	-8.042	-10.836	-17.220	1.00	0.00
ATOM	2121	C2'	ADE	66	-9.704	-8.877	-19.903	1.00	1.00
ATOM	2122	H2'	ADE	66	-8.779	-8.364	-20.174	1.00	0.00
ATOM	2123	O2'	ADE	66	-10.844	-8.266	-20.475	1.00	1.00
ATOM	2124	HO2'	ADE	66	-11.335	-7.856	-19.762	1.00	0.00
ATOM	2125	C3'	ADE	66	-9.605	-10.354	-20.256	1.00	1.00
ATOM	2126	H3'	ADE	66	-8.608	-10.763	-20.099	1.00	0.00
ATOM	2127	O3'	ADE	66	-9.926	-10.591	-21.620	1.00	1.00
ATOM	2128	P	URI	67	-8.749	-10.645	-22.714	1.00	1.00
ATOM	2129	O1P	URI	67	-9.363	-11.054	-24.004	1.00	1.00
ATOM	2130	O2P	URI	67	-7.625	-11.436	-22.154	1.00	1.00
ATOM	2131	O5'	URI	67	-8.281	-9.128	-22.848	1.00	1.00
ATOM	2132	C5'	URI	67	-9.160	-8.136	-23.360	1.00	1.00
ATOM	2133	H5'	URI	67	-10.102	-8.158	-22.812	1.00	0.00
ATOM	2134	H5''	URI	67	-9.360	-8.323	-24.413	1.00	0.00
ATOM	2135	C4'	URI	67	-8.538	-6.766	-23.216	1.00	1.00
ATOM	2136	H4'	URI	67	-9.195	-6.054	-23.717	1.00	0.00
ATOM	2137	O4'	URI	67	-8.338	-6.482	-21.807	1.00	1.00
ATOM	2138	C1'	URI	67	-7.201	-5.648	-21.642	1.00	1.00
ATOM	2139	H1'	URI	67	-7.544	-4.739	-21.146	1.00	0.00
ATOM	2140	N1	URI	67	-6.244	-6.322	-20.751	1.00	0.00
ATOM	2141	C6	URI	67	-6.241	-7.691	-20.605	1.00	0.00
ATOM	2142	H6	URI	67	-6.969	-8.281	-21.163	1.00	0.00
ATOM	2143	C2	URI	67	-5.342	-5.530	-20.062	1.00	0.00
ATOM	2144	O2	URI	67	-5.316	-4.317	-20.165	1.00	0.00

ATOM	2145	N3	URI	67	-4.476	-6.214	-19.245	1.00	0.00
ATOM	2146	H3	URI	67	-3.806	-5.658	-18.731	1.00	0.00
ATOM	2147	C4	URI	67	-4.419	-7.578	-19.054	1.00	0.00
ATOM	2148	O4	URI	67	-3.578	-8.047	-18.285	1.00	0.00
ATOM	2149	C5	URI	67	-5.382	-8.324	-19.801	1.00	0.00
ATOM	2150	H5	URI	67	-5.413	-9.411	-19.717	1.00	0.00
ATOM	2151	C2'	URI	67	-6.646	-5.363	-23.039	1.00	1.00
ATOM	2152	H2'	URI	67	-5.553	-5.342	-23.033	1.00	0.00
ATOM	2153	O2'	URI	67	-7.202	-4.158	-23.533	1.00	1.00
ATOM	2154	HO2'	URI	67	-8.091	-4.353	-23.821	1.00	0.00
ATOM	2155	C3'	URI	67	-7.139	-6.584	-23.805	1.00	1.00
ATOM	2156	H3'	URI	67	-6.514	-7.462	-23.653	1.00	0.00
ATOM	2157	O3'	URI	67	-7.178	-6.343	-25.213	1.00	1.00
ATOM	2158	P	CYT	68	-5.925	-6.754	-26.133	1.00	1.00
ATOM	2159	O1P	CYT	68	-6.334	-6.568	-27.547	1.00	1.00
ATOM	2160	O2P	CYT	68	-5.427	-8.078	-25.681	1.00	1.00
ATOM	2161	O5'	CYT	68	-4.820	-5.659	-25.789	1.00	1.00
ATOM	2162	C5'	CYT	68	-5.011	-4.293	-26.141	1.00	1.00
ATOM	2163	H5'	CYT	68	-5.952	-3.934	-25.721	1.00	0.00
ATOM	2164	H5''	CYT	68	-5.047	-4.195	-27.229	1.00	0.00
ATOM	2165	C4'	CYT	68	-3.875	-3.455	-25.602	1.00	1.00
ATOM	2166	H4'	CYT	68	-3.991	-2.444	-25.996	1.00	0.00
ATOM	2167	O4'	CYT	68	-3.890	-3.516	-24.150	1.00	1.00
ATOM	2168	C1'	CYT	68	-2.570	-3.403	-23.649	1.00	1.00
ATOM	2169	H1'	CYT	68	-2.550	-2.533	-22.993	1.00	0.00
ATOM	2170	N1	CYT	68	-2.274	-4.595	-22.835	1.00	0.00
ATOM	2171	C6	CYT	68	-2.943	-5.771	-23.044	1.00	0.00
ATOM	2172	H6	CYT	68	-3.703	-5.825	-23.823	1.00	0.00
ATOM	2173	C2	CYT	68	-1.295	-4.510	-21.841	1.00	0.00
ATOM	2174	O2	CYT	68	-0.706	-3.432	-21.674	1.00	0.00
ATOM	2175	N3	CYT	68	-1.018	-5.600	-21.089	1.00	0.00
ATOM	2176	C4	CYT	68	-1.678	-6.741	-21.301	1.00	0.00
ATOM	2177	N4	CYT	68	-1.372	-7.791	-20.537	1.00	0.00
ATOM	2178	H42	CYT	68	-1.849	-8.670	-20.670	1.00	0.00
ATOM	2179	H41	CYT	68	-0.660	-7.706	-19.822	1.00	0.00
ATOM	2180	C5	CYT	68	-2.680	-6.858	-22.307	1.00	0.00
ATOM	2181	H5	CYT	68	-3.212	-7.795	-22.472	1.00	0.00
ATOM	2182	C2'	CYT	68	-1.642	-3.242	-24.854	1.00	1.00
ATOM	2183	H2'	CYT	68	-0.702	-3.777	-24.700	1.00	0.00
ATOM	2184	O2'	CYT	68	-1.440	-1.867	-25.113	1.00	1.00
ATOM	2185	HO2'	CYT	68	-2.281	-1.501	-25.383	1.00	0.00
ATOM	2186	C3'	CYT	68	-2.459	-3.919	-25.945	1.00	1.00
ATOM	2187	H3'	CYT	68	-2.372	-5.006	-25.930	1.00	0.00
ATOM	2188	O3'	CYT	68	-2.049	-3.503	-27.242	1.00	1.00
ATOM	2189	P	ADE	69	-0.973	-4.377	-28.055	1.00	1.00
ATOM	2190	O1P	ADE	69	-0.857	-3.787	-29.411	1.00	1.00
ATOM	2191	O2P	ADE	69	-1.328	-5.811	-27.904	1.00	1.00
ATOM	2192	O5'	ADE	69	0.395	-4.114	-27.283	1.00	1.00
ATOM	2193	C5'	ADE	69	0.996	-2.825	-27.283	1.00	1.00
ATOM	2194	H5'	ADE	69	0.282	-2.085	-26.920	1.00	0.00
ATOM	2195	H5''	ADE	69	1.298	-2.559	-28.293	1.00	0.00
ATOM	2196	C4'	ADE	69	2.210	-2.820	-26.388	1.00	1.00
ATOM	2197	H4'	ADE	69	2.701	-1.851	-26.504	1.00	0.00
ATOM	2198	O4'	ADE	69	1.796	-3.099	-25.024	1.00	1.00
ATOM	2199	C1'	ADE	69	2.862	-3.701	-24.309	1.00	1.00
ATOM	2200	H1'	ADE	69	3.123	-3.025	-23.494	1.00	0.00
ATOM	2201	N9	ADE	69	2.378	-4.953	-23.728	1.00	0.00

ATOM	2202	C4	ADE	69	2.919	-5.612	-22.648	1.00	0.00
ATOM	2203	N3	ADE	69	3.986	-5.245	-21.918	1.00	0.00
ATOM	2204	C2	ADE	69	4.216	-6.129	-20.949	1.00	0.00
ATOM	2205	H2	ADE	69	5.069	-5.906	-20.306	1.00	0.00
ATOM	2206	N1	ADE	69	3.552	-7.253	-20.650	1.00	0.00
ATOM	2207	C6	ADE	69	2.484	-7.591	-21.403	1.00	0.00
ATOM	2208	N6	ADE	69	1.821	-8.712	-21.107	1.00	0.00
ATOM	2209	H62	ADE	69	1.020	-8.987	-21.658	1.00	0.00
ATOM	2210	H61	ADE	69	2.120	-9.285	-20.331	1.00	0.00
ATOM	2211	C5	ADE	69	2.134	-6.736	-22.464	1.00	0.00
ATOM	2212	N7	ADE	69	1.119	-6.787	-23.410	1.00	0.00
ATOM	2213	C8	ADE	69	1.308	-5.711	-24.131	1.00	0.00
ATOM	2214	H8	ADE	69	0.678	-5.442	-24.967	1.00	0.00
ATOM	2215	C2'	ADE	69	4.016	-3.887	-25.296	1.00	1.00
ATOM	2216	H2'	ADE	69	4.515	-4.845	-25.137	1.00	0.00
ATOM	2217	O2'	ADE	69	4.904	-2.793	-25.195	1.00	1.00
ATOM	2218	HO2'	ADE	69	5.196	-2.577	-26.081	1.00	0.00
ATOM	2219	C3'	ADE	69	3.264	-3.900	-26.622	1.00	1.00
ATOM	2220	H3'	ADE	69	2.814	-4.866	-26.845	1.00	0.00
ATOM	2221	O3'	ADE	69	4.125	-3.584	-27.717	1.00	1.00
ATOM	2222	P	CYT	70	4.864	-4.759	-28.532	1.00	1.00
ATOM	2223	O1P	CYT	70	5.462	-4.148	-29.747	1.00	1.00
ATOM	2224	O2P	CYT	70	3.923	-5.900	-28.673	1.00	1.00
ATOM	2225	O5'	CYT	70	6.053	-5.206	-27.569	1.00	1.00
ATOM	2226	C5'	CYT	70	7.135	-4.326	-27.293	1.00	1.00
ATOM	2227	H5'	CYT	70	6.751	-3.369	-26.937	1.00	0.00
ATOM	2228	H5''	CYT	70	7.716	-4.161	-28.200	1.00	0.00
ATOM	2229	C4'	CYT	70	8.033	-4.924	-26.236	1.00	1.00
ATOM	2230	H4'	CYT	70	8.901	-4.272	-26.130	1.00	0.00
ATOM	2231	O4'	CYT	70	7.274	-5.081	-25.005	1.00	1.00
ATOM	2232	C1'	CYT	70	7.752	-6.209	-24.290	1.00	1.00
ATOM	2233	H1'	CYT	70	8.042	-5.859	-23.297	1.00	0.00
ATOM	2234	N1	CYT	70	6.645	-7.169	-24.136	1.00	1.00
ATOM	2235	C6	CYT	70	5.608	-7.186	-25.028	1.00	1.00
ATOM	2236	H6	CYT	70	5.602	-6.486	-25.862	1.00	0.00
ATOM	2237	C2	CYT	70	6.667	-8.064	-23.062	1.00	1.00
ATOM	2238	O2	CYT	70	7.620	-8.023	-22.269	1.00	1.00
ATOM	2239	N3	CYT	70	5.654	-8.949	-22.918	1.00	1.00
ATOM	2240	C4	CYT	70	4.648	-8.960	-23.795	1.00	1.00
ATOM	2241	N4	CYT	70	3.671	-9.851	-23.613	1.00	1.00
ATOM	2242	H42	CYT	70	2.894	-9.886	-24.258	1.00	0.00
ATOM	2243	H41	CYT	70	3.707	-10.490	-22.832	1.00	0.00
ATOM	2244	C5	CYT	70	4.598	-8.057	-24.898	1.00	1.00
ATOM	2245	H5	CYT	70	3.772	-8.075	-25.607	1.00	0.00
ATOM	2246	C2'	CYT	70	8.937	-6.768	-25.077	1.00	1.00
ATOM	2247	H2'	CYT	70	8.972	-7.858	-25.012	1.00	0.00
ATOM	2248	O2'	CYT	70	10.133	-6.163	-24.626	1.00	1.00
ATOM	2249	HO2'	CYT	70	9.944	-5.241	-24.462	1.00	0.00
ATOM	2250	C3'	CYT	70	8.568	-6.337	-26.489	1.00	1.00
ATOM	2251	H3'	CYT	70	7.824	-6.984	-26.952	1.00	0.00
ATOM	2252	O3'	CYT	70	9.698	-6.340	-27.354	1.00	1.00
ATOM	2253	P	CYT	71	10.003	-7.629	-28.265	1.00	1.00
ATOM	2254	O1P	CYT	71	11.130	-7.278	-29.167	1.00	1.00
ATOM	2255	O2P	CYT	71	8.722	-8.108	-28.841	1.00	1.00
ATOM	2256	O5'	CYT	71	10.523	-8.719	-27.225	1.00	1.00
ATOM	2257	C5'	CYT	71	11.761	-8.544	-26.545	1.00	1.00
ATOM	2258	H5'	CYT	71	11.780	-7.568	-26.061	1.00	0.00

ATOM	2259	H5'	CYT	71	12.584	-8.603	-27.257	1.00	0.00
ATOM	2260	C4'	CYT	71	11.938	-9.621	-25.501	1.00	1.00
ATOM	2261	H4'	CYT	71	12.940	-9.515	-25.081	1.00	0.00
ATOM	2262	O4'	CYT	71	10.885	-9.500	-24.513	1.00	1.00
ATOM	2263	C1'	CYT	71	10.577	-10.781	-23.982	1.00	1.00
ATOM	2264	H1'	CYT	71	10.749	-10.725	-22.905	1.00	0.00
ATOM	2265	N1	CYT	71	9.144	-11.050	-24.209	1.00	0.00
ATOM	2266	C6	CYT	71	8.465	-10.415	-25.212	1.00	0.00
ATOM	2267	H6	CYT	71	8.990	-9.706	-25.852	1.00	0.00
ATOM	2268	C2	CYT	71	8.487	-11.968	-23.382	1.00	0.00
ATOM	2269	O2	CYT	71	9.127	-12.528	-22.480	1.00	0.00
ATOM	2270	N3	CYT	71	7.174	-12.218	-23.587	1.00	0.00
ATOM	2271	C4	CYT	71	6.520	-11.594	-24.568	1.00	0.00
ATOM	2272	N4	CYT	71	5.225	-11.871	-24.733	1.00	0.00
ATOM	2273	H42	CYT	71	4.700	-11.417	-25.466	1.00	0.00
ATOM	2274	H41	CYT	71	4.770	-12.539	-24.126	1.00	0.00
ATOM	2275	C5	CYT	71	7.165	-10.654	-25.425	1.00	0.00
ATOM	2276	H5	CYT	71	6.620	-10.151	-26.223	1.00	0.00
ATOM	2277	C2'	CYT	71	11.505	-11.794	-24.661	1.00	1.00
ATOM	2278	H2'	CYT	71	10.980	-12.732	-24.861	1.00	0.00
ATOM	2279	O2'	CYT	71	12.661	-11.982	-23.869	1.00	1.00
ATOM	2280	HO2'	CYT	71	13.367	-11.474	-24.268	1.00	0.00
ATOM	2281	C3'	CYT	71	11.817	-11.084	-25.974	1.00	1.00
ATOM	2282	H3'	CYT	71	11.032	-11.206	-26.720	1.00	0.00
ATOM	2283	O3'	CYT	71	13.013	-11.574	-26.563	1.00	1.00
ATOM	2284	P	CYT	72	12.937	-12.758	-27.645	1.00	1.00
ATOM	2285	O1P	CYT	72	14.310	-12.970	-28.171	1.00	1.00
ATOM	2286	O2P	CYT	72	11.828	-12.457	-28.589	1.00	1.00
ATOM	2287	O5'	CYT	72	12.532	-14.036	-26.790	1.00	1.00
ATOM	2288	C5'	CYT	72	13.416	-14.572	-25.811	1.00	1.00
ATOM	2289	H5'	CYT	72	13.730	-13.782	-25.128	1.00	0.00
ATOM	2290	H5''	CYT	72	14.296	-14.989	-26.298	1.00	0.00
ATOM	2291	C4'	CYT	72	12.725	-15.662	-25.029	1.00	1.00
ATOM	2292	H4'	CYT	72	13.461	-16.099	-24.351	1.00	0.00
ATOM	2293	O4'	CYT	72	11.572	-15.101	-24.348	1.00	1.00
ATOM	2294	C1'	CYT	72	10.571	-16.097	-24.201	1.00	1.00
ATOM	2295	H1'	CYT	72	10.382	-16.202	-23.132	1.00	0.00
ATOM	2296	N1	CYT	72	9.331	-15.622	-24.839	1.00	1.00
ATOM	2297	C6	CYT	72	9.360	-14.656	-25.806	1.00	1.00
ATOM	2298	H6	CYT	72	10.314	-14.226	-26.108	1.00	0.00
ATOM	2299	C2	CYT	72	8.113	-16.180	-24.437	1.00	1.00
ATOM	2300	O2	CYT	72	8.118	-17.056	-23.559	1.00	1.00
ATOM	2301	N3	CYT	72	6.969	-15.755	-25.016	1.00	1.00
ATOM	2302	C4	CYT	72	7.007	-14.811	-25.959	1.00	1.00
ATOM	2303	N4	CYT	72	5.852	-14.423	-26.503	1.00	1.00
ATOM	2304	H42	CYT	72	5.846	-13.711	-27.221	1.00	0.00
ATOM	2305	H41	CYT	72	4.983	-14.841	-26.198	1.00	0.00
ATOM	2306	C5	CYT	72	8.233	-14.225	-26.389	1.00	1.00
ATOM	2307	H5	CYT	72	8.253	-13.454	-27.159	1.00	0.00
ATOM	2308	C2'	CYT	72	11.121	-17.382	-24.818	1.00	1.00
ATOM	2309	H2'	CYT	72	10.336	-17.936	-25.336	1.00	0.00
ATOM	2310	O2'	CYT	72	11.756	-18.153	-23.817	1.00	1.00
ATOM	2311	HO2'	CYT	72	12.174	-17.544	-23.210	1.00	0.00
ATOM	2312	C3'	CYT	72	12.113	-16.815	-25.826	1.00	1.00
ATOM	2313	H3'	CYT	72	11.636	-16.467	-26.742	1.00	0.00
ATOM	2314	O3'	CYT	72	13.086	-17.785	-26.211	1.00	1.00
ATOM	2315	P	ADE	73	12.837	-18.697	-27.514	1.00	1.00

ATOM	2316	O1P	ADE	73	14.020	-19.581	-27.669	1.00	1.00
ATOM	2317	O2P	ADE	73	12.429	-17.810	-28.633	1.00	1.00
ATOM	2318	O5'	ADE	73	11.593	-19.605	-27.113	1.00	1.00
ATOM	2319	C5'	ADE	73	11.689	-20.558	-26.061	1.00	1.00
ATOM	2320	H5'	ADE	73	12.026	-20.067	-25.148	1.00	0.00
ATOM	2321	H5''	ADE	73	12.408	-21.332	-26.331	1.00	0.00
ATOM	2322	C4'	ADE	73	10.340	-21.196	-25.815	1.00	1.00
ATOM	2323	H4'	ADE	73	10.475	-21.983	-25.070	1.00	0.00
ATOM	2324	O4'	ADE	73	9.399	-20.165	-25.402	1.00	1.00
ATOM	2325	C1'	ADE	73	8.096	-20.503	-25.840	1.00	1.00
ATOM	2326	H1'	ADE	73	7.462	-20.555	-24.953	1.00	0.00
ATOM	2327	N9	ADE	73	7.601	-19.426	-26.695	1.00	1.00
ATOM	2328	C4	ADE	73	6.289	-19.182	-27.022	1.00	1.00
ATOM	2329	N3	ADE	73	5.206	-19.873	-26.624	1.00	1.00
ATOM	2330	C2	ADE	73	4.097	-19.346	-27.140	1.00	1.00
ATOM	2331	H2	ADE	73	3.170	-19.848	-26.866	1.00	0.00
ATOM	2332	N1	ADE	73	3.959	-18.284	-27.946	1.00	1.00
ATOM	2333	C6	ADE	73	5.068	-17.612	-28.326	1.00	1.00
ATOM	2334	N6	ADE	73	4.930	-16.557	-29.132	1.00	1.00
ATOM	2335	H62	ADE	73	5.746	-16.040	-29.430	1.00	0.00
ATOM	2336	H61	ADE	73	4.012	-16.275	-29.441	1.00	0.00
ATOM	2337	C5	ADE	73	6.306	-18.072	-27.847	1.00	1.00
ATOM	2338	N7	ADE	73	7.605	-17.625	-28.039	1.00	1.00
ATOM	2339	C8	ADE	73	8.335	-18.459	-27.337	1.00	1.00
ATOM	2340	H8	ADE	73	9.409	-18.393	-27.271	1.00	0.00
ATOM	2341	C2'	ADE	73	8.204	-21.849	-26.552	1.00	1.00
ATOM	2342	H2'	ADE	73	7.535	-21.893	-27.416	1.00	0.00
ATOM	2343	O2'	ADE	73	7.966	-22.897	-25.631	1.00	1.00
ATOM	2344	HO2'	ADE	73	7.255	-23.428	-25.984	1.00	0.00
ATOM	2345	C3'	ADE	73	9.654	-21.806	-27.017	1.00	1.00
ATOM	2346	H3'	ADE	73	9.796	-21.214	-27.918	1.00	0.00
ATOM	2347	O3'	ADE	73	10.150	-23.104	-27.311	1.00	1.00
ATOM	2348	P	CYT	74	10.211	-23.603	-28.836	1.00	1.00
ATOM	2349	O1P	CYT	74	10.763	-24.983	-28.832	1.00	1.00
ATOM	2350	O2P	CYT	74	10.874	-22.548	-29.646	1.00	1.00
ATOM	2351	O5'	CYT	74	8.682	-23.681	-29.272	1.00	1.00
ATOM	2352	C5'	CYT	74	7.801	-24.626	-28.676	1.00	1.00
ATOM	2353	H5'	CYT	74	7.769	-24.475	-27.599	1.00	0.00
ATOM	2354	H5''	CYT	74	8.149	-25.638	-28.884	1.00	0.00
ATOM	2355	C4'	CYT	74	6.410	-24.464	-29.244	1.00	1.00
ATOM	2356	H4'	CYT	74	5.802	-25.289	-28.867	1.00	0.00
ATOM	2357	O4'	CYT	74	5.900	-23.154	-28.875	1.00	1.00
ATOM	2358	C1'	CYT	74	5.073	-22.652	-29.911	1.00	1.00
ATOM	2359	H1'	CYT	74	4.091	-22.472	-29.470	1.00	0.00
ATOM	2360	N1	CYT	74	5.612	-21.357	-30.360	1.00	1.00
ATOM	2361	C6	CYT	74	6.926	-21.032	-30.162	1.00	1.00
ATOM	2362	H6	CYT	74	7.587	-21.745	-29.668	1.00	0.00
ATOM	2363	C2	CYT	74	4.753	-20.456	-30.992	1.00	1.00
ATOM	2364	O2	CYT	74	3.565	-20.777	-31.158	1.00	1.00
ATOM	2365	N3	CYT	74	5.234	-19.262	-31.407	1.00	1.00
ATOM	2366	C4	CYT	74	6.518	-18.956	-31.210	1.00	1.00
ATOM	2367	N4	CYT	74	6.949	-17.766	-31.637	1.00	1.00
ATOM	2368	H42	CYT	74	7.914	-17.502	-31.503	1.00	0.00
ATOM	2369	H41	CYT	74	6.310	-17.130	-32.090	1.00	0.00
ATOM	2370	C5	CYT	74	7.418	-19.855	-30.567	1.00	1.00
ATOM	2371	H5	CYT	74	8.465	-19.594	-30.413	1.00	0.00
ATOM	2372	C2'	CYT	74	5.025	-23.710	-31.015	1.00	1.00

ATOM	2373	H2'	CYT	74	5.049	-23.246	-32.004	1.00	0.00
ATOM	2374	O2'	CYT	74	3.884	-24.528	-30.835	1.00	1.00
ATOM	2375	HO2'	CYT	74	3.878	-24.811	-29.921	1.00	0.00
ATOM	2376	C3'	CYT	74	6.321	-24.469	-30.761	1.00	1.00
ATOM	2377	H3'	CYT	74	7.189	-23.988	-31.213	1.00	0.00
ATOM	2378	O3'	CYT	74	6.264	-25.792	-31.291	1.00	1.00
ATOM	2379	P	CYT	75	6.968	-26.129	-32.700	1.00	1.00
ATOM	2380	O1P	CYT	75	6.574	-27.510	-33.074	1.00	1.00
ATOM	2381	O2P	CYT	75	8.407	-25.779	-32.597	1.00	1.00
ATOM	2382	O5'	CYT	75	6.279	-25.123	-33.721	1.00	1.00
ATOM	2383	C5'	CYT	75	4.896	-25.236	-34.038	1.00	1.00
ATOM	2384	H5'	CYT	75	4.305	-25.170	-33.123	1.00	0.00
ATOM	2385	H5''	CYT	75	4.706	-26.197	-34.513	1.00	0.00
ATOM	2386	C4'	CYT	75	4.485	-24.128	-34.980	1.00	1.00
ATOM	2387	H4'	CYT	75	3.475	-24.347	-35.326	1.00	0.00
ATOM	2388	O4'	CYT	75	4.594	-22.854	-34.284	1.00	1.00
ATOM	2389	C1'	CYT	75	5.033	-21.853	-35.184	1.00	1.00
ATOM	2390	H1'	CYT	75	4.307	-21.039	-35.139	1.00	0.00
ATOM	2391	N1	CYT	75	6.333	-21.338	-34.724	1.00	1.00
ATOM	2392	C6	CYT	75	7.129	-22.076	-33.890	1.00	1.00
ATOM	2393	H6	CYT	75	6.794	-23.060	-33.560	1.00	0.00
ATOM	2394	C2	CYT	75	6.747	-20.077	-35.157	1.00	1.00
ATOM	2395	O2	CYT	75	6.006	-19.430	-35.913	1.00	1.00
ATOM	2396	N3	CYT	75	7.942	-19.595	-34.743	1.00	1.00
ATOM	2397	C4	CYT	75	8.711	-20.323	-33.930	1.00	1.00
ATOM	2398	N4	CYT	75	9.880	-19.808	-33.548	1.00	1.00
ATOM	2399	H42	CYT	75	10.487	-20.331	-32.934	1.00	0.00
ATOM	2400	H41	CYT	75	10.160	-18.891	-33.872	1.00	0.00
ATOM	2401	C5	CYT	75	8.313	-21.612	-33.472	1.00	1.00
ATOM	2402	H5	CYT	75	8.947	-22.197	-32.809	1.00	0.00
ATOM	2403	C2'	CYT	75	5.086	-22.501	-36.564	1.00	1.00
ATOM	2404	H2'	CYT	75	5.918	-22.106	-37.153	1.00	0.00
ATOM	2405	O2'	CYT	75	3.838	-22.340	-37.214	1.00	1.00
ATOM	2406	HO2'	CYT	75	3.903	-21.556	-37.759	1.00	0.00
ATOM	2407	C3'	CYT	75	5.356	-23.950	-36.182	1.00	1.00
ATOM	2408	H3'	CYT	75	6.409	-24.145	-35.979	1.00	0.00
ATOM	2409	O3'	CYT	75	4.970	-24.845	-37.222	1.00	1.00
ATOM	2410	P	ADE	76	6.082	-25.729	-37.979	1.00	1.00
ATOM	2411	O1P	ADE	76	6.955	-26.331	-36.940	1.00	1.00
ATOM	2412	O2P	ADE	76	6.683	-24.895	-39.050	1.00	1.00
ATOM	2413	O5'	ADE	76	5.245	-26.899	-38.664	1.00	1.00
ATOM	2414	C5'	ADE	76	4.535	-27.850	-37.876	1.00	1.00
ATOM	2415	H5'	ADE	76	4.527	-27.533	-36.833	1.00	0.00
ATOM	2416	H5''	ADE	76	5.020	-28.823	-37.948	1.00	0.00
ATOM	2417	C4'	ADE	76	3.112	-27.974	-38.371	1.00	1.00
ATOM	2418	H4'	ADE	76	2.547	-27.134	-37.965	1.00	0.00
ATOM	2419	O4'	ADE	76	3.124	-28.015	-39.826	1.00	1.00
ATOM	2420	C1'	ADE	76	2.599	-29.248	-40.278	1.00	1.00
ATOM	2421	H1'	ADE	76	1.583	-29.057	-40.626	1.00	0.00
ATOM	2422	N9	ADE	76	3.395	-29.702	-41.416	1.00	1.00
ATOM	2423	C4	ADE	76	3.776	-30.995	-41.680	1.00	1.00
ATOM	2424	N3	ADE	76	3.496	-32.093	-40.958	1.00	1.00
ATOM	2425	C2	ADE	76	4.030	-33.176	-41.519	1.00	1.00
ATOM	2426	H2	ADE	76	3.848	-34.112	-40.992	1.00	0.00
ATOM	2427	N1	ADE	76	4.758	-33.277	-42.637	1.00	1.00
ATOM	2428	C6	ADE	76	5.022	-32.154	-43.341	1.00	1.00
ATOM	2429	N6	ADE	76	5.749	-32.255	-44.457	1.00	1.00

ATOM	2430	H62	ADE	76	5.959	-31.430	-44.999	1.00	0.00
ATOM	2431	H61	ADE	76	6.088	-33.158	-44.758	1.00	0.00
ATOM	2432	C5	ADE	76	4.512	-30.939	-42.851	1.00	1.00
ATOM	2433	N7	ADE	76	4.595	-29.634	-43.318	1.00	1.00
ATOM	2434	C8	ADE	76	3.920	-28.940	-42.433	1.00	1.00
ATOM	2435	H8	ADE	76	3.786	-27.871	-42.499	1.00	0.00
ATOM	2436	C2'	ADE	76	2.631	-30.203	-39.088	1.00	1.00
ATOM	2437	H2'	ADE	76	3.615	-30.666	-38.980	1.00	0.00
ATOM	2438	O2'	ADE	76	1.599	-31.162	-39.220	1.00	1.00
ATOM	2439	HO2'	ADE	76	1.748	-31.834	-38.555	1.00	0.00
ATOM	2440	H3'	ADE	76	2.748	-29.609	-36.983	1.00	0.00
ATOM	2441	C3'	ADE	76	2.379	-29.237	-37.938	1.00	1.00
ATOM	2442	O3'	ADE	76	0.981	-28.993	-37.757	1.00	1.00
ATOM	2443	H3T	ADE	76	0.881	-28.504	-36.937	1.00	0.00

END