

DFT study on C-H oxidation reactivity of Fe(IV)-oxo species with N4/N5 ligands derived from L-proline

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Table S1. Energies of intermediates in the cyclohexane (CYH) hydroxylation by **1** and **2**. Absolute energies are in a.u. units and the relative ones are in kcal mol⁻¹.^a

	ZPE	cor to G	SPE	E	G	ΔE	ΔG
CYH	0.171036	0.147485	-235.997725	-235.826689	-235.85024	-	-
CYH radical	0.156117	0.131781	-235.330454	-235.174337	-235.198673	-	-
¹ 1	0.484606	0.444426	-2505.778097	-2505.293491	-2505.333671	26.4	26.8
³ 1	0.484631	0.443849	-2505.820233	-2505.335602	-2505.376384	0.0	0.0
⁵ 1	0.484016	0.440896	-2505.816643	-2505.332627	-2505.375747	1.9	0.4
¹ 2	0.543072	0.497636	-2622.544843	-2622.001771	-2622.047207	33.3	34.9
³ 2	0.54323	0.495223	-2622.598054	-2622.054824	-2622.102831	0.0	0.0
⁵ 2	0.542412	0.492284	-2622.592563	-2622.050151	-2622.100279	2.9	1.6
¹ 2'	0.542706	0.493997	-2622.551245	-2622.008539	-2622.057248	29.0	28.6
³ 2'	0.543015	0.495165	-2622.597789	-2622.054774	-2622.102624	0.0 ^b	0.1
⁵ 2'	0.542852	0.493396	-2622.593394	-2622.050542	-2622.099998	2.7	1.8
CYH + 1							
¹ RC	0.656865	0.607569	-2741.785034	-2741.128169	-2741.177465	26.4	26.6
¹ TS	0.650224	0.602839	-2741.772587	-2741.122363	-2741.169748	30.0	31.5
¹ PC	0.660298	0.612418	-2741.878557	-2741.218259	-2741.266139	-30.1	-29.0
³ RC	0.657084	0.607437	-2741.827333	-2741.170249	-2741.219896	0.0	0.0
³ TS	0.6501	0.602418	-2741.798	-2741.1479	-2741.195582	14.0	15.3
³ IM	0.65415	0.6045	-2741.816013	-2741.161863	-2741.211513	5.3	5.3
³ PC_{reb}	0.656988	0.607172	-2741.877404	-2741.220416	-2741.270232	-31.5	-31.6
⁵ RC	0.656135	0.603533	-2741.824065	-2741.16793	-2741.220532	1.5	-0.4
⁵ TS	0.647033	0.596288	-2741.804786	-2741.157753	-2741.208498	7.8	7.2
⁵ IM	0.649575	0.598088	-2741.821161	-2741.171586	-2741.223073	-0.8	-2.0
⁵ PC_{reb}	0.655394	0.603843	-2741.893091	-2741.237697	-2741.289248	-42.3	-43.5
² FP_{HAA}	0.496009	0.455594	-2506.474606	-2505.978597	-2506.019012	10.9	1.4
⁴ FP_{HAA}	0.495073	0.451899	-2506.460961	-2505.965888	-2506.009062	18.8	7.6
⁶ FP_{HAA}	0.491757	0.447694	-2506.475252	-2505.983495	-2506.027558	7.8	-4.0
CYH + 2							
¹ RC	0.715272	0.715272	-2858.559574	-2857.844302	-2857.844302	28.5	64.1
¹ TS	0.712953	0.660268	-2858.556401	-2857.843448	-2857.896133	29.0	31.5
¹ PC	0.718438	0.666501	-2858.667902	-2857.949464	-2858.001401	-37.5	-34.5
³ RC	0.715328	0.658695	-2858.605069	-2857.889741	-2857.946374	0.0	0.0
³ TS	0.708582	0.654819	-2858.577685	-2857.869103	-2857.922866	13.0	14.8
³ IM	0.712525	0.657302	-2858.594381	-2857.881856	-2857.937079	4.9	5.8
³ PC_{reb}	0.715131	0.658086	-2858.662291	-2857.94716	-2858.004205	-36.0	-36.3
⁵ RC	0.714368	0.654951	-2858.600079	-2857.885711	-2857.945128	2.5	0.8
⁵ TS	0.706127	0.64908	-2858.580536	-2857.874409	-2857.931456	9.6	9.4
⁵ IM	0.707941	0.649587	-2858.596885	-2857.888944	-2857.947298	0.5	-0.6
⁵ PC_{reb}	0.713119	0.653128	-2858.675544	-2857.962425	-2858.022416	-45.6	-47.7
² FP_{HAA}	0.553644	0.507338	-2623.251468	-2622.697824	-2622.74413	11.0	2.2
⁴ FP_{HAA}	0.552326	0.501724	-2623.245553	-2622.693227	-2622.743829	13.9	2.4

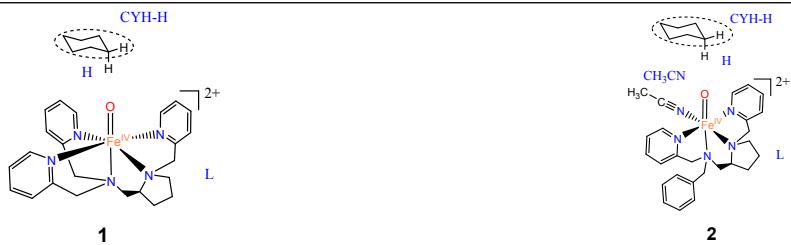
⁶FP_{HAA}	0.549758	0.498694	-2623.249352	-2622.699594	-2622.750658	9.9	-1.9
CYH + ²'							
³RC	0.716375	0.662029	-2858.606003	-2857.889628	-2857.943974	0.1	1.5
³TS	0.709046	0.655957	-2858.578043	-2857.868997	-2857.922086	13.0	15.2
³IM	0.712566	0.65717	-2858.595307	-2857.882741	-2857.938137	4.4	5.2
³PC_{reb}	0.715272	0.658756	-2858.659536	-2857.944264	-2858.00078	-34.2	-34.1
⁵RC	0.715045	0.656446	-2858.601472	-2857.886427	-2857.945026	2.1	0.8
⁵TS	0.705868	0.648284	-2858.580472	-2857.874604	-2857.932188	9.5	8.9
⁵IM	0.708158	0.650534	-2858.596786	-2857.888628	-2857.946252	0.7	0.1
⁵PC_{reb}	0.713035	0.654633	-2858.676531	-2857.963496	-2858.021898	-46.3	-47.4
²FP_{HAA}	0.554273	0.507387	-2623.252096	-2622.697823	-2622.744709	11.0	1.9
⁴FP_{HAA}	0.552708	0.50242	-2623.245202	-2622.692494	-2622.742782	14.4	3.1
⁶FP_{HAA}	0.549771	0.498817	-2623.249291	-2622.69952	-2622.750474	10.0	-1.7

^a Energy of doublet CYH radical was included in the FP_{HAA}.

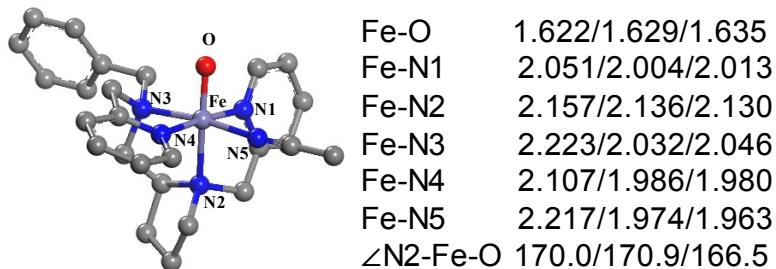
^b The spin point energy of ³2' is 0.03 kcal mol⁻¹ higher than ³2.

Table S2. Mulliken charges and spins of the complex **1**, **2** and intermediates in the cyclohexane hydroxylation at the B3LYP-D3(BJ)/B1 level.^a

Charge						Spin						
	Fe	O	L		Fe	O	L					
¹ 1	0.60	-0.44	1.84		0.00	0.00	0.00					
³ 1	0.63	-0.43	1.80		1.25	0.83	-0.08					
⁵ 1	0.77	-0.44	1.67		3.14	0.62	0.24					
¹ 2	0.59	-0.41	1.82		0.00	0.00	0.00					
³ 2	0.60	-0.41	1.81		1.22	0.87	-0.09					
⁵ 2	0.75	-0.43	1.67		3.14	0.66	0.19					
¹ 2'	0.60	-0.42	1.82		0.00	0.00	0.00					
³ 2'	0.60	-0.41	1.81		1.22	0.87	-0.09					
⁵ 2'	0.75	-0.43	1.67		3.14	0.66	0.19					
CYH + 1												
	Fe	O	L	H	CYH-H	Fe	O	L	H	CYH-H		
³ RC	0.64	-0.44	1.79	0.16	-0.15	1.23	0.84	-0.07	0.00	0.00		
³ TS	0.58	-0.60	1.65	0.34	0.02	0.94	0.58	-0.05	-0.05	0.57		
³ IM	0.49	-0.70	1.69	0.46	0.05	0.94	0.16	-0.06	0.02	0.94		
³ PC_{reb}	0.56	-0.65	1.22	0.47	0.41	1.98	0.02	-0.01	0.00	0.01		
⁵ RC	0.77	-0.45	1.67	0.16	-0.15	3.13	0.62	0.24	0.00	0.00		
⁵ TS	0.84	-0.63	1.44	0.30	0.05	3.93	0.10	0.38	0.00	-0.42		
⁵ IM	0.77	-0.76	1.44	0.45	0.11	4.15	0.31	0.46	-0.05	-0.87		
⁵ PC_{reb}	0.68	-0.66	1.09	0.47	0.42	3.78	0.02	0.20	0.00	0.01		
CYH + 2												
	Fe	O	L	CH ₃ CN	H	CYH-H	Fe	O	L	CH ₃ CN	H	CYH-H
³ RC	0.61	-0.41	1.53	0.26	0.17	-0.15	1.20	0.88	-0.07	-0.01	0.00	0.01
³ TS	0.64	-0.56	1.32	0.33	0.18	0.10	0.94	0.59	-0.07	-0.01	-0.01	0.55
³ IM	0.47	-0.68	1.43	0.25	0.47	0.06	0.95	0.18	-0.07	-0.01	0.02	0.93
³ PC_{reb}	0.54	-0.64	1.05	0.20	0.46	0.39	1.99	0.02	0.01	-0.03	0.00	0.01
⁵ RC	0.74	-0.43	1.44	0.23	0.17	-0.15	3.15	0.66	0.15	0.04	0.00	0.00
⁵ TS	0.81	-0.60	1.22	0.22	0.30	0.05	3.92	0.11	0.30	0.04	0.00	-0.38
⁵ IM	0.76	-0.75	1.18	0.22	0.45	0.13	4.14	0.33	0.38	0.05	-0.05	-0.85
⁵ PC_{reb}	0.66	-0.67	0.93	0.19	0.47	0.42	3.78	0.03	0.17	0.02	0.00	0.01
CYH + 2'												
	Fe	O	L	CH ₃ CN	H	CYH-H	Fe	O	L	CH ₃ CN	H	CYH-H
³ RC	0.61	-0.42	1.53	0.26	0.17	-0.15	1.20	0.88	-0.07	-0.01	0.00	0.01
³ TS	0.55	-0.58	1.40	0.24	0.35	0.03	0.93	0.62	-0.06	-0.01	-0.05	0.57
³ IM	0.47	-0.68	1.43	0.25	0.47	0.06	0.95	0.18	-0.07	-0.01	0.02	0.93
³ PC_{reb}	0.53	-0.65	1.05	0.20	0.47	0.40	1.99	0.02	-0.03	0.01	0.00	0.01
⁵ RC	0.76	-0.43	1.42	0.22	0.14	-0.12	3.13	0.67	0.15	0.04	0.00	0.01
⁵ TS	0.82	-0.61	1.22	0.22	0.30	0.05	3.93	0.11	0.30	0.05	0.00	-0.39
⁵ IM	0.77	-0.75	1.19	0.22	0.45	0.13	4.15	0.32	0.38	0.05	-0.05	-0.85
⁵ PC_{reb}	0.66	-0.66	0.92	0.19	0.47	0.41	3.78	0.02	0.17	0.02	0.00	0.01



^a CYH-H is the CYH radical.



5/3/1 2'

ΔE **2.7/0.0/29.0**

Fig. S1 Key geometric parameters for **2'** at the UB3LYP-D3(BJ)/B1 level and spin-state energy gaps at the UB3LYP-D3(BJ)/B2//B1 level (including ZPE and solvation corrections).

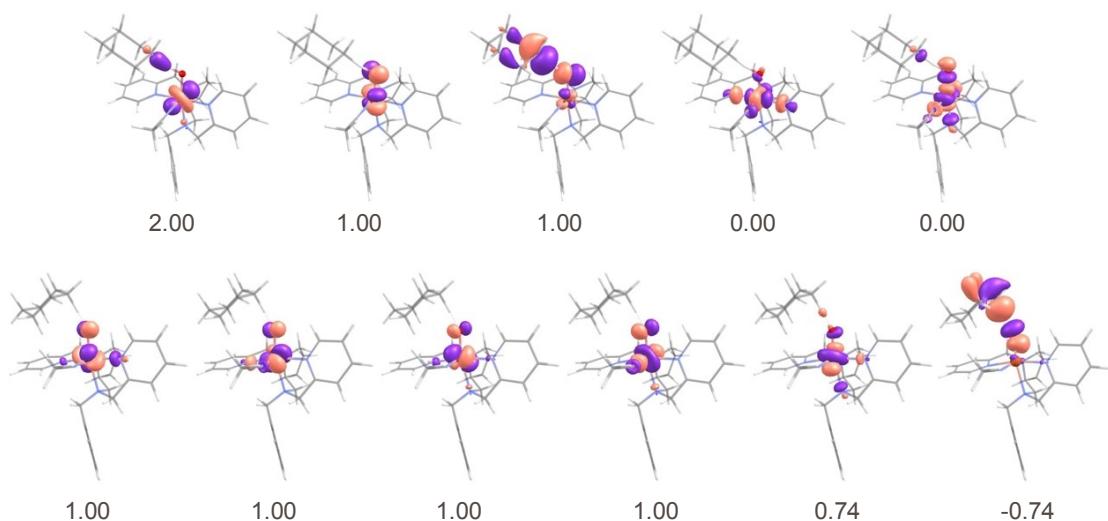
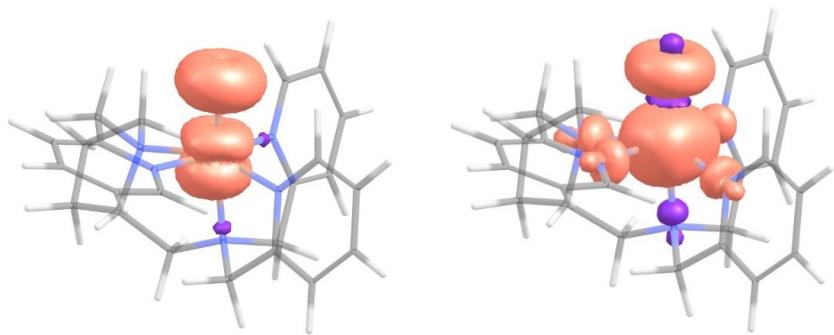
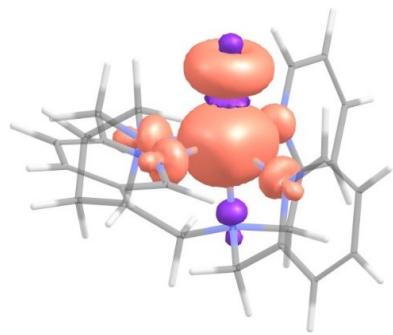


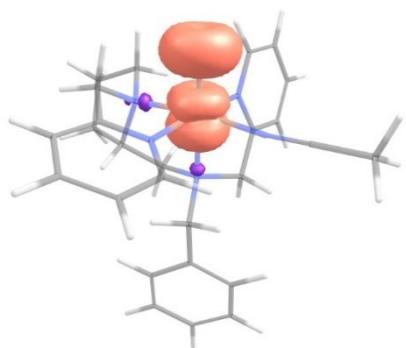
Fig. S2 Natural d orbitals and their occupations in **3TS** (top panel) and the spin natural orbitals and their occupations in **5TS** (bottom panel) for the H-abstraction reaction of **2** with cyclohexane.



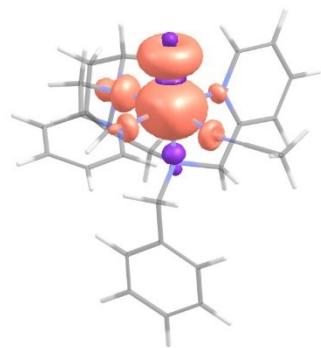
$^3\mathbf{1}$



$^5\mathbf{1}$



$^3\mathbf{2}$



$^5\mathbf{2}$

Fig. S3 Spin density plot of $^3\mathbf{1}$, $^5\mathbf{1}$, $^3\mathbf{2}$, and $^5\mathbf{2}$, contour value = 0.005.

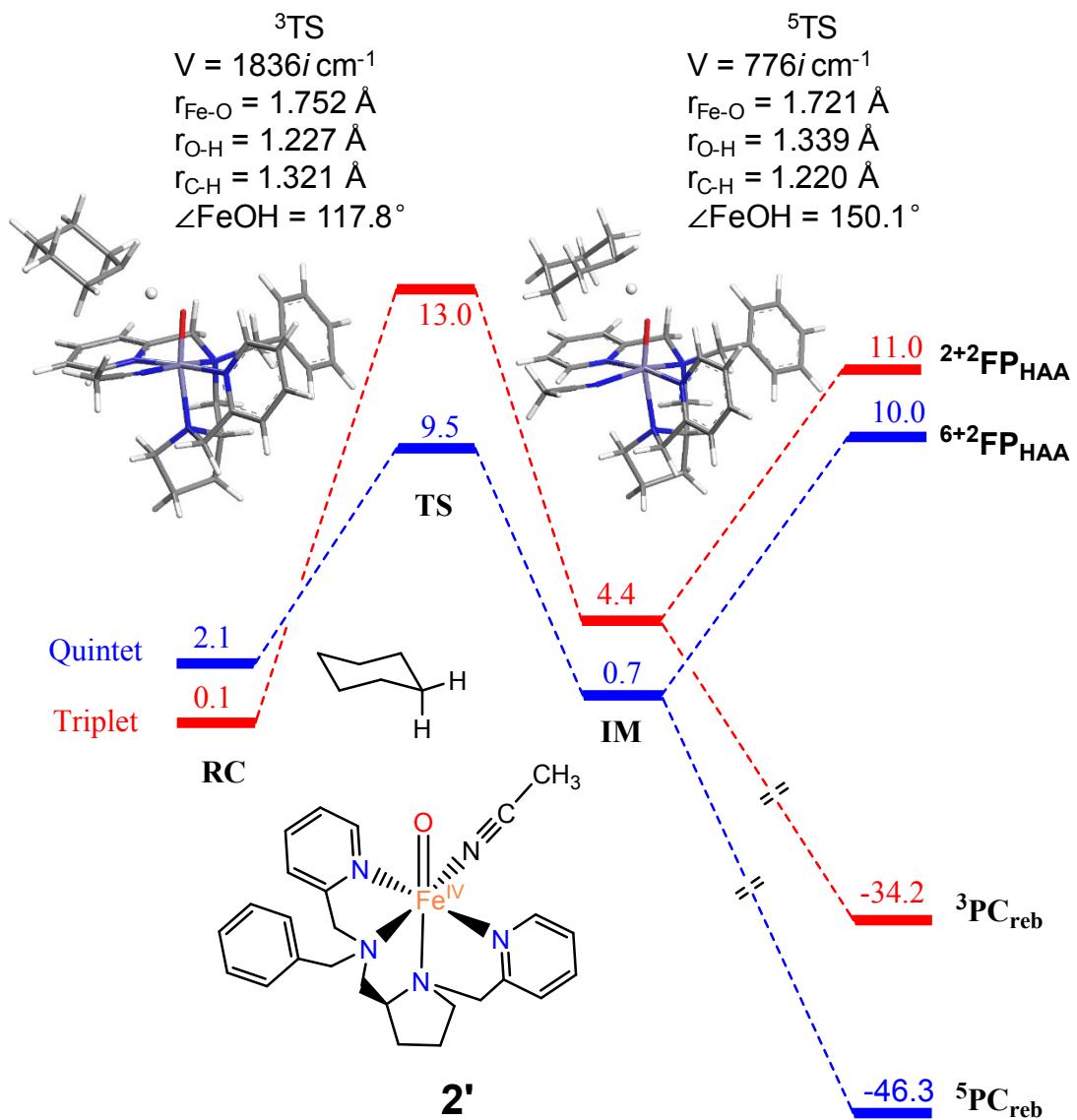


Fig. S4 Key geometric parameters of the transition state structures and energy profile for cyclohexane hydroxylation by **2'** at the UB3LYP-D3(BJ)/B2//B1 level with solvent correction. **FR**: free reactants, **RC**: reactant cluster, **TS**: transition state, **IM**: intermediate, **PC_{reb}**: rebound productions, **FP**: free productions after H-atom abstraction.

Cartesian coordinates**¹**

Fe 7.72827 7.94766 3.08533
O 9.07383 8.65178 2.49592
N 6.67987 7.59163 1.45953
N 5.8369 7.30263 3.86091
N 6.87235 9.72302 3.413
N 8.32274 7.59104 4.96499
N 8.69752 6.15841 2.80552
C 6.97138 8.14002 0.26538
H 7.75814 8.88292 0.2577
C 6.29583 7.75343 -0.88552
H 6.55324 8.21118 -1.83303
C 5.30064 6.78145 -0.79144
H 4.75897 6.46156 -1.67471
C 4.99494 6.23202 0.45484
H 4.21308 5.49012 0.56828
C 5.70425 6.65636 1.56955
C 5.46703 6.17261 2.97638
H 4.42779 5.86112 3.12442
H 6.11118 5.31989 3.2092
C 4.86168 8.41992 3.69915
H 4.06565 8.34518 4.44503
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C 4.93061 10.92337 4.12256
H 3.8883 10.90196 4.42013
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H 5.16793 13.05242 4.35184
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C 7.40978 6.57087 5.62252
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C 7.71396 6.67374 7.13216
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H 7.4402 9.3098 5.81605
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C 9.68877 6.99802 4.8239
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C 10.53872 4.89698 3.68248
H 11.27765 4.76828 4.46516
C 10.4571 4.01194 2.60935
H 11.13933 3.17184 2.53783
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H 9.38208 3.56386 0.78139
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H 6.5669 8.23383 -1.88797
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H 4.37676 8.3158 2.70868
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H 3.86707 10.86419 4.44148
C 5.62848 12.08226 4.12336
H 5.14995 13.01387 4.40541

C 6.96754 12.06089 3.73265
H 7.56189 12.96606 3.69655
C 7.5492 10.84686 3.39497
H 8.58565 10.75768 3.09582
C 6.0017 6.92805 5.27416
H 5.34604 6.09461 5.54461
H 5.67611 7.79452 5.85288
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C 10.52886 4.90487 3.70279
H 11.28951 4.79756 4.46747
C 10.41664 3.98929 2.65848
H 11.09584 3.14632 2.5928
C 9.41819 4.17475 1.70418
H 9.29302 3.4917 0.87264
C 8.56379 5.26248 1.8272
H 7.7859 5.43517 1.09808**⁵**

Fe 7.73429 8.13075 3.00741
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N 6.80673 9.93835 3.48453
N 8.42887 7.59193 4.98793
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C 4.98051	6.11749	0.44236						C -0.36307	4.32455	-0.19546
H 4.19721	5.39403	0.63685		¹²				H -1.12924	5.04821	-0.446
C 5.70291	6.65925	1.49754		Fe -0.01276	0.06429	0.0312		C -0.65222	2.9696	-0.27275
C 5.49014	6.27695	2.94364		O 0.02658	-0.06172	1.66011		H -1.6276	2.61887	-0.57896
H 4.45444	5.97329	3.12741		N 2.00824	0.06976	0.01097		C -0.90324	-3.71795	-1.60282
H 6.13697	5.43684	3.2109		N 0.19717	-0.2029	-2.09812		H -1.12567	-4.06147	-2.60647
C 4.85311	8.53302	3.61911		N 0.2678	2.03137	0.02106		C -0.88312	-4.59753	-0.52234
H 4.01066	8.37877	4.29958		N -0.33142	-1.91015	-0.1516		H -1.09142	-5.65146	-0.67147
H 4.45954	8.48575	2.59993		C 1.10535	1.20417	-5.07271		C -0.59157	-4.10451	0.74974
C 5.49936	9.87357	3.81922		H 1.95593	1.60073	-4.52444		H -0.56946	-4.75263	1.6177
C 4.81202	11.00107	4.25225		C 1.19172	1.04512	-6.45638		C -0.32133	-2.75152	0.89926
H 3.76643	10.92391	4.52703		H 2.11149	1.30313	-6.97231		H -0.09832	-2.30225	1.8586
C 5.49121	12.21753	4.32042		C 0.09437	0.56501	-7.17391		C -0.63244	-2.37213	-1.38269
H 4.97478	13.10985	4.65744		H 0.15933	0.44296	-8.25087		C -0.69406	-1.3317	-2.46209
C 6.83708	12.27562	3.95438		C -1.09248	0.25662	-6.50482		H -0.42837	-1.75178	-3.4363
H 7.39417	13.20398	3.99331		H -1.95489	-0.10028	-7.05953		H -1.71578	-0.95073	-2.53666
C 7.46678	11.10981	3.54151		C -1.1763	0.41588	-5.12176		N -1.96925	0.21296	-0.14479
H 8.51089	11.07728	3.25372		H -2.10885	0.19141	-4.61146		C -3.12361	0.21784	-0.14493
C 6.01865	7.12087	5.23917		C -0.0742	0.87734	-4.38888		C -4.57402	0.23004	-0.15617
H 5.27561	6.3759	5.54079		C -0.15609	1.03331	-2.88962		H -4.92947	0.2883	-1.18897
H 5.80176	8.03691	5.7925		H 0.51328	1.82615	-2.55818		H -4.94872	-0.68733	0.30691
C 7.42243	6.63704	5.58149		H -1.17007	1.30489	-2.58995		H -4.93631	1.09651	0.40425
H 7.59374	5.6484	5.15557		C 1.61446	-0.61472	-2.29995				
C 7.6737	6.67419	7.1073		H 1.90124	-0.5107	-3.3495	³²			
H 6.72473	6.6451	7.64895		H 1.69482	-1.67455	-2.05025	Fe 0.01921	0.08014	0.08028	
H 8.25021	5.80218	7.42136		C 2.53148	0.19062	-1.40291	O -0.01185	0.02839	1.70638	
C 8.45472	7.99178	7.36654		H 2.50536	1.24526	-1.68057	N 2.02753	0.06127	0.03881	
H 9.45818	7.77831	7.74231		C 3.97479	-0.37008	-1.37321	N 0.1798	-0.17647	-2.06222	
H 7.9589	8.63029	8.10026		H 4.11055	-1.08217	-2.19172	N 0.30975	2.04926	0.05464	
C 8.5228	8.69235	5.99795		H 4.70734	0.42689	-1.51188	N -0.27581	-1.89273	-0.09068	
H 7.67124	9.35766	5.85628		C 4.12934	-1.05692	0.00818	C 1.03574	1.1937	-5.07138	
H 9.43244	9.26802	5.82435		H 4.58037	-2.04815	-0.06821	H 1.89428	1.60028	-4.5431	
C 9.74344	6.9263	4.81723		H 4.7583	-0.45975	0.67348	C 1.09865	1.01675	-6.45419	
H 10.08243	6.47332	5.75411		C 2.6994	-1.14828	0.5493	H 2.0084	1.27099	-6.98944	
H 10.46573	7.69859	4.5366		H 2.19129	-2.0261	0.15258	C -0.0093	0.52374	-7.14619	
C 9.67258	5.88741	3.73064		H 2.61227	-1.16211	1.63552	H 0.03732	0.38786	-8.22246	
C 10.52942	4.7902	3.70569		C 2.40585	1.27348	0.7976	C -1.18328	0.2204	-6.45257	
H 11.24134	4.64485	4.51055		H 3.45535	1.52402	0.62613	H -2.054	-0.14644	-6.98749	
C 10.45208	3.89866	2.63826		H 2.27171	1.03736	1.85502	C -1.24357	0.39771	-5.07043	
H 11.10984	3.03714	2.59529		C 1.50248	2.40559	0.42428	H -2.16644	0.1776	-4.54095	
C 9.51558	4.12934	1.63089		C 1.86076	3.74523	0.51217	C -0.13045	0.87192	-4.36275	
H 9.41948	3.46298	0.78177		H 2.86368	4.01297	0.82386	C -0.18719	1.0461	-2.86427	
C 8.68718	5.2404	1.73277		C 0.91509	4.71972	0.19849	H 0.48756	1.84354	-2.55405	

H -1.19577 1.32194 -2.5507	N -1.94679 0.25565 -0.09538	H 1.34441 5.86475 0.08064
C 1.59592 -0.59184 -2.27967		C -0.25848 4.44349 -0.18684
H 1.87297 -0.47791 -3.3307	52	H -1.02607 5.17781 -0.39988
H 1.67631 -1.6545 -2.04279	Fe -0.00349 0.05656 0.11607	C -0.57997 3.09296 -0.18976
C 2.52884 0.19855 -1.38547	O -0.018 0.00016 1.73589	H -1.58295 2.74767 -0.40316
H 2.50047 1.25709 -1.64757	N 2.17128 0.13279 0.00435	C -0.98463 -3.70877 -1.59833
C 3.97155 -0.36446 -1.38381	N 0.20281 -0.20227 -2.04176	H -1.20363 -4.03118 -2.60963
H 4.0895 -1.07662 -2.20504	N 0.34015 2.14541 0.06372	C -0.98619 -4.61031 -0.5341
H 4.70254 0.43127 -1.53661	N -0.40244 -1.9482 -0.09814	H -1.20968 -5.65718 -0.709
C 4.15297 -1.05374 -0.00717	C 1.18394 1.20674 -4.98383	C -0.69349 -4.15587 0.75283
H 4.60964 -2.04151 -0.094	H 2.03005 1.58366 -4.41521	H -0.68452 -4.82782 1.60249
H 4.788 -0.45492 0.65076	C 1.29547 1.05366 -6.36613	C -0.4043 -2.81141 0.93542
C 2.73205 -1.15897 0.55405	H 2.22964 1.29826 -6.86231	H -0.16772 -2.38827 1.90422
H 2.2244 -2.03445 0.15298	C 0.20437 0.59578 -7.10757	C -0.69396 -2.37344 -1.34831
H 2.66037 -1.18575 1.64115	H 0.28859 0.47808 -8.18367	C -0.72447 -1.30837 -2.40744
C 2.43739 1.2618 0.82801	C -1.00021 0.30319 -6.46366	H -0.47456 -1.71917 -3.38961
H 3.49024 1.49976 0.66001	H -1.85688 -0.03721 -7.03726	H -1.73487 -0.89513 -2.46827
H 2.29994 1.02363 1.88602	C -1.10917 0.45659 -5.08151	C -3.33428 0.38117 -0.1861
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C 1.92981 3.74178 0.53276	C -0.01436 0.89702 -4.32538	H -5.17439 0.27338 -1.17054
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C 0.99707 4.72789 0.21586	H 0.56142 1.82284 -2.47924	H -5.15748 1.27238 0.30963
H 1.26992 5.77608 0.27109	H -1.12957 1.33443 -2.53467	N -2.17813 0.40719 -0.22078
C -0.2873 4.34905 -0.17399	C 1.6121 -0.65683 -2.24783	
H -1.0432 5.08281 -0.4265	H 1.86241 -0.62379 -3.31161	12'
C -0.59673 2.99778 -0.24408	H 1.67072 -1.70222 -1.93794	Fe -0.00263 -0.00715 -0.00056
H -1.57743 2.65873 -0.54626	C 2.59938 0.16802 -1.43829	O -0.01222 -0.01046 1.63427
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C -0.82903 -4.5807 -0.44382	H 4.0791 -1.2146 -2.24887	N 1.55372 -1.28318 -0.01472
H -1.038 -5.63542 -0.58622	H 4.76874 0.31757 -1.72535	N -1.5333 1.23972 -0.15446
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C -0.22986 -2.73295 0.95952	H 4.93604 -0.39761 0.51571	C 4.82666 4.44078 0.04093
H 0.02986 -2.28422 1.90986	C 2.86933 -1.0607 0.57362	H 5.57247 4.6915 -0.70713
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H 2.12602 1.20546 1.73561	H -3.00848 -3.87817 -1.29427	H 19.64676 2.68181 13.21644
C 1.19543 2.22737 -1.36633		C 19.95592 1.13176 14.68737
H 1.95552 3.01067 -1.41085	^{32'}	H 20.88739 0.76655 14.27161
H 0.25252 2.67747 -1.68167	Fe 17.46421 0.0968 17.99378	C 19.4369 0.53825 15.82906
C 1.54529 1.07288 -2.2819	O 18.52572 -1.13794 17.96438	H 19.92292 -0.29108 16.32656
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C -0.55881 0.33424 -3.0684	H 21.62054 5.20859 21.19555	H 14.79233 -1.27451 18.70016
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H 0.286 -2.03954 -2.53419	C 21.5813 1.34883 20.83861	C 15.55976 -1.28954 15.94107
C 1.9329 -1.77406 -1.21178	H 21.59561 0.26864 20.72546	N 16.20474 -0.75531 16.73503
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H 3.28286 -3.0324 -2.30289	C 19.91223 1.48619 18.94001	H 14.63102 -1.30712 14.07148
C 3.65312 -3.08182 -0.16986	H 19.76931 2.16894 18.10363	H 15.21709 -2.89259 14.64851
H 4.48221 -3.77818 -0.23449	H 20.36842 0.57232 18.5583	H 13.75261 -2.16624 15.36814
C 3.23245 -2.59067 1.06639	C 17.72059 2.26254 19.85253	
H 3.71275 -2.89219 1.98964	H 18.35032 2.95296 20.41798	^{52'}
C 2.17571 -1.69237 1.10688	H 16.94681 1.90232 20.5324	Fe 0.54625 0.02926 0.63303
H 1.79293 -1.28271 2.03281	C 17.07905 2.94728 18.66388	O 1.01757 0.05099 2.18514
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H 0.46463 3.73088 0.63185	C 16.27285 2.28422 16.4543	C 3.81225 5.78326 1.19115
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N -1.10191 -1.6154 -0.23962	C 17.59041 1.96611 15.8112	H 2.96362 4.17096 2.33293
C -2.45004 -3.84143 -0.3545	C 18.06134 2.61287 14.6734	C 3.28702 3.5951 0.27761
H -1.75944 -4.68822 -0.30705	H 17.48932 3.42791 14.24512	C 2.7232 2.20474 0.44566
H -3.14778 -3.8914 0.48623	C 19.2612 2.19179 14.10395	H 3.18333 1.52145 -0.2699

H 2.92125 1.818 1.44729	H -2.59676 -4.29891 0.53297	H -5.08221 0.02128 -1.34343
C 0.79566 2.44176 -1.12831		H -4.78995 1.20432 -2.61375
H 1.33447 3.31913 -1.49847	CYH + 1	C -3.21032 1.11458 -1.12203
H -0.26202 2.7105 -1.08991	³ RC	H -2.7283 1.92671 -1.66472
C 0.9912 1.26684 -2.07401	Fe -0.30067 0.48726 -0.35586	H -3.54521 1.49839 -0.15799
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H 0.09329 2.58838 -3.55414	N 0.10359 0.41717 -2.43203	H -2.83538 -0.34496 1.05791
H 1.03331 1.28423 -4.26654	N -0.4244 2.4322 -0.79423	C -1.57934 -1.92956 0.37247
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H -1.63858 0.91884 -1.46552	C 3.8374 0.69817 0.61327	C 0.53304 -3.63104 0.76916
H -1.62733 -0.78366 -1.9405	H 4.43868 1.03635 1.44848	H 1.39874 -4.2667 0.90975
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H 1.13245 -1.11905 -3.09245	H 5.48536 -0.06805 -0.548	H 1.69722 -1.96343 0.07573
H 0.23629 -2.01737 -1.86613	C 3.59686 -0.33442 -1.55191	C 1.38492 -3.20287 4.4427
C 2.19411 -1.45657 -1.25539	H 4.01485 -0.80267 -2.43559	H 1.57138 -4.07082 5.08766
C 3.28167 -2.14345 -1.78032	C 2.22613 -0.13643 -1.46026	H 1.38174 -3.5747 3.40914
H 3.26377 -2.47049 -2.81348	C 1.23248 -0.54088 -2.52856	C 2.51283 -2.17247 4.59665
C 4.37975 -2.39746 -0.95873	H 1.68991 -0.52631 -3.52327	H 2.5915 -1.87672 5.65311
H 5.23947 -2.93064 -1.35001	H 0.8529 -1.5507 -2.35095	H 3.47601 -2.62075 4.32186
C 4.36386 -1.95783 0.36614	C 0.56351 1.76505 -2.87947	C 0.01202 -2.59195 4.75974
H 5.19811 -2.13904 1.03304	H 0.36558 1.90386 -3.94563	H -0.78014 -3.33062 4.58189
C 3.25211 -1.268 0.8267	H 1.64651 1.83282 -2.74632	H -0.02872 -2.33639 5.82874
H 3.17178 -0.89428 1.84027	C -0.081 2.82365 -2.03851	C -0.24918 -1.32569 3.93166
C -1.98314 3.32335 1.64896	C -0.26042 4.13596 -2.46228	H -1.21024 -0.87766 4.21461
H -1.76846 4.36942 1.83569	H 0.00938 4.41441 -3.47453	H -0.3327 -1.59576 2.87185
C -3.28144 2.82432 1.73878	C -0.78209 5.06851 -1.56789	C 2.24303 -0.92293 3.74659
H -4.1023 3.48242 2.00251	H -0.93224 6.09743 -1.87646	H 2.25245 -1.20536 2.68375
C -3.51148 1.47344 1.47899	C -1.10682 4.66008 -0.27416	H 3.04603 -0.18696 3.88172
H -4.50524 1.04541 1.53368	H -1.51033 5.35331 0.45422	C 0.88243 -0.30167 4.08996
C -2.43446 0.66799 1.13393	C -0.91919 3.3305 0.07771	H 0.90568 0.05748 5.12944
H -2.55646 -0.38449 0.91367	H -1.16532 2.94428 1.05852	H 0.68417 0.56787 3.45332
C -0.94692 2.45903 1.3119	C -1.14812 0.04322 -3.15114	⁵ RC
C 0.49163 2.90684 1.25107	H -0.92314 -0.56683 -4.03135	Fe -0.33692 0.19538 0.14363
H 0.55286 3.97649 1.02906	H -1.60061 0.97016 -3.50896	O -0.58507 0.42865 1.72453
H 0.95707 2.73589 2.22642	C -2.13339 -0.68101 -2.24209	N 1.74405 0.04225 0.01392
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N -0.61742 -1.85816 0.65234	C -3.57645 -0.63617 -2.79609	N -0.64801 2.20316 -0.34705
C -1.5923 -4.25734 0.96384	H -3.56081 -0.4032 -3.86394	N -2.26213 -0.58798 -0.40668
H -0.94907 -4.98261 0.45735	H -4.06291 -1.60718 -2.68555	N -0.22193 -2.09617 0.49903
H -1.64246 -4.49725 2.02972	C -4.3075 0.46155 -1.97564	

C 2.60328 0.3215 1.00849	C -0.51177 -4.71852 1.37042	H 0.88987 -1.84843 -1.84572
H 2.17023 0.73952 1.90912	H -0.62781 -5.74276 1.70791	C 0.64414 1.49583 -2.21159
C 3.96341 0.06731 0.88153	C 0.75475 -4.19501 1.11052	H 0.39588 1.67323 -3.2618
H 4.6328 0.29587 1.702	H 1.65198 -4.78937 1.23583	H 1.73271 1.54698 -2.12868
C 4.4326 -0.48564 -0.31041	C 0.85523 -2.87698 0.6817	C 0.0506 2.52944 -1.30262
H 5.48896 -0.69461 -0.43963	H 1.82135 -2.43482 0.47752	C -0.14812 3.85417 -1.67631
C 3.53437 -0.76511 -1.34268	C 1.41578 -3.80158 4.85049	H 0.07058 4.16583 -2.69139
H 3.87225 -1.18799 -2.28171	H 1.59675 -4.65577 5.51514	C -0.62382 4.75724 -0.72713
C 2.18593 -0.49439 -1.14866	H 1.39269 -4.19894 3.82671	H -0.78852 5.79552 -0.99464
C 1.1147 -0.79592 -2.17152	C 2.56161 -2.78583 4.96613	C -0.88497 4.30611 0.5666
H 1.50559 -0.72448 -3.1916	H 2.65688 -2.46626 6.01428	H -1.25328 4.97541 1.33518
H 0.73567 -1.81133 -2.02971	H 3.51449 -3.25594 4.69188	C -0.67887 2.96536 0.86538
C 0.40299 1.5234 -2.40506	C 0.05727 -3.16001 5.1688	H -0.87027 2.54208 1.84322
H 0.23957 1.64005 -3.48023	H -0.74893 -3.89047 5.0236	C -1.11322 -0.17691 -2.44304
H 1.47597 1.63442 -2.22505	H 0.03568 -2.87221 6.23018	H -0.95536 -0.73401 -3.37185
C -0.32425 2.56703 -1.60715	C -0.19404 -1.91514 4.30609	H -1.57534 0.77518 -2.71224
C -0.59815 3.84507 -2.07923	H -1.14551 -1.44431 4.58445	C -2.04329 -0.94303 -1.51315
H -0.34328 4.1111 -3.09863	H -0.29169 -2.21731 3.25624	H -1.69954 -1.97208 -1.41155
C -1.19845 4.76438 -1.21862	C 2.30362 -1.55193 4.0895	C -3.51911 -0.86383 -1.9706
H -1.42279 5.76727 -1.56577	H 2.30361 -1.85753 3.03334	H -3.57063 -0.56555 -3.02105
C -1.50821 4.38347 0.08819	H 3.11747 -0.82454 4.20525	H -4.00251 -1.83926 -1.88891
H -1.97161 5.07319 0.78337	C 0.95378 -0.90369 4.4259	C -4.18996 0.1823 -1.03949
C -1.22068 3.08671 0.49087	H 0.99003 -0.51603 5.45474	H -4.91768 -0.29631 -0.3794
H -1.4459 2.71708 1.48427	H 0.76194 -0.04864 3.76764	H -4.7173 0.95784 -1.59847
C -1.27943 -0.23722 -2.64714	³TS	
H -1.05829 -0.70369 -3.6122	Fe -0.06393 0.13225 0.2899	C -3.03282 0.78869 -0.23158
H -1.82733 0.68506 -2.85086	O -0.19673 0.4812 2.00258	H -2.5886 1.62983 -0.76209
C -2.13907 -1.16627 -1.79657	N 1.91502 0.07597 0.12397	H -3.29831 1.12067 0.77275
H -1.66992 -2.14678 -1.71989	N 0.18984 0.13723 -1.78976	C -2.40168 -1.30369 0.88144
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H -3.61287 -0.96931 -3.39293	N -2.00683 -0.29596 -0.14101	H -2.48638 -0.78234 1.83856
H -3.96718 -2.26569 -2.26058	N -0.07493 -1.87362 0.69598	C -1.31937 -2.3363 0.95734
C -4.41168 -0.26707 -1.45566	C 2.77906 0.47634 1.06875	C -1.56189 -3.66787 1.27435
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H -4.93189 0.48659 -2.05008	C 4.14906 0.28435 0.92566	C -0.48678 -4.55009 1.36167
C -3.38438 0.39696 -0.52141	H 4.82167 0.61302 1.70887	H -0.6496 -5.59317 1.60981
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H -3.76043 0.63579 0.47385	H 5.68709 -0.49584 -0.37015	H 1.66945 -4.70582 1.19756
C -2.599 -1.64596 0.57919	C 3.72038 -0.71933 -1.22342	C 0.96211 -2.72514 0.7978
H -3.49789 -2.19246 0.27803	H 4.05962 -1.17701 -2.14556	H 1.94702 -2.32432 0.60819
H -2.80935 -1.14833 1.5303	C 2.36493 -0.50154 -1.01807	C 1.35296 -3.19236 5.57417
C -1.44426 -2.59505 0.75485	C 1.28118 -0.84197 -2.01646	H 1.61537 -3.68068 6.52065
C -1.62852 -3.90654 1.18704	H 1.65837 -0.7976 -3.04366	H 1.44718 -3.95367 4.78634
H -2.63035 -4.27705 1.37339		C 2.32869 -2.04445 5.28751
		H 2.30058 -1.32541 6.11736

H 3.35822 -2.41626 5.21954	C -0.78152 3.31249 0.77021	H -0.18412 1.57573 5.02392
C -0.09658 -2.69333 5.62131	H -0.99544 2.97158 1.77573	H -0.10929 0.62643 3.49003
H -0.78941 -3.52638 5.79128	C -1.09866 -0.0357 -2.35592	³IM
H -0.21862 -1.99567 6.46083	H -0.94692 -0.52393 -3.32547	Fe -0.23404 0.53954 -0.36956
C -0.46905 -1.97727 4.3021	H -1.6049 0.91223 -2.55238	O -0.43657 0.92074 1.37625
H -1.49422 -1.5927 4.34996	C -1.98689 -0.90838 -1.47244	N 1.74772 0.47606 -0.42662
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C 1.96175 -1.31236 3.97379	C -3.44537 -0.92448 -1.98838	N -0.4066 2.47972 -0.76529
H 2.11343 -2.00519 3.1366	H -3.47551 -0.666 -3.05019	N -2.15548 0.08155 -0.84654
H 2.63547 -0.46257 3.82285	H -3.87784 -1.92197 -1.88844	N -0.25282 -1.45399 0.12451
C 0.51678 -0.8639 4.02596	C -4.20432 0.11003 -1.11288	C 2.56346 0.88382 0.55818
H 0.36921 0.00273 4.68132	H -4.97946 -0.381 -0.51942	H 2.08095 1.35887 1.40312
H 0.17952 -0.29185 2.87274	H -4.69109 0.88286 -1.71132	C 3.93791 0.68328 0.48845
⁵TS		
Fe -0.07756 0.34082 0.51907	C -3.12718 0.72613 -0.2016	H 4.57023 1.01679 1.30254
O -0.30654 0.7156 2.18221	H -2.68927 1.61433 -0.65753	C 4.46985 0.05187 -0.63485
N 2.0202 0.11079 0.21533	H -3.47599 0.99797 0.79548	H 5.53788 -0.11824 -0.71597
N 0.20159 0.28689 -1.71961	C -2.44799 -1.35138 0.89863	C 3.61683 -0.34854 -1.6661
N -0.27983 2.37999 -0.06204	H -3.36636 -1.86698 0.60076	H 4.00023 -0.82384 -2.56166
N -2.05912 -0.31512 -0.08981	H -2.64166 -0.84114 1.84729	C 2.25356 -0.12393 -1.53318
N -0.08443 -1.87532 0.88148	C -1.33117 -2.34071 1.09146	C 1.21823 -0.49632 -2.56943
C 2.94898 0.3825 1.14809	C -1.5687 -3.64607 1.51376	H 1.63513 -0.46927 -3.58161
H 2.58967 0.86414 2.04965	H -2.5875 -3.98833 1.65676	H 0.83103 -1.50328 -2.39235
C 4.28645 0.05472 0.96477	C -0.48338 -4.48492 1.75665	C 0.55747 1.82576 -2.8606
H 5.01067 0.28326 1.73746	H -0.64219 -5.50344 2.09424	H 0.35329 1.96199 -3.92593
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H 5.69787 -0.83816 -0.40188	H 1.68167 -4.60983 1.73402	C -0.09058 2.87931 -2.01409
C 3.69662 -0.83008 -1.1997	C 0.96196 -2.68694 1.11483	C -0.3007 4.18682 -2.43719
H 3.96193 -1.29653 -2.14165	H 1.94721 -2.27464 0.94217	H -0.05187 4.47143 -3.45323
C 2.37516 -0.47902 -0.94768	C 0.98268 -2.22836 4.96955	C -0.82808 5.10845 -1.53352
C 1.25009 -0.73197 -1.9275	H 1.22872 -3.21615 4.56231	H -1.00343 6.13434 -1.83933
H 1.62535 -0.72288 -2.95756	H 1.15338 -2.27898 6.05433	C -1.12644 4.69304 -0.23589
H 0.81365 -1.71871 -1.74524	C -0.49269 -1.90385 4.70018	H -1.53428 5.37912 0.49708
C 0.67462 1.62334 -2.15473	H -0.67676 -1.94546 3.62105	C -0.90696 3.36632 0.11351
H 0.49741 1.77363 -3.22502	H -1.14275 -2.65697 5.16005	H -1.12448 2.96942 1.09656
H 1.75607 1.67789 -1.99895	C 1.90527 -1.16475 4.36007	C -1.16645 0.11381 -3.10774
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H -1.4197 5.34107 1.04781	H -0.82218 -0.49388 6.31205	H -4.05944 -1.56287 -2.59517
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	C 0.08201 0.56276 4.70343	

H -5.05602 0.05087 -1.21892	C 2.86349 0.52688 1.31938	C -0.61109 -4.33839 1.91175
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C -3.18357 1.15249 -1.03486	C 4.20286 0.1786 1.20013	C 0.68721 -3.85029 1.76829
H -2.72106 1.97206 -1.58323	H 4.90286 0.44546 1.98275	H 1.55288 -4.47141 1.96509
H -3.49727 1.52857 -0.06055	C 4.61163 -0.51447 0.05968	C 0.8623 -2.53449 1.35785
C -2.58617 -0.87358 0.21197	H 5.65003 -0.8021 -0.06521	H 1.85423 -2.12244 1.23185
H -3.53766 -1.35039 -0.03846	C 3.67632 -0.82446 -0.92863	C 1.17353 -2.30544 5.15198
H -2.71364 -0.30145 1.1345	H 3.9681 -1.34618 -1.83299	H 1.47869 -3.26701 4.72246
C -1.50465 -1.89575 0.39039	C 2.35041 -0.45009 -0.74206	H 1.36374 -2.36505 6.23315
C -1.75684 -3.20188 0.79447	C 1.25629 -0.75302 -1.74219	C -0.32375 -2.07602 4.91009
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C -0.68736 -4.08131 0.95245	H 0.80452 -1.72346 -1.5148	H -0.9146 -2.88643 5.35164
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C 0.60323 -3.61966 0.70085	H 0.58209 1.66452 -3.22075	H 3.08079 -1.33612 4.7433
H 1.4691 -4.2604 0.81659	H 1.78508 1.65022 -1.93598	H 1.88893 -1.17455 3.461
C 0.77799 -2.30388 0.29	C 0.03135 2.72482 -1.42101	C 1.59068 0.19967 5.10449
H 1.76761 -1.91973 0.09008	C -0.17313 3.96804 -2.01112	H 2.10927 1.01491 4.58478
C 1.35807 -3.21105 4.82363	H 0.10891 4.12704 -3.04587	H 1.92104 0.26518 6.15884
H 1.60615 -3.89097 5.6479	C -0.74037 4.98997 -1.25089	C -0.7886 -0.72309 5.47542
H 1.28157 -3.82791 3.91639	H -0.91165 5.96632 -1.69178	H -0.78471 -0.78391 6.58081
C 2.47858 -2.17882 4.63992	C -1.08628 4.74166 0.07829	H -1.82766 -0.51552 5.19253
H 2.61076 -1.61346 5.57202	H -1.52714 5.51121 0.70099	C 0.10808 0.40448 5.06932
H 3.43254 -2.67574 4.42494	C -0.86403 3.47328 0.5983	H -0.26697 1.42091 5.18234
C 0.00659 -2.53509 5.09016	H -1.11413 3.20346 1.6173	H -0.26346 0.62988 3.1647
H -0.78869 -3.28404 5.18951	C -1.06746 -0.06772 -2.29319	
H 0.05403 -1.98458 6.03909	H -0.88752 -0.60861 -3.22948	³ PC _{reb}
C -0.35094 -1.54735 3.94796	H -1.56216 0.86997 -2.55736	Fe -0.07989 0.35023 -0.3043
H -1.28092 -1.01553 4.17584	C -1.98729 -0.88886 -1.39227	O 0.33687 0.28551 1.88408
H -0.53553 -2.14788 3.04657	H -1.56982 -1.88549 -1.24355	N 2.00045 0.29077 -0.68749
C 2.13716 -1.19116 3.49247	C -3.42766 -0.93554 -1.95402	N 0.12578 0.60761 -2.55361
H 2.15318 -1.76391 2.5535	H -3.42282 -0.74524 -3.03048	N -0.31048 2.32749 -0.51039
H 2.90824 -0.41786 3.41118	H -3.86624 -1.92428 -1.80472	N -0.207157 -0.11059 -0.85878
C 0.78136 -0.59456 3.71269	C -4.21058 0.1532 -1.16999	N -0.07159 -1.66602 -0.02855
H 0.72001 0.40085 4.1491	H -5.01027 -0.29766 -0.57719	C 2.9664 0.52472 0.21668
H -0.07183 0.22773 1.96784	H -4.66986 0.89114 -1.83093	H 2.6294 0.8676 1.18737
⁵IM	C -3.16239 0.81813 -0.25855	C 4.31252 0.31635 -0.06513
Fe -0.13973 0.47605 0.61711	H -2.70513 1.6777 -0.74847	H 5.06049 0.5168 0.69323
O -0.47519 1.06034 2.29618	H -3.54375 1.14748 0.70885	C 4.66535 -0.15103 -1.33064
N 1.96253 0.20866 0.37262	C -2.53017 -1.19161 0.98567	H 5.70529 -0.3272 -1.58474
N 0.21233 0.28471 -1.63379	H -3.44887 -1.7109 0.69633	C 3.66306 -0.37556 -2.27444
N -0.32335 2.48737 -0.14261	H -2.73656 -0.62622 1.89966	H 3.90181 -0.71882 -3.27519
N -2.10298 -0.21736 -0.05105	C -1.42906 -2.18164 1.24805	C 2.33711 -0.14406 -1.92227
N -0.17229 -1.71494 1.09796	C -1.68478 -3.49112 1.64418	C 1.18937 -0.34454 -2.89115
	H -2.70889 -3.83379 1.73948	H 1.54245 -0.23154 -3.92539

H 0.78798	-1.35881	-2.7921	H 1.454	0.9626	6.29703	C -0.87893	3.46166	0.44373
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H 0.28497	2.36017	-3.7678	H -2.69903	1.40917	5.16679	C -1.22892	0.48519	-2.95777
H 1.63647	2.06049	-2.68704	H -1.5581	2.6593	4.67967	H -1.14359	0.15652	-4.00147
C -0.05045	2.89791	-1.70913	C -1.38211	0.82453	3.54865	H -1.72101	1.46104	-2.97378
C -0.30657	4.24589	-1.94613	H -2.05514	1.16349	2.75129	C -2.09767	-0.50594	-2.18222
H -0.09739	4.66334	-2.9249	H -1.57022	-0.24916	3.69207	H -1.66867	-1.50732	-2.25138
C -0.83475	5.03399	-0.92627	C 1.04625	0.56455	4.2076	C -3.56276	-0.46206	-2.67783
H -1.03997	6.08581	-1.09448	H 0.92423	-0.51627	4.37435	H -3.60973	-0.0872	-3.70398
C -1.11021	4.44121	0.30516	H 2.07544	0.72999	3.86958	H -3.99737	-1.46409	-2.68236
H -1.53749	5.00487	1.12613	C 0.0717	1.00589	3.11957	C -4.30303	0.46783	-1.67872
C -0.84026	3.08925	0.46635	H 0.2682	2.05239	2.87057	H -5.09539	-0.07618	-1.15834
H -1.07286	2.58227	1.39134	H 0.39334	-0.66129	2.09695	H -4.76656	1.32386	-2.17417
C -1.19216	0.32959	-3.14756	⁵PC_{reb}					
H -1.09825	-0.09867	-4.1535	Fe -0.0834	0.44611	-0.10665	H -2.77351	1.87688	-1.00993
H -1.70995	1.2854	-3.26049	O 0.4351	0.33152	1.99997	H -3.56263	1.05858	0.33534
C -2.04406	-0.60381	-2.28338	N 2.04219	0.135	-0.56808	C -2.54546	-1.27719	0.1009
H -1.61052	-1.60525	-2.28864	N 0.10475	0.67258	-2.3506	H -3.46993	-1.74217	-0.25823
C -3.51909	-0.60072	-2.7479	N -0.33591	2.59596	-0.4318	H -2.74105	-0.90117	1.11129
H -3.58872	-0.28323	-3.79194	N -2.14993	-0.11459	-0.73331	C -1.44124	-2.30106	0.15874
H -3.94548	-1.60442	-2.68917	N -0.18418	-1.8147	0.16596	C -1.70537	-3.66681	0.22707
C -4.24899	0.37853	-1.78869	C 3.0581	0.21045	0.30887	H -2.73049	-4.0199	0.2014
H -5.01083	-0.14637	-1.20663	H 2.799	0.56368	1.30012	C -0.63789	-4.55802	0.32556
H -4.74841	1.18935	-2.32346	C 4.35544	-0.16205	-0.02549	H -0.8189	-5.62641	0.37998
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C -2.44399	-1.22289	0.05335	C 3.55164	-0.6879	-2.23164	H 1.83583	-2.2448	0.26473
H -3.36314	-1.72869	-0.26055	H 3.71204	-1.02712	-3.24916	C -0.92514	1.61591	5.86581
H -2.63041	-0.7903	1.04218	C 2.27857	-0.30121	-1.82264	H -1.17989	2.28698	6.69417
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C -1.49909	-3.5549	0.38008	H 1.40156	-0.23382	-3.79094	C 0.56962	1.72882	5.53587
H -2.50628	-3.94086	0.48965	H 0.60174	-1.33358	-2.66358	H 0.8131	2.77439	5.30115
C -0.38978	-4.3923	0.47852	C 0.61813	2.03382	-2.60307	H 1.17765	1.45067	6.40369
H -0.51643	-5.45232	0.67053	H 0.46468	2.33228	-3.64746	C -1.79142	1.93853	4.64053
C 0.88161	-3.84319	0.32019	H 1.69787	2.0337	-2.42651	H -2.85379	1.80415	4.87169
H 1.77523	-4.45253	0.38651	C -0.01664	3.035	-1.6677	H -1.65843	2.99488	4.3676
C 0.99852	-2.48271	0.06628	C -0.23353	4.35612	-2.05438	C -1.40811	1.05348	3.44458
H 1.96861	-2.02391	-0.05994	H 0.02311	4.67086	-3.06001	H -1.99904	1.3117	2.55837
C -0.68928	1.14905	5.9637	C -0.78373	5.25108	-1.13932	H -1.62625	0.00169	3.67875
H -0.87444	1.72935	6.87503	H -0.96073	6.28374	-1.42128	C 0.94804	0.8422	4.33804
H -0.87152	0.09458	6.21471	C -1.11482	4.79555	0.13683	H 0.79258	-0.21416	4.60265
C 0.76982	1.31791	5.51861	H -1.55532	5.45211	0.87809	H 2.00532	0.96337	4.07756
H 0.98494	2.38544	5.37133				C 0.07956	1.17783	3.12999

H 1.815 1.70362 -4.49234	H -0.21704 -4.85618 1.61387	H 0.30177 0.66627 -8.13757
C 1.00734 1.13979 -6.40451	C -0.06271 -2.83175 0.93429	C -0.98056 0.48128 -6.41377
H 1.89942 1.43623 -6.94772	H 0.2129 -2.40124 1.88852	H -1.85232 0.18858 -6.99097
C -0.09535 0.62695 -7.09051	C -0.51777 -2.40485 -1.3166	C -1.07462 0.59461 -5.02672
H -0.06217 0.51784 -8.17031	C -0.67067 -1.34247 -2.36684	H -2.02361 0.3991 -4.53528
C -1.24722 0.26907 -6.38589	H -0.44346 -1.73393 -3.36265	C 0.03989 0.97308 -4.26583
H -2.11426 -0.11355 -6.91571	H -1.70741 -0.99568 -2.37926	C -0.04948 1.07827 -2.76315
C -1.29046 0.41157 -4.99905	C -3.0354 0.15398 0.1086	H 0.65853 1.8197 -2.39577
H -2.19682 0.14858 -4.46072	C -4.48247 0.18006 0.20896	H -1.04855 1.39056 -2.4541
C -0.18165 0.90515 -4.29793	H -4.85602 -0.83719 0.35592	C 1.63096 -0.69044 -2.23756
C -0.21677 1.04164 -2.79487	H -4.77452 0.80323 1.05888	H 1.88507 -0.63038 -3.29931
H 0.44062 1.85088 -2.4783	H -4.90527 0.5957 -0.71017	H 1.66073 -1.74648 -1.96093
H -1.22697 1.28019 -2.457	N -1.88424 0.14155 0.02382	C 2.63806 0.08279 -1.40053
C 1.62259 -0.55704 -2.28795	C -0.54816 2.65303 3.71231	H 2.65664 1.13183 -1.7
H 1.87188 -0.41129 -3.34194	H 0.21014 2.10981 4.29024	C 4.04801 -0.5631 -1.45375
H 1.73884 -1.62206 -2.07824	H -0.15599 2.74058 2.69173	H 4.08302 -1.3149 -2.24715
C 2.55419 0.24044 -1.39726	C -0.75679 4.05909 4.29149	H 4.81143 0.18319 -1.67946
H 2.48675 1.30378 -1.63176	H -1.03952 3.97443 5.35104	C 4.26586 -1.20181 -0.05873
C 4.01226 -0.27893 -1.44755	H 0.18286 4.62522 4.2598	H 4.67941 -2.21042 -0.12145
H 4.12894 -0.96619 -2.28986	C -1.858 1.85372 3.67537	H 4.95292 -0.59927 0.54185
H 4.71536 0.54177 -1.5985	H -1.68314 0.8787 3.20681	C 2.87001 -1.21161 0.57469
C 4.25007 -0.99695 -0.09458	H -2.19403 1.66378 4.70538	H 2.29532 -2.07871 0.24227
H 4.7332 -1.96804 -0.21857	C -2.95865 2.61666 2.92557	H 2.85365 -1.19113 1.66442
H 4.88467 -0.39604 0.56182	H -3.89899 2.05054 2.95419	C 2.61258 1.22973 0.78655
C 2.84832 -1.15883 0.50056	H -2.6749 2.7101 1.86727	H 3.65594 1.49079 0.58575
H 2.35577 -2.0395 0.09175	C -1.85862 4.81766 3.53758	H 2.51716 1.00843 1.85377
H 2.80738 -1.21423 1.58809	H -1.52742 4.99959 2.5055	C 1.70826 2.38516 0.44602
C 2.48339 1.24184 0.85136	H -2.0223 5.80232 3.99312	C 2.14345 3.70626 0.47309
H 3.52338 1.52181 0.66733	C -3.17061 4.02042 3.51018	H 3.18195 3.92358 0.69577
H 2.37762 0.9681 1.90433	H -3.55612 3.92591 4.53585	C 1.22905 4.72647 0.21694
C 1.55086 2.36899 0.53405	H -3.9328 4.56119 2.93518	H 1.54733 5.76308 0.23604
C 1.88221 3.71198 0.6683	⁵RC	C -0.09654 4.39649 -0.06387
H 2.88076 3.98995 0.9848	Fe 0.03345 -0.01231 0.1462	H -0.84084 5.15731 -0.26564
C 0.91434 4.67609 0.39232	O 0.02404 -0.13154 1.76154	C -0.45988 3.05662 -0.08866
H 1.14822 5.73018 0.49295	N 2.20508 0.01621 0.03988	H -1.47338 2.74793 -0.30748
C -0.35514 4.26736 -0.01648	N 0.2341 -0.20441 -2.01938	C -1.06025 -3.68714 -1.69212
H -1.13664 4.98271 -0.24183	N 0.42859 2.07674 0.15209	H -1.28781 -3.96878 -2.71377
C -0.61731 2.9097 -0.13498	N -0.42561 -1.9969 -0.13355	C -1.09194 -4.62292 -0.65835
H -1.586 2.54768 -0.44777	C 1.24348 1.26291 -4.92363	H -1.34783 -5.65595 -0.86792
C -0.76394 -3.75255 -1.55494	H 2.1056 1.59382 -4.35038	C -0.78752 -4.22098 0.64336
H -1.03438 -4.07931 -2.55236	C 1.34012 1.14985 -6.31095	H -0.80144 -4.92087 1.47015
C -0.65894 -4.65663 -0.49986	H 2.27858 1.37838 -6.8067	C -0.45638 -2.89323 0.87093
H -0.84825 -5.71192 -0.664	C 0.22899 0.75277 -7.05767	H -0.20848 -2.50975 1.85331
C -0.30658 -4.18754 0.76609		C -0.7283 -2.37057 -1.39729

C -0.72559	-1.26986	-2.42002	H -2.22171	0.12139	-4.58078	C -4.48945	0.30158	-0.10566
H -0.48903	-1.65493	-3.41577	C -0.19341	0.85078	-4.46971	H -4.84961	-0.39488	0.65703
H -1.72327	-0.82437	-2.46504	C -0.2088	1.0385	-2.97156	H -4.83102	1.31254	0.13435
C -3.28205	0.45253	-0.05586	H 0.46034	1.85139	-2.68919	H -4.88341	0.00653	-1.08237
C -4.72574	0.51171	0.07896	H -1.21233	1.29957	-2.63079	N -1.88443	0.2687	-0.16108
H -5.15722	1.00462	-0.79682	C 1.6268	-0.54802	-2.41132	C -0.15116	2.80911	3.40237
H -5.12669	-0.50258	0.16049	H 1.8792	-0.4307	-3.46814	H 0.80707	2.44339	3.78796
H -4.98219	1.07763	0.97926	H 1.735	-1.6081	-2.17432	H 0.04806	3.31201	2.44953
N -2.1307	0.41537	-0.16269	C 2.5628	0.26291	-1.53632	C -0.76562	3.84626	4.37077
C -0.18153	3.77952	3.62406	H 2.50628	1.32024	-1.80005	H -0.87723	3.39249	5.36477
H 0.20015	4.79987	3.75508	C 4.01747	-0.26917	-1.57223	H -0.07888	4.69443	4.47933
H 0.38107	3.34004	2.78942	H 4.12953	-0.9836	-2.39262	C -1.12035	1.66619	3.18877
C -1.67364	3.80901	3.26541	H 4.72737	0.54084	-1.74873	H -0.55043	0.85123	2.31425
H -2.22461	4.32895	4.06271	C 4.24861	-0.94633	-0.19736	H -1.17735	0.98978	4.04971
H -1.83275	4.38587	2.34602	H 4.73015	-1.92198	-0.28968	C -2.48322	2.09308	2.68937
C 0.07116	2.9434	4.88618	H 4.88291	-0.3269	0.44236	H -3.15295	1.2315	2.59375
H 1.14517	2.90728	5.10911	C 2.84255	-1.08257	0.39564	H -2.39242	2.55866	1.70002
H -0.41367	3.43131	5.74467	H 2.3483	-1.97292	0.00985	C -2.13518	4.31696	3.86501
C -0.48772	1.52203	4.72899	H 2.79619	-1.10865	1.48425	H -2.00482	4.84776	2.91071
H -0.33024	0.94679	5.65041	C 2.48497	1.32444	0.67716	H -2.57159	5.03447	4.5705
H 0.0627	1.00611	3.93014	H 3.53103	1.59023	0.50493	C -3.09085	3.13494	3.6591
C -2.23468	2.38897	3.1086	H 2.35339	1.0835	1.73486	H -3.29089	2.65278	4.62541
H -1.74811	1.90204	2.25416	C 1.57249	2.45528	0.31291	H -4.05521	3.47786	3.26515
H -3.30914	2.42713	2.88597	C 1.94047	3.79448	0.38463			
C -1.97931	1.54289	4.36406	H 2.95019	4.05897	0.67684			
H -2.55236	1.96179	5.20448	C 0.99394	4.77222	0.08458			
H -2.34574	0.51975	4.21045	H 1.25612	5.82317	0.13918			
			C -0.29222	4.37967	-0.28757			
			H -1.06008	5.10541	-0.52691			
			C -0.58485	3.02453	-0.35749			
			H -1.56341	2.67494	-0.65496			
			C -0.74531	-3.71898	-1.58095			
			H -1.00827	-4.08185	-2.56802			
			C -0.63913	-4.58603	-0.49481			
			H -0.81912	-5.64791	-0.62392			
			C -0.29791	-4.07108	0.75629			
			H -0.20812	-4.71097	1.62616			
			C -0.06477	-2.70764	0.87945			
			H 0.19948	-2.23601	1.81758			
			C -0.50996	-2.3625	-1.38477			
			C -0.66532	-1.33285	-2.46861			
			H -0.43672	-1.75273	-3.45248			
			H -1.70246	-0.98823	-2.49219			
			C -3.03876	0.27578	-0.13791			

³TS

Fe 0.07541 0.10474 -0.05784
O 0.10715 0.02833 1.69075
N 2.09533 0.11485 -0.10478
N 0.2044 -0.16564 -2.16715
N 0.32986 2.0817 -0.06512
N -0.15946 -1.87838 -0.17488
C 0.94534 1.1844 -5.21641
H 1.81216 1.61009 -4.71771
C 0.97035 0.99448 -6.59874
H 1.85954 1.25815 -7.16326
C -0.14912 0.4762 -7.2527
H -0.13217 0.32995 -8.32851
C -1.29673 0.16091 -6.5213
H -2.1767 -0.22574 -7.02639
C -1.31883 0.35146 -5.13973

⁵TS

Fe 0.09991 -0.12358 0.33354
O 0.20337 -0.36877 2.03177
N 2.24128 -0.09202 0.10483
N 0.21861 -0.24439 -1.93637
N 0.52873 2.00086 0.3653
N -0.34501 -2.1512 -0.09251
C 1.10378 1.39018 -4.79351
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C 1.16615 1.34111 -6.18686
H 2.08302 1.62225 -6.69613
C 0.04893 0.93969 -6.92192
H 0.09473 0.90287 -8.00622
C -1.1324 0.59895 -6.25875
H -2.00966 0.30139 -6.82534
C -1.19124 0.6483 -4.86583
H -2.11883 0.39706 -4.35883
C -0.07044 1.03178 -4.11655
C -0.11943 1.05641 -2.60695
H 0.574 1.80412 -2.22223

H -1.11851	1.32673	-2.25743	N -2.01606	0.31563	0.10966	C 2.57481	0.24555	-1.55915
C 1.61396	-0.68046	-2.20374	C 0.35973	2.49376	4.16138	H 2.50026	1.30988	-1.78845
H 1.86088	-0.55952	-3.26326	H 1.03982	3.20343	4.64634	C 4.03519	-0.26676	-1.63929
H 1.67763	-1.74885	-1.9843	H 0.75763	2.31153	3.15615	H 4.13487	-0.96883	-2.47194
C 2.62058	0.07186	-1.34295	C -1.04852	3.09253	4.04359	H 4.73052	0.5542	-1.82239
H 2.59663	1.13682	-1.57939	H -1.4123	3.36613	5.04427	C 4.30785	-0.9616	-0.2815
C 4.04682	-0.52195	-1.47823	H -1.014	4.01647	3.45395	H 4.81663	-1.92057	-0.39922
H 4.09225	-1.18723	-2.34497	C 0.34717	1.16831	4.93578	H 4.93317	-0.33512	0.36025
H 4.78473	0.26676	-1.63655	H 1.34508	0.71481	4.95247	C 2.91505	-1.14923	0.32799
C 4.3067	-1.28956	-0.15663	H 0.07589	1.36325	5.98687	H 2.43718	-2.0396	-0.07841
H 4.70622	-2.29144	-0.32728	C -0.66931	0.18899	4.37566	H 2.88539	-1.20937	1.41573
H 5.02319	-0.75161	0.47014	H -0.67133	-0.78013	4.88635	C 2.50591	1.23762	0.69032
C 2.93464	-1.34906	0.52627	H -0.26095	-0.10361	3.26835	H 3.54351	1.53345	0.51531
H 2.35004	-2.19513	0.1601	C -2.02487	2.0976	3.40206	H 2.38932	0.9595	1.74041
H 2.96054	-1.40276	1.61452	H -1.71166	1.90732	2.36935	C 1.56465	2.36009	0.37642
C 2.69986	1.0657	0.91198	H -3.03363	2.52448	3.35381	C 1.90136	3.70411	0.49865
H 3.74141	1.31773	0.69018	C -2.05899	0.76313	4.16049	H 2.90612	3.98035	0.79685
H 2.63821	0.77464	1.9647	H -2.50855	0.92125	5.15502	C 0.93199	4.67064	0.238
C 1.81089	2.26155	0.68924	H -2.6977	0.03588	3.64523	H 1.17085	5.7244	0.33092
C 2.26485	3.56546	0.86762				C -0.34689	4.26392	-0.14481
H 3.30528	3.74422	1.11499				H -1.13108	4.98096	-0.35559
C 1.36252	4.61889	0.73431	³IM			C -0.61065	2.90642	-0.26099
H 1.69248	5.64234	0.87676	Fe 0.11762	-0.00411	-0.06192	H -1.58312	2.54504	-0.56432
C 0.03398	4.34043	0.41042	O 0.18434	-0.11678	1.7288	C -0.67166	-3.78832	-1.67584
H -0.699	5.12986	0.2941	N 2.13351	0.04476	-0.12575	H -0.95563	-4.12646	-2.66578
C -0.34195	3.01631	0.2276	N 0.2087	-0.19972	-2.16181	C -0.52313	-4.68482	-0.61868
H -1.35716	2.74803	-0.03653	N 0.32748	1.97456	-0.00881	H -0.69074	-5.74511	-0.77468
C -0.9969	-3.76312	-1.72715	N -0.0765	-1.9827	-0.23034	C -0.1563	-4.20207	0.638
H -1.24718	-3.98799	-2.75788	C 0.90046	1.29449	-5.16036	H -0.03394	-4.86627	1.48536
C -0.98647	-4.75903	-0.75172	H 1.75022	1.73617	-4.6462	C 0.05908	-2.83932	0.79702
H -1.23153	-5.78253	-1.01526	C 0.93036	1.15629	-6.54864	H 0.33793	-2.38872	1.74095
C -0.653	-4.42707	0.56273	H 1.80715	1.47565	-7.10366	C -0.45133	-2.4351	-1.44498
H -0.63293	-5.17409	1.34744	C -0.16886	0.61749	-7.22016	C -0.64759	-1.37212	-2.48886
C -0.3356	-3.10801	0.85537	H -0.14821	0.51093	-8.30055	H -0.42919	-1.75109	-3.49132
H -0.06518	-2.77648	1.8505	C -1.30152	0.23027	-6.50008	H -1.69085	-1.0451	-2.48038
C -0.67719	-2.45908	-1.3627	H -2.16631	-0.17261	-7.01845	C -2.99738	0.11244	-0.01008
C -0.72733	-1.31006	-2.33587	C -1.32872	0.36933	-5.11245	C -4.44697	0.10245	0.06315
H -0.53342	-1.66061	-3.35482	H -2.22075	0.08339	-4.56216	H -4.78925	-0.8851	0.38528
H -1.73579	-0.88483	-2.32419	C -0.2224	0.88818	-4.42576	H -4.78165	0.8556	0.78191
C -3.16378	0.37759	0.2404	C -0.2384	1.02239	-2.92223	H -4.86429	0.32934	-0.92205
C -4.60108	0.46689	0.41552	H 0.41225	1.84054	-2.61423	N -1.84447	0.12724	-0.07599
H -5.03233	1.07746	-0.38276	H -1.24629	1.24622	-2.56838	C -0.31085	2.73026	3.56141
H -5.03586	-0.53622	0.38289	C 1.63427	-0.55022	-2.44388	H 0.52467	2.26897	4.09824
H -4.8183	0.92641	1.38425	H 1.86335	-0.39308	-3.50067	H 0.06164	3.01211	2.56718

C -0.76208	4.03534	4.26889	H 4.80504	0.24938	-1.66508	H 1.16902	0.90609	4.98307
H -1.00653	3.81077	5.31554	C 4.37476	-1.36166	-0.23004	H 0.01157	1.65803	6.06925
H 0.06761	4.75278	4.27682	H 4.77707	-2.3533	-0.44779	C -0.88868	0.44605	4.58444
C -1.4664	1.78566	3.42992	H 5.10342	-0.8413	0.39778	H -0.82423	-0.58327	4.93632
H -0.48746	0.46724	2.14828	C 3.02106	-1.45622	0.48559	H -0.15464	-0.15647	2.95266
H -1.56361	0.98029	4.15612	H 2.43277	-2.29269	0.10327	C -2.19094	2.29299	3.44572
C -2.71128	2.32559	2.79742	H 3.07635	-1.5511	1.56997	H -1.87259	2.07214	2.42051
H -3.52164	1.58898	2.82184	C 2.77696	0.9384	0.97345	H -3.19592	2.725	3.37781
H -2.52346	2.57611	1.74247	H 3.8152	1.20242	0.74948	C -2.24529	0.97939	4.24506
C -1.99116	4.63646	3.57447	H 2.72664	0.60868	2.01535	H -2.78084	1.16943	5.19498
H -1.71714	4.94127	2.55415	C 1.88203	2.13749	0.8012	H -2.83855	0.22148	3.71891
H -2.31163	5.54458	4.09959	C 2.33986	3.43965	0.98131			
C -3.1504	3.63314	3.50943	H 3.38614	3.61623	1.20398			
H -3.48191	3.39116	4.52782	C 1.43587	4.49517	0.877			
H -4.00992	4.06635	2.98352	H 1.77019	5.51705	1.02033			
⁵IM								
Fe 0.16315	-0.24569	0.444	C 0.1007	4.22103	0.57828			
O 0.32479	-0.61472	2.20779	H -0.63342	5.01205	0.48211			
N 2.30908	-0.18987	0.12999	C -0.28058	2.89875	0.3947			
N 0.23402	-0.27373	-1.86616	H -1.30107	2.63496	0.14792			
N 0.59035	1.88001	0.50847	C -0.94111	-3.80965	-1.79482			
N -0.27157	-2.26882	-0.09958	H -1.21264	-3.98817	-2.82924			
C 1.02838	1.4675	-4.68348	C -0.89286	-4.85175	-0.87			
H 1.91622	1.77127	-4.13479	H -1.13	-5.86479	-1.17765			
C 1.04453	1.47664	-6.07899	C -0.53119	-4.57918	0.4506			
H 1.94646	1.77264	-6.60622	H -0.48103	-5.36346	1.19672			
C -0.09955	1.11442	-6.7928	C -0.22539	-3.27073	0.79953			
H -0.08976	1.12307	-7.87862	H 0.06424	-2.98271	1.8031			
C -1.26118	0.75425	-6.10558	C -0.62996	-2.5205	-1.3739			
H -2.15909	0.487	-6.65469	C -0.71437	-1.32646	-2.28937			
C -1.27364	0.74519	-4.71061	H -0.54642	-1.62766	-3.32869			
H -2.18613	0.4792	-4.18407	H -1.7252	-0.91059	-2.23158			
C -0.12582	1.08905	-3.98338	C -3.10112	0.25066	0.35251			
C -0.12574	1.05121	-2.47294	C -4.54572	0.33797	0.44932			
H 0.57947	1.78434	-2.08168	H -4.94231	0.84241	-0.43647			
H -1.11363	1.30668	-2.08212	H -4.96807	-0.66878	0.51564			
C 1.62437	-0.68923	-2.18202	H -4.81556	0.90613	1.3444			
H 1.84679	-0.52556	-3.24145	N -1.9482	0.19169	0.27771			
H 1.69923	-1.76507	-2.00668	C 0.19639	2.69266	4.18013			
C 2.65011	0.03333	-1.31673	H 0.89077	3.41265	4.62728			
H 2.616	1.10669	-1.51068	H 0.57528	2.47114	3.17598			
C 4.07456	-0.54787	-1.51489	C -1.20944	3.29535	4.06553			
H 4.09793	-1.18117	-2.40625	H -1.56531	3.58608	5.06424			
			H -1.17616	4.20935	3.46091			
			C 0.18813	1.39608	5.0084			

C 2.84255 -1.08257 0.39564	H -2.39242 2.55866 1.70002	H 3.74141 1.31773 0.69018
H 2.3483 -1.97292 0.00985	C -2.13518 4.31696 3.86501	H 2.63821 0.77464 1.9647
H 2.79619 -1.10865 1.48425	H -2.00482 4.84776 2.91071	C 1.81089 2.26155 0.68924
C 2.48497 1.32444 0.67716	H -2.57159 5.03447 4.5705	C 2.26485 3.56546 0.86762
H 3.53103 1.59023 0.50493	C -3.09085 3.13494 3.6591	H 3.30528 3.74422 1.11499
H 2.35339 1.0835 1.73486	H -3.29089 2.65278 4.62541	C 1.36252 4.61889 0.73431
C 1.57249 2.45528 0.31291	H -4.05521 3.47786 3.26515	H 1.69248 5.64234 0.87676
C 1.94047 3.79448 0.38463		C 0.03398 4.34043 0.41042
H 2.95019 4.05897 0.67684	⁵ TS	H -0.699 5.12986 0.2941
C 0.99394 4.77222 0.08458	Fe 0.09991 -0.12358 0.33354	C -0.34195 3.01631 0.2276
H 1.25612 5.82317 0.13918	O 0.20337 -0.36877 2.03177	H -1.35716 2.74803 -0.03653
C -0.29222 4.37967 -0.28757	N 2.24128 -0.09202 0.10483	C -0.9969 -3.76312 -1.72715
H -1.06008 5.10541 -0.52691	N 0.21861 -0.24439 -1.93637	H -1.24718 -3.98799 -2.75788
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H -0.81912 -5.64791 -0.62392	H 2.08302 1.62225 -6.69613	H -0.06518 -2.77648 1.8505
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H -0.20812 -4.71097 1.62616	H 0.09473 0.90287 -8.00622	C -0.72733 -1.31006 -2.33587
C -0.06477 -2.70764 0.87945	C -1.1324 0.59895 -6.25875	H -0.53342 -1.66061 -3.35482
H 0.19948 -2.23601 1.81758	H -2.00966 0.30139 -6.82534	H -1.73579 -0.88483 -2.32419
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H 0.80707 2.44339 3.78796	C 4.04682 -0.52195 -1.47823	H -1.014 4.01647 3.45395
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C -0.76562 3.84626 4.37077	H 4.78473 0.26676 -1.63655	H 1.34508 0.71481 4.95247
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H -0.07888 4.69443 4.47933	H 4.70622 -2.29144 -0.32728	C -0.66931 0.18899 4.37566
C -1.12035 1.66619 3.18877	H 5.02319 -0.75161 0.47014	H -0.67133 -0.78013 4.88635
H -0.55043 0.85123 2.31425	C 2.93464 -1.34906 0.52627	H -0.26095 -0.10361 3.26835
H -1.17735 0.98978 4.04971	H 2.35004 -2.19513 0.1601	C -2.02487 2.0976 3.40206
C -2.48322 2.09308 2.68937	H 2.96054 -1.40276 1.61452	H -1.71166 1.90732 2.36935
H -3.15295 1.2315 2.59375	C 2.69986 1.0657 0.91198	H -3.03363 2.52448 3.35381

C -2.05899	0.76313	4.16049	H 2.90612	3.98035	0.79685	⁵ IM
H -2.50855	0.92125	5.15502	C 0.93199	4.67064	0.238	Fe 0.16315
H -2.6977	0.03588	3.64523	H 1.17085	5.7244	0.33092	O 0.32479
³ IM			C -0.34689	4.26392	-0.14481	N 2.30908
Fe 0.11762	-0.00411	-0.06192	H -1.13108	4.98096	-0.35559	N 0.23402
O 0.18434	-0.11678	1.7288	C -0.61065	2.90642	-0.26099	N 0.59035
N 2.13351	0.04476	-0.12575	H -1.58312	2.54504	-0.56432	N -0.27157
N 0.2087	-0.19972	-2.16181	C -0.67166	-3.78832	-1.67584	C 1.02838
N 0.32748	1.97456	-0.00881	H -0.95563	-4.12646	-2.66578	H 1.91622
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C 0.90046	1.29449	-5.16036	H -0.69074	-5.74511	-0.77468	C 1.04453
H 1.75022	1.73617	-4.6462	C -0.1563	-4.20207	0.638	H 1.77264
C 0.93036	1.15629	-6.54864	H -0.03394	-4.86627	1.48536	C -0.09955
H 1.80715	1.47565	-7.10366	C 0.05908	-2.83932	0.79702	H 1.11442
C -0.16886	0.61749	-7.22016	H 0.33793	-2.38872	1.74095	N -6.7928
H -0.14821	0.51093	-8.30055	C -0.45133	-2.4351	-1.44498	N -0.26622
C -1.30152	0.23027	-6.50008	C -0.64759	-1.37212	-2.48886	C -0.09955
H -2.16631	-0.17261	-7.01845	H -0.42919	-1.75109	-3.49132	H -1.26118
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H -2.22075	0.08339	-4.56216	C -2.99738	0.11244	-0.01008	H -6.10558
C -0.2224	0.88818	-4.42576	C -4.44697	0.10245	0.06315	H -2.15909
C -0.2384	1.02239	-2.92223	H -4.78925	-0.8851	0.38528	C 0.487
H 0.41225	1.84054	-2.61423	H -4.78165	0.8556	0.78191	N -6.65469
H -1.24629	1.24622	-2.56838	H -4.86429	0.32934	-0.92205	C -1.27364
C 1.63427	-0.55022	-2.44388	N -1.84447	0.12724	-0.07599	H -4.71061
H 1.86335	-0.39308	-3.50067	C -0.31085	2.73026	3.56141	H -2.18613
H 1.76273	-1.61565	-2.2449	H 0.52467	2.26897	4.09824	C -3.98338
C 2.57481	0.24555	-1.55915	H 0.06164	3.01211	2.56718	H 1.05121
H 2.50026	1.30988	-1.78845	C -0.76208	4.03534	4.26889	H -2.47294
C 4.03519	-0.26676	-1.63929	H -1.00653	3.81077	5.31554	H 1.78434
H 4.13487	-0.96883	-2.47194	H 0.06761	4.75278	4.27682	H -2.08212
H 4.73052	0.5542	-1.82239	C -1.4664	1.78566	3.42992	C 1.62437
C 4.30785	-0.9616	-0.2815	H -0.48746	0.46724	2.14828	H -0.68923
H 4.81663	-1.92057	-0.39922	H -1.56361	0.98029	4.15612	C 2.18202
H 4.93317	-0.33512	0.36025	C -2.71128	2.32559	2.79742	H 1.84679
C 2.91505	-1.14923	0.32799	H -3.52164	1.58898	2.82184	H 1.69923
H 2.43718	-2.0396	-0.07841	H -2.52346	2.57611	1.74247	C 0.03333
H 2.88539	-1.20937	1.41573	C -1.99116	4.63646	3.57447	H -1.31673
C 2.50591	1.23762	0.69032	H -1.71714	4.94127	2.55415	H 2.616
H 3.54351	1.53345	0.51531	H -2.31163	5.54458	4.09959	C -0.54787
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H -1.21264	-3.98817	-2.82924	H 1.91811	1.8361	-4.44817	H -0.4233	-5.28916	0.95782
C -0.89286	-4.85175	-0.87	C 1.23083	1.46263	-6.45417	C -0.24144	-3.20557	0.48346
H -1.13	-5.86479	-1.17765	H 2.14998	1.81533	-6.91256	H 0.0116	-2.88206	1.48528
C -0.53119	-4.57918	0.4506	C 0.17685	1.01131	-7.25118	C -0.62706	-2.55049	-1.71583
H -0.48103	-5.36346	1.19672	H 0.27421	1.00796	-8.33277	C -0.73348	-1.40647	-2.69654
C -0.22539	-3.27073	0.79953	C -1.00817	0.5755	-6.65306	H -0.55136	-1.7661	-3.71655
H 0.06424	-2.98271	1.8031	H -1.83677	0.23704	-7.26814	H -1.75544	-1.01323	-2.66979
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C -0.71437	-1.32646	-2.28937	H -2.06426	0.25662	-4.80637	C -4.55116	0.04352	-0.06296
H -0.54642	-1.62766	-3.32869	C -0.07668	1.01802	-4.45292	H -4.9656	-0.88194	0.34709
H -1.7252	-0.91059	-2.23158	C -0.18892	0.98361	-2.94606	H -4.89288	0.89112	0.53787
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C -4.54572	0.33797	0.44932	H -1.21328	1.20213	-2.63094	N -1.94397	-0.0663	-0.02907
H -4.94231	0.84241	-0.43647	C 1.5872	-0.70284	-2.52764	C 0.22984	1.0772	3.86976
H -4.96807	-0.66878	0.51564	H 1.90763	-0.50423	-3.55669	H 0.56744	1.76347	3.0868
H -4.81556	0.90613	1.3444	H 1.66918	-1.7819	-2.37713	H -0.85236	1.23165	3.98924
N -1.9482	0.19169	0.27771	C 2.51363	0.01409	-1.55545	C 0.94417	1.37333	5.19762
C 0.19639	2.69266	4.18013	H 2.46698	1.09088	-1.73022	H 2.03065	1.30549	5.04424
H 0.89077	3.41265	4.62728	C 3.96514	-0.52411	-1.63511	H 0.73368	2.40312	5.50723
H 0.57528	2.47114	3.17598	H 4.08417	-1.13809	-2.53225	C 0.46817	-0.36852	3.43898
C -1.20944	3.29535	4.06553	H 4.68568	0.29316	-1.70632	H -1.15901	-0.64503	2.34253
H -1.56531	3.58608	5.06424	C 4.17518	-1.35845	-0.34541	H 1.5291	-0.52174	3.21866
H -1.17616	4.20935	3.46091	H 4.61509	-2.33721	-0.54829	C 0.04082	-1.36335	4.51524
C 0.18813	1.39608	5.0084	H 4.83836	-0.83942	0.35198	H 0.25215	-2.38383	4.17594
H 1.16902	0.90609	4.98307	C 2.76675	-1.49723	0.24352	H -1.04747	-1.28371	4.65589
H 0.01157	1.65803	6.06925	H 2.23592	-2.33113	-0.21487	C 0.52207	0.38272	6.29103
C -0.88868	0.44605	4.58444	H 2.73366	-1.62987	1.32614	H -0.54391	0.5268	6.51725
H -0.82423	-0.58327	4.93632	C 2.52486	0.88879	0.72141	H 1.07347	0.58447	7.21678
H -0.15464	-0.15647	2.95266	H 3.55589	1.17012	0.4888	C 0.75248	-1.06754	5.8448
C -2.19094	2.29299	3.44572	H 2.51102	0.55171	1.76088	H 1.8304	-1.24361	5.72219
H -1.87259	2.07214	2.42051	C 1.60541	2.06476	0.5722	H 0.40417	-1.76748	6.61249
H -3.19592	2.725	3.37781	C 2.00947	3.37872	0.7815	⁵PC_{reb}		
C -2.24529	0.97939	4.24506	H 3.04535	3.59331	1.01901	Fe 0.13094	-0.12034	0.14245
H -2.78084	1.16943	5.19498	C 1.06348	4.3984	0.68288	O -0.1469	-0.43023	2.26676
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³PC_{reb}			C -0.25686	4.07348	0.37136	N 0.2462	-0.29449	-2.0984
Fe 0.00208	-0.21817	-0.05059	H -1.02175	4.8359	0.28303	N 0.58636	1.98911	0.34303
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			C -0.87582	-3.86731	-2.09429			

H 1.89954 1.74949 -4.39763	H -0.3331 -5.27585 1.18987	H -0.16524 0.50172 -8.30161
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C -1.18789 0.52201 -6.39165	H -0.51998 -1.74015 -3.48214	C -0.22117 0.88752 -4.42746
H -2.06095 0.19378 -6.94791	H -1.69928 -0.98797 -2.40751	C -0.23068 1.02443 -2.92419
C -1.22976 0.56469 -4.99775	C -3.18485 0.25872 0.10052	H 0.42403 1.84046 -2.6191
H -2.13989 0.27636 -4.4787	C -4.63612 0.27164 0.03162	H -1.23623 1.25167 -2.56611
C -0.11469 0.9875 -4.26117	H -4.98736 1.30009 -0.0914	C 1.64139 -0.55074 -2.44608
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H 0.52587 1.76585 -2.36525	H -5.05281 -0.14583 0.95258	H 1.76897 -1.61657 -2.2488
H -1.1484 1.22901 -2.38551	N -2.02793 0.25262 0.14869	C 2.58026 0.24358 -1.55881
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H 2.58668 1.15674 -1.79154	H -0.3877 0.85621 6.421	C 4.30876 -0.96395 -0.27518
C 4.09584 -0.45003 -1.7554	H -2.0669 1.0882 5.93636	H 4.81713 -1.9234 -0.3905
H 4.12481 -1.11246 -2.62541	C 0.74348 1.20363 3.87551	H 4.93265 -0.33725 0.36771
H 4.79944 0.36301 -1.94672	H 1.0529 1.83368 3.03704	C 2.91412 -1.15018 0.33044
C 4.44361 -1.2094 -0.4499	H 1.51362 1.29844 4.65183	H 2.43723 -2.04062 -0.07689
H 4.85812 -2.20194 -0.64052	C 0.70413 -0.26363 3.44294	H 2.88214 -1.20996 1.41823
H 5.17908 -0.65338 0.13859	H 1.68494 -0.59394 3.09407	C 2.50852 1.23856 0.68684
C 3.10765 -1.29325 0.3017	H -1.06699 -0.22534 2.50208	H 3.54542 1.53433 0.50748
H 2.52744 -2.1599 -0.02407	C -1.14082 -0.70676 5.13528	H 2.3976 0.96193 1.73793
H 3.20237 -1.34617 1.38777	H -1.93286 -0.83444 4.38143	C 1.56586 2.36078 0.37517
C 2.83812 1.11605 0.66257	H -1.42537 -1.35006 5.97489	C 1.90253 3.70355 0.50265
H 3.84478 1.41791 0.35201	C 0.20862 -1.17502 4.56679	H 2.90892 3.97875 0.79653
H 2.90208 0.84328 1.72108	H 0.96365 -1.15947 5.36294	C 0.9317 4.67055 0.24984
C 1.89027 2.28305 0.52161	H 0.1458 -2.20656 4.20245	H 1.17182 5.72411 0.34355
C 2.33031 3.59983 0.63201	2FP	C -0.3489 4.26572 -0.12802
H 3.38705 3.80519 0.76296	Fe 0.11855 0.00045 -0.07215	H -1.13355 4.9842 -0.33246
C 1.39677 4.63306 0.57565	O 0.16744 -0.09477 1.72771	C -0.6136 2.90924 -0.24955
H 1.71844 5.66568 0.66126	N 2.13457 0.04441 -0.1261	H -1.58861 2.54866 -0.54596
C 0.04761 4.322 0.40254	N 0.21568 -0.19951 -2.16466	C -0.66417 -3.78754 -1.67756
H -0.71016 5.09508 0.35172	N 0.32806 1.97711 -0.0103	H -0.94517 -4.12833 -2.6674
C -0.31455 2.98628 0.28599	N -0.0751 -1.97836 -0.23454	C -0.51661 -4.68136 -0.61792
H -1.34651 2.68869 0.14264	C 0.90058 1.2868 -5.16754	H -0.68189 -5.74227 -0.77197
C -0.80742 -3.85433 -1.86331	H 1.75454 1.72563 -4.65803	C -0.15381 -4.19545 0.63866
H -1.04915 -4.08289 -2.89554	C 0.92385 1.14552 -6.55565	H -0.03251 -4.85759 1.48773
C -0.72999 -4.8603 -0.90119	H 1.79982 1.4594 -7.11507	C 0.0591 -2.8321 0.79542
H -0.91386 -5.89382 -1.17576	C -0.18082 0.61074 -7.22139	H 0.33491 -2.38 1.73954
C -0.40664 -4.52299 0.41372		C -0.4466 -2.4336 -1.44919

C -0.64128	-1.37153	-2.49389	H 2.42399	-2.3025	0.10647	C 4.09404	5.12856	-0.32677
H -0.42068	-1.74977	-3.49599	H 3.06593	-1.56646	1.57718	H 4.72787	5.4887	-1.13127
H -1.68429	-1.04403	-2.48704	C 2.78771	0.93065	0.97398	C 3.81574	5.94761	0.76929
C -2.99682	0.11402	-0.01697	H 3.82132	1.19504	0.73159	H 4.22819	6.95086	0.81764
C -4.44604	0.10422	0.06493	H 2.76161	0.60209	2.01741	C 3.01835	5.46797	1.81113
H -4.78692	-0.88641	0.37907	C 1.8872	2.1266	0.81164	H 2.81361	6.09378	2.67437
H -4.77638	0.85095	0.79265	C 2.3509	3.43262	0.92858	C 2.49035	4.1785	1.7502
H -4.86852	0.34041	-0.91594	H 3.40666	3.61597	1.09299	H 1.88742	3.80616	2.57356
N -1.84424	0.12752	-0.0908	C 1.44152	4.48463	0.82985	C 2.74439	3.35624	0.64363
H -0.55992	0.43542	2.09803	H 1.78243	5.51079	0.91612	C 2.16443	1.96575	0.56738
⁶FP								
Fe 0.1566	-0.2493	0.44303	H -0.64622	4.98961	0.53152	H 2.80743	1.32137	-0.03052
O 0.23534	-0.63641	2.23598	C -0.2978	2.87463	0.49455	H 2.07137	1.52509	1.56019
N 2.30771	-0.19847	0.13713	H -1.33005	2.60154	0.31706	C 0.76545	2.33468	-1.46978
N 0.23606	-0.27278	-1.85061	C -0.93655	-3.80906	-1.7809	H 1.40092	3.21515	-1.58813
N 0.58247	1.86059	0.58537	H -1.21064	-3.9884	-2.8144	H -0.25325	2.63842	-1.71606
N -0.26522	-2.26862	-0.08723	C -0.88306	-4.85092	-0.85583	C 1.20293	1.21184	-2.38861
C 1.01733	1.47041	-4.66808	H -1.11869	-5.8644	-1.16293	H 2.24008	0.94126	-2.18403
H 1.91343	1.76428	-4.12759	C -0.51813	-4.57834	0.46381	C 0.97563	1.55029	-3.8847
C 1.01972	1.48316	-6.06362	H -0.46403	-5.36268	1.20944	H 0.72438	2.60923	-3.99229
H 1.91932	1.77154	-6.59891	C -0.2143	-3.26978	0.81277	H 1.87979	1.37039	-4.4687
C -0.13491	1.13444	-6.76708	H 0.07637	-2.98414	1.81679	C -0.19535	0.6453	-4.34127
H -0.13553	1.14582	-7.8529	C -0.62689	-2.51954	-1.36173	H -0.92814	1.18415	-4.94529
C -1.29363	0.78459	-6.06973	C -0.71382	-1.32494	-2.2766	H 0.16914	-0.19528	-4.93789
H -2.19958	0.52835	-6.61075	H -0.54237	-1.62353	-3.31571	C -0.81501	0.15225	-3.02984
C -1.29271	0.77199	-4.67482	H -1.72455	-0.91022	-2.22057	H -1.49583	0.90051	-2.62421
H -2.2031	0.51517	-4.14013	C -3.10211	0.24374	0.27562	H -1.35117	-0.79507	-3.1008
C -0.13403	1.10162	-3.95827	C -4.55027	0.31614	0.31304	C 1.0995	-1.23238	-2.3843
C -0.1223	1.05882	-2.44842	H -4.91305	0.83582	-0.57843	H 1.62124	-1.16392	-3.34309
H 0.58964	1.78642	-2.05787	H -4.96432	-0.69594	0.33917	H 0.38622	-2.05837	-2.45793
H -1.10585	1.31686	-2.0499	H -4.86481	0.86165	1.20742	C 2.06543	-1.50641	-1.26986
C 1.62431	-0.69119	-2.17551	N -1.94695	0.19302	0.23855	C 3.22266	-2.26072	-1.43176
H 1.8406	-0.52092	-3.23487	H 0.12067	0.10133	2.85892	H 3.48724	-2.6305	-2.41583
H 1.69683	-1.76824	-2.00773	CYH + 2'					
C 2.65261	0.02416	-1.31021	³RC					
H 2.62445	1.09801	-1.5024	Fe -0.00167	0.01522	0.02068	C 2.4665	-1.28297	1.01883
C 4.07403	-0.56473	-1.50582	O 0.00087	0.01862	1.64914	H 2.10575	-0.87784	1.95546
H 4.09372	-1.20021	-2.39561	N 0.33858	0.01045	-2.08516	C -2.68345	3.14329	0.46882
H 4.80868	0.2282	-1.65785	N 0.7815	1.88701	-0.04074	H -2.55408	4.16249	0.81397
C 4.36936	-1.3777	-0.21935	N 1.71596	-1.01116	-0.06457	C -3.93962	2.64845	0.12175
H 4.76941	-2.37054	-0.43527	N -1.70086	1.03387	-0.07189	H -4.81647	3.28184	0.1987
H 5.09767	-0.85869	0.40987	C 3.56456	3.83896	-0.38603	C -4.05283	1.33475	-0.33353
C 3.01396	-1.46934	0.49274	H 3.80441	3.19887	-1.23125	H -5.00884	0.91339	-0.61971

C	-2.90869	0.55374	-0.41871	C	3.77991	5.77627	1.22144	H	0.52287	3.96906	1.02923
H	-2.94379	-0.4672	-0.77213	H	3.78977	6.45497	2.06891	H	0.92109	2.71977	2.21939
C	-1.57967	2.3059	0.36625	C	3.28366	4.48197	1.3767	C	-1.11109	-2.89714	0.84551
C	-0.18656	2.70894	0.74515	H	2.91935	4.15954	2.3481	N	-0.66308	-1.85307	0.62807
H	-0.01443	3.77473	0.57691	C	3.26529	3.59131	0.29438	C	-1.68509	-4.20134	1.12081
H	-0.02322	2.49224	1.80375	C	2.69854	2.20082	0.4509	H	-1.139	-4.96782	0.56362
C	-1.38173	-2.78313	-0.06222	H	3.16477	1.52006	-0.26315	H	-1.61365	-4.40953	2.19215
N	-0.90752	-1.73236	-0.11332	H	2.88601	1.80883	1.45249	H	-2.73606	-4.20967	0.81803
C	-1.98338	-4.10201	-0.00127	C	0.78756	2.44874	-1.14123	C	-1.3234	0.59893	4.69638
H	-1.58501	-4.72273	-0.8089	H	1.32765	3.33028	-1.49939	H	-1.20049	1.57699	5.17893
H	-1.74743	-4.56318	0.96201	H	-0.27142	2.7131	-1.11315	H	-1.05792	0.73082	3.64038
H	-3.06827	-4.01572	-0.10886	C	0.99922	1.28027	-2.09321	C	-2.78368	0.13615	4.79835
C	-3.04442	0.42226	3.40992	H	2.06101	1.0381	-2.16035	H	-3.07916	0.10219	5.85722
H	-3.2022	1.39189	3.899	C	0.37347	1.55242	-3.48533	H	-3.44598	0.86113	4.30951
H	-2.44162	0.61261	2.51318	H	0.12383	2.61282	-3.57728	C	-0.36185	-0.42649	5.31353
C	-4.39025	-0.1898	2.9966	H	1.07798	1.31599	-4.28459	H	0.67577	-0.09641	5.18042
H	-5.02776	-0.29565	3.88647	C	-0.89425	0.6634	-3.55657	H	-0.5417	-0.48647	6.39716
H	-4.91848	0.4819	2.30909	H	-1.76832	1.2121	-3.9128	C	-0.55696	-1.81728	4.6926
C	-2.25864	-0.52128	4.33153	H	-0.74086	-0.1838	-4.2301	H	0.11264	-2.54456	5.16937
H	-1.28324	-0.08317	4.57673	C	-1.09973	0.18158	-2.116	H	-0.27493	-1.77129	3.63174
H	-2.80331	-0.63775	5.28017	H	-1.63805	0.92805	-1.53283	C	-2.97374	-1.25748	4.18309
C	-2.06977	-1.90116	3.68472	H	-1.62005	-0.77179	-2.01841	H	-2.77718	-1.20358	3.10283
H	-1.54013	-2.57435	4.37089	C	0.9385	-1.17819	-2.05719	H	-4.01436	-1.58615	4.29651
H	-1.43437	-1.78622	2.79608	H	1.15627	-1.10425	-3.12574	C	-2.01607	-2.27943	4.81122
C	-4.20087	-1.57001	2.35217	H	0.238	-2.00652	-1.91841	H	-2.27027	-2.40506	5.87388
H	-3.64835	-1.45038	1.40922	C	2.18715	-1.45611	-1.27367	H	-2.14735	-3.2632	4.34161
H	-5.17258	-2.00783	2.09208	C	3.2801	-2.14482	-1.78499				
C	-3.41646	-2.51378	3.27465	H	3.27793	-2.4654	-2.82034	³TS			
H	-4.01374	-2.70955	4.17708	C	4.36291	-2.40989	-0.94679	Fe	-0.06022	0.19813	0.00724
H	-3.26414	-3.48515	2.78679	H	5.22625	-2.94512	-1.32713	O	-0.05889	0.31368	1.75508
			C	4.32724	-1.97892	0.38066	N	0.32963	0.03892	-2.05531	
⁵RC			H	5.14932	-2.16896	1.06009	N	0.90233	1.99541	-0.11777	
Fe	0.51754	0.02798	0.59442	C	3.21161	-1.28619	0.82717	N	1.57948	-0.95406	0.0575
O	0.97573	0.05245	2.14924	H	3.11579	-0.91824	1.8415	N	-1.66777	1.35855	-0.14857
N	0.28244	0.06159	-1.54841	C	-2.00908	3.30085	1.67901	C	3.83668	3.70348	-0.47045
N	1.21244	2.10802	0.24163	H	-1.78974	4.33553	1.91682	H	4.0395	3.00856	-1.28119
N	2.17316	-1.02925	0.00898	C	-3.30881	2.80307	1.75086	C	4.47025	4.94673	-0.455
N	-1.22113	1.16241	0.97537	H	-4.12497	3.44929	2.05514	H	5.14773	5.21669	-1.25938
C	3.77697	4.01396	-0.94031	C	-3.54728	1.46935	1.41843	C	4.23954	5.83475	0.59748
H	3.80211	3.32382	-1.7797	H	-4.54266	1.04341	1.45462	H	4.73343	6.80167	0.61229
C	4.27411	5.30847	-1.09778	C	-2.47465	0.6777	1.03225	C	3.38355	5.46959	1.63928
H	4.66866	5.62141	-2.05969	H	-2.60252	-0.36094	0.75829	H	3.21376	6.14863	2.46937
C	4.27095	6.19367	-0.01803	C	-0.97797	2.44993	1.29426	C	2.75124	4.2264	1.62119
H	4.65899	7.20063	-0.13843	C	0.46129	2.89758	1.24267	H	2.10103	3.94292	2.44411

C 2.95859	3.33549	0.55886	C -2.39829	-3.71976	0.09193	H 1.03676	3.16628	-1.31781
C 2.26484	1.99533	0.52989	H -2.01801	-4.30694	0.9328	H -0.55408	2.42229	-1.29781
H 2.87065	1.26955	-0.01149	H -3.46576	-3.52916	0.23459	C 0.98017	1.15894	-2.11757
H 2.10541	1.61568	1.53972	H -2.24943	-4.27774	-0.83698	H 2.05289	0.99219	-2.00129
C 0.96212	2.35127	-1.56895	C -2.70964	1.4866	3.28044	C 0.60561	1.5276	-3.57786
H 1.67872	3.16051	-1.72964	H -1.9515	2.17804	3.66486	H 0.31494	2.5804	-3.63481
H -0.01861	2.73013	-1.86315	H -3.01408	1.84864	2.29208	H 1.45769	1.3922	-4.24667
C 1.30801	1.13649	-2.4072	C -3.95677	1.48505	4.19468	C -0.5705	0.58987	-3.95264
H 2.31062	0.78305	-2.16121	H -3.65552	1.22297	5.21789	H -1.40257	1.12707	-4.41295
C 1.14271	1.40279	-3.92551	H -4.38144	2.49549	4.233	H -0.24483	-0.17897	-4.65869
H 0.98223	2.4707	-4.09894	C -2.15501	0.08283	3.1658	C -0.98701	-0.04283	-2.61797
H 2.04082	1.11654	-4.4756	H -1.12566	0.15382	2.34023	H -1.68307	0.60475	-2.08307
C -0.09001	0.57298	-4.36136	H -1.63226	-0.24356	4.07265	H -1.44271	-1.03052	-2.70112
H -0.75787	1.13223	-5.01985	C -3.15417	-0.93815	2.66749	C 1.09146	-1.28572	-2.25843
H 0.21546	-0.33172	-4.89415	H -2.71166	-1.93985	2.64073	H 1.50627	-1.13335	-3.26004
C -0.78176	0.21774	-3.04151	H -3.47281	-0.68588	1.64823	H 0.43802	-2.16261	-2.30599
H -1.40552	1.04479	-2.7014	C -4.9979	0.47687	3.69194	C 2.19653	-1.55832	-1.27343
H -1.39522	-0.68365	-3.07325	H -5.36098	0.7955	2.70413	C 3.39994	-2.15443	-1.63759
C 0.98772	-1.28157	-2.25253	H -5.86673	0.46642	4.36128	H 3.59007	-2.39337	-2.6779
H 1.52234	-1.32509	-3.20576	C -4.40333	-0.93282	3.58094	C 4.34164	-2.43309	-0.64827
H 0.20738	-2.04755	-2.27793	H -4.11927	-1.29051	4.57977	H 5.28699	-2.89611	-0.91081
C 1.91507	-1.55266	-1.10376	H -5.14454	-1.63798	3.18577	C 4.0572	-2.10772	0.67934
C 3.01587	-2.39823	-1.19247	⁵TS					
H 3.27078	-2.85059	-2.14412	Fe 0.07939	-0.29575	0.41335	H 4.76399	-2.30984	1.47542
C 3.76639	-2.65035	-0.04558	N 0.26981	-0.13274	-1.81522	C 2.84153	-1.50503	0.9705
H 4.62913	-3.30642	-0.09032	N 0.68216	1.80068	0.27729	H 2.55394	-1.22055	1.97518
C 3.3909	-2.05197	1.15767	N 1.93852	-1.23285	0.00913	C -2.79715	2.8159	1.17635
H 3.94174	-2.22884	2.07391	N -1.81203	0.74822	0.49516	H -2.66352	3.84099	1.50326
C 2.28804	-1.2086	1.17167	C 3.2949	3.91043	-0.29253	C -4.06894	2.26855	1.01707
H 1.93438	-0.7169	2.06888	H 3.49815	3.28481	-1.15781	H -4.95048	2.86659	1.22167
C -2.4323	3.60597	0.1497	C 3.742	5.23233	-0.27632	C -4.19312	0.94727	0.58569
H -2.20186	4.63497	0.40055	H 4.2777	5.63135	-1.13235	H -5.16308	0.48554	0.44426
C -3.72539	3.21745	-0.19602	C 3.50731	6.03466	0.84214	C -3.03756	0.22125	0.32786
H -4.52847	3.94609	-0.21687	H 3.85625	7.06285	0.85756	H -3.07694	-0.80299	-0.02181
C -3.97009	1.88242	-0.51932	C 2.83436	5.50711	1.94686	C -1.68358	2.02138	0.91911
H -4.95925	1.53759	-0.79564	H 2.66294	6.12147	2.82563	C -0.27707	2.51138	1.15528
C -2.91346	0.98214	-0.49106	C 2.3883	4.18555	1.9278	H -0.21591	3.59436	1.0105
H -3.05045	-0.05899	-0.74901	H 1.87991	3.77715	2.79688	H -0.00117	2.2908	2.19068
C -1.42447	2.64818	0.1753	C 2.60255	3.3767	0.80319	C -1.3614	-3.2554	0.11049
C -0.01132	2.94303	0.5819	C 2.09703	1.95497	0.76991	N -0.94221	-2.17769	0.08968
H 0.26079	3.97958	0.36714	H 2.72662	1.34542	0.12055	C -1.89698	-4.60329	0.14543
H 0.09289	2.7667	1.65505	H 2.11508	1.5065	1.76474	H -1.07307	-5.32273	0.15723
C -1.68525	-2.45741	0.02177	C 0.50775	2.22569	-1.13776	H -2.50215	-4.72846	1.04805
N -1.12711	-1.44843	-0.03022						

C -2.43515 0.48083 4.2768	H 2.2504 0.80052 -2.15498	H -4.15529 1.23901 5.2217
H -2.94899 1.29445 4.80153	C 1.01893 1.41938 -3.87572	H -4.40351 2.60887 4.13451
H -2.15089 0.87053 3.29249	H 0.84072 2.48629 -4.03757	C -2.52742 -0.19841 3.44777
C -3.37514 -0.71803 4.09063	H 1.90126 1.14601 -4.45703	H -0.83681 0.0007 2.26052
H -3.73802 -1.05197 5.07314	C -0.21855 0.57849 -4.27579	H -1.9132 -0.65821 4.22042
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H 0.45729 -1.39574 4.92672	C 0.9419 -1.2777 -2.21848	H -6.24659 0.9133 3.91453
H -0.07568 -0.74353 3.33287	H 1.43804 -1.3097 -3.19252	C -4.96195 -0.76529 3.42523
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H -3.33211 -2.7427 3.29116	C 3.01974 -2.37969 -1.23792	
C -1.38523 -2.29823 4.13599	H 3.24244 -2.83161 -2.19775	⁵ IM
H -1.66062 -2.74673 5.10519	C 3.81439 -2.62331 -0.119	Fe 0.18992 -0.27579 0.48873
H -0.84227 -3.07211 3.58052	H 4.6801 -3.27253 -0.19484	N 0.2934 -0.1285 -1.77474
³IM		
Fe -0.03257 0.18008 0.06956	C 3.47924 -2.02646 1.09687	N 0.76811 1.83589 0.27699
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H -0.08201 2.72978 -1.77014	C -2.79188 1.27426 3.52816	C 0.55302 1.51214 -3.56686
C 1.23758 1.14746 -2.36555	H -2.0075 1.79266 4.08957	H 0.26184 2.56452 -3.62899
	H -2.8085 1.71074 2.52003	H 1.37962 1.36522 -4.26472
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C -0.99456 -0.05296 -2.52734	H 0.19295 -1.58501 4.90746	C 0.99317 -1.28403 -2.0476
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H 1.469 -1.13319 -3.26609	H -3.65131 -2.78408 3.23894	C 3.06642 -2.31451 -1.0094
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C 2.25806 -1.53058 -1.31099	H -2.05254 -2.96649 5.05492	C 3.91359 -2.46025 0.08668
C 3.45054 -2.11403 -1.72831	H -1.15187 -3.18943 3.56519	H 4.77185 -3.12156 0.03367
H 3.59375 -2.36057 -2.77438	³ PC _{reb}	C 3.64569 -1.73213 1.24537
C 4.44309 -2.36907 -0.78317	Fe 0.06613 0.38165 0.16789	H 4.27987 -1.8018 2.12125
H 5.38135 -2.82135 -1.08687	O -0.14255 0.88533 2.36383	C 2.5407 -0.89236 1.26222
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H 4.96654 -2.21679 1.31587	N 1.05339 2.26026 -0.20557	C -2.2913 3.83902 0.01742
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C -2.68448 2.84457 1.25208	C 3.97604 3.88136 -0.9025	H -4.40276 4.12987 -0.30485
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H -2.41099 -4.72575 1.10431	H 0.04065 2.75227 -1.97335	H -0.05423 2.2677 4.63907
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H -3.13168 1.23131 4.76843	H 1.06196 2.33037 -4.2097	H -0.36677 1.29238 6.94037
H -2.30927 0.754 3.28918	H 2.05687 0.90609 -4.48901	C 0.28194 0.37621 3.66006
C -3.62508 -0.76968 4.06656	C -0.0907 0.46072 -4.30401	H -1.1016 1.03931 2.41168
H -4.01324 -1.09365 5.04275	H -0.76208 1.00185 -4.9748	H 1.36662 0.52309 3.66849
H -4.48614 -0.43151 3.47806	H 0.17403 -0.48138 -4.79298	C -0.04664 -1.10636 3.81299
C -1.41055 -0.0521 5.07945	C -0.74564 0.19375 -2.94181	H 0.42563 -1.67907 3.00812
H -0.65733 0.74414 5.11796		H -1.13305 -1.23514 3.70848

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H -1.29371	-0.92865	6.32719	C 3.50672	-2.08824	-1.64249	H 0.37237	0.66122	3.15892
H 0.16538	-1.14523	7.29284	H 3.84082	-2.23902	-2.66311			
C 0.4077	-1.62086	5.18771	C 4.31881	-2.42624	-0.56103	²FP		
H 1.50407	-1.56893	5.24716	H 5.30479	-2.84688	-0.72878	Fe 0.05292	-0.16656	0.27885
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⁵PC_{reb}								
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H 4.56461	5.42813	-1.02916	C -3.15022	0.41965	-0.0961	H 3.91411	7.00778	0.99798
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H 2.71452	6.00112	2.81279	H -0.20775	3.64788	0.72946	H 2.00184	3.62146	2.82406
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H 1.80106	3.70666	2.71491	C -1.61201	-3.23813	-0.63736	C 2.16237	1.90502	0.6981
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H 1.97174	1.43979	1.68949	H -2.13777	-5.19311	-0.10589	H 1.10063	3.1601	-1.32469
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	H 4.79109 -2.2529 1.48512	
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