

### Appendix 3. Wells included in this study including calculated depths to selected geothermal boundaries based on maps from Collett and others, 2009

#### General information for wells included in appendixes 2 and 3

[API, American Petroleum Institute; GHSZ, gas hydrate stability zone; Co, company; AK, Alaska; DOI, U.S. Department of the Interior. Estimated depth horizons were calculated by the interpolation of geothermal horizon contours of Collett and others (2009). GHSZ thickness was calculated as the difference of the bottom GHSZ and top GHSZ. GHSZ 2 was calculated directly from interpolated contours of GHSZ thickness in Collett and others (2009).]

Well name	Label	API number	Operator	Year Drilled	Latitude N	Longitude W	Gas Hydrate Presence	Thermogenic Gas Present	Estimated Depth Horizons						
									Top GHSZ ft.	Bottom GHSZ ft.	Permafrost Base ft.	GHSZ Thickness ft.	GHSZ Thickness 2 ft.		
<b>STAGE 1 (wells drilled from 1979 to 1991: appendix 2)</b>															
KUPARUK RIVER UNIT 2B-10	KRU 2B-10	50029210840000	ARCO ALASKA INC	1984	70.28937	-149.93751	evidence	evidence	705	2432	1523	1727	1728		
KUPARUK RIVER UNIT 2D-15	KRU 2D-15	50029211840000	ARCO ALASKA INC	1984	70.28401	-149.76165	evidence	evidence	702	2504	1554	1802	1807		
KUPARUK RIVER UNIT 3A-9	KRU 3A-9	50029206990000	ARCO ALASKA INC	1982	70.40330	-149.93776	evidence	evidence	697	2644	1578	1947	1867		
KUPARUK RIVER UNIT 3H-9	KRU 3H-9	50103200860000	ARCO ALASKA INC	1987	70.41181	-150.01174	limited	evidence	700	2640	1582	1941	1806		
KUPARUK RIVER UNIT 3K-9	KRU 3K-9	50029216560000	ARCO ALASKA INC	1986	70.43321	-149.76079	limited	evidence	690	2772	1791	2082	2079		
MILNE POINT UNIT KR E-4	MPU E-4	50029219970000	CONOCOPHILLIPS AK	1990	70.45542	-149.43674	evidence	evidence	695	2821	1848	2127	2133		
PRUDHOE BAY UNIT R-1	PBU R-1	50029203530000	SOHIO PETROLEUM CO	1979	70.34547	-148.91084	limited	evidence	680	3400	2000	2720	2895		
PRUDHOE BAY UNIT S-26	PBU S-26	50029220470000	BP EXPL ALASKA INC	1990	70.35359	-149.03021	limited	evidence	679	3263	1998	2584	2587		
PRUDHOE BAY UNIT Z-7	PBU Z-7	50029220460000	BP EXPL ALASKA INC	1990	70.29769	-149.19553	evidence	evidence	689	3015	1909	2325	2300		
PRUDHOE BAY UNIT Z-8	PBU Z-8	50029217870000	BP EXPL ALASKA INC	1988	70.29777	-149.19959	evidence	evidence	690	3010	1908	2320	2297		
<b>STAGE 2 (wells drilled from 1993 to 2009: this appendix)</b>															
AKLAQ 6	AKLA 6	50279200190000	FEX LP	2007	70.71232	-154.60767	limited	no evidence	794	1638	994	844	768		
AKLAQYAAQ 1	AKLA 1	50279200180000	FEX LP	2007	70.55727	-155.42036	limited	limited	788	1724	1009	935	998		
AMAGUQ 2	AMAG 2	50279200170000	FEX LP	2007	70.39315	-155.80656	evidence	evidence	795	1658	927	864	783		
ANTIGUA 1	ANTI 1	50029232990000	CONOCOPHILLIPS AK	2006	70.18088	-149.52665	evidence	evidence	707	2658	1542	1951	1883		
ATLAS 1	ATLA 1	50103203600000	PHILLIPS ALASKA INC	2001	70.15183	-150.55046	evidence	evidence	743	2445	1273	1702	1549		
CARBON 1	CARB 1	50103204770000	CONOCOPHILLIPS AK	2004	70.24785	-151.88878	evidence	evidence	814	1389	960	575	51		
CARIBOU 26-11 1	CARI 26-11	50279200090000	TOTAL E&P USA INC	2004	70.18979	-153.08764	limited	limited	796	1897	943	859	648		
IAPETUS	IAPE 2	50103205060000	CONOCOPHILLIPS AK	2005	70.40790	-151.18305	evidence	evidence	750	2213	1353	1463	1210		
KOKODA 1	KOKO 1	50279200110000	CONOCOPHILLIPS AK	2005	70.28495	-153.13746	evidence	evidence	811	1492	944	681	486		
KOKODA 5	KOKO 5	50279200120000	CONOCOPHILLIPS AK	2005	70.33439	-153.20463	evidence	evidence	814	1472	948	658	424		
KUPARUK RIVER UNIT 1H-SOUTH	KRU 1H-S	50029232960000	CONOCOPHILLIPS AK	2006	70.39486	-149.55789	evidence	evidence	686	2737	1845	2051	2006		
KUPARUK RIVER UNIT 1R-EAST	KRU 1R-E	50029232950000	CONOCOPHILLIPS AK	2006	70.39541	-149.55907	evidence	evidence	686	2737	1845	2051	2007		
KUPARUK RIVER UNIT TARN 2N-305	KRU 2N-305	50103203490000	PHILLIPS ALASKA INC	2000	70.17132	-150.31427	evidence	evidence	729	2430	1334	1702	1610		
MILNE PT UNIT SB 1-16	MPU 1-16	50029232210000	CONOCOPHILLIPS AK	2004	70.43653	-149.57800	evidence	evidence	690	2768	1842	2078	2057		
MILNE PT UNIT SB S-15	MPU S-15	50029230610000	BP EXPL ALASKA INC	2002	70.40972	-149.46630	evidence	evidence	686	2804	1869	2118	2070		
MOUNT ELBERT 1	MTEL 1	50029233020000	BP EXPL ALASKA INC	2007	70.45559	-149.41321	evidence	evidence	694	2843	1851	2149	2151		
NOATAK 1	NOAT 1	50279200130000	CONOCOPHILLIPS AK	2007	70.38020	-153.13346	limited	limited	822	1391	939	569	274		
PIONEER 1	PION 1	50103205950000	CONOCOPHILLIPS AK	2009	70.14205	-151.48645	evidence	evidence	802	1516	1006	714	517		
PLACER 1	PLAC 1	50103204810000	CONOCOPHILLIPS AK	2004	70.34671	-150.39832	evidence	evidence	723	2447	1546	1724	1615		
SCOUT 1	SCOU 1	50103204790000	CONOCOPHILLIPS AK	2004	70.28673	-151.95708	no evidence	evidence	0	0	955	0	0		
SPARK 4	SPAR 4	50103204800000	CONOCOPHILLIPS AK	2004	70.28837	-151.79243	evidence	evidence	810	1463	1025	653	147		
SPARK DD9	SPRK DD9	50103205690000	CONOCOPHILLIPS AK	2008	70.20406	-151.64643	evidence	evidence	807	1424	1007	617	375		
THETIS ISLAND 1	THET 1	50103201900000	EXXON CO USA	1993	70.55393	-150.15224	limited	evidence	711	2654	1587	1943	1871		
WAINWRIGHT 1	WAIN 1	50301200030000	U S DEPT OF INTER AK	2007	70.64409	-160.02374	limited	no evidence	838	1488	1004	650	287		
WAINWRIGHT W-OC1-08	W-OC1-08	50301200100000	U S DEPT OF INTER AK	2008	70.64364	-160.02386	limited	limited	838	1488	1004	649	288		

## Aklaq 6 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>2</sub> H <sub>4</sub> μL/L	C <sub>3</sub> μL/L	C <sub>3</sub> H <sub>6</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	δDC <sub>1</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub>
140	42.67	736	0.35	0.15	213	292	2.6	0.3	1.9	0.1	0.8	0.3	0.0	0.0	65	2.6	1.4				
200	60.96	726	0.35	0.15	594	2231	1.6	0.4	2.5	0.3	1.2	0.6	0.4	0.0	543	2.2	3.8				
260	79.25	718	0.34	0.16	291	22287	0.0	0.0	0.6	0.0	0.2	0.1	0.0	0.0		2.5	76.5	-25.0	-63.7		1.041
320	97.54	665	0.32	0.18	7474	42495	0.0	0.0	1.0	0.2	0.3	0.1	0.0	0.0		2.5	5.7				
380	115.82	375	0.18	0.32	17262	7830	3.8	1.1	1.3	1.1	0.5	0.4	0.0	0.0	1554	1.5	0.5	-21.8	-49.4	-222	1.029
440	134.11	413	0.20	0.30	22364	19588	36.7	0.6	2.0	0.6	4.6	0.3	0.0	0.0	506	15.0	0.9		-57.1		
500	152.40	402	0.19	0.31	1725	1506	7.3	1.1	1.5	1.1	0.5	0.3	0.0	0.0	173	1.5	0.9				
560	170.69	503	0.24	0.26	11810	10037	72.5	0.7	2.0	0.8	0.4	0.4	0.0	0.0	135	1.0	0.8	-18.1	-55.1		1.039
620	188.98	457	0.22	0.28	2595	2725	14.3	1.0	1.0	0.9	0.4	0.3	0.0	0.0	178	1.5	1.1				
680	207.26	450	0.21	0.29	46440	28667	9.3	0.7	0.9	0.5	0.3	0.0	0.0	0.0	2792		0.6	-11.2	-57.8		1.049
740	225.55	419	0.20	0.30	63943	32679	9.3	0.8	1.7	0.6	0.5	0.3	0.0	0.0	2973	1.5	0.5				
800	243.84	430	0.20	0.30	66066	40228	8.1	8.8	1.0	0.9	0.0	0.0	0.0	0.0	4429		0.6	-20.7	-58.8	-231	1.040
860	262.13	365	0.17	0.33	52022	31529	6.9	1.9	1.1	0.8	0.0	0.0	0.0	0.0	3907		0.6				
920	280.42	460	0.22	0.28	6157	9748	3.3	0.6	0.8	0.5	0.0	0.0	0.0	0.0	2375		1.6		-57.2		
980	298.70	434	0.21	0.29	9212	12121	4.1	0.6	0.9	0.3	0.3	0.0	0.0	0.0	2440		1.3				
1040	316.99	451	0.21	0.29	24119	11143	4.6	0.9	1.2	0.4	0.4	0.3	0.0	0.0	1907	1.5	0.5	-24.7	-60.0		1.038
1100	335.28	510	0.24	0.26	13691	12918	5.0	0.4	1.3	0.4	0.4	0.2	0.0	0.0	2068	2.0	0.9				
1160	353.57	473	0.23	0.27	20421	15370	6.3	0.7	0.9	0.5	0.2	0.0	0.0	0.0	2136		0.8	-24.2	-57.8		1.036
1220	371.86	516	0.25	0.25	14861	14281	5.4	0.5	0.4	0.5	0.0	0.0	0.0	0.0	2464		1.0				
1280	390.14	696	0.33	0.17	5559	14699	5.8	0.0	0.5	0.2	0.2	0.0	0.0	0.0	2331		2.6		-59.0		
1340	408.43	738	0.35	0.15	8430	18137	5.4	0.0	0.4	0.1	0.1	0.0	0.0	0.0	3154		2.2				
1400	426.72	718	0.34	0.16	10441	32830	7.7	0.0	0.2	0.2	0.0	0.0	0.0	0.0	4128		3.1	-20.3	-59.1	-254	1.041
1460	445.01	357	0.17	0.33	13841	2970	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1093		0.2				
1520	463.30	718	0.34	0.16	15782	17294	6.5	0.0	0.4	0.0	0.1	0.0	0.0	0.0	2510		1.1	-20.8	-58.8		1.040
1580	481.58	705	0.34	0.16	27336	20015	9.2	0.0	0.3	0.1	0.1	0.0	0.0	0.0	2087		0.7				
1640	499.87	709	0.34	0.16	24303	19046	7.7	0.0	0.5	0.1	0.1	0.0	0.0	0.0	2329		0.8		-58.7		
1700	518.16	688	0.33	0.17	21373	8840	4.4	0.3	0.3	0.0	0.0	0.0	0.0	0.0	1888		0.4				
1760	536.45	702	0.33	0.17	19879	26819	12.5	0.0	0.4	0.0	0.1	0.0	0.0	0.0	2073		1.3	-23.0	-58.4		1.038
1820	554.74	739	0.35	0.15	19889	19527	9.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1941		1.0				
1880	573.02	372	0.18	0.32	77277	2752	13.5	6.4	0.5	1.1	0.4	0.0	0.0	0.0	196			-26.9	-55.1		1.030
1940	591.31	382	0.18	0.32	49156	1495	10.5	6.8	0.9	1.2	0.3	0.0	0.0	0.0	132						
2000	609.60	461	0.22	0.28	47184	2773	11.8	6.5	1.3	1.1	0.4	0.3	0.0	0.0	213	1.5	0.1	-26.5	-56.8	-238	1.032
2060	627.89	721	0.34	0.16	15925	17705	13.3	0.2	0.4	0.0	0.0	0.0	0.0	0.0	1293		1.1				

Chemical analysis based on standards accurate to within 2%.

Akqaqaaq1 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>2</sub> H <sub>4</sub> μL/L	C <sub>3</sub> μL/L	C <sub>3</sub> H <sub>6</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δDC <sub>1</sub> ‰	α CO <sub>2</sub> -C <sub>1</sub>
120	36.58	485	0.23	0.27	687	3541	4.7	0.8	0.5	0.3	0.0	0.0	0.0	0.0	691		5.2					
180	54.86	392	0.19	0.31	6211	34411	6.2	0.7	0.7	0.5	0.0	0.0	0.0	0.0	5000		5.5	-18.7	-61.4			1.046
240	73.15	405	0.19	0.31	3026	32807	5.9	0.8	0.5	0.6	0.0	0.0	0.0	0.0	5150		10.8					
300	91.44	387	0.18	0.32	8737	41459	10.6	0.7	1.0	0.5	0.3	0.0	0.0	0.0	3559		4.7	-21.3	-60.7		-234	1.042
360	109.73	457	0.22	0.28	9083	10705	7.5	0.8	0.9	0.5	0.0	0.0	0.0	0.0	1269		1.2					
420	128.02	467	0.22	0.28	9238	165163	0.0	0.0	1.1	0.4	0.0	0.0	0.0	0.0	147000		17.9		-59.9			
480	146.30	517	0.25	0.25	2268	22268	5.7	0.0	0.8	0.3	0.2	0.0	0.0	0.0	3429		9.8					
540	164.59	370	0.18	0.32	1544	6322	6.8	1.3	3.3	0.7	0.9	0.9	0.0	0.0	625	1.0	4.1	-15.0	-56.9			1.044
600	182.88	551	0.26	0.24	525	11773	5.2	0.9	0.9	0.4	0.2	0.2	0.0	0.0	1940	1.0	22.4					
660	201.17	564	0.27	0.23	5084	20939	5.9	0.0	0.7	0.3	0.0	0.0	0.0	0.0	3197		4.1	-17.5	-57.7			1.043
720	219.46	496	0.24	0.26	1899	6512	4.7	0.7	0.7	0.3	0.2	0.0	0.0	0.0	1215		3.4					
780	237.74	406	0.19	0.31	1285	4854	4.3	1.4	0.6	0.6	0.0	0.0	0.0	0.0	987		3.8	-19.6	-55.7		-243	1.038
840	256.03	593	0.28	0.22	1310	5942	3.6	0.4	0.4	0.2	0.0	0.0	0.0	0.0	1483		4.5					
900	274.32	665	0.32	0.18	1795	11811	5.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	2267		6.6		-57.2			
960	292.61	600	0.29	0.21	2775	9975	9.6	0.5	1.6	0.4	0.4	0.2	0.0	0.0	893	2.5	3.6					
1020	310.90	521	0.25	0.25	1117	13403	8.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1483		12.0	-18.8	-58.2			1.042
1080	329.18	547	0.26	0.24	2943	12966	9.1	0.0	0.7	0.3	0.0	0.0	0.0	0.0	1318		4.4					
1140	347.47	470	0.22	0.28	5430	15179	12.1	0.6	0.7	0.4	0.2	0.0	0.0	0.0	1183		2.8	-20.4	-57.8			1.040
1200	365.76	684	0.33	0.17	4869	5886	4.2	0.4	0.5	0.2	0.1	0.1	0.0	0.0	1250	1.0	1.2					
1260	384.05	433	0.21	0.29	3990	3648	13.3	1.3	1.0	0.4	0.3	0.0	0.0	0.0	256		0.9		-53.7			
1320	402.34	486	0.23	0.27	1857	8646	9.4	0.7	1.2	0.3	0.3	0.2	0.0	0.0	819	1.5	4.7					
1380	420.62	512	0.24	0.26	5149	15762	17.5	0.7	2.8	0.4	0.5	0.4	0.0	0.0	773	1.3	3.1	-20.8	-58.8		-244	1.040
1440	438.91	469	0.22	0.28	2601	13007	11.4	0.7	0.7	0.4	0.0	0.0	0.0	0.0	1071		5.0					
1500	457.20	533	0.25	0.25	1164	7915	11.9	0.7	1.8	0.3	0.5	0.3	0.0	0.0	575	1.7	6.8	-22.0	-55.2			1.035
1560	475.49	346	0.16	0.34	2238	6104	12.4	2.0	1.4	0.8	0.0	0.4	0.0	0.0	441		2.7					
1620	493.78	416	0.20	0.30	2743	6370	11.6	1.2	0.6	0.5	0.0	0.0	0.0	0.0	523		2.3		-55.6			
1680	512.06	533	0.25	0.25	1067	13289	15.5	0.5	1.6	0.3	0.4	1.9	0.0	0.0	778	0.2	12.5					
1740	530.35	576	0.27	0.23	2304	8641	37.1	0.6	3.7	0.0	0.3	0.2	0.0	0.0	212	1.3	3.8	-23.9	-56.1			1.034
1800	548.64	522	0.25	0.25	1517	5806	26.7	0.5	2.6	0.3	0.4	0.5	0.0	0.0	198	0.8	3.8					
1860	566.93	628	0.30	0.20	2016	15926	86.7	0.0	16.1	0.0	5.4	2.8	1.6	0.0	155	2.0	7.9	-23.0	-54.2	-49.3		1.033
1920	585.22	539	0.26	0.24	2275	14884	100.3	0.5	32.7	0.4	12.8	6.1	3.8	0.0	112	2.1	6.5		-52.4	-49.3		
1980	603.50	310	0.15	0.35	5968	13153	122.2	2.1	53.2	1.0	25.8	15.5	6.7	0.0	75	1.7	2.2	-25.7	-51.4		-231	1.027

Chemical analysis based on standards accurate to within 2%.

Amaguq 2 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdpsc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>2</sub> H <sub>4</sub> μL/L	C <sub>3</sub> μL/L	C <sub>3</sub> H <sub>6</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	C <sub>7</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>7</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δ <sup>13</sup> C <sub>3</sub> ‰	δ <sup>13</sup> iC <sub>4</sub> ‰	δ <sup>13</sup> nC <sub>4</sub> ‰	δDC <sub>1</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub> ‰
140	42.67	372	0.18	0.32	383	2734	65	3	34	1	8	8	2	0	28	1.0	7.1									
200	60.96	259	0.12	0.38	46116	7635	5	8	2	3	2	1	0	0	1042	4.0	0.2									
260	79.25	439	0.21	0.29	47460	6486	22	3	6	3	2	2	0	0	230	0.9	0.1	-15.0	-64.5							1.053
320	97.54	637	0.30	0.20	35011	17765	6	1	1	1	0	0	0	0	2491	3.5	0.5									
380	115.82	441	0.21	0.29	29967	23752	11	3	2	2	0	0	0	0	1755	0.7	0.8	2.6	-61.5						-241	1.068
440	134.11	543	0.26	0.24	32586	21569	11	2	2	1	0	0	0	0	1638	1.0	0.7									
500	152.40	290	0.14	0.36	29090	35641	22	3	6	3	1	1	0	0	1283	1.0	1.2		-60.3							
560	170.69	413	0.20	0.30	6478	29614	17	2	2	2	0	1	0	0	1561	0.8	4.6									
620	188.98	525	0.25	0.25	14700	31700	29	4	3	2	0	0	0	0	981	1.0	2.2	-9.4	-60.2							1.054
680	207.26	472	0.22	0.28	17144	48003	45	1	5	1	0	0	2	1	970	1.0	2.4	2.8								
740	225.55	430	0.20	0.30	20186	32730	44	2	7	1	1	1	1	0	649	1.2	1.6	-13.5	-59.3							1.049
800	243.84	477	0.23	0.27	9850	49612	31	1	3	1	0	0	0	0	1475	0.7	5.0									
860	262.13	337	0.16	0.34	47815	46334	28	2	3	1	0	0	0	0	1510	1.0	1.0		-59.6							
920	280.42	508	0.24	0.26	14510	38089	12	1	1	1	0	0	0	0	2879	0.0	2.6									
980	298.70	390	0.19	0.31	47215	20477	36	7	8	4	1	1	0	0	465	1.2	0.4	-17.0	-58.3						-244	1.044
1040	316.99	537	0.26	0.24	7929	112917	65	0	3	0	0	0	0	0	1677	0.6	14.2									
1100	335.28	405	0.19	0.31	54467	13776	78	3	5	2	1	0	1	0	167	4.0	0.3	-23.0	-58.1							1.037
1160	353.57	423	0.20	0.30	28163	41355	123	1	3	2	1	1	0	0	328	1.8	1.5									
1220	371.86	313	0.15	0.35	419360	8547	16	4	2	2	0	0	0	0	465	1.0	0.0		-58.7							
1280	390.14	506	0.24	0.26	13331	38596	118	1	5	1	0	1	0	0	312	0.6	2.9									
1340	408.43	365	0.17	0.33	29089	33593	160	2	34	2	4	3	0	0	173	1.6	1.2	-15.9	-58.0							1.045
1400	426.72	237	0.11	0.39	27443	18661	254	3	189	2	59	54	38	14	42	1.1	0.7									
1460	445.01	328	0.16	0.34	20912	41383	314	2	258	2	101	87	48	18	72	1.2	2.6	-14.1	-56.4	-45.1	-27.4					1.045
1520	463.30	344	0.16	0.34	13545	51308	415	2	346	2	129	106	36	11	67	1.2	3.3									
1580	481.58	585	0.28	0.22	9538	47851	416	0	357	0	136	105	28	6	62	1.3	4.3	5.0	-55.9	-47.0	-27.0	-26.9	-26.4			1.059
1640	499.87	419	0.20	0.30	8885	45330	304	1	237	0	94	94	29	11	84	1.0	2.7	5.1								
1700	518.16	484	0.23	0.27	9940	37655	239	1	152	1	65	62	28	14	96	1.0	2.1	3.8	-15.0	-56.0	-46.3	-26.9			-229	1.043
1760	536.45	432	0.21	0.29	43203	31472	126	2	32	1	11	9	5	2	200	1.2	2.7	0.7								
1820	554.74	542	0.26	0.24	25681	23713	52	1	13	1	3	3	2	1	362	1.0	2.6	0.9	-4.7	-56.5						1.055
1880	573.02	531	0.25	0.25	17691	15247	37	1	8	1	3	3	1	0	335	1.0	0.9									
1940	591.31	448	0.21	0.29	62753	20022	39	2	9	1	3	3	1	0	410	1.1	0.3		-55.6							
2000	609.60	606	0.29	0.21	11430	27475	66	1	7	1	2	2	2	1	378	1.0	1.5	2.4								
2180	664.46	389	0.19	0.31	340	17672	422	2	124	2	22	18	11	4	32	1.2	2.4	52.0	-14.7	-52.6						1.040
2240	682.75	432	0.21	0.29	243	24606	1060	1	394	1	87	63	33	12	17	1.4	2.7	101.2								
2300	701.04	366	0.17	0.33	430	18352	933	1	391	1	77	55	23	8	14	1.4	3.0	42.7	-15.2	-51.4	-33.5	-29.4				1.038
2360	719.33	329	0.16	0.34	636	16502	1478	1	662	2	108	67	22	5	8	1.6	4.2	26.0								
2420	737.62	369	0.18	0.32	406	10649	802	1	354	2	53	34	10	2	9	1.6	4.4	26.2		-50.1	-32.7	-29.9				
2480	755.90	318	0.15	0.35	437	21154	2500	0	1216	2	156	93	22	4	6	1.7	5.2	48.4								
2540	774.19	607	0.29	0.21	153	27733	2460	0	683	1	78	40	8	1	9	2.0	7.9	181.0	-14.6	-49.7	-32.3	-30.2	-31.2	-30.0	-214	1.037
2600	792.48	503	0.24	0.26	315	12832	2296	0	801	1	112	73	16	3	4	1.5	6.3	40.7								
2660	810.77	601	0.29	0.21	329	21217	2751	0	526	1	82	61	13	3	6	1.3	4.6	64.5	-15.0	-46.7	-31.7	-30.2	-30.9	-29.6		1.033
2720	829.06	541	0.26	0.24	508	21451	6475	0	1062	1	156	92	27	8	3	1.7	3.3	42.2								
2780	847.34	580	0.28	0.22	786	11993	4297	0	2426	1	388	573	149	77	2	0.7	1.9	15.3		-44.1	-31.7	-30.6	-30.6	-30.5		
2840	865.63	452	0.22	0.28	291	14288	5953	0	1243	1	479	348	137	60	2	1.4	2.3	49.1								
2900	883.92	371	0.18	0.32	1446	19217	3728	1	463	2	86	129	36	31	5	0.7	1.2	13.3	-15.1	-46.4	-31.5	-25.9				1.033
2960	902.21	348	0.17	0.33	867	19628	2666	1	663	3	144	180	55	35	6	0.8	1.6	22.6								
3020	920.50	409	0.19	0.31	564	16299	2846	0	1609	2	388	447	168	102	4	0.9	1.6	28.9	-15.2	-47.2	-32.0	-29.6	-30.4	-29.3		1.034
3080	938.78	476	0.23	0.27	1206	10961	2499	0	1811	1	412	441	155	78	3	0.9	2.0	9.1								
3140	957.07	492	0.23	0.27	556	19394	2352	0	1004	1	179	165	48	20	6	1.1	2.4	34.9		-48.3	-32.9	-30.2	-30.7	-29.5		
3200	975.36	533	0.25	0.25	757	17363	1902	0	795	1	143	125	34	11	6	1.1	3.1	22.9								
3260	993.65	440	0.21	0.29	7764	8138	1447	1	764	1	145	131	33	11	4	1.1	2.9	1.0	-20.6	-47.8	-33.1	-30.7	-31.5	-30.3	-205	1.029
3320	1011.94	576	0.27	0.23	148	18433	2123	0	949	1	203	151	48	15	6	1.3	3.1	124.4								
3380	1030.22	387	0.18	0.32	291	18502	2010	0	916	2	194	164	55	28	6	1.2	2.0	63.5	-14.3	-47.7	-34.0	-31.2	-31.4	-30.3		1.035
3440	1048.51	439	0.21	0.29	292	13765	1712	0	863	1	198	170	64	30	5	1.2	2.2	47.1								
3500	1066.80	482	0.23	0.27	236	12727	1933	0	974	1	234	168	62	24	4	1.4	2.6	54.0		-46.7	-34.5	-31.7	-31.8	-30.7		
3560	1085.09	381	0.18	0.32	316	4442	1141	1	884	1	244	176	66	25	2	1.4	2.7	14.1								
3620	1103.38	385	0.18	0.32	328	7030	1312	1	852	2	238	156	62	21	3	1.5	2.9	21.4	-13.7	-46.2	-34.5	-32.1	-31.8	-31.0		1.034
3680	1121.66	464	0.22	0.28	417	4774	1093	1	955	1	261	156	54	17	2	1.7	3.3	11.5								
3740	1139.95	463	0.22	0.28	368	7214	1128	1	621	1	147	72	23	6	4	2.0	4.1	19.6	-16.0	-46.0	-35.9	-32.7	-32.1	-31.6		1.031
3800	1158.24	598	0.28	0.22	234	6017	801	0	418	0	96	45</														

Antigua-1 cuttings

Depth	Depth	Sed. Wt.	Sample Vol.	Hdspsc	CO <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	iC <sub>4</sub>	nC <sub>4</sub>	neoC <sub>5</sub>	iC <sub>5</sub>	nC <sub>5</sub>	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub>	iC <sub>4</sub> /nC <sub>4</sub>	iC <sub>5</sub> /nC <sub>5</sub>	C <sub>1</sub> /CO <sub>2</sub>	δ <sup>13</sup> CO <sub>2</sub>	δ <sup>13</sup> C <sub>1</sub>	δ <sup>13</sup> C <sub>2</sub>	δ <sup>13</sup> C <sub>3</sub>	δ <sup>13</sup> iC <sub>4</sub>	δ <sup>13</sup> nC <sub>4</sub>	δDC <sub>1</sub>	αCO <sub>2</sub> -C <sub>1</sub>
ft.	m	gm	L	L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	ratio	ratio	ratio	ratio	‰	‰	‰	‰	‰	‰	‰	‰
60	18.3	287	0.14	0.36	25416	25	12.2	18.7	2.4	9.7	2.5	3.5	5.5	0.8	0.2	0.0	0.6	-13.9							
150	45.7	438	0.21	0.29	139782	1134	9.4	2.1	0.2	0.3	0.3	0.1	0.1	98.4	0.7	0.0	1.0								
210	64.0	412	0.20	0.30	118247	1872	9.9	1.2	0.2	0.2	0.1	0.1	0.1	168.6	0.8	0.0	0.7	-10.6	-72.5					-297	1.067
270	82.3	421	0.20	0.30	86790	1972	10.6	1.3	0.2	0.4	0.1	0.2	0.1	166.8	0.6	0.0	1.1								
330	100.6	451	0.21	0.29	117728	3586	14.0	4.4	0.3	0.2	0.1	0.1	0.1	194.8	1.4	0.0	0.9		-71.0						
390	118.9	509	0.24	0.26	62869	2083	7.6	8.3	0.1	0.1	0.1	0.1	0.1	131.2	0.6	0.0	0.8								
450	137.2	337	0.16	0.34	36137	2290	8.5	2.1	0.3	0.2	0.1	0.1	0.1	215.9	1.3	0.1	1.8	-17.4	-68.9						1.055
510	155.5	367	0.17	0.33	24063	1522	7.4	1.3	0.1	0.1	0.1	0.0	0.1	175.0	0.9	0.1	0.6								
570	173.8	303	0.14	0.36	39076	370	5.5	9.5	0.3	0.2	0.1	0.1	0.1	24.8	2.0	0.0	0.7	-20.3							
630	192.1	361	0.17	0.33	35462	289	6.1	3.1	0.2	0.5	0.1	0.2	0.2	31.2	0.4	0.0	1.1								
690	210.4	354	0.17	0.33	32087	22	3.4	9.1	0.1	0.1	0.1	0.1	0.0	1.7	0.9	0.0		-18.7							
750	228.7	327	0.16	0.34	48399	31	4.2	2.6	0.1	0.2	0.1	1.5	0.1	4.5	0.6	0.0	16.0								
810	247.0	486	0.23	0.27	16723	15	1.7	0.7	0.1	0.2	0.1	0.1	0.1	6.3	0.6	0.0	1.2	-18.1							
870	265.2	334	0.16	0.34	97132	65	3.9	9.2	0.1	0.2	0.1	0.2	1.0	4.9	0.4	0.0	0.2								
930	283.5	368	0.18	0.32	43830	131	3.6	6.9	0.1	0.1	0.0	0.1	0.2	12.5	1.0	0.0	0.5	-21.8	-41.8	-33.3	-30.5				1.021
990	301.8	398	0.19	0.31	27587	1786	6.6	1.6	0.1	0.1	0.0	0.1	0.1	218.9	0.7	0.1	1.0								
1050	320.1	358	0.17	0.33	22036	7111	13.0	1.3	0.1	0.1	0.1	0.1	0.1	498.0	0.8	0.3	0.8	-18.3	-61.3					-285	1.046
1110	338.4	490	0.23	0.27	22617	2273	4.7	0.9	0.1	0.0	0.0	0.0	0.0	408.3	1.7	0.1	1.0								
1170	356.7	367	0.17	0.33	18927	11904	15.1	1.0	0.1	0.1	0.1	0.1	0.0	738.5	0.5	0.6	2.3		-56.7						
1230	375.0	374	0.18	0.32	18744	13122	19.3	1.2	0.1	0.1	0.1	0.1	0.0	640.3	1.0	0.7	2.7								
1290	393.3	312	0.15	0.35	30064	21746	22.6	1.3	0.1	0.1	0.1	0.0	0.0	909.3	0.9	0.7		-15.0	-53.1						1.040
1350	411.6	298	0.14	0.36	34950	9349	14.2	1.5	0.1	0.3	0.1	0.1	0.1	593.3	0.3	0.3	1.3								
1410	429.9	357	0.17	0.33	55440	26344	19.6	2.4	0.2	0.4	1.4	0.1	0.4	1194.7	0.6	0.5	0.4	-15.6	-49.4						1.036
1470	448.2	361	0.17	0.33	33667	23528	13.9	19.3	0.2	0.2	7.5	0.1	0.3	708.0	0.8	0.7	0.4								
1530	466.5	528	0.25	0.25	17657	24065	10.1	0.9	0.1	0.1	2.2	0.0	0.1	2186.7	1.1	1.4	0.5		-46.8	-32.6	-33.1	-29.2	-29.3		
1590	484.8	432	0.21	0.29	28354	25593	14.0	1.4	0.3	0.2	1.9	0.1	0.1	1662.8	1.8	0.9	0.9								
1650	503.0	462	0.22	0.28	21967	37721	16.3	1.1	0.1	0.1	1.6	0.1	0.1	2173.7	0.8	1.7	1.1	-16.4	-50.4						1.036
1710	521.3	400	0.19	0.31	45435	26341	20.6	2.3	0.8	0.5	1.4	0.2	0.3	1148.0	1.6	0.6	0.7								
1770	539.6	409	0.19	0.31	17475	15770	9.8	1.0	0.4	0.2	0.7	0.1	0.1	1464.9	2.3	0.9	1.2	-15.9	-48.6						1.034
1830	557.9	465	0.22	0.28	15877	8615	4.9	9.3	0.1	0.1	0.2	0.1	0.1	608.3	1.2	0.5	0.9								
1890	576.2	463	0.22	0.28	31632	8851	5.5	11.1	0.1	0.2	0.5	0.1	0.3	534.9	0.6	0.3	0.2		-50.2						
1950	594.5	464	0.22	0.28	19563	9116	4.4	0.9	0.2	0.2	0.3	0.1	0.1	1700.4	1.6	0.5	0.6								
2010	612.8	453	0.22	0.28	26384	1826	3.0	1.2	0.1	0.1	0.1	0.0	0.2	434.3	0.5	0.1	0.0	-22.1	-30.6					-268	1.009
2070	631.1	416	0.20	0.30	9144	5971	3.0	5.5	0.1	0.0	0.1	0.0	0.1	698.7	3.3	0.7	0.6								
2130	649.4	373	0.18	0.32	6552	7339	3.7	18.4	0.2	0.1	0.1	0.0	0.1	332.1	3.4	1.1	0.7	-20.5	-52.5						1.034
2190	667.7	327	0.16	0.34	2543	2801	2.0	14.2	0.2	0.1	0.4	0.1	0.1	173.0	2.0	1.1	1.3								
2250	686.0	384	0.18	0.32	1249	2369	1.2	0.6	0.0	0.2	0.1	0.1	0.1	1340.5	0.2	1.9	1.2		-54.3						
2310	704.3	572	0.27	0.23	585	7372	1.0	0.4	0.1	0.0	0.0	0.0	0.0	5363.0	2.5	12.6	0.8								
2370	722.6	411	0.20	0.30	544	5387	1.2	0.7	0.4	0.1	0.0	0.0	0.0	2783.1	7.9	9.9	0.8	-15.4	-52.9						1.040
2430	740.9	304	0.14	0.36	4540	3460	1.7	0.7	0.2	0.1	0.1	0.0	0.2	1450.6	1.9	0.8	0.0								
2490	759.1	440	0.21	0.29	3882	1825	1.7	1.0	0.3	0.1	0.6	0.0	0.1	675.2	4.5	0.5	0.5	-21.2	-50.8						1.031
2550	777.4	474	0.23	0.27	1750	1479	0.5	0.3	0.1	0.1	0.1	0.0	0.0	2002.0	1.1	0.8	1.2								
2610	795.7	454	0.22	0.28	2416	12325	2.8	7.3	0.1	0.1	0.3	0.0	0.1	1223.8	1.5	5.1	0.7		-47.0						
2670	814.0	407	0.19	0.31	3744	11932	2.2	0.7	0.1	0.1	0.2	0.0	0.2	4015.4	1.5	3.2	0.2								
2730	832.3	488	0.23	0.27	7923	4980	3.9	2.8	0.1	0.1	0.3	0.0	0.1	737.3	1.7	0.6	0.0	-18.6	-38.1						1.020
2780	847.6	406	0.19	0.31	6329	21338	7.9	1.2	0.2	0.1	0.3	0.0	0.1	2337.5	2.1	3.4	0.0								
2850	868.9	385	0.18	0.32	4975	10259	5.0	9.1	0.2	0.1	0.2	0.1	0.1	727.6	1.7	2.1	1.1	-18.6	-44.8					-291	1.027
2910	887.2	471	0.22	0.28	1524	10189	4.7	10.7	0.1	0.1	0.2	0.1	0.1	661.1	0.6	6.7	0.8								
2970	905.5	348	0.17	0.33	2098	26648	7.1	1.4	0.3	0.2	0.2	0.1	0.1	3144.5	1.2	12.7	1.6		-49.4						
3030	923.8	375	0.18	0.32	702	16776	5.4	6.5	0.2	0.1	0.2	0.1	0.1	1411.3	1.3	23.9	1.9								
3090	942.1	360	0.17	0.33	920	19895	5.6	0.8	0.3	0.2	0.3	0.1	0.1	3129.3	1.3	21.6	2.3	-15.0	-49.5						1.036
3150	960.4	280	0.13	0.37	110	17550	4.2	0.9	0.3	0.2	0.2	0.1	0.0	3481.7	1.6	159.5	1.9								
3210	978.7	288	0.14	0.36	265	3937	3.7	0.5	0.1	0.1	0.1	0.1	0.0	926.5	2.6	14.9	3.0								
3270	997.0	375	0.18	0.32	1422	20019	8.6	1.3	0.3	0.4	0.4	0.3	0.2	2022.9	0.8	14.1	1.5								
3330	1015.2	468	0.22	0.28	423	12720	9.7	0.9	0.2	0.6	0.8	0.4	0.3	1194.7	0.4	30.1	1.3	-15.2	-46.4					-291	1.033

Chemical analysis based on standards accurate to within 2%.

Atlas 1 flowed gas

Depth Ft.	Depth m	O <sub>2</sub> +Ar+N <sub>2</sub> ppm	CO <sub>2</sub> ppm	C <sub>1</sub> ppm	C <sub>2</sub> ppm	C <sub>3</sub> ppm	iC <sub>4</sub> ppm	nC <sub>4</sub> ppm	neoC <sub>5</sub> ppm	iC <sub>5</sub> ppm	nC <sub>5</sub> ppm	2-2DMB ppm	2MP ppm	3MP ppm	C <sub>6</sub> ppm	MCH ppm	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub>
160	48.8	999366	618	9	3.3	0.2	0.1	0.1	0.0	2.5	0.9	0.0	0.0	0.0	0.0	0.0	3	0.9	2.8	0.0	-13.65	-41.67		1.029
710	216.5	998271	526	1200	1.1	0.3	0.1	0.1	0.1	1.5	0.7	0.0	0.0	0.0	0.0	0.0	1050	0.9	2.0	2.3	-14.18	-50.47		1.038
781	238.1	993224	497	6274	2.7	0.5	0.2	0.2	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	2331	0.9	1.9	12.6	-13.85	-52.73		1.041
850	259.1	992167	544	7278	2.3	0.8	0.1	0.1	0.0	5.9	2.1	0.0	0.0	0.0	0.0	0.0	3099	0.9	2.8	13.4	-13.31	-51.55		1.040
1004	306.1	993967	525	5502	3.1	0.2	0.1	0.1	0.0	1.4	0.9	0.0	0.0	0.0	0.0	0.0	1796	0.8	1.5	10.5	-15.68	-53.69		1.040
1150	350.6	993355	561	6077	2.5	0.4	0.0	0.9	0.0	1.9	0.8	0.0	0.0	0.0	0.0	0.0	2411		2.4	10.8	-15.09	-52.29		1.039
1525	464.9	999393	574	18	3.2	0.1	0.0	0.0	0.0	9.4	2.1	0.0	0.0	0.0	0.0	0.0	6		4.4	0.0	-13.29	-39.44		1.027
1675	510.7	987929	543	11502	6.1	1.2	0.1	0.1	0.1	13.7	4.1	0.0	0.0	0.0	0.0	0.0	1881	0.9	3.4	21.2	-14.71	-54.14		1.042
1750	533.5	979369	593	20006	17.4	1.6	0.3	0.1	0.1	9.4	3.0	0.0	0.0	0.0	0.0	0.0	1152	2.6	3.1	33.7	-14.8	-54.21	-48.48	1.042
1825	556.4	990867	548	8574	8.9	0.7	0.2	0.2	0.1	0.8	0.5	0.0	0.0	0.0	0.0	0.0	964	1.2	1.8	15.7	-14.43	-54.22	-43.94	1.042
1970	600.6	996265	579	3139	10.4	1.9	1.3	1.2	0.5	1.6	0.8	0.0	0.0	0.0	0.0	0.0	302	1.1	1.9	5.4	-15.42	-52.92	-40.99	1.040
2125	647.9	988016	581	11360	18.6	3.0	0.7	1.9	0.1	13.4	5.1	0.0	0.0	0.0	0.0	0.0	615	0.3	2.6	19.5	-12.05	-52.71	-44.35	1.043
2275	693.6	996634	739	2612	9.0	1.6	0.1	0.5	0.1	1.8	1.4	0.0	0.0	0.0	0.0	0.0	292	0.3	1.3	3.5	-14.98	-51.09		1.038
2426	739.6	997258	597	2132	8.8	1.0	0.1	0.4	0.0	1.9	1.0	0.0	0.0	0.0	0.0	0.0	243	0.3	1.8	3.6	-15.51	-50.36	-38.41	1.037
2500	762.2	997516	566	1886	10.6	2.8	0.1	0.2	0.0	13.9	3.9	0.0	0.0	0.0	0.0	0.0	181	0.5	3.5	3.3	-13.44	-29.22	-35.29	1.016

Chemical analysis based on standards accurate to within 2%.

## Carbon1 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	CP μL/L	2-2DMB μL/L	2MP μL/L	3MP μL/L	C <sub>6</sub> μL/L	MCP μL/L	C <sub>7</sub> μL/L	MCH μL/L	C <sub>7</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>7</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δ <sup>13</sup> C <sub>3</sub> ‰	δ <sup>13</sup> C <sub>4</sub> ‰	δ <sup>13</sup> nC <sub>4</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub>			
120	36.6	324	0.15	0.35	4325	15	0.6	0.7	0.6	0.9	0.1	0.7	0.7	0.2	0.1	0.9	0.4	17.9	4.3	7.1	19.6	11	0.7	1.0	0.00	-60.8	-9.0						1.055		
180	54.9	426	0.20	0.30	308	13183	19.2	0.7	0.1	0.4	0.3	0.3	0.3	0.1	0.1	0.6	0.3	9.1	2.2	9.6	13.4	663	0.4	1.0	42.86	-81.7	-16.7						1.071		
240	73.2	379	0.18	0.32	425	7648	7.6	0.9	0.2	0.4	0.1	0.3	0.4	0.1	0.0	0.3	0.1	8.6	2.3	12.1	18.7	905	0.4	0.7	18.00	-81.5	-14.5						1.073		
300	91.5	387	0.18	0.32	274	1284	5.7	1.6	0.3	0.7	0.1	0.5	0.6	0.2	0.1	0.6	0.2	10.6	2.1	4.9	14.2	175	0.4	0.9	4.68										
360	109.8	395	0.19	0.31	315	550	6.3	2.4	0.3	0.7	0.1	0.2	0.2	0.1	0.1	0.3	0.2	2.9	0.4	0.7	1.2	63	0.5	1.4	1.75	-73.3	-16.3						1.062		
420	128.0	404	0.19	0.31	895	387	7.8	0.0	0.1	0.3	0.1	0.2	0.3	0.1	0.0	0.3	0.1	6.2	1.1	4.3	10.1	50	0.5	0.7	0.43										
480	146.3	362	0.17	0.33	2053	475	23.1	1.2	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	1.7	0.3	1.3	2.5	20	0.4	1.7	0.23	-70.4	-25.5						1.048		
540	164.6	455	0.22	0.28	2105	2681	28.1	1.5	0.1	0.2	0.1	0.1	0.2	0.0	0.0	0.2	0.1	4.0	0.5	2.3	7.7	91	0.5	0.6	1.27	-84.5	-29.7						1.060		
600	182.9	394	0.19	0.31	2647	11538	21.8	1.3	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.2	0.1	3.2	0.5	2.0	6.0	498	0.9	0.8	4.36	-77.7	-8.3						1.075		
660	201.2	415	0.20	0.30	5539	37626	71.4	5.2	0.2	0.5	0.1	0.2	0.1	0.0	0.0	0.2	0.1	1.7	0.3	1.3	2.7	491	0.4	1.5	6.79										
720	219.5	421	0.20	0.30	5722	46555	82.2	5.9	0.3	0.6	0.1	0.2	0.2	0.0	0.0	0.2	0.1	2.7	0.5	1.9	4.2	529	0.5	1.1	8.14	-54.5	-5.0						1.052		
780	237.8	418	0.20	0.30	6033	37587	57.3	2.1	0.2	0.3	0.1	0.2	0.1	0.0	0.0	0.2	0.1	2.9	0.6	1.8	4.3	633	0.7	1.6	6.23										
840	256.1	396	0.19	0.31	7151	53839	60.2	3.0	1.4	0.2	1.9	0.6	0.0	0.0	0.2	0.1	0.1	1.6	0.3	1.0	2.7	851	6.7	13.4	7.53	-57.3	-4.8							1.056	
900	274.4	385	0.18	0.32	5959	71492	92.4	12.2	5.4	1.5	2.7	1.0	0.1	0.0	0.4	0.3	0.1	1.5	0.2	1.0	1.7	683	3.7	6.9	12.00										
1020	311.0	466	0.22	0.28	4449	73263	71.6	39.9	44.7	4.1	3.5	3.3	1.1	0.1	0.6	0.6	0.3	2.7	0.3	1.8	1.3	657	11.0	3.0	16.47	-53.3	-5.0							1.051	
1080	329.3	404	0.19	0.31	5772	58300	32.9	12.2	26.3	0.5	2.3	1.1	0.1	0.0	0.5	0.2	0.1	1.1	0.2	0.8	2.1	1293	48.0	9.8	10.10										
1140	347.6	436	0.21	0.29	4661	66554	27.0	2.1	9.8	0.2	0.5	0.2	0.1	0.0	0.1	0.1	0.1	1.4	0.3	1.5	3.2	2286	51.0	3.1	14.28	-56.8	-4.5							1.055	
1200	365.9	427	0.20	0.30	13000	55384	33.5	3.2	4.3	0.2	0.3	0.1	0.1	0.0	0.1	0.1	0.0	1.2	0.2	1.2	2.7	1510	19.7	1.8	4.26										
1260	384.1	419	0.20	0.30	13177	56534	30.0	1.7	0.7	0.3	0.2	0.1	0.1	0.0	0.1	0.2	0.1	1.2	0.2	1.1	2.3	1782	2.6	1.8	4.29	-58.0	-5.1							1.056	
1320	402.4	394	0.19	0.31	17532	59606	32.5	1.9	0.3	0.4	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.8	0.1	0.8	1.6	1736	0.9	2.7	3.40										
1380	420.7	431	0.21	0.29	7124	53900	21.6	1.8	0.5	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.6	0.1	0.4	1.2	2312	1.9	2.3	7.57	-55.9	-4.8							1.054	
1440	439.0	368	0.18	0.32	3373	45405	2.4	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	17525	0.6	1.3	13.46										
1500	457.3	486	0.23	0.27	6742	41685	3.9	1.0	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.2	0.0	0.8	0.1	0.4	1.1	8414	0.9	2.1	6.18	-54.1	-3.7							1.053	
1560	475.6	358	0.17	0.33	6398	39452	30.1	3.5	0.2	0.3	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.7	0.1	0.9	1.8	1175	0.6	1.2	6.17										
1680	512.2	425	0.20	0.30	3294	42294	9.1	0.4	0.2	0.1	0.1	0.2	0.1	0.0	0.2	0.3	0.1	1.6	0.3	1.4	5.3	4435	2.1	1.6	12.84	-55.4	-5.6							1.053	
1740	530.5	445	0.21	0.29	2243	52669	18.3	2.9	0.4	0.2	0.3	0.1	0.0	0.0	0.1	0.1	0.0	0.3	0.0	0.1	0.3	2485	2.2	2.7	23.48										
1800	548.8	406	0.19	0.31	4822	22905	27.3	1.8	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.2	0.0	1.1	0.1	0.8	2.3	787	0.8	0.9	4.75	-55.5	-4.6							1.054	
1860	567.1	423	0.20	0.30	6300	31691	62.2	6.5	0.3	0.3	0.8	0.1	0.1	0.0	0.1	0.2	0.1	0.9	0.1	0.9	1.6	461	0.8	1.0	5.03										
1920	585.4	425	0.20	0.30	16985	38897	166.2	34.6	8.9	6.7	1.5	8.1	2.3	0.1	1.5	4.9	2.1	11.6	0.4	6.0	2.5	194	1.3	3.6	2.29	-55.9	-4.0	-45.2	-26.2					1.055	
1980	603.7	458	0.22	0.28	17114	38506	196.5	55.6	17.5	23.1	2.1	35.0	40.7	0.3	2.4	32.2	11.8	42.3	2.0	26.4	13.9	153	0.8	0.9	2.25										
2040	622.0	393	0.19	0.31	20111	30393	287.5	193.9	24.3	65.3	1.5	33.0	32.0	1.2	0.5	3.8	1.0	26.8	1.5	3.8	2.6	63	0.4	1.0	1.51	-55.6	-4.4	-40.9	-22.7		-25.6			1.054	
2100	640.2	457	0.22	0.28	12794	29987	290.7	199.8	5.4	25.6	1.2	4.8	3.9	1.4	0.2	4.4	0.4	17.7	0.7	1.2	0.8	61	0.2	1.2	2.34										
2160	658.5	442	0.21	0.29	14375	40070	647.9	284.7	1.9	10.2	0.5	0.7	0.6	0.4	0.1	0.9	0.0	4.0	0.3	0.4	0.3	43	0.2	1.1	2.79	-54.9	-3.9							1.054	
2220	676.8	455	0.22	0.28	13168	20779	323.0	142.5	6.6	6.8	0.3	2.3	1.1	0.3	0.1	1.1	0.3	8.3	0.3	3.0	1.8	45	1.0	2.1	1.58										
2280	695.1	445	0.21	0.29	5561	68195	1287.5	444.6	43.2	22.6	0.7	8.2	3.3	1.1	0.0	2.0	0.2	22.0	0.3	4.1	2.6	39	1.9	2.4	12.26	-54.2	-5.9	-38.9	-33.5					1.051	
2340	713.4	463	0.22	0.28	67347	31962	611.1	197.8	34.3	12.6	0.7	6.9	1.9	0.7	0.1	1.5	0.3	18.0	0.3	4.1	2.3	40	2.7	3.7	0.47										
2400	731.7	431	0.21	0.29	31898	29973	455.3	123.5	25.1	7.9	0.7	5.6	1.2	0.4	0.1	1.3	0.3	11.8	0.3	3.7	2.2	52	3.2	4.8	0.94	-53.4	-3.8	-39.8	-35.1					1.052	
2460	750.0	450	0.21	0.29	6440	20827	217.3	44.0	14.3	4.4	0.7	5.6	1.2	0.3	0.1	1.2	0.3	13.6	0.5	4.4	2.6	80	3.3	4.5	3.23										
2520	768.3	347	0.17	0.33	263	39364	800.2	125.6	42.7	13.5	4.2	17.1	6.1	1.0	0.8	3.4	1.1	33.6	1.0	10.1	5.0	43	3.2	2.8	149.46	-50.9	-9.1	-41.0						1.044	
2580	786.6	220	0.10	0.40	27201	21052	149.0	26.4	2.4	4.6	1.4	2.3	2.1	0.4	0.5	2.6	0.8	21.1	0.9	5.6	4.3	120	0.5	1.1	0.77										
2640	804.9	406	0.19	0.31	19161	54391	469.5	26.2	15.7	5.2	5.6	30.0	21.2	0.8	2.1	8.7	2.5	30.7	18.4	11.1	13.4	110	3.0	1.4	2.84	-51.0	-3.0	-43.9						1.051	
2700	823.2	380	0.18	0.32	74582	35281	236.3	22.9	51.2	11.4	6.8	69.3	49.1	1.6	5.5	45.1	13.1	69.7	54.8	57.7	111.5	136	4.5	1.4	0.47										
2760	841.5	484	0.23	0.27	40953	46613	124.0	14.0	38.3	6.8	12.2	19.1	13.1	0.5	7.2	25.3	4.4	26.8	9.8	43.6	53.0	338	5.6	1.5	1.14	-49.5	-9.7								1.0

Caribou 26-11 cuttings

Depth	Depth	Sed. Wt.	Sample Vol.	Hdpsc	CO <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	iC <sub>4</sub>	nC <sub>4</sub>	neoC <sub>5</sub>	iC <sub>5</sub>	nC <sub>5</sub>	CP	2-2DMB	2MP	3MP	C <sub>6</sub>	MCP	C <sub>7</sub>	MCH	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub>	iC <sub>4</sub> /nC <sub>4</sub>	iC <sub>5</sub> /nC <sub>5</sub>	C <sub>1</sub> /CO <sub>2</sub>	δ <sup>13</sup> C <sub>1</sub>	δ <sup>13</sup> CO <sub>2</sub>	αCO <sub>2</sub> -C <sub>1</sub>
ft.	m	gm	L	L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	ratio	ratio	ratio	ratio	‰	‰	
120	120	493	0.23	0.27	3197	60	2.3	1.5	0.3	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	16	0.8	1.1	0.02	-50.1	-23.5	1.028
180	180	552	0.26	0.24	42050	3555	2.2	1.3	0.2	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.1	0.0	1020	1.1	1.7	0.08	-68.1	-3.8	1.069
240	240	637	0.30	0.20	1660	460	0.6	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	587	0.9	1.1	0.28	-68.6	-25.3	1.046
300	300	578	0.28	0.22	14446	22212	14.7	2.5	0.3	0.2	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	1294	1.5	1.8	1.54	-71.4	-26.4	1.048
360	360	444	0.21	0.29	5842	34272	35.4	2.8	0.6	0.2	0.2	0.4	0.2	0.0	0.0	0.1	0.0	0.4	0.0	0.2	0.0	896	2.7	1.7	5.87	-77.6	-19.5	1.063
420	420	455	0.22	0.28	2445	23107	36.3	3.3	0.6	0.2	0.1	0.5	0.2	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.0	583	2.9	3.6	9.45			
480	480	505	0.24	0.26	1209	18886	38.4	2.9	0.4	0.3	0.1	0.3	0.3	0.0	0.0	0.1	0.0	0.3	0.0	0.1	0.0	457	1.2	1.0	15.63	-68.0	-16.3	1.055
540	540	481	0.23	0.27	21163	42444	64.4	2.7	0.2	0.2	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	632	1.3	0.5	2.01			
600	600	554	0.26	0.24	21747	25095	54.1	2.6	0.3	0.3	0.1	0.2	1.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	443	1.2	0.2	1.15	-66.2	-25.4	1.044
660	660	486	0.23	0.27	16224	28583	37.7	2.1	0.3	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.2	718	1.3	0.7	1.76			
720	720	568	0.27	0.23	3632	11201	9.8	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	1099	1.1	0.3	3.08	-66.6	-19.1	1.051
780	780	615	0.29	0.21	9407	20944	17.3	1.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1109	1.2	1.2	2.23			
840	840	545	0.26	0.24	473	35609	36.1	1.2	0.1	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	954	1.1	0.1	75.35	-65.1	-17.5	1.051
900	900	526	0.25	0.25	2022	17981	20.0	1.4	0.1	0.1	0.0	0.1	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	841	1.0	0.1	8.89			
960	960	418	0.20	0.30	620	19867	27.1	3.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	656	0.7	1.0	32.05	-63.8	-12.6	1.055
1020	1020	367	0.17	0.33	8896	16991	25.1	1.6	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.0	0.3	0.0	0.0	637	0.7	0.3	1.91			
1080	1080	428	0.20	0.30	930	13472	20.5	0.9	0.1	0.2	0.0	0.2	0.5	0.0	0.0	0.0	0.0	1.6	0.0	0.3	0.2	628	0.8	0.4	14.48	-64.6	-11.8	1.056
1140	1140	427	0.20	0.30	423	12372	24.0	13.5	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	330	2.0	6.3	29.24			
1200	1200	378	0.18	0.32	1084	26471	56.5	3.1	0.1	0.2	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.5	0.0	0.1	0.0	444	0.6	0.6	24.41	-64.2	-12.5	1.055
1260	1260	522	0.25	0.25	647	21	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127			0.03			
1320	1320	612	0.29	0.21	13827	16146	68.9	5.4	1.5	0.9	0.1	0.9	0.4	0.1	0.0	0.2	0.0	2.1	0.0	0.5	0.1	217	1.7	2.6	1.17	-63.4	-27.4	1.038
1380	1380	488	0.23	0.27	18092	16192	158.6	16.6	5.7	3.9	0.4	3.8	1.1	0.3	0.1	0.7	0.1	8.0	0.1	1.6	0.5	92	1.5	3.6	0.89			
1440	1440	510	0.24	0.26	265	15469	118.6	16.1	5.3	3.0	0.2	1.9	0.7	0.2	0.0	0.3	0.0	4.7	0.1	0.9	0.4	115	1.7	2.9	58.44	-62.3	-27.7	1.037
1500	1500	540	0.26	0.24	17038	12674	94.5	11.0	3.5	3.1	0.3	1.9	1.1	0.1	0.0	0.7	0.1	5.3	0.0	1.1	3.2	120	1.1	1.7	0.74			
1560	1560	510	0.24	0.26	35968	13765	94.5	11.3	3.0	2.4	0.3	1.4	0.8	0.2	0.0	0.4	0.1	4.1	0.0	1.1	0.3	130	1.2	1.8	0.38	-58.5	-27.7	1.033
1620	1620	538	0.26	0.24	286	8936	47.2	5.1	1.2	1.0	0.2	0.5	0.3	0.0	0.0	0.2	0.0	1.7	0.0	0.7	0.1	171	1.2	1.8	31.30			
1680	1680	593	0.28	0.22	5464	7691	26.8	2.2	0.4	0.4	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.6	0.0	0.1	0.0	265	1.2	1.7	1.41	-58.7	-22.0	1.039
1740	1740	427	0.20	0.30	61337	19522	36.6	2.9	0.8	0.6	0.1	0.4	0.3	0.1	0.0	0.2	0.0	1.6	0.0	0.3	0.3	494	1.3	1.4	0.32			
1800	1800	442	0.21	0.29	385	16864	29.7	1.8	0.3	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	535	1.1	1.1	43.79	-55.5	-11.4	1.047
1860	1860	473	0.23	0.27	512	21482	23.3	1.9	0.3	0.3	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0	853	0.9	0.8	41.93			
1920	1920	373	0.18	0.32	690	12360	21.2	8.2	0.6	0.6	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.5	0.0	0.1	0.0	421	0.9	1.6	17.92	-52.4	-8.7	1.046
1980	1980	333	0.16	0.34	646	11670	22.6	5.9	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.4	0.1	0.0	0.0	409	0.9	1.4	18.07			
2040	2040	342	0.16	0.34	1449	8053	23.3	2.5	0.3	0.4	0.1	0.2	0.1	0.0	0.0	0.1	0.0	1.1	0.0	0.0	0.1	312	0.9	1.1	5.56	-50.6	-18.5	1.034
2100	2100	334	0.16	0.34	922	7096	14.8	1.6	0.3	0.4	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.5	0.0	0.4	0.0	433	0.7	0.9	7.70	-50.6	-12.1	1.041
2160	2160	287	0.14	0.36	851	5530	9.6	1.8	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	483	0.7	1.4	6.50	-51.5	-11.0	1.043
2220	2220	553	0.26	0.24	315	12897	32.1	2.6	0.7	0.5	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.0	372	1.5	1.2	41.00	-56.4	-18.6	1.040
2280	2280	422	0.20	0.30	89	34451	35.1	4.4	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	871	0.8	1.5	385.83	-55.0		
2340	2340	526	0.25	0.25	0	27395	22.4	4.7	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.2	1010	1.1	2.1		-51.5		
2400	2400	454	0.22	0.28	13	37952	33.3	2.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1074	1.1	1.9	2891.00			
2460	2460	501	0.24	0.26	33	53793	35.7	3.7	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1366	1.1	1.9	1636.33	-52.7		
2520	2520	507	0.24	0.26	0	39777	29.3	4.5	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1175	1.0	2.0				
2580	2580	451	0.21	0.29	13	22353	31.6	3.2	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	643	1.2	2.3	1683.00	-52.3		
2640	2640	481	0.22	0.28	12	22858	24.3	3.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	838	0.9	1.7	1859.00			
2700	2700	505	0.24	0.26	11	18573	14.3	1.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0	1182	1.2	1.7	1721.00	-54.8		
2760	2760	502	0.24	0.26	55	27684	22.5	1.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1179	0.9	1.6	507.20			
2820	2820	504	0.24	0.26	0	38675	40.0	2.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.4	920	1.0	2.1	#DIV/0!	-55.6		
2880	2880	568	0.27	0.23	25	31041	33.6	2.6	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	857	1.4	0.5	1219.33			
2940	2940	338	0.16	0.34	42	24962	49.0	4.0	0.4	0.4	0.2	0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	471	0.9	0.0	592.50	-55.0		
3000	3000	464	0.22	0.28	25	33720	55.4	4.2	0.3	0.																		



Iapetus 2 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdpsc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	CP μL/L	2-2DMB μL/L	2MP μL/L	3MP μL/L	C <sub>6</sub> μL/L	MCP μL/L	C <sub>7</sub> μL/L	MCH μL/L	C <sub>7</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>7</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δ <sup>13</sup> C <sub>3</sub> ‰	δ <sup>13</sup> C <sub>4</sub> ‰	δ <sup>15</sup> nC <sub>4</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub>			
180	54.9	393	0.19	0.31	167	45	4.5	1.7	0.2	0.5	0.8	0.2	0.4	0.1	0.0	0.2	0.1	0.1	0.2	0.1	1.5	7	0.3	0.5	0.3										
240	73.2	548	0.26	0.24	119	898	11.4	0.8	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2	74	0.5	0.5	7.5	-83.8	-25.0							1.064	
300	91.5	519	0.25	0.25	82	1867	8.4	0.9	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.3	202	1.0	1.5	22.8										
360	109.8	527	0.25	0.25	129	984	6.5	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.3	134	0.7	1.2	7.6	-83.1	-7.6								1.082	
420	128.0	482	0.23	0.27	71	5809	20.9	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.4	266	1.4	1.1	82.2											
480	146.3	711	0.34	0.16	157	12272	19.7	0.8	0.2	0.2	0.1	0.2	0.1	0.1	0.0	0.2	0.0	0.1	0.1	0.1	0.7	598	1.1	1.5	78.0	-69.8	-10.3							1.064	
540	164.6	487	0.23	0.27	474	7553	19.1	0.8	0.1	0.2	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.7	379	0.7	0.8	15.9										
600	182.9	562	0.27	0.23	243	5706	19.0	0.9	0.1	0.2	0.2	0.1	0.2	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	286	0.6	0.8	23.5	-65.1	-9.1							1.060	
660	201.2	481	0.23	0.27	142	6068	18.0	0.9	0.1	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.4	321	0.6	1.3	42.7										
720	219.5	565	0.27	0.23	275	3113	10.1	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.7	284	1.1	0.9	11.3	-67.7	-13.7							1.058	
780	237.8	387	0.18	0.32	2518	1405	8.4	0.8	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	153	1.0	0.4	0.6										
840	256.1	469	0.22	0.28	1549	10606	18.7	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	541	0.8	0.5	6.8	-66.5	-25.1								1.044
900	274.4	355	0.17	0.33	6069	22674	41.1	1.7	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.3	530	0.9	0.6	3.7											
960	292.7	326	0.16	0.34	14391	42366	74.6	2.6	0.2	0.4	0.1	0.1	0.4	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	549	0.5	0.3	2.9	-59.2	-27.1							1.034	
1020	311.0	292	0.14	0.36	6386	10242	18.7	4.2	0.3	0.2	0.1	0.2	0.2	0.1	0.0	0.2	0.0	0.1	0.1	0.1	0.4	447	1.1	0.9	1.6										
1080	329.3	479	0.23	0.27	2944	7817	18.0	1.4	0.3	0.3	0.1	0.2	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.9	403	1.2	0.6	2.7	-57.6	-18.9							1.041	
1140	347.6	352	0.17	0.33	2320	10620	18.8	1.6	0.2	0.2	0.2	0.2	0.4	0.1	0.0	0.1	0.0	0.1	0.0	0.6	5.2	0.9	0.5	4.6											
1200	365.9	350	0.17	0.33	4100	8086	14.2	2.3	0.2	0.2	0.1	0.1	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.2	0.3	491	0.7	0.6	2.0	-59.8	-21.1							1.041	
1260	384.1	335	0.16	0.34	4311	9464	21.3	1.7	0.2	0.4	0.1	0.5	0.7	0.1	0.0	0.3	0.0	0.2	0.1	0.0	0.6	411	0.6	0.7	2.2										
1320	402.4	252	0.12	0.38	9658	14646	35.2	2.6	0.4	0.4	0.1	0.4	1.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	388	0.9	0.4	1.5	-68.6	-25.7							1.046	
1380	420.7	261	0.12	0.38	31711	6769	35.4	2.8	0.2	0.3	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	177	0.6	0.4	0.2										
1440	439.0	241	0.11	0.39	5237	5424	34.9	2.5	0.1	0.1	0.1	0.5	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	145	0.7	1.4	1.0	-79.2	-20.4							1.064	
1500	457.3	269	0.13	0.37	2584	8737	41.5	2.2	0.1	0.2	0.1	0.2	0.3	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	200	0.6	0.6	3.4										
1560	475.6	270	0.13	0.37	2080	8156	38.7	1.5	0.1	0.2	0.2	0.1	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	203	0.5	0.4	3.9	-81.1	-16.8							1.070	
1620	493.9	250	0.12	0.38	27680	3826	25.0	2.7	0.1	0.2	0.4	0.1	0.3	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	138	0.5	0.3	0.1										
1680	512.2	274	0.13	0.37	1954	4645	20.7	2.3	0.3	0.1	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	202	2.1	0.9	2.4										
1740	530.5	299	0.14	0.36	4622	3441	15.6	1.3	0.1	0.1	0.2	0.1	0.4	0.0	0.0	0.0	0.2	0.1	0.0	0.1	0.6	204	1.3	0.2	0.7										
1800	548.8	273	0.13	0.37	3529	2347	11.7	1.8	0.2	0.2	0.2	0.1	0.4	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	174	1.1	0.3	0.7	-74.4	-14.8							1.064	
1860	567.1	263	0.13	0.37	6464	3002	13.5	1.7	0.2	0.2	0.3	0.2	0.5	0.2	0.0	0.0	0.0	0.2	0.1	0.0	0.0	198	1.0	0.3	0.5										
1920	585.4	462	0.22	0.28	1158	6467	19.3	0.8	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.4	320	1.2	0.4	5.6	-75.6	-14.8								1.066
1980	603.7	434	0.21	0.29	923	4675	16.7	0.9	0.1	0.2	0.2	0.1	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2	265	0.7	0.3	5.1										
2040	622.0	486	0.23	0.27	2286	8648	28.0	1.1	0.1	0.2	0.2	0.1	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.3	298	0.7	0.4	3.8	-71.2	-17.0							1.058	
2100	640.2	438	0.21	0.29	1104	9445	35.6	3.7	1.7	1.8	0.2	1.8	2.2	0.1	0.0	0.2	0.2	0.3	0.8	0.0	2.0	240	1.0	0.8	8.6										
2160	658.5	487	0.23	0.27	913	8138	24.5	1.2	0.2	0.2	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	317	0.7	0.4	8.9	-62.3	-15.4							1.050	
2220	676.8	560	0.27	0.23	726	9935	24.6	0.9	0.1	0.1	0.2	0.1	0.3	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	389	0.5	0.5	13.7										
2280	695.1	436	0.21	0.29	1197	11732	56.6	2.1	0.1	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	200	0.3	0.6	9.8	-57.4	-15.2							1.045	
2340	713.4	456	0.22	0.28	1133	12310	70.3	2.7	0.2	0.2	0.2	0.1	0.2	0.0	0.0	0.2	0.0	0.1	0.0	0.1	0.0	168	1.0	0.4	10.9										
2400	731.7	531	0.25	0.25	1065	30751	125.1	9.1	3.3	4.1	0.2	3.6	1.4	0.1	0.1	0.8	0.7	0.3	0.1	0.2	0.3	229	0.8	2.5	28.9	-54.4	-10.5							1.046	
2460	750.0	527	0.25	0.25	3344	33574	109.0	7.6	1.3	0.5	0.3	0.2	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.3	288	2.6	0.6	10.0										
2520	768.3	270	0.13	0.37	173	35638	360.2	197.3	429.0	258.2	7.6	79.2	46.8	4.6	2.3	10.9	0.0	3.7	2.0	1.2	7.7	64	1.7	1.7	205.6	-45.2	-14.9	-39.0	-28.7	-30.7			1.032		
2580	786.6	289	0.14	0.36	263	33280	340.5	182.2	208.2	191.6	3.7	68.7	35.3	2.4	2.8	9.8	6.2	3.5	3.6	0.9	4.5	64	1.1	1.9	126.4										
2640	804.9	283	0.13	0.37	1626	64993	619.0	497.2	348.1	376.1	7.5	220.2	106.7	4.3	11.5	40.0	42.2	23.8	16.7	22.9	82.9	58	0.9	2.1	40.0	-44.8	-10.5	-33.2	-30.2	-29.1	-28.2			1.036	
2700	823.2	305	0.15	0.35	1637	44277	399.4	300.5	155.4	138.3	2.0	83.6	57.4	1.7	3.8	26.2	24.8	16.2	6.1	14.9	61.7	63	1.1	1.5	27.1										
2760	841.5	270	0.13	0.37	1242	23305	107.2	87.6	73.3	68.5	1.6	48.2	33.0	0.8	2.5	22.1	22.4	7.9	3.0	8.5	30.5	120	1.1	1.5	18.8	-42.6</									

Kokoda 1 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	CP μL/L	2-2DMB μL/L	2MP μL/L	3MP μL/L	C <sub>6</sub> μL/L	MCP μL/L	C <sub>7</sub> μL/L	MCH μL/L	C <sub>7</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>7</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>7</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δ <sup>13</sup> C <sub>3</sub> ‰	δ <sup>13</sup> iC <sub>4</sub> ‰	δ <sup>13</sup> nC <sub>4</sub> ‰	α-CO <sub>2</sub> -C <sub>1</sub>		
120	36.6	361	0.17	0.33	191	210	7.6	0.3	0.1	0.2	0.1	0.2	1.2	0.0	0.0	0.4	0.3	0.3	1.4	0.6	10.7	26	0.4	0.1	1.1									
180	54.9	315	0.15	0.35	2497	9660	3.8	0.6	0.1	0.1	0.1	0.1	0.7	0.0	0.0	0.0	0.3	1.5	0.0	16.6	2235	1.0	0.1	3.9	-65.6	-15.4							1.054	
240	73.2	384	0.18	0.32	6226	27386	29.3	1.2	0.4	0.5	0.2	0.8	1.2	0.1	0.1	1.0	0.7	0.6	1.6	1.3	24.4	896	1.0	0.7	4.4									
300	91.5	269	0.13	0.37	3281	14981	37.7	1.1	0.3	0.4	0.2	0.6	0.8	0.1	0.0	0.4	0.3	0.4	1.2	0.8	13.5	386	0.8	0.7	4.6	-67.3	-14.6						1.057	
360	109.8	369	0.18	0.32	830	4263	18.5	0.9	0.5	0.5	0.2	0.9	0.8	0.2	0.1	1.2	1.0	1.1	3.2	2.0	34.8	220	0.9	1.1	5.1									
420	128.0	365	0.17	0.33	1201	12893	45.0	1.4	0.4	0.5	0.2	0.9	0.8	0.2	0.1	0.8	0.6	0.6	1.7	1.2	16.5	278	0.7	1.1	10.7	-61.7	-12.9						1.052	
480	146.3	364	0.17	0.33	584	23765	62.2	2.1	0.2	0.3	0.1	0.3	0.4	0.1	0.0	0.0	0.1	0.2	0.4	0.1	0.0	370	0.7	0.9	40.7									
540	164.6	446	0.21	0.29	244	10509	24.2	0.8	0.1	0.2	0.1	0.1	0.2	0.0	0.0	0.5	0.2	0.1	0.4	0.0	4.0	421	0.8	0.9	43.1	-59.8	-14.3						1.048	
600	182.9	334	0.16	0.34	386	8725	27.9	0.6	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.4	0.2	0.3	0.0	0.0	307	0.8	0.6	22.6								1.052	
660	201.2	411	0.20	0.30	264	12531	43.5	0.9	0.1	0.2	0.1	0.3	0.3	0.1	0.0	0.2	0.2	0.1	0.3	0.4	3.8	282	0.7	0.9	47.4	-60.4	-11.2						1.052	
720	219.5	461	0.22	0.28	307	15460	69.0	1.1	0.2	0.2	0.1	0.2	0.3	0.0	0.0	0.1	0.2	0.2	0.5	0.3	3.2	220	0.8	0.8	50.4								1.047	
780	237.8	382	0.18	0.32	245	11262	31.5	1.0	0.4	0.4	0.1	0.7	0.5	0.1	0.0	0.8	0.6	0.5	1.2	0.9	7.9	346	0.9	1.3	46.0	-60.6	-16.6						1.047	
840	256.1	543	0.26	0.24	187	8413	14.9	0.5	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.3	0.0	0.0	544	1.8	0.4	45.1								1.053	
900	274.4	353	0.17	0.33	652	14039	10.6	0.4	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	1272	0.9	0.8	21.5	-61.8	-12.5						1.053	
960	292.7	468	0.22	0.28	211	13468	99.5	0.4	0.1	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	135	1.3	0.7	63.7								1.053	
1020	311.0	380	0.18	0.32	264	10914	14.1	0.6	0.3	0.5	0.1	0.3	0.3	0.1	0.0	0.4	0.3	0.3	0.8	0.6	5.9	743	0.7	1.0	41.3	-62.8	-13.2						1.053	
1080	329.3	485	0.23	0.27	850	9040	11.6	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	759	0.7	0.6	10.6								1.049	
1140	347.6	454	0.22	0.28	433	8664	18.4	0.5	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	459	0.7	0.9	20.0	-61.4	-15.4						1.049	
1200	365.9	608	0.29	0.21	153	5794	10.9	0.4	0.2	0.2	0.0	0.3	0.2	0.0	0.0	0.2	0.2	0.1	0.5	0.3	2.7	512	1.0	1.7	38.0								1.047	
1260	384.1	354	0.17	0.33	590	6803	25.6	1.5	0.2	0.4	0.1	0.3	0.3	0.1	0.0	0.0	0.5	0.2	5.2	0.1	0.0	252	0.4	0.8	11.5	-57.7	-13						1.047	
1320	402.4	422	0.20	0.30	446	8066	32.7	3.5	1.0	1.5	0.2	1.8	1.3	0.4	0.0	1.5	0.5	1.6	0.4	1.2	10.0	223	0.7	1.4	18.1								1.043	
1380	420.7	518	0.25	0.25	401	15857	46.2	4.8	1.4	2.2	0.2	2.5	1.6	0.4	0.1	2.2	0.8	1.5	1.3	1.9	13.4	311	0.7	1.6	39.6	-52.2	-11.5						1.043	
1440	439.0	422	0.20	0.30	938	13706	159.2	5.3	1.0	1.9	0.2	1.5	1.3	0.0	0.0	0.0	1.1	1.0	2.4	0.7	0.0	83	0.5	1.1	14.6								1.036	
1500	457.3	466	0.22	0.28	489	12031	256.9	6.3	1.0	1.8	0.2	1.5	1.4	0.4	0.1	1.4	0.5	1.1	0.6	1.0	8.8	46	0.5	1.1	24.6	-48.5	-14.3	-34.2					1.036	
1560	475.6	453	0.22	0.28	461	11215	403.3	7.1	2.3	1.2	0.2	1.1	0.8	0.1	0.1	1.1	0.4	0.6	0.7	0.8	7.3	27	1.9	1.3	24.3								1.037	
1620	493.9	481	0.23	0.27	674	20915	2174.3	6.7	193.4	0.4	3.5	0.7	0.3	0.1	0.6	1.3	0.1	0.3	0.2	0.3	2.0	10	483.6	2.1	31.0	-47	-11.7	-34.4						1.037
1680	512.2	489	0.23	0.27	883	11186	997.0	3.1	53.4	0.4	1.0	0.7	0.4	0.1	0.5	1.2	0.3	0.3	0.5	0.7	9.8	11	120.5	1.7	12.7	-45.2	-10	-35.8						1.036
1740	530.5	465	0.22	0.28	1057	17122	1305.9	3.3	43.6	0.3	0.9	0.3	0.2	0.0	0.2	0.0	0.5	0.2	0.3	0.3	3.1	13	159.7	1.5	16.2	-45	-10.6	-34						1.036
1800	548.8	502	0.24	0.26	1015	13798	605.9	2.5	16.0	0.3	0.4	0.4	0.3	0.0	0.1	0.4	0.2	0.2	0.3	0.0	12.9	23	54.3	1.2	13.6	-46.3	-9.9	-33						1.038
1860	567.1	548	0.26	0.24	595	14684	320.6	2.6	8.2	0.4	0.2	0.2	0.1	0.0	0.0	0.0	0.3	0.1	0.5	0.0	0.0	45	21.2	2.6	24.7	-47.1	-8.9	-33.8						1.040
1920	585.4	480	0.23	0.27	606	11994	241.1	4.1	9.1	0.4	0.4	0.4	0.3	0.0	0.0	0.4	0.2	0.2	0.4	0.3	0.0	49	24.2	1.7	19.8	-47.2	-8.8	-32.1						1.040
1980	603.7	455	0.22	0.28	745	13992	312.5	5.5	6.4	0.2	0.3	0.3	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.1	1.3	44	27.0	1.9	18.8	-47.5	-9.6	-31.9						1.040
2040	622.0	485	0.23	0.27	1095	15820	375.1	7.4	4.0	0.4	0.2	0.3	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.1	3.4	41	11.0	1.7	14.4	-47.7	-7.8	-33.3						1.042
2100	640.2	512	0.24	0.26	609	12756	510.7	29.1	2.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.3	0.1	0.3	0.2	1.9	24	10.3	1.9	20.9	-47.9	-11	-28.3						1.039
2160	658.5	316	0.15	0.35	1463	10336	734.0	61.9	7.4	2.5	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	13	3.0	1.1	7.1	-47.1	-9.7	-28.8	-26.5					1.039
2220	676.8	408	0.19	0.31	1731	10810	1140.8	34.6	66.7	2.7	1.8	2.2	0.2	0.0	1.7	3.6	0.7	0.4	1.4	0.4	23.2	9	24.4	10.1	6.2	-47.3	-8.8	-28.6						1.040
2280	695.1	313	0.15	0.35	2049	12574	1066.6	57.4	22.2	2.8	0.7	0.8	0.3	0.0	0.4	0.8	0.1	0.1	0.3	0.2	0.1	11	7.9	3.0	6.1	-47.9	-8.5	-28.9						1.041
2340	713.4	353	0.17	0.33	1817	10722	736.5	23.8	6.9	1.5	0.3	0.2	3.8	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	14	4.7	0.0	5.9	-48.4	-9.1	-29.1						1.041
2400	731.7	410	0.20	0.30	1327	10771	533.9	17.0	8.3	0.6	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.0	0.0	20	14.1	1.4	8.1	-48.7	-9.2	-29.7						1.042
2460	750.0	392	0.19	0.31	957	10558	958.5	8.4	4.2	0.5	0.2	0.3	0.2	0.0	0.2	0.0	1.2	0.3	0.9	0.1	9.9	11	9.2	1.1	11.0	-48.5	-9.4	-29.6						1.041
2520	768.3	357	0.17	0.33	116	7008	941.5	39.5	4.8	2.2	2.3	2.1	3.3	0.8	0.2	5.9	3.3	7.4	13.4	5.7	136.3	7	2.2	0.6	60.2	-46.2	-12.5	-29						1.035
2580	786.6	368	0.18	0.32	93	17569	843.2	11.3	0.9	0.7	0.3	2.8	5.9	3.6	0.2	16.0	12.2	32.6	89.9	36.3	912.0	21	1.3	0.5	189.6									1.038
2640	804.9	385	0.18	0.32	52	22731	459.5	2.6	0.7	0.4	0.5	2.0	3.8	2.5	0.2	11.1	6.9	21.6	56.7	21.1	619.6	49	1.6	0.5	438.7	-48.2	-12.4	-29.8						1.038
2700	823.2	314	0.15	0.35	11649																													



KRU 1H-South cuttings																										
Depth	Depth	Sed. Wt.	Sample Vol.	Hdspc	CO	CO <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>2</sub> H <sub>4</sub>	C <sub>3</sub>	C <sub>3</sub> H <sub>6</sub>	iC <sub>4</sub>	nC <sub>4</sub>	iC <sub>5</sub>	nC <sub>5</sub>	C <sub>6</sub> +	C1/C2+C3	iC4/nC4	C1/CO <sub>2</sub>	δ <sup>18</sup> CO <sub>2</sub>	δ <sup>13</sup> C <sub>1</sub>	δDC <sub>1</sub>	α.CO <sub>2</sub> -C <sub>1</sub>			
ft.	m	gm	L	L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	uL/L	ratio	ratio	ratio	‰	‰	‰				
160	48.8	467	0.22	0.28	0.0	48438	19100	5.2	0.0	21.7	0.6	0.2	0.0	0.0	0.0	21.7	708									
220	67.1	401	0.19	0.31	0.0	59721	9873	10.7	5.0	37.1	4.4	0.5	0.6	0.0	0.0	37.1	207									
280	85.4	473	0.23	0.27	0.0	48917	17688	10.6	0.0	30.4	0.4	0.4	0.2	0.0	0.0	30.4	432						1.029			
340	103.7	501	0.24	0.26	0.0	44599	14793	3.2	0.0	16.7	0.4	0.0	0.2	0.0	0.0	16.7	746									
400	122.0	549	0.26	0.24	0.0	37872	18343	4.0	0.0	15.6	0.4	0.2	0.2	0.0	0.0	15.6	935	1.0	0.48							
460	140.2	452	0.22	0.28	0.0	51068	23153	11.6	0.8	31.0	0.7	0.0	0.0	0.0	0.0	31.0	543						1.035			
520	158.5	531	0.25	0.25	0.0	40269	28736	7.0	0.0	21.0	0.5	0.0	0.0	0.0	0.0	21.0	1024									
580	176.8	542	0.26	0.24	0.0	35804	69545	5.8	0.0	21.7	0.6	0.0	0.2	0.0	0.0	21.7	2532									
640	195.1	594	0.28	0.22	0.0	35236	42836	15.5	0.0	14.1	0.5	0.0	0.2	0.0	0.0	14.1	1446									
700	213.4	435	0.21	0.29	0.0	54572	28276	23.9	0.0	30.8	0.7	0.0	0.0	0.0	0.0	30.8	517									
760	231.7	544	0.26	0.24	0.0	40368	43903	30.5	0.0	20.9	0.4	0.0	0.0	0.0	0.0	20.9	854									
820	250.0	506	0.24	0.26	0.0	38811	42144	26.9	0.0	21.4	0.5	0.2	0.0	0.0	0.0	21.4	873						1.028			
880	268.3	314	0.15	0.35	0.0	119073	25080	24.4	1.4	23.7	0.9	0.0	0.0	0.0	0.0	23.7	522									
940	286.6	435	0.21	0.29	0.0	56693	28276	13.6	0.6	20.2	0.7	0.0	0.0	0.0	0.0	20.2	837									
1000	304.9	462	0.22	0.28	0.0	51291	18200	9.3	0.0	20.0	0.5	0.0	0.0	0.0	0.0	20.0	622						1.024			
1060	323.2	403	0.19	0.31	0.0	62131	30985	13.3	0.0	35.8	0.6	0.0	0.0	0.0	0.0	35.8	631									
1120	341.5	323	0.15	0.35	0.0	82828	33762	14.4	1.1	46.6	0.7	0.0	0.0	0.0	0.0	46.6	554									
1180	359.8	313	0.15	0.35	0.0	86180	36261	13.0	1.2	28.7	0.9	0.0	0.5	0.0	0.0	28.7	870									
1300	396.3	455	0.22	0.28	0.0	51785	35308	6.4	0.5	26.9	0.8	0.0	0.3	0.0	0.0	26.9	1059						1.009			
1360	414.6	345	0.16	0.34	0.0	61100	23091	11.4	0.0	37.4	1.0	0.0	0.0	0.0	0.0	37.4	473									
1420	432.9	405	0.19	0.31	0.0	51441	15050	6.7	1.1	30.3	1.1	0.6	0.3	0.0	0.0	30.3	407	2.0	0.29							
1480	451.2	307	0.15	0.35	0.0	77930	14957	19.1	1.7	46.7	1.0	0.7	0.5	0.0	0.0	46.7	227	1.5	0.19				1.015			
1540	469.5	429	0.20	0.30	0.0	49072	22582	20.6	0.9	24.5	0.6	0.4	0.0	0.0	0.0	24.5	502									
1600	487.8	343	0.16	0.34	0.0	79563	30712	19.6	1.0	46.8	1.0	0.4	0.4	0.0	0.0	46.8	463	1.0	0.39							
1660	506.1	418	0.20	0.30	0.0	46568	51860	11.5	0.0	35.2	0.8	0.3	0.0	0.0	0.0	35.2	1110						1.012			
1720	524.4	444	0.21	0.29	81.9	194630	10032	6.3	0.0	66.7	0.5	0.0	0.0	0.0	0.0	66.7	137									
1780	542.7	446	0.21	0.29	0.0	44013	28304	10.0	0.0	18.6	0.7	0.3	0.0	0.0	0.0	18.6	991									
1840	561.0	498	0.24	0.26	0.0	42896	74598	8.4	0.0	28.7	0.6	0.2	0.2	0.0	0.0	28.7	2009	1.0	1.74				-37.7			
1900	579.3	503	0.24	0.26	0.0	42303	44913	6.3	0.0	22.1	0.5	0.2	0.0	0.0	0.0	22.1	1582									
1960	597.6	568	0.27	0.23	0.0	31907	62796	0.0	0.0	19.0	0.3	0.2	0.2	0.0	0.0	19.0	3304	1.0	1.97							
2020	615.9	560	0.27	0.23	0.0	35350	30363	4.5	0.0	23.5	0.4	0.3	0.2	0.0	0.0	23.5	1088						1.008			
2080	634.1	560	0.27	0.23	26.3	118300	7429	3.2	0.0	31.2	0.0	0.0	0.0	0.0	0.0	31.2	217									
2140	652.4	575	0.27	0.23	33.0	122343	10739	2.9	0.0	43.9	0.3	0.2	0.0	0.0	0.0	43.9	230									
2200	670.7	245	0.12	0.38	0.0	118943	294729	0.0	0.0	82.1	2.0	0.7	0.7	0.0	0.0	82.1	3588	1.0	2.48				1.006			
2260	689.0	394	0.19	0.31	0.0	63269	4412	4.8	1.0	35.1	0.7	0.0	0.0	0.0	0.0	35.1	110									
2320	707.3	360	0.17	0.33	0.0	73025	5252	4.0	1.3	40.3	0.8	0.0	0.0	0.0	0.0	40.3	119									
2380	725.6	435	0.21	0.29	0.0	59097	9020	8.2	1.0	32.2	0.8	0.3	0.0	0.0	0.0	32.2	223						1.023			
2440	743.9	360	0.17	0.33	0.0	340592	4658	3.5	0.0	55.6	0.6	0.0	0.0	0.0	0.0	55.6	79									
2500	762.2	405	0.19	0.31	0.0	267556	3583	2.4	0.0	45.4	0.6	0.0	0.0	0.0	0.0	45.4	75									
2560	780.5	276	0.13	0.37	0.0	468607	1133	4.8	0.0	129.8	0.8	0.0	0.0	0.0	0.0	129.8	8						-36.2			
2620	798.8	352	0.17	0.33	0.0	79318	1557	9.7	2.4	43.2	1.4	0.0	0.0	0.0	0.0	43.2	29									
2680	817.1	338	0.16	0.34	0.0	81733	8279	11.8	3.4	35.4	1.9	0.4	0.4	0.0	0.0	35.4	175	1.0	0.10							
2740	835.4	406	0.19	0.31	0.0	63290	30297	7.6	1.6	37.0	1.3	0.3	0.3	0.0	0.0	37.0	680						1.016			
2800	853.7	404	0.19	0.31	0.0	64280	5916	8.0	2.4	37.9	1.1	0.0	0.0	0.0	0.0	37.9	129									
2860	872.0	350	0.17	0.33	0.0	83600	2440	10.0	1.2	58.0	1.0	0.4	0.0	0.0	0.0	58.0	36									
2920	890.2	409	0.19	0.31	0.0	59398	21785	3.8	0.0	33.7	0.8	0.3	0.3	0.0	0.0	33.7	582	1.0	0.37				1.015			
2980	908.5	553	0.26	0.24	0.0	42420	20671	9.0	1.2	25.8	1.1	0.3	0.3	0.0	0.0	25.8	594	1.0	0.49							
3040	926.8	600	0.29	0.21	0.0	26250	17475	9.8	2.0	25.1	1.4	0.4	0.2	0.0	0.0	25.1	500	1.7	0.67							
3100	945.1	520	0.25	0.25	71.3	120065	7970	3.9	0.4	49.3	0.4	0.0	0.0	0.0	0.0	49.3	150									
3160	963.4	343	0.16	0.34	0.0	71318	44729	9.9	0.0	57.1	0.8	0.8	0.4	0.0	0.0	57.1	668	2.0	0.63				-29.5	-50.6	-259	1.022

Chemical analysis based on standards accurate to within 2%.

KRU 1R-East cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	δDC <sub>1</sub> ‰	α.CO <sub>2</sub> -C <sub>1</sub>
60	18.3	406	0.19	0.31	0	1332	4.9	2.1	1.4	1.8	0.4	2.8	1.0	191.2	0.8	2.8					
120	36.6	401	0.19	0.31	712	736	6.7	1.2	0.3	0.3	0.1	0.3	0.1	93.0	0.8	2.1	1.0	-15.7	-90.3		1.082
180	54.9	446	0.21	0.29	1287	179	3.7	0.8	0.3	0.2	0.2	0.2	0.1	39.2	1.2	2.2	0.1				
240	73.2	465	0.22	0.28	6454	1577	8.4	0.8	0.2	0.1	0.1	0.1	0.0	171.8	3.1	1.9	0.2	-18.4	-69.2	-262	1.055
300	91.5	439	0.21	0.29	3800	871	5.4	0.5	0.1	0.1	0.1	0.0	0.0	147.4	1.4	2.1	0.2				
360	109.8	547	0.26	0.24	2198	1125	7.4	0.8	0.1	0.1	0.1	0.1	0.0	137.9	1.0	2.3	0.5		-68.2		
420	128.0	393	0.19	0.31	9395	5274	8.0	0.6	0.1	0.0	0.0	0.0	0.0	615.5	1.2	3.8	0.6				
480	146.3	456	0.22	0.28	10825	8973	13.5	0.8	0.1	0.1	0.1	0.0	0.0	628.8	2.0	2.0	0.8	-15.4	-63.3		1.051
600	182.9	421	0.20	0.30	19662	7506	10.8	0.6	0.1	0.1	0.1	0.1	0.0	659.3	1.0	1.4	0.4				
660	201.2	361	0.17	0.33	16528	12090	14.7	0.6	0.0	0.1	0.1	0.0	0.0	790.8	0.5	1.6	0.7	-16.6	-61.2		1.047
720	219.5	378	0.18	0.32	5262	20834	31.5	0.6	0.3	0.1	0.1	0.0	0.0	649.6	4.8	4.5	4.0				
780	237.8	312	0.15	0.35	11023	30703	42.5	1.1	0.0	0.1	0.1	0.0	0.0	703.0	0.5	2.0	2.8		-54.8		
840	256.1	421	0.20	0.30	4378	15270	19.7	0.5	0.1	0.0	0.1	0.0	0.0	756.9	2.0	3.8	3.5				
900	274.4	283	0.13	0.37	14798	10856	12.5	0.6	0.2	0.1	0.1	0.1	0.0	831.3	2.7	3.4	0.7	-13.7	-53.5	-272	1.042
960	292.7	347	0.17	0.33	6767	14250	16.8	0.9	0.3	0.2	0.2	0.1	0.0	806.7	1.7	3.7	2.1				
1020	311.0	304	0.14	0.36	4515	2033	3.4	0.1	0.1	0.0	0.0	0.0	0.0	570.6	7.0	0.5	0.5	-15.5	-52.0		1.039
1080	329.3	246	0.12	0.38	12060	13602	19.1	0.7	0.1	0.1	0.1	0.0	0.0	688.9	1.5	4.0	1.1				
1140	347.6	455	0.22	0.28	1896	12909	15.1	0.7	0.0	0.1	0.1	0.1	0.0	818.5	0.4	11.0	6.8		-50.4		
1200	365.9	319	0.15	0.35	1444	12519	14.0	0.7	0.2	0.1	0.2	0.1	0.0	853.5	2.4	2.5	8.7				
1260	384.1	420	0.20	0.30	1860	14859	16.6	0.8	0.2	0.1	0.1	0.1	0.0	855.7	1.7	3.5	8.0	-13.7	-49.7		1.038
1320	402.4	465	0.22	0.28	1925	6897	7.6	0.4	0.0	0.1	0.1	0.0	0.0	858.1	0.6	2.5	3.6				
1380	420.7	434	0.21	0.29	2328	10377	10.2	0.3	0.1	0.0	0.1	0.0	0.0	986.4	1.2	5.0	4.5	-16.8	-50.6		1.036
1440	439.0	496	0.24	0.26	1854	7150	8.2	0.5	0.1	0.1	0.2	0.1	0.0	819.8	0.5	1.8	3.9				
1500	457.3	469	0.22	0.28	3109	2661	4.0	0.5	0.2	0.1	0.1	0.1	0.0	584.7	1.9	2.2	0.9		-48.8		
1560	475.6	482	0.23	0.27	3865	2847	5.5	0.4	0.1	0.1	0.2	0.0	0.0	481.1	1.3	2.0	0.7				
1620	493.9	484	0.23	0.27	187	4073	2848.4	0.3	0.2	0.3	0.1	1.1	0.1	1.4	0.6	15.4	21.8	-15.3	-49.9	-275	1.036
1680	512.2	452	0.22	0.28	2739	7941	41.0	0.6	0.1	0.1	0.5	0.0	0.0	190.9	1.1	1.6	2.9				
1740	530.5	454	0.22	0.28	971	7237	191.8	0.7	0.1	0.2	0.3	0.1	0.1	37.6	0.3	1.2	7.4	-14.6	-48.8		1.036
1800	548.8	482	0.23	0.27	1037	6268	7.7	0.6	0.1	0.1	0.6	0.0	0.0	757.4	1.2	1.3	6.0				
1860	567.1	469	0.22	0.28	3766	11137	10.2	0.6	0.1	0.1	0.5	0.1	0.0	1029.0	0.8	11.8	3.0		-50.9		
1920	585.4	487	0.23	0.27	1491	1019	1.6	0.1	0.0	0.0	0.1	0.0	0.0	593.1	0.7	7.0	0.7				
1980	603.7	443	0.21	0.29	4111	5229	6.3	0.5	0.2	0.1	0.6	0.0	0.0	773.9	2.3	9.0	1.3	-15.7	-51.2		1.037
2040	622.0	517	0.25	0.25	2340	3342	4.6	0.3	0.1	0.0	0.3	0.0	0.0	681.7	1.5	1.6	1.4				
2100	640.2	223	0.11	0.39	6750	7691	10.3	0.9	0.3	0.2	0.9	0.1	0.1	687.0	1.4	1.6	1.1		-52.3		
2130	649.4	250	0.12	0.38	12736	7091	5.1	0.4	0.2	0.1	0.3	0.0	0.0	1302.7	3.7	0.6	0.6				
2160	658.5	396	0.19	0.31	6111	7280	4.9	0.2	0.1	0.0	0.2	0.0	0.0	1421.6	3.5	15.0	1.2	-18.3	-52.4	-275	1.036
2220	676.8	286	0.14	0.36	10204	15066	9.6	0.4	0.1	0.1	0.5	0.0	0.0	1513.6	0.8	15.0	1.5				
2280	695.1	348	0.17	0.33	8271	9706	7.6	0.4	0.1	0.1	0.6	0.0	0.0	1210.1	0.8	1.9	1.2	-16.2	-52.3		1.038
2340	713.4	474	0.23	0.27	2698	11309	11.6	0.6	0.1	0.1	0.6	0.1	0.0	929.7	0.6	3.0	4.2				
2400	731.7	306	0.15	0.35	8218	9968	73.1	0.5	0.1	0.2	0.5	0.1	0.0	135.4	0.4	2.3	1.2		-51.4		
2460	750.0	416	0.20	0.30	7773	10792	9.2	0.4	0.2	0.1	0.5	0.1	0.0	1123.6	2.9	1.4	1.4				
2520	768.3	411	0.20	0.30	2363	7618	8.6	0.4	0.1	0.1	0.5	0.1	0.0	842.5	0.8	4.5	3.2	-16.6	-49.5		1.035
2580	786.6	390	0.19	0.31	728	13369	12.4	0.6	0.2	0.1	0.9	0.1	0.0	1026.1	2.1	4.8	18.4				
2640	804.9	298	0.14	0.36	5198	11748	14.2	0.7	0.2	0.0	1.2	0.1	0.0	786.5	4.1	4.7	2.3	-14.3	-49.4		1.037
2700	823.2	362	0.17	0.33	3896	8000	6.6	0.4	0.1	0.1	1.0	0.0	0.0	1150.1	0.6	1.4	2.1				
2760	841.5	346	0.16	0.34	5575	12169	12.0	0.8	0.1	0.2	1.0	0.1	0.0	949.9	0.7	2.4	2.2		-48.0		
2820	859.8	504	0.24	0.26	1918	7069	6.5	0.4	0.1	0.1	0.3	0.0	0.0	1023.4	1.5	12.7	3.7				
2880	878.0	512	0.24	0.26	998	7293	6.1	0.3	0.0	0.0	0.1	0.0	0.0	1151.9	0.7	1.5	7.3	-14.8	-46.9		1.034
2940	896.3	440	0.21	0.29	1705	6405	4.7	0.3	0.3	0.1	0.3	0.0	0.0	1274.9	4.2	12.0	3.8				
3000	914.6	456	0.22	0.28	1394	4750	4.7	0.3	0.1	0.1	0.2	0.0	0.0	964.7	1.0	3.1	3.4	-15.5	-89.1	-266	1.081

Chemical analysis based on standards accurate to within 2%.

Tern KRU 214-305 columns

Table with 30 columns: Depth, Depth, Sed. Wt., Air, CO2, C1, C2, C3, nC4, nC5, nC6, nC7, nC8, nC9, nC10, CO2, C1, C2, C3, nC4, nC5, nC6, nC7, nC8, nC9, nC10, 2-ZMB, 2-MP, 3-MP, C1, C2, MCH, C1/C2, C1/nC4, C2/nC4, C3/nC4, C4/C5, C5/C6, C7/C8, C9/C10, nCO2/C1. Rows represent depth profiles from 0 to 3630 meters.

Chemical analysis based on standards accurate to within 2%.



MPU SB-15 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sam. L	Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	CP μL/L	2-2DMB μL/L	2MP μL/L	3MP μL/L	C <sub>6</sub> μL/L	MCP μL/L	C <sub>7</sub> μL/L	MCH μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	α CO <sub>2</sub> -C <sub>1</sub>
185	56.4	109	0.05	0.45	66782	382	14.5	8.0	2.1	5.0	1.4	2.5	3.4	0.0	0.0	1.4	0.4	7.3	0.7	0.0	3.0	17	0.4	0.7	0.0	-36.79				
275	83.8	430	0.20	0.30	24944	2384	3.6	1.7	0.8	1.3	0.2	1.1	1.5	0.1	0.0	0.9	0.4	1.9	0.9	2.1	3.6	449	0.7	0.7	0.1					
365	111.3	340	0.16	0.34	21645	42	0.4	0.2	0.0	0.4	0.0	0.3	0.3	0.0	0.0	0.3	0.1	1.0	0.4	0.0	1.8	73	0.0	1.2	0.0	-52.73	-18.26			1.036
455	138.7	353	0.17	0.33	25315	5094	15.9	3.2	0.9	1.5	0.3	1.0	1.0	0.2	0.0	0.7	0.5	3.0	1.6	5.9	6.9	266	0.6	1.1	0.2					
545	166.2	474	0.23	0.27	15083	6421	12.7	2.0	0.5	1.0	0.1	0.8	0.8	0.1	0.0	0.8	0.4	2.0	1.4	3.2	7.1	437	0.5	1.1	0.4	-59.1	-21.34			1.040
635	193.6	309	0.15	0.35	20566	14804	25.2	2.1	0.3	0.5	0.1	0.4	0.4	0.1	0.0	0.2	0.1	0.8	0.5	0.6	7.4	542	0.6	1.1	0.7					
725	221.0	480	0.23	0.27	4947	11331	20.3	1.7	0.3	0.4	0.1	0.3	0.2	0.0	0.0	0.1	0.1	0.5	0.4	1.5	1.5	514	0.7	1.3	2.3	-55.85	-18.92	-51.61		1.039
815	248.5	319	0.15	0.35	34382	5990	14.6	2.3	0.3	0.7	0.3	0.3	0.5	0.1	0.0	0.3	0.1	0.7	0.7	2.7	2.3	356	0.4	0.7	0.2					
905	275.9	446	0.21	0.29	21393	19927	17.7	1.5	0.2	0.4	0.3	0.2	0.1	0.1	0.4	0.0	0.0	0.1	0.2	0.0	2.2	1038	0.5	1.5	0.9	-53.15	-13.67			1.042
995	303.4	307	0.15	0.35	24103	30044	23.4	2.2	0.3	0.4	0.5	0.4	0.2	0.0	0.0	0.0	0.1	2.5	0.5	0.0	1.4	1174	0.8	1.8	1.2					
1085	330.8	383	0.18	0.32	18336	24867	22.9	1.5	0.2	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	6.6	1019	0.7	1.5	1.4	-51.79	-12.79			1.041
1175	358.2	442	0.21	0.29	15904	17754	18.5	1.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	2.9	0.0	0.0	1.7	907	3.5	1.5	1.1					
1265	385.7	350	0.17	0.33	17012	20930	21.9	2.3	0.4	0.5	0.2	0.3	0.3	0.0	0.0	0.1	0.1	1.7	0.3	1.1	0.7	865	0.7	1.3	1.2	-50.81	-14.34			1.038
1355	413.1	469	0.22	0.28	7726	16818	15.8	2.0	0.2	0.4	0.3	0.2	0.2	0.0	0.0	0.0	0.0	2.8	0.1	0.0	0.4	943	0.5	0.8	2.2					
1445	440.5	531	0.25	0.25	9457	17500	14.6	2.2	0.4	0.7	0.2	0.5	0.4	0.1	0.0	0.2	0.1	1.5	0.4	1.3	1.2	1044	0.6	1.1	1.9	-51.23	-11.63			1.042
1545	471.0	370	0.18	0.32	15888	17577	22.2	2.8	0.6	0.9	0.3	0.7	0.7	0.1	0.0	0.4	0.2	5.1	1.1	2.9	5.1	703	0.7	1.0	1.1					
1605	489.3	509	0.24	0.26	5427	9785	11.2	1.1	0.7	0.4	0.2	0.3	0.2	0.0	0.0	0.2	0.1	0.8	0.3	1.2	1.0	794	1.6	1.7	1.8	-52.38	-12.04			1.043
1665	507.6	444	0.21	0.29	4254	21502	11.8	1.3	3.2	0.3	0.6	0.2	0.2	0.0	0.0	0.1	0.0	0.4	0.1	0.8	0.4	1635	12.4	0.9	5.1					
1725	525.9	357	0.17	0.33	12946	18255	11.6	1.8	2.0	0.8	0.5	0.7	0.3	0.0	0.0	0.4	0.2	1.9	0.5	1.1	1.6	1362	2.5	2.0	1.4	-42.2	-14.07			1.029
1785	544.2	159	0.08	0.42	59400	49280	11.0	2.9	1.3	1.8	4.7	1.0	0.0	1.0	0.0	0.0	0.2	1.9	2.4	5.6	3.5	3532	0.7	0.8	0.8					
1845	562.5	277	0.13	0.37	0	26506	14.8	2.1	0.7	0.7	0.6	0.4	0.4	0.0	0.0	0.2	0.1	1.1	0.3	1.4	1.0	1564	1.0	1.2	1.2	-46.82	-11.23	-28.9		1.037
1905	580.8	260	0.12	0.38	48312	38850	17.9	2.2	0.7	0.7	0.5	0.4	0.5	0.1	0.0	0.2	0.1	1.2	0.4	1.7	0.9	1936	1.0	0.9	0.8					
1965	599.1	388	0.18	0.32	18256	40708	13.6	1.1	0.4	0.3	0.4	0.6	0.1	0.2	0.0	0.1	0.0	0.5	0.6	0.3	0.7	2774	1.4	6.9	2.2	-49.76	-11.17			1.041
2025	617.4	263	0.13	0.37	52068	75483	16.7	1.6	1.0	0.4	3.6	0.3	0.2	0.0	0.0	0.0	0.1	3.3	0.4	0.0	1.8	4138	2.2	1.8	1.4					
2085	635.7	240	0.11	0.39	63788	33895	9.2	1.4	1.0	0.8	3.4	0.6	0.6	0.0	0.0	0.3	0.2	1.5	0.6	2.6	2.3	3182	1.3	0.9	0.5					
2145	654.0	387	0.18	0.32	34092	42230	14.4	1.4	0.9	0.5	3.6	0.4	0.3	0.0	0.0	0.2	0.1	0.7	0.3	1.0	0.6	2667	1.8	1.3	1.2					
2205	672.3	270	0.13	0.37	43622	38295	15.6	1.6	1.0	0.6	3.9	0.4	0.4	0.0	0.0	0.1	0.1	1.1	0.3	1.5	0.7	2233	1.7	1.1	0.9	-47.69	-5.29			1.045
2265	690.5	268	0.13	0.37	25911	40553	19.2	1.5	0.8	0.5	3.2	0.4	0.3	0.0	0.0	0.1	0.0	2.1	0.3	1.4	0.7	1960	1.8	1.2	1.6					
2325	708.8	379	0.18	0.32	15899	32465	11.7	1.1	0.5	0.5	1.2	0.5	0.4	0.1	0.0	0.4	0.2	1.2	0.8	2.2	1.6	2519	1.0	1.3	2.0					
2385	727.1	258	0.12	0.38	65693	22624	10.4	1.8	0.7	0.8	2.4	0.7	0.7	0.1	0.0	0.6	0.3	1.8	1.9	5.7	6.8	1855	0.9	0.9	0.3					
2445	745.4	354	0.17	0.33	37159	16492	8.2	1.4	0.3	0.6	0.6	2.0	0.5	0.4	0.1	0.0	0.3	2.1	0.6	1.9	1.9	1715	0.5	4.4	0.4					
2505	763.7	401	0.19	0.31	33826	13263	8.1	1.2	0.3	0.3	1.6	0.3	0.3	0.0	0.0	0.2	0.1	0.6	0.4	1.5	1.6	1424	1.0	1.0	0.4	-46.75	-16.23			1.032
2565	782.0	249	0.12	0.38	0	21006	4.4	1.4	0.4	0.8	0.8	0.5	0.5	0.1	0.0	0.3	0.1	1.3	0.6	3.0	2.0	3618	0.6	1.1	1.1					
2625	800.3	258	0.12	0.38	0	35987	3.4	1.4	0.5	0.9	1.2	0.5	0.5	0.1	0.0	0.3	0.2	1.1	0.5	2.8	1.6	7558	0.5	1.0	1.0	-48.06	-18.91			1.031
2685	818.6	292	0.14	0.36	0	15718	9.3	2.5	0.9	1.5	0.8	0.8	0.8	0.1	0.0	0.3	0.2	1.9	0.6	1.8	1.5	1325	0.6	1.0	1.0					
2745	836.9	471	0.22	0.28	0	32258	13.9	1.6	0.6	0.8	0.4	0.5	0.4	0.0	0.0	0.2	0.1	0.8	0.3	1.1	0.8	2072	0.7	1.3	1.3	-46.71				
2805	855.2	239	0.11	0.39	0	43750	18.5	2.3	0.9	1.5	1.5	1.0	1.2	0.0	1.7	1.1	0.2	2.0	0.3	10.3	2.0	2099	0.6	0.8	0.8					
2865	873.5	427	0.20	0.30	0	58402	10.8	1.0	0.4	0.8	0.4	0.3	0.3	0.0	0.0	0.2	0.1	0.8	0.2	0.0	0.7	4953	0.5	1.0	1.0	-44.51				
2925	891.8	472	0.22	0.28	0	44188	7.3	1.1	0.4	0.6	0.6	0.4	0.4	0.0	0.0	0.2	0.1	1.7	0.1	0.5	0.5	5212	0.7	1.0	1.0					
2985	910.1	378	0.18	0.32	0	158567	1.9	2.4	6.8	0.8	2.1	0.8	0.4	0.0	0.0	0.0	0.0	0.8	0.0	0.0	3.9	36555	8.2	2.1	2.1	-38.95				
3045	928.4	383	0.18	0.32	0	114116	2.8	1.1	3.1	0.5	2.0	0.3	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.4	29371	6.6	1.3	1.3	-48.64	-23.35			1.027
3315	1010.7	282	0.13	0.37	0	28114	5.3	2.3	1.4	1.7	2.5	0.7	0.7	0.0	0.0	0.0	0.3	0.0	0.0	0.0	2.1	3731	0.9	1.0	1.0					
3405	1038.1	413	0.20	0.30	0	26260	2.8	0.8	0.3	0.4	1.8	0.2	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.2	7202	0.8	0.8	0.8					
3495	1065.5	445	0.21	0.29	0	22725	2.8	0.7	0.2	0.3	1.8	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	6481	0.9	0.6	0.6					
3585	1093.0	397	0.19	0.31	0	3010	1.6	0.7	4.6	0.8	0.3	0.5	0.6	0.0	0.0	0.2	0.1	0.7	2.3	0.1	0.5	1298	6.0	0.9	0.9					
3675	1120.4	524	0.25	0.25	0	28633	4.7	0.8	7.1	0.8	1.1	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.5	5181	9.0	0.9	0.9	-43.85	-14.64			1.031
3765	1147.9	470	0.22	0.28	0	29163	7.2	0.8	3.2	0.5	1.4	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3646	6.7	0.7	0.7					
3855	1175.3	412	0.20	0.30	0																									



Mount Elbert 1 cuttings

Depth (ft.)	Depth (m)	O <sub>2</sub> + Ar μ/L/L	N <sub>2</sub> μ/L/L	N <sub>2</sub> calc. μ/L/L	CO μ/L/L	H <sub>2</sub> μ/L/L	CO <sub>2</sub> μ/L/L	C <sub>1</sub> μ/L/L	C <sub>2</sub> μ/L/L	C <sub>2</sub> H <sub>6</sub> μ/L/L	C <sub>3</sub> μ/L/L	C <sub>3</sub> H <sub>8</sub> μ/L/L	iC <sub>4</sub> μ/L/L	nC <sub>4</sub> μ/L/L	iC <sub>5</sub> μ/L/L	nC <sub>5</sub> μ/L/L	C <sub>6</sub> + μ/L/L	C <sub>7</sub> /C <sub>2</sub> +C <sub>3</sub>	C <sub>7</sub> /CO <sub>2</sub>	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub>	Comments
150	45.7	199000	822000	112000	0	1040	9330	6390	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	13.5	30800	0.7	-11.8	-83.4	1.078	Drill 12 1/4" hole
210	64.0	202000	879000	159000	0	380	9870	5950	1.4	0.0	0.5	0.0	0.0	0.2	0.0	0.0	9.6	3020	0.6				
270	82.3	209000	847000	102000	0	1160	4140	1760	0.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	10.5	1660	0.4				
330	100.6	306000	1259000	166000	0	1160	18500	660	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.9	830	0.0	-18.3	-86.4	1.075	
390	118.9	280000	1199000	201000	0	1150	14300	580	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	970	0.0				
450	137.2	232000	952000	125000	0	1080	13100	450	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	410	0.0				
510	155.4	202000	843000	123000	0	1130	8010	240	2.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	9.4	70	0.0				
570	173.7	223000	934000	138000	0	1010	6870	250	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5	360	0.0				
630	192.0	222000	967000	176000	0	860	8500	580	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	290	0.1				
690	210.3	406000	2093000	643000	430	2320	19200	2550	10.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	23.4	220	0.1	-18.3	-80.6	1.068	
750	228.6	216000	1219000	450000	250	1100	7510	2210	11.1	1.4	0.6	0.0	0.0	0.0	0.0	0.0	13.6	190	0.3				
810	246.9	384000	1625000	255000	0	1730	10700	1060	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8	200	0.1				
870	265.2	260000	1170000	240000	70	1130	8060	490	3.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0	16.4	130	0.1	-16.5	-79.5	1.068	
930	283.5	231000	1067000	244000	0	1000	5090	910	4.2	0.0	0.3	0.0	0.3	0.0	0.0	0.0	14.6	210	0.2				
990	301.8	226000	1053000	248000	100	1080	13100	1010	3.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	13.7	250	0.1				
1050	320.0	287000	1324000	299000	110	1680	15500	4780	3.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0	12.6	1220	0.3		-74.2		
1110	338.3	291000	1288000	248000	50	1480	11300	460	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	160	0.0				
1170	356.6	283000	1184000	175000	60	1160	11100	3480	2.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	25.5	1240	0.3				
1230	374.9	246000	1303000	426000	90	1420	10500	10800	6.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	47.1	1490	1.0	-10.3	-65.9	1.060	
1290	393.2	272000	1158000	187000	0	1430	11500	8850	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7	2180	0.8				
1350	411.5	91000	1406000	1083000	310	1240	9150	18600	13.4	0.9	0.8	0.5	0.0	0.0	0.0	0.0	14.2	1310	2.0				
1410	429.8	200000	941000	228000	30	1020	2980	2290	7.7	1.1	0.3	0.0	0.0	0.0	0.0	0.0	11.3	2980	0.8	-12.0	-54.0	1.044	
1470	448.1	211000	1314000	560000	80	1010	3120	29300	15.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	19.5	1740	9.4				
1530	466.3	190000	1378000	701000	90	1460	1880	1240	6.8	0.9	0.6	0.5	0.0	0.0	0.0	0.0	13.2	170	0.7				
1590	484.6	291000	1775000	736000	0	1560	2700	8040	7.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0	19.9	1050	3.0		-28.3		
1650	502.9	180000	807000	164000	0	770	6600	5990	4.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0	10.6	1220	0.9				
1710	521.2	372000	1541000	213000	0	1460	16300	11500	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	1920	0.7				
1770	539.5	192000	995000	311000	0	810	6790	18500	6.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0	10.3	2680	2.7	-14.8	-53.6	1.041	
1830	557.8	302000	1326000	250000	0	1560	8590	16300	4.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0	26.4	3190	1.9				
1890	576.1	221000	1015000	226000	0	1200	10600	20700	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	4530	1.9				
1980	603.5	179000	2908000	2269000	0	2740	1150	27100	5.3	2.8	14.6	1.6	0.6	0.6	0.0	0.0	45.2	1360	23.5	-15.7	-47.9	1.034	Casing at 1960 feet Drill 8 1/2" hole Coring started
2010	612.6	94000	2260000	1927000	0	980	470	1290	2.6	2.4	8.2	1.2	0.0	0.0	0.0	0.0	22.6	120	2.7				
2040	621.8	75000	1560000	1293000	0	810	360	2670	1.3	1.1	3.8	0.5	0.5	0.0	0.0	0.0	21.5	530	7.4				
2070	630.9	77000	1541000	1266000	0	1190	520	5380	1.3	1.0	2.3	0.5	0.3	0.0	0.0	0.0	21.9	1500	10.3		-45.5		
2100	640.1	99000	2402000	2048000	350	1740	680	7000	2.5	1.8	12.0	1.0	0.0	0.0	0.0	0.0	21.3	480	10.3				
2130	649.2	119000	2428000	2005000	330	2000	770	22900	3.6	1.3	14.4	1.5	0.8	0.0	0.0	0.0	34.5	1270	29.7				
2160	658.4	94000	2124000	1789000	220	1430	360	17700	2.0	0.9	6.7	0.9	0.4	0.0	0.0	0.0	25.3	2030	49.5		-45.5		
2190	667.5	258000	1816000	894000	290	1700	350	1380	1.7	0.8	1.9	0.4	0.0	0.0	0.0	0.0	38.2	390	3.9				
2220	676.7	166000	3118000	2527000	920	2490	690	6160	2.3	2.3	9.5	1.6	0.0	0.0	0.0	0.0	37.9	520	8.9				
2250	685.8	255000	3226000	2317000	910	2610	770	1820	2.1	2.1	6.6	1.4	0.0	0.0	0.0	0.0	39.7	210	2.4		-42.9		
2280	694.9	159000	2146000	1578000	690	2010	440	4300	6.5	1.2	3.5	0.7	0.0	0.0	0.0	0.0	30.3	430	9.8				
2310	704.1	313000	2903000	1785000	770	2180	580	2070	1.6	1.3	2.6	1.0	0.0	0.0	0.0	0.0	37.7	490	3.6				
2340	713.2	318000	2127000	993000	270	1610	640	2620	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	30.1	890	4.1		-43.7		
2370	722.4	348000	2601000	1358000	440	1980	740	1740	2.4	0.0	2.7	0.0	0.0	0.0	0.0	0.0	38.4	350	2.4				
2400	731.5	80000	1804000	1520000	130	1330	420	14600	4.7	1.1	5.7	0.8	0.0	0.0	0.0	0.0	17.3	1400	35.0				
2430	740.7	112000	2332000	1933000	1180	2010	730	1930	4.2	2.0	7.6	1.2	0.0	0.0	0.0	0.0	21.8	160	2.6		-41.9		
2460	749.8	234000	2042000	1208000	300	1580	550	2270	1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	22.3	620	4.1				
2490	759.0	87000	1931000	1620000	490	1370	750	1920	4.2	1.4	5.9	0.8	0.0	0.0	0.0	0.0	10.1	190	2.6				Coring stopped
2520	768.1	95000	1050000	712000	180	1030	290	4760	0.9	0.5	0.7	0.3	0.0	0.0	0.0	0.0	7.4	2960	16.6		-45.2		Drill to TD
2550	777.2	244000	1874000	1002000	280	1620	1060	5400	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	13.4	2120	5.1				
2580	786.4	165000	1358000	770000	180	1020	520	8470	1.5	0.0	1.1	0.0	0.0	0.0	0.0	0.0	9.6	3250	16.3				
2610	795.5	194000	1664000	972000	210	1300	390	6850	1.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	10.3	2290	17.5		-44.1		
2640	804.7	100000	1684000	1326000	270	1230	140	8460	2.0	0.9	2.2	0.5	0.0	0.0	0.0	0.0	13.3	2050	59.0				
2670	813.8	100000	1031000	672000	180	920	310	14400	1.3	0.0	0.8	0.2	0.0	0.0	0.0	0.0	6.3	7000	46.7				
2700	823.0	136000	1271000	784000	150	990	330	43200	0.0	0.0	1.7	0.3	0.0	0.0	0.0	0.0	8.0	24800	129.6		-45.5		
2730	832.1	85000	1752000	1447000	340	1610	420	51600	0.0	0.0	3.6	0.6	0.0	0.0	0.0	0.0	11.2	14400	124.1				
2760	841.2	233000	1651000	819000	330	1270	480	30800	1.5	0.0	1.9	0.4	0.0	0.0	0.0	0.0	12.5	8940	64.4				
2790	850.4	79000	1662000	1380000	520	1510	570	35400	0.0	0.0	3.7	0.7	0.0	0.0	0.0	0.0	11.2	9480	62.2		-45.5		
2850	868.7	77000	1748000	1475000	130	1310	680	56100	2.3	0.0	5.3	0.6	0.0	0.0	0.0	0.0	12.2	7450	82.8				

Noatak 1 cuttings

Depth ft.	Depth m	Sed. Wt. (gm)	Sam. Vol. L	Hdspc L	CO uL/L	CO <sub>2</sub> uL/L	C <sub>1</sub> uL/L	C <sub>2</sub> uL/L	C <sub>2</sub> H <sub>4</sub> uL/L	C <sub>3</sub> uL/L	C <sub>3</sub> H <sub>6</sub> uL/L	iC <sub>4</sub> uL/L	nC <sub>4</sub> uL/L	iC <sub>5</sub> uL/L	nC <sub>5</sub> uL/L	C <sub>6</sub> + uL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>1</sub> ‰	δDC <sub>1</sub> ‰	α.CO <sub>2</sub> -C <sub>1</sub>
150	63.0	238.00	0.11	0.39	0.0	1535	133	8.2	17.1	57.0	0.0	2.0	1.7	0.0	0.0	58.0	5.3	1.2	0.1				
210	88.2	354.00	0.17	0.33	0.0	95553	305	15.3	4.1	30.9	0.6	1.4	0.6	0.0	0.0	59.0	15.7	2.3	0.0				
270	113.4	318.00	0.15	0.35	0.0	99442	232	11.7	1.4	8.1	0.9	0.0	0.0	0.0	0.0	60.0	17.7		0.0	-19.1			
330	138.7	296.00	0.14	0.36	0.0	175764	4101	33.4	1.3	36.7	0.0	0.5	0.5	0.0	0.0	61.0	118.4	1.0	0.0				
390	163.9	408.00	0.19	0.31	0.0	80565	31471	55.7	0.9	26.8	0.0	0.0	0.3	0.0	0.0	62.0	555.6	0.0	0.4	-15.2	-62.9	-226	1.051
450	189.1	320.00	0.15	0.35	0.0	160600	33306	50.4	1.1	40.2	0.0	0.0	0.0	0.0	0.0	63.0	646.0		0.2				
510	214.3	378.00	0.18	0.32	0.0	97422	36622	87.3	0.0	34.0	0.0	0.4	0.4	0.0	0.0	64.0	419.6	1.0	0.4		-58.9		
570	239.5	334.00	0.16	0.34	0.0	129480	26582	37.5	0.0	33.7	0.0	0.0	0.0	0.0	0.0	65.0	708.6		0.2				
630	264.7	348.00	0.17	0.33	0.0	122043	12325	11.1	2.2	35.9	0.0	0.0	0.0	0.0	0.0	66.0	925.8		0.1	-14.9	-54.6		1.042
690	289.9	328.00	0.16	0.34	0.0	96634	28176	22.5	1.8	5.1	0.0	0.0	0.0	0.0	0.0	67.0	1163.6		0.3				
750	315.1	321.00	0.15	0.35	0.0	163514	33157	44.7	0.0	5.5	0.7	0.0	0.0	0.0	0.0	68.0	741.1		0.2	-16.7	-56.8		1.043
810	340.3	362.00	0.17	0.33	0.0	112893	23757	19.6	0.0	5.5	0.0	0.0	0.0	0.0	0.0	69.0	1213.6		0.2				
930	390.8	287.00	0.14	0.36	132.9	187161	26851	16.2	1.6	38.3	0.0	0.0	0.0	0.0	0.0	70.0	1507.5		0.1		-56.0		
990	416.0	327.00	0.16	0.34	0.0	125364	28743	19.5	2.0	29.0	0.0	0.0	0.0	0.0	0.0	71.0	1340.2		0.2				
1050	441.2	335.00	0.16	0.34	0.0	109918	37991	27.1	0.0	25.8	0.0	0.0	0.0	0.0	0.0	72.0	1401.6		0.3	-15.4	-55.4	-236	1.042
1110	466.4	379.00	0.18	0.32	0.0	93657	33284	29.2	0.9	27.1	0.0	0.0	0.0	0.0	0.0	73.0	1105.9		0.4				
1170	491.6	256.00	0.12	0.38	0.0	231377	43422	45.3	0.0	7.4	0.0	0.0	0.0	0.0	0.0	74.0	958.9		0.2	-18.0	-53.5		1.038
1230	516.8	316.00	0.15	0.35	0.0	131934	46456	54.4	1.6	37.9	0.0	0.0	0.5	0.0	0.0	75.0	829.9	0.0	0.4				
1290	542.0	274.00	0.13	0.37	0.0	158315	36534	42.2	1.4	42.2	0.0	0.6	0.6	0.0	0.0	76.0	837.7	1.0	0.2		-51.3		
1350	567.2	141.00	0.07	0.43	0.0	490602	12700	92.8	5.8	76.7	0.0	1.9	3.2	0.0	0.0	77.0	128.8	0.6	0.0				
1410	592.4	299.00	0.14	0.36	0.0	196164	21977	176.6	4.0	57.0	0.0	0.5	1.0	0.0	0.0	78.0	121.7	0.5	0.1	-20.5	-46.7		1.027
1470	617.6	248.00	0.12	0.38	0.0	277143	16816	178.5	1.9	55.9	0.0	0.0	0.0	0.0	0.0	79.0	93.2		0.1				
1530	642.9	265.00	0.13	0.37	0.0	234611	24853	348.4	0.0	49.5	0.0	0.0	0.0	0.0	0.0	80.0	71.3		0.1	-19.7	-44.9		1.026
1590	668.1	391.00	0.19	0.31	0.0	73653	33034	1535.6	3.4	29.2	0.0	0.0	0.0	0.0	0.0	81.0	21.5		0.4				
1650	693.3	376.00	0.18	0.32	53.8	93392	30115	3801.5	0.0	32.6	0.0	199.7	0.5	0.0	0.0	82.0	7.9	371.3	0.3	-16.6	-45.3	-232	1.030
1710	718.5	438.00	0.21	0.29	0.0	60781	35071	2593.9	0.0	30.9	0.0	180.7	0.0	0.0	0.0	83.0	13.5		0.6				
1770	743.7	319.00	0.15	0.35	0.0	134971	49497	1556.2	0.0	33.2	0.0	153.5	0.0	0.0	0.0	84.0	31.8		0.4		-46.7		
1830	768.9	313.00	0.15	0.35	0.0	147400	30139	974.1	0.9	41.0	0.0	99.4	0.0	0.0	0.0	85.0	30.9		0.2				
1890	794.1	382.00	0.18	0.32	0.0	76593	34449	635.1	1.2	26.2	0.0	74.3	0.0	0.0	0.0	86.0	54.1		0.4	-18.0	-46.0		1.029
2010	844.5	351.00	0.17	0.33	0.0	131834	19476	287.0	1.4	20.9	0.0	57.8	0.0	0.0	0.0	87.0	67.5		0.1				
2070	869.7	247.00	0.12	0.38	0.0	241225	26983	677.2	0.0	61.4	0.0	41.9	0.0	0.0	0.0	88.0	39.8		0.1	-19.7	-47.0		1.029
2130	895.0	305.00	0.15	0.35	0.0	140451	29067	741.1	0.0	41.8	0.0	76.5	11.5	0.0	0.0	89.0	39.2	6.7	0.2				
2190	920.2	328.00	0.16	0.34	0.0	134495	40502	696.7	0.0	24.7	0.0	59.7	8.6	0.0	0.0	90.0	58.1	6.9	0.3		-46.3		
2310	970.6	173.00	0.08	0.42	0.0	454215	32495	396.4	0.0	64.4	0.0	17.7	0.0	0.0	0.0	91.0	82.0		0.1				
2370	995.8	262.00	0.12	0.38	0.0	212038	55641	284.2	0.0	41.8	0.0	14.7	0.0	0.0	0.0	92.0	195.8		0.3	-18.3	-49.7	-237	1.033
2430	1021.0	273.00	0.13	0.37	0.0	216308	31308	153.7	0.0	38.4	0.0	13.1	0.0	0.0	0.0	93.0	203.7		0.1				
2490	1046.2	317.00	0.15	0.35	0.0	157699	12163	78.8	1.2	34.9	0.0	8.3	0.0	0.0	0.0	94.0	152.0		0.1	-18.7	-48.2		1.031
2550	1071.4	259.00	0.12	0.38	152.7	166751	15209	142.0	1.8	44.9	0.0	10.4	0.6	0.0	0.0	95.0	105.7	17.0	0.1				
2610	1096.6	324.00	0.15	0.35	0.0	143631	27561	97.9	1.8	6.3	0.0	6.1	0.0	0.0	0.0	96.0	276.4		0.2		-50.4		
2670	1121.8	324.00	0.15	0.35	89.6	98593	27113	92.8	1.8	37.2	0.0	4.5	0.4	0.0	0.0	97.0	286.7	10.0	0.3				
2730	1147.1	343.00	0.16	0.34	0.0	97702	25559	37.9	1.4	49.3	0.0	3.1	0.4	0.0	0.0	98.0	649.2	7.5	0.3	-19.1	-51.8		1.034
2790	1172.3	355.00	0.17	0.33	0.0	108655	18344	32.1	1.2	32.9	0.0	2.2	0.0	0.0	0.0	99.0	551.2		0.2				
2850	1197.5	314.00	0.15	0.35	93.8	23908	25549	62.1	3.0	37.0	0.0	2.1	0.0	0.0	0.0	100.0	392.1		1.1	-15.4	-52.4		1.039
2910	1222.7	361.00	0.17	0.33	0.0	9734	15460	71.4	2.5	37.4	0.0	2.1	0.6	0.0	0.0	101.0	209.3	3.7	1.6				
2970	1247.9	276.00	0.13	0.37	336.5	31409	33372	287.2	5.9	57.8	0.8	13.7	16.3	12.3	0.0	102.0	113.9	0.8	1.1	-15.8	-53.5	-241	1.040

Chemical analysis based on standards accurate to within 2%.

Pioneer 1 flowed gas Isotubes®

Sample Date	Sample Time	Gas Units	Depth Feet	Depth m	O <sub>2</sub> + Ar ppm	CO <sub>2</sub> ppm	N <sub>2</sub> ppm	CO ppm	C <sub>1</sub> ppm	C <sub>2</sub> ppm	C <sub>2</sub> H <sub>4</sub> ppm	C <sub>3</sub> ppm	C <sub>3</sub> H <sub>8</sub> ppm	iC <sub>4</sub> ppm	nC <sub>4</sub> ppm	iC <sub>5</sub> ppm	nC <sub>5</sub> ppm	C <sub>6</sub> + ppm	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δ <sup>13</sup> C <sub>3</sub> ‰	δ <sup>13</sup> C <sub>4</sub> ‰	δ <sup>13</sup> nC <sub>4</sub> ‰	δ <sup>13</sup> C <sub>5</sub> ‰	δ <sup>13</sup> nC <sub>5</sub> ‰	δDC <sub>1</sub> ‰		
3/12/2009	3:15	1	120	36.6	220100	810	779100	0	7	0	0	0	0	0	0	0	0	1				0.009									
3/12/2009	14:30	4	360	109.8	220400	430	779100	0	21	0	0	0	0	0	0	0	0	20				0.049									
3/12/2009	17:49	2	600	182.9	220500	430	779000	0	23	0	0	0	0	0	0	0	0	17				0.053									
3/12/2009	19:35	10	720	219.5	216100	410	782600	0	810	1	0	0	0	0	0	0	0	113	810.0			1.976	-71.1								
3/12/2009	21:22	12	840	256.1	216000	420	782200	0	1270	1	0	0	0	0	0	0	0	112	1270.0			3.024	-72.1								
3/12/2009	23:00	17	960	292.7	215000	320	782500	0	2090	2	0	0	0	0	0	0	0	88	1045.0			6.531	-69.0							-260	
3/13/2009	0:30	18	1080	329.3	216000	360	782100	0	1480	2	0	0	0	0	0	0	0	88	740.0			4.111	-65.1								
3/13/2009	1:57	55	1200	365.9	213500	370	779700	0	6260	3	1	0	0	0	0	0	0	117	2086.7			16.919	-57.0							-277	
3/13/2009	3:41	37	1320	402.4	216100	410	779600	0	3840	10	0	1	0	0	0	0	0	82	349.1			9.366	-60.1								
3/13/2009	5:33	42	1440	439.0	215500	400	779400	0	4550	28	0	2	0	0	0	0	1	96	151.7			11.375	-58.7	<b>-50.8</b>						-272	
3/13/2009	7:27	121	1560	475.6	210800	300	771900	0	16800	111	0	6	0	1	1	0	1	106	143.6	1.0		56.000	-57.6	<b>-49.4</b>						-277	
3/13/2009	10:12	61	1680	512.2	213500	330	778000	0	8060	38	0	2	0	0	1	0	1	81	201.5	0.0		24.424	-57.1	<b>-49.8</b>						-276	
3/13/2009	11:30	9	1800	548.8	220600	370	778900	0	68	0	0	0	0	0	0	0	0	26				0.184									
3/13/2009	12:46	91	1920	585.4	212300	340	775800	0	11500	15	0	1	0	0	1	0	1	74	718.8			33.824	-57.5								
3/13/2009	12:58	71	2040	622.0	213300	380	776300	0	9940	12	0	1	0	0	0	0	1	59	764.6			26.158	-57.4								
3/13/2009	15:13	23	2160	658.5	217800	410	778500	0	3200	3	0	0	0	0	0	0	0	47	1066.7			7.805	-57.0								
3/13/2009	16:51	33	2280	695.1	214900	420	781000	0	3590	3	0	0	0	0	0	0	0	65	1196.7			8.548	-57.5								
3/13/2009	18:24	45	2400	731.7	213400	490	778800	0	7200	3	0	0	0	0	0	0	0	60	2400.0			14.694	-58.0								
3/13/2009	19:45	43	2520	768.3	213800	570	779500	0	6100	4	0	0	0	0	0	0	0	51	1525.0			10.702	-58.1								
3/13/2009	21:09	62	2640	804.9	212600	700	777800	0	8800	13	0	2	0	0	0	0	1	65	586.7			12.571	-58.1								
3/13/2009	22:50	57	2760	841.5	213400	740	778800	0	7030	16	0	3	0	1	1	0	0	45	370.0	1.0		9.500	-57.7								
3/17/2009	1:36	14	2880	878.0	215600	250	781500	0	2680	5	0	1	0	0	0	0	0	6	446.7			10.720	-58.0								
3/17/2009	4:24	38	3120	951.2	215300	370	778300	0	6010	30	0	5	0	1	1	0	0	6	171.7		1.0	16.243	-55.6								
3/17/2009	6:54	31	3360	1024.4	216300	350	776800	0	6500	43	0	16	0	4	6	1	1	6	110.2	0.7		18.571	-54.9	<b>-36.0</b>	<b>-32.5</b>		<b>-32.1</b>			-246	
3/17/2009	9:12	36	3600	1097.6	216000	370	777000	0	6560	19	0	7	0	5	8	4	5	12	252.3	0.6		17.730	-54.9								
3/17/2009	11:25	22	3840	1170.7	217100	390	778400	0	4020	20	0	14	0	11	19	10	11	25	118.2	0.6		10.308	-54.8								
3/17/2009	14:00	31	4080	1243.9	215800	410	777800	0	5750	39	0	42	0	21	41	18	20	40	71.0	0.5		14.024	-54.7	<b>-35.2</b>	<b>-31.6</b>		<b>-31.5</b>	<b>-29.6</b>		-242	
3/17/2009	16:40	48	4320	1317.1	213700	460	777500	0	8020	78	0	66	0	27	47	18	20	36	55.7	0.6		17.435	-54.9								
3/17/2009	18:45	45	4560	1390.2	213400	480	775900	0	9870	112	0	72	0	25	43	16	18	35	53.6	0.6		20.563	-55.3								
3/17/2009	21:17	47	4800	1463.4	212800	480	777300	0	9120	132	0	70	0	22	36	14	15	32	45.1	0.6		19.000	-54.5	<b>-36.7</b>	<b>-32.4</b>		<b>-32.0</b>	<b>-30.2</b>		-235	
3/18/2009	5:40	42	5040	1536.6	213900	500	779300	0	6150	85	0	28	0	11	16	7	7	19	54.4	0.7		12.300	-51.7								
3/18/2009	8:06	47	5280	1609.8	213900	370	777000	0	8430	180	0	37	0	12	19	9	9	27	38.8	0.6		22.784	-52.0								
3/18/2009	11:19	37	5520	1682.9	213700	410	779600	0	5980	192	0	38	0	11	16	8	8	22	26.0	0.7		14.585	-50.8	<b>-34.3</b>	<b>-34.0</b>		<b>-32.1</b>	<b>-30.3</b>		-214	
3/18/2009	13:40	67	5760	1756.1	212900	510	776400	0	9530	497	0	120	1	17	22	10	8	27	15.4	0.8		18.686	-49.0								
3/18/2009	16:30	86	6000	1829.3	211700	570	773400	0	12500	1100	1	435	0	57	108	27	26	36	8.1	0.5		21.930	-47.1								
3/18/2009	18:54	119	6240	1902.4	211300	780	769600	0	15000	1730	2	895	3	128	274	72	78	146	5.7	0.5		19.231	-47.2	-32.3	-30.8		-30.5	<b>-28.9</b>	<b>-29.9</b>		-204
3/18/2009	22:17	269	6480	1975.6	204500	1300	750500	0	34300	4410	11	2690	7	375	891	228	259	484	4.8	0.4		26.385	-48.3	-33.2	-31.6		-31.2	-30.2	-30.7		-219
3/19/2009	18:20	19	6720	2048.8	216400	670	779900	0	2090	216	1	199	0	41	113	40	50	311	5.0	0.4		3.119	-49.9								
3/20/2009	1:55	47	6960	2122.0	212500	350	779500	0	5360	644	2	596	2	94	261	71	89	492	4.3	0.4		15.314	-50.0	-34.2	-32.5		-31.7	<b>-29.6</b>	<b>-30.1</b>		-216
3/20/2009	0:00	209	7200	2195.1	202100	580	757600	0	33300	2890	5	1880	6	202	651	140	164	522	7.0	0.3		57.414	-50.8								
3/20/2009	16:18	108	7440	2268.3	207500	820	773700	0	13600	1030	2	1010	2	135	408	101	116	1540	6.7	0.3		16.585	-52.4								
3/20/2009	20:48	143	7680	2341.5	203300	940	771700	0	18200	1680	4	1680	4	199	637	142	174	1370	5.4	0.3		19.362	-52.3	-37.7	-35.1			-30.3	-32.7		-229
3/20/2009	0:00	78	7920	2414.6	203900	1100	778500	0	11500	1260	5	1440	4	214	567	147	165	1170	4.3	0.4		10.455	-50.6								
3/21/2009	4:47	110	8160	2487.8	204400	390	777900	0	12000	1420	7	1410	5	230	576	178	196	1280	4.2	0.4		30.769	-52.1								
3/23/2009	10:33	41	8400	2561.0	211700	600	779600	0	5830	804	2	609	1	79	194	52	58	452	4.1	0.4		9.717	-51.2	-35.7	-32.5	-32.2	-32.2	<b>-29.8</b>	<b>-31.5</b>		-235
3/30/2009	3:30	78	8640	2634.1	212400	370	777800	0	6590	1240	2	881	2	80	229	49	63	270	3.1	0.3		17.811	-51.0								
3/30/2009	7:59	86	8800	2682.9	213300	430	777600	0	5510	1140	2	956	1	110	332	81	103	419	2.6	0.3		12.814	-50.4	-35.3	-31.7	-33.0	-31.3	-31.1	-31.2		-236

Chemical analysis based on standards accurate to within 2%.

For the chemical analysis, values reported as zero are Not Detected/Below Detection Limit

in blue = carbon isotope data obtained via cryogenic enrichment

Placer 1 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdpsc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	CP μL/L	2-2DMB μL/L	2MP μL/L	3MP μL/L	C <sub>6</sub> μL/L	MCP μL/L	C <sub>7</sub> μL/L	MCH μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	αCO <sub>2</sub> -C <sub>1</sub>
100	30.5	405	0.19	0.31	0	8903	70.9	101.5	30.9	66.6	3.9	24.4	38.4	3.6	0.5	13.5	3.6	38.9	12.9	15.0	24.0	52	0.5	0.6		-78.1	-18.8		1.064
160	48.8	379	0.18	0.32	584	14659	33.8	1.4	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.9	0.1	0.1	0.3	416	0.5	0.9	25.1	-52.2	-20.2		1.034
280	85.4	360	0.17	0.33	1073	21927	39.5	1.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.7	0.1	0.0	0.2	539	0.7		20.4	-57.8	-17.8		1.042	
340	103.7	382	0.18	0.32	1224	21684	28.0	3.0	0.4	1.1	0.4	0.5	0.7	0.2	0.0	0.5	0.2	7.8	1.1	1.5	2.9	701	0.3	0.7	17.7	-64.0	-22.9		1.044
400	122.0	356	0.17	0.33	20489	10761	10.4	2.2	0.1	0.4	0.5	0.2	0.2	0.0	0.0	0.1	0.0	1.6	0.1	0.5	0.5	855	0.3	0.6	0.5	-66.7	-25.4		1.044
460	140.2	515	0.25	0.25	5101	5277	15.6	0.5	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.1	0.2	0.2	329	0.4	2.2	1.0	-66.1	-22.9		1.046
520	158.5	489	0.23	0.27	5690	5644	14.2	0.7	0.1	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	1.0	0.1	0.4	0.3	378	0.4	0.6	1.0	-67.1	-25.8		1.044
580	176.8	422	0.20	0.30	2202	1324	5.2	0.5	0.1	0.1	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.9	0.1	0.1	0.5	235	0.5	1.0	0.6	-67.1	-26.9		1.043
640	195.1	439	0.21	0.29	473	1211	3.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	310	1.8		2.6				
700	213.4	431	0.21	0.29	761	1465	4.7	0.4	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.1	0.2	0.3	283	0.5	4.0	1.9	-69.2	-25.7		1.047
760	231.7	402	0.19	0.31	371	1483	4.4	0.5	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	1.3	0.1	0.1	2.0	304	0.8	24.0	4.0				
820	250.0	443	0.21	0.29	726	1987	9.1	0.7	0.1	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.2	204	0.4	44.0	2.7	-70.7	-27.2		1.047
880	268.3	466	0.22	0.28	476	2456	6.6	0.8	0.1	0.3	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.7	0.1	0.0	0.4	335	0.5	1.1	5.2				
940	286.6	538	0.26	0.24	590	1313	5.4	0.6	0.1	0.2	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.2	0.1	217	0.6	1.1	2.2	-66.9	-26.4		1.043
1000	304.9	499	0.24	0.26	552	3037	5.9	0.5	0.1	0.1	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.5	0.0	0.1	0.2	479	0.5	0.8	5.5				
1060	323.2	428	0.20	0.30	945	9708	10.8	1.1	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.1	818	0.5	37.0	10.3	-55.4	-25.9		1.031
1180	359.8	452	0.22	0.28	688	8666	4.9	0.4	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	1617	1.1	7.5	12.6				
1240	378.0	466	0.22	0.28	1454	8685	6.7	0.9	0.2	0.3	0.4	0.3	0.3	0.0	0.0	0.1	0.0	1.7	0.1	0.6	0.4	1145	0.5	1.0	6.0	-53.7	-24.1		1.031
1300	396.3	433	0.21	0.29	641	7338	4.5	0.9	0.2	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.7	0.1	0.3	0.2	1347	0.8	19.6	11.4				
1360	414.6	435	0.21	0.29	1654	4298	1.5	0.4	0.1	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.9	0.1	0.3	0.4	2221	0.4	5.4	2.6	-48.8	-22.2		1.028
1420	432.9	500	0.24	0.26	429	13376	4.8	0.9	0.1	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.3	2346	0.3	7.6	31.2				
1480	451.2	462	0.22	0.28	305	9965	3.9	0.6	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.1	0.2	2182	0.4	53.0	32.6	-51.4	-26.1		1.027
1540	469.5	489	0.23	0.27	883	13079	6.1	0.7	0.1	0.2	0.3	0.1	0.1	0.0	0.0	0.2	0.0	0.6	0.1	0.2	0.2	1934	0.5	0.8	14.8				
1600	487.8	450	0.21	0.29	387	14573	13.8	1.0	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.3	0.2	985	0.5	78.0	37.7	-50.5	-16.6		1.036
1660	506.1	362	0.17	0.33	969	41793	21.9	1.7	0.1	0.4	0.4	0.1	0.2	0.0	0.0	0.0	0.0	1.1	0.0	0.3	0.4	1771	0.3	0.7	43.1				
1720	524.4	414	0.20	0.30	876	19249	11.9	1.0	0.1	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.0	1494	0.5	48.0	22.0	-52.5	-20.3		1.034
1780	542.7	407	0.19	0.31	964	23003	15.6	0.9	0.1	0.2	0.5	0.2	0.2	0.0	0.0	0.1	0.0	1.7	0.1	0.6	0.5	1394	0.4	0.8	23.9				
1900	579.3	395	0.19	0.31	2902	12105	7.3	1.0	0.1	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	1.1	0.1	0.1	0.2	1469	0.4	0.5	4.2	-52.9	-25.1		1.029
1960	597.6	379	0.18	0.32	5665	14022	21.4	1.3	0.1	0.4	0.3	0.1	0.4	0.0	0.0	0.0	0.0	2.6	0.1	0.2	0.4	618	0.3	0.2	2.5				
2080	634.1	382	0.18	0.32	3165	15441	24.9	1.1	0.1	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.3	0.2	595	0.4	3.2	4.9	-55.1	-21.6		1.035
2140	652.4	392	0.19	0.31	1141	21570	23.5	1.3	0.1	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	1.8	0.1	0.3	0.3	870	0.3	1.4	18.9				
2200	670.7	457	0.22	0.28	1765	13729	31.0	1.4	0.2	0.4	0.4	0.2	0.5	0.0	0.0	0.1	0.0	2.2	0.1	0.4	0.4	423	0.4	0.4	7.8	-53.4	-25.1		1.030
2260	689.0	419	0.20	0.30	3268	16234	53.5	2.2	0.3	0.5	0.7	0.3	0.5	0.0	0.0	0.1	0.0	2.2	0.1	0.3	0.4	292	0.5	0.5	5.0				
2320	707.3	416	0.20	0.30	1311	14433	74.8	2.1	0.4	0.5	0.4	0.3	0.3	0.0	0.0	0.0	0.0	1.8	0.1	0.3	0.4	188	0.7	0.9	11.0				
2440	743.9	312	0.15	0.35	5298	11661	115.5	6.9	1.8	2.4	1.7	2.8	2.2	0.2	0.3	0.8	0.2	6.4	0.3	1.9	0.9	95	0.7	1.3	2.2				
2560	780.5	389	0.19	0.31	34	61497	1676.1	166.2	32.1	31.9	17.4	42.2	54.8	2.3	2.1	16.6	4.2	36.9	2.9	13.0	11.6	33	1.0	0.8	1809.6	-50.3	-15.4	-50.1	1.037
2620	798.8	303	0.14	0.36	49	29066	813.6	43.2	8.0	11.3	4.3	12.0	22.1	1.2	0.6	7.9	1.7	40.8	2.9	10.0	11.8	34	0.7	0.5	589.5				
2680	817.1	299	0.14	0.36	1030	63483	1664.3	99.5	16.2	18.9	9.0	30.5	46.7	1.6	1.3	10.1	3.3	45.1	3.4	9.0	8.0	36	0.9	0.7	61.6	-53.7	-19.5	-50.5	1.036
2740	835.4	286	0.14	0.36	1202	41566	1282.2	48.3	5.2	6.9	2.1	9.2	12.4	0.3	0.3	1.1	0.0	17.0	1.0	2.6	2.2	31	0.8	0.7	34.6				
2800	853.7	266	0.13	0.37	236	16358	2092.6	47.7	4.3	8.0	2.4	9.4	17.4	0.6	0.4	4.7	1.7	35.6	2.1	6.2	6.3	8	0.5	0.5	69.4	-53.0	-19.9	-49.5	1.035
2860	872.0	337	0.16	0.34	1016	30107	2242.7	48.9	2.3	5.9	0.9	4.5	3.9	0.3	0.1	2.6	0.6	21.6	1.4	2.7	4.5	13	0.4	1.1	29.6				
2920	890.2	360	0.17	0.33	307	11903	1629.2	35.4	1.7	4.9	0.6	3.3	3.2	0.1	0.1	1.9	0.4	16.3	1.0	3.4	4.9	7	0.3	1.0	38.8	-51.7	-20.2	-47.2	1.033
2980	908.5	385	0.18	0.32	656	29225	1830.9	44.4	3.4	5.9	0.8	4.1	9.0	0.3	0.1	2.7	0.6	14.4	0.8	2.4	2.9	16	0.6	0.5	44.5				
3040	926.8	387	0.18	0.32	685	32602	976.5	47.9	4.7	6.5	1.0	5.7	10.7	0.2	0.1	2.8	0.5	14.8	0.7	2.7	3.1	32	0.7	0.5	47.6	-51.9	-18.4	-46.6	1.035

Chemical analysis based on standards accurate to within 2%.

## Scout 1 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdpsc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>3</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	neoC <sub>5</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	CP μL/L	2-2DMB μL/L	2MP μL/L	3MP μL/L	C <sub>6</sub> μL/L	MCP μL/L	C <sub>7</sub> μL/L	MCH μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	iC <sub>5</sub> /nC <sub>5</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> CO <sub>2</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	α.CO <sub>2</sub> -C <sub>1</sub>	
108	32.9	298	0.14	0.36	4366	883	10.2	1.5	0.6	0.3	0.5	0.1	0.0	0.0	0.0	0.2	0.3	5.2	0.2	0.0	0.0	75	1.7	5.3	0.2	-81.3	-24.0		1.062	
120	36.6	376	0.18	0.32	14950	4069	7.5	1.1	0.4	0.4	0.2	0.1	0.3	0.0	0.0	0.1	0.1	3.2	0.1	0.0	0.0	473	1.0	0.3	0.3	-82.0	-24.7		1.062	
180	54.9	390	0.19	0.31	34794	9612	12.3	1.5	0.3	0.4	0.3	0.2	0.3	0.0	0.0	0.2	0.2	4.3	0.1	0.0	0.0	698	0.8	0.5	0.3	-93.2	-24.9		1.075	
240	73.2	464	0.22	0.28	4332	11834	23.9	4.7	0.8	1.1	0.4	0.4	0.5	0.1	0.0	0.3	0.3	5.0	0.2	0.0	0.0	414	0.7	0.8	2.7	-89.0	-20.8		1.075	
300	91.5	432	0.21	0.29	6423	5179	13.1	3.8	2.3	0.8	0.5	0.3	0.3	0.0	0.1	0.0	0.2	3.7	0.1	0.0	0.0	307	2.8	0.9	0.8	-84.0	-20.5		1.069	
360	109.8	388	0.18	0.32	12848	1416	14.7	1.5	0.4	0.4	0.3	0.1	0.3	0.0	0.0	0.2	0.2	4.4	0.2	0.0	0.2	87	1.0	0.4	0.1					
420	128.0	385	0.18	0.32	6909	3524	8.6	0.8	0.5	0.3	0.5	0.1	0.2	0.0	0.0	0.2	0.3	5.1	0.2	0.0	0.0	374	2.1	0.5	0.5	-61.0	-22.2		1.041	
480	146.3	417	0.20	0.30	8015	29054	38.4	2.0	1.2	0.2	0.6	0.1	0.0	0.0	0.1	0.0	0.2	3.6	0.1	0.0	0.0	718	5.4	2.1	3.6					
540	164.6	468	0.22	0.28	2276	61732	113.8	4.1	0.5	0.6	1.0	0.1	0.2	0.0	0.0	0.4	0.9	12.1	0.4	0.0	0.0	524	0.9	0.5	27.1	-53.3	-16.5		1.039	
600	182.9	387	0.18	0.32	5773	52783	128.9	6.8	5.1	0.5	0.7	0.1	0.3	0.0	0.0	0.2	0.3	5.4	0.2	0.0	0.0	389	10.4	0.4	9.1					
660	201.2	262	0.12	0.38	2526	37204	72.4	3.4	1.5	0.4	0.7	0.1	0.3	0.0	0.0	0.2	0.4	7.0	0.3	0.0	0.0	491	3.6	0.3	14.7	-51.1	-19.4		1.033	
720	219.5	279	0.13	0.37	12657	61956	159.6	7.5	2.8	0.6	0.9	0.4	0.2	0.0	0.3	0.0	0.5	7.6	0.3	0.0	0.0	371	4.5	2.3	4.9					
780	237.8	272	0.13	0.37	8066	52429	107.8	23.0	24.0	0.0	0.3	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	401	0.0	0.0	6.5	-45.8	-18.8		1.028
840	256.1	312	0.15	0.35	5062	33423	63.5	60.2	66.9	1.1	2.5	0.9	0.6	0.0	0.4	0.4	0.3	5.3	0.2	0.0	0.0	270	60.3	1.5	6.6	-44.3	-18.6		1.027	
900	274.4	273	0.13	0.37	911	24961	66.9	95.7	214.7	2.0	7.6	5.1	0.1	0.0	3.9	0.0	0.6	9.0	0.3	0.0	0.0	153	109.7	44.1	27.4	-44.1	-16.9		1.028	
960	292.7	362	0.17	0.33	2471	29991	54.7	49.7	136.8	0.5	3.9	2.3	0.0	0.0	2.7	0.0	0.4	1.2	0.2	0.0	0.0	287	283.3	120.2	12.1					
1020	311.0	321	0.15	0.35	2544	19735	51.4	63.0	187.1	1.3	6.5	4.9	0.1	0.0	6.3	0.0	0.5	5.3	0.2	0.0	0.0	172	139.6	79.8	7.8	-45.2	-16.2		1.030	
1080	329.3	324	0.15	0.35	4369	11809	35.9	13.7	111.0	0.4	3.9	1.1	0.0	0.0	3.9	0.0	0.4	5.1	0.2	0.0	0.0	238	300.1	2.7						
1140	347.6	309	0.15	0.35	767	8010	38.5	10.5	38.7	0.8	1.4	0.4	0.0	0.0	1.6	0.0	0.2	3.8	0.2	0.0	0.1	163	48.2	19.9	10.4	-40.8	-19.6		1.022	
1200	365.9	303	0.14	0.36	1183	20019	54.7	32.6	70.7	1.3	2.1	1.3	0.1	0.0	1.6	0.0	0.2	3.8	0.2	0.0	0.1	229	52.4	22.8	16.9					
1260	384.1	300	0.14	0.36	2750	24450	37.5	8.4	6.7	0.3	0.8	0.2	0.0	0.0	0.2	0.0	0.3	5.2	0.2	0.0	0.1	533	20.6	5.5	8.9	-46.2	-20.4		1.027	
1320	402.4	310	0.15	0.35	4655	20792	30.1	11.0	14.1	0.3	1.3	0.3	0.1	0.0	0.5	0.0	0.3	5.0	0.3	0.0	0.3	506	46.8	5.8	4.5					
1380	420.7	415	0.20	0.30	26456	36983	19.0	5.4	9.8	0.3	1.4	0.2	0.0	0.3	0.0	0.1	2.0	0.0	0.0	0.0	0.0	1516	31.1	1.4	47.7	-22.2			1.027	
1440	439.0	414	0.20	0.30	1521	38052	50.5	4.1	5.5	0.4	0.7	0.2	0.3	0.0	0.2	0.0	0.1	2.6	0.0	0.0	0.0	697	13.4	0.5	25.0					
1500	457.3	439	0.21	0.29	6319	40084	11.3	1.8	1.5	0.2	0.3	0.1	0.0	0.0	0.1	0.2	0.1	2.8	0.1	0.0	0.1	3064	6.8	1.6	6.3	-49.8	-21.8		1.029	
1560	475.6	402	0.19	0.31	8576	48342	15.2	2.5	1.3	0.4	0.7	0.1	0.1	0.0	0.1	0.1	0.1	2.3	0.0	0.0	0.0	2737	3.7	1.6	5.6					
1620	493.9	452	0.22	0.28	8785	25984	23.0	2.2	1.9	0.3	0.3	0.1	0.1	0.0	0.1	0.2	0.2	3.7	0.1	0.0	0.0	1031	5.6	1.4	3.0	-51.2	-21.1		1.032	
1680	512.2	384	0.18	0.32	14291	36300	40.8	4.5	6.7	0.6	0.5	0.3	0.4	0.0	0.2	0.0	0.2	4.0	0.3	0.0	0.2	801	12.0	0.8	2.5					
1800	548.8	443	0.21	0.29	17484	55301	86.6	5.7	1.0	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.3	6.2	7.8	0.0	0.0	599	2.1	1.8	3.2	-53.3	-20.0		1.035	
1860	567.1	434	0.21	0.29	11114	43688	101.4	8.6	1.2	1.3	1.1	0.8	0.5	0.1	0.1	0.7	0.5	8.7	0.3	0.0	0.0	397	0.9	1.6	3.9					
1920	585.4	481	0.23	0.27	15568	46733	151.3	11.8	1.1	1.9	0.5	0.9	0.5	0.1	0.1	0.5	0.2	3.8	0.1	0.0	0.1	286	0.6	1.7	3.0	-55.0	-19.6		1.037	
1980	603.7	449	0.21	0.29	20814	54746	265.3	21.3	1.5	3.0	0.9	1.2	1.0	0.1	0.1	0.9	0.2	6.1	0.1	0.0	0.0	191	0.5	1.2	2.6					
2040	622.0	436	0.21	0.29	12238	35235	139.9	9.2	0.9	0.7	0.8	0.2	0.2	0.0	0.1	0.2	0.2	3.7	0.1	0.0	0.0	236	1.4	0.9	2.9	-53.3	-20.3		1.035	
2100	640.2	380	0.18	0.32	9257	14740	125.6	17.8	1.3	2.3	0.8	0.6	0.6	0.1	0.1	0.4	0.1	3.1	0.0	0.0	0.0	103	0.6	1.1	1.6					
2160	658.5	365	0.17	0.33	18411	28920	172.1	19.9	0.9	1.7	0.7	0.3	0.1	0.0	0.0	0.3	0.4	3.6	0.0	0.0	0.0	151	0.5	2.0	1.6	-53.3	-20.0		1.035	
2220	676.8	261	0.12	0.38	41808	7648	94.0	15.8	1.0	2.1	0.6	0.5	0.8	0.2	0.0	0.3	0.3	5.1	0.2	0.0	0.1	70	0.5	0.6	0.2					
2280	695.1	292	0.14	0.36	32501	22558	66.5	8.5	0.9	1.2	0.5	0.5	0.1	0.1	0.0	0.6	0.5	7.0	0.4	0.0	0.4	301	0.7	4.0	0.7	-53.0	-24.3		1.030	
2340	713.4	339	0.16	0.34	27958	22421	96.3	9.9	1.0	1.3	0.7	0.3	0.3	0.1	0.1	0.0	0.0	1.3	0.0	0.0	0.0	211	0.8	1.1	0.8	-52.9	-21.8		1.033	
2400	731.7	226	0.11	0.39	328	5323	40.5	7.6	2.6	4.0	2.0	1.5	1.9	0.3	0.1	1.1	0.9	15.9	1.4	0.0	1.0	111	0.7	0.8	16.2	-46.4	-20.3		1.027	
2460	750.0	342	0.16	0.34	476	12173	71.2	5.8	1.2	1.0	2.2	0.6	0.3	0.0	0.2	0.4	0.5	6.8	0.3	0.0	0.1	158	1.2	1.7	25.6	-51.8	-19.7		1.034	
2520	768.3	330	0.16	0.34	85724	17345	118.3	8.2	2.5	2.0	2.6	4.3	1.4	0.1	0.5	1.4	0.5	0.0	1.1	0.0	0.0	137	1.3	3.1	0.2					
2580	786.6	319	0.15	0.35	70671	17049	95.4	7.9	4.0	3.2	2.7	13.5	5.3	0.1	1.7	7.3	2.2	23.5	3.0	0.0	2.1	165	1.3	2.6	0.2	-50.2	-20.8		1.031	
2640	804.9	300	0.14	0.36	71225	18050	76.3	5.5	2.4	2.4	2.1	10.9	4.6	0.1	1.7	12.0	3.3	35.7	4.7	0.0	15.3	221	1.0	2.4	0.3					
2700	823.2	433	0.21	0.29	17570	4588	47.8	2.3	0.7	0.7	0.7	1.2	0.6	0.0	0.2	1.3	0.5	6.5	0.5	0.0	1.1	92	0.9	2.0	0.3	-48.7	-19.7		1.030	
2760	841.5	389	0.19	0.31	75344	35668	258.1	3.9	0.6	0.6	0.7	0.3	0.2	0.0	0.1	0.2	0.2	3.0	0.2	0.0	0.1	136	1.1	1.4	0.5					
2820	859.8	470	0.22	0.28	55705	19954	419.6	4.6	0.5	0.7	1.1	0.3	0.2	0.0	0.1	0.2	0.1	2.4	0.1	0.0	0.0	47	0.7	1.3	0.4	-47.6	-18.6		1.030	
2880	878.0	470	0.22	0.28	35874	65293	1752.3	95.5	27.2	5.9	1.8	0.3	0.1	0.0	0.1	0.2	0.1	1.7	0.1	0.0	0.0	35	4.6	2.3	1.8	-48.0	-17.8	-33.5	1.032	
2940	896.3	436																												

## Spark 4 cuttings

Depth	Depth	Sed. Wt.	Sample Vol.	Hdscpc	CO <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	iC <sub>4</sub>	nC <sub>4</sub>	neoC <sub>5</sub>	iC <sub>5</sub>	nC <sub>5</sub>	CP	2-2DMB	2MP	3MP	C <sub>6</sub>	MCP	C <sub>7</sub>	MCH	C <sub>2</sub> /C <sub>2</sub> +C <sub>3</sub>	iC <sub>4</sub> /nC <sub>4</sub>	iC <sub>5</sub> /nC <sub>5</sub>	C <sub>1</sub> /CO <sub>2</sub>	δ <sup>13</sup> C <sub>1</sub>	δ <sup>13</sup> CO <sub>2</sub>	δ <sup>13</sup> C <sub>2</sub>	δ <sup>13</sup> C <sub>3</sub>	δ <sup>13</sup> iC <sub>4</sub>	δ <sup>13</sup> nC <sub>4</sub>	δ <sup>13</sup> nC <sub>5</sub>	αCO <sub>2</sub> -C <sub>1</sub>	
ft.	m	gm	L	L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	μL/L	ratio	ratio	ratio	ratio	‰	‰	‰	‰	‰	‰	‰	‰	‰
180	54.9	435	0.21	0.29	367.6	1880.3	8.0	6.6	3.2	10.7	0.2	5.3	10.0	0.4	0.2	2.8	1.0	22.0	2.4	5.5	9.0	129	0.3	0.5	0.5	-78.4	-13.5						1.070	
240	73.2	428	0.20	0.30	3502.4	1206.2	5.3	1.2	0.2	0.5	0.1	0.2	0.3	0.0	0.0	0.1	0.0	2.0	0.3	0.9	1.4	186	0.4	0.8	0.8									
300	91.5	462	0.22	0.28	432.7	775.1	3.8	0.8	0.3	0.8	0.4	0.4	0.4	0.0	0.0	0.2	0.4	5.4	0.4	0.7	1.5	167	0.4	1.1	1.1	-81.2	-11.3							1.076
360	109.8	526	0.25	0.25	99.6	365.8	2.6	0.8	0.4	0.8	0.3	0.4	0.4	0.0	0.0	0.2	0.2	3.5	0.3	1.0	1.0	107	0.5	1.2	1.2									
420	128.0	468	0.22	0.28	634.2	970.0	3.3	1.4	0.7	2.0	0.4	0.9	1.2	0.1	0.0	0.4	0.4	5.4	0.3	0.6	0.4	206	0.3	0.8	0.8	-81.8	-17.8							1.070
480	146.3	460	0.22	0.28	577.2	1192.8	21.7	2.6	0.9	0.9	0.4	0.4	0.4	0.0	0.0	0.2	0.2	4.0	0.3	0.5	0.5	49	1.0	1.1	1.1									
540	164.6	465	0.22	0.28	742.3	640.8	4.7	4.6	2.1	7.8	0.1	3.7	7.3	0.7	0.8	2.5	0.8	15.6	1.1	2.3	5.5	69	0.3	0.5	0.5									
600	182.9	467	0.22	0.28	873.9	911.3	7.4	1.1	0.2	0.5	0.4	0.2	0.2	0.0	0.0	0.1	0.2	2.6	0.2	0.3	0.2	107	0.5	1.0	1.0	-59.5	-16.4							1.046
660	201.2	438	0.21	0.29	1215.6	320.5	15.0	1.0	0.3	0.5	0.4	0.2	0.2	0.0	0.0	0.1	0.3	3.6	0.2	0.2	1.1	20	0.6	1.0	1.0	-49.7	-23.9							
720	219.5	461	0.22	0.28	523.8	907.1	4.0	0.5	0.2	0.5	0.2	0.2	0.2	0.0	0.0	0.1	0.1	1.9	0.1	0.2	0.1	203	0.3	1.0	1.0	-79.7	-22.8							1.062
840	256.1	465	0.22	0.28	1295.8	27098.7	45.2	2.1	0.1	0.3	0.5	0.2	0.2	0.2	0.0	0.1	0.2	2.2	0.1	0.4	0.1	573	0.2	1.3	1.3	-73.3	-14.0							1.064
900	274.4	414	0.20	0.30	1229.0	57654.8	104.2	6.0	1.2	0.8	0.3	0.5	0.3	0.0	0.0	0.2	0.2	2.8	0.1	0.4	0.2	523	1.6	1.8	1.8									
960	292.7	441	0.21	0.29	1974.8	68509.0	96.6	4.4	1.9	0.4	0.3	0.1	0.1	0.0	0.2	0.3	0.2	2.4	0.1	0.1	0.3	678	5.4	0.8	0.8	-69.7	-13.7							1.060
1020	311.0	429	0.20	0.30	1317.3	38302.2	90.9	5.0	0.3	0.5	0.3	0.2	0.2	0.0	0.0	0.1	0.2	2.4	0.1	0.1	0.2	399	0.6	1.1	1.1									
1080	329.3	396	0.19	0.31	7283.2	25367.3	55.0	5.1	1.2	1.7	0.8	1.1	1.1	0.1	0.2	0.5	0.0	4.7	0.5	2.1	1.9	422	0.7	1.1	1.1	-53.1	-16.5							1.039
1140	347.6	405	0.19	0.31	2373.0	48685.6	135.6	39.6	4.0	1.9	1.6	0.7	0.3	0.0	0.3	0.5	0.3	3.8	0.2	0.4	0.1	278	2.1	2.6	2.6	-50.5	-11.0							1.042
1200	365.9	437	0.21	0.29	799.6	39950.2	52.7	57.5	45.1	1.8	2.0	1.7	0.2	0.0	0.4	0.3	0.2	2.7	0.1	0.2	0.1	363	24.4	7.4	7.4	-49.4	-10.7							1.041
1260	384.1	437	0.21	0.29	32080.8	52771.3	34.4	44.0	47.4	1.3	1.2	1.2	0.2	0.0	0.5	0.6	0.1	1.8	0.2	0.6	0.8	674	35.7	6.2	6.2	-52.9	-3.7							1.052
1320	402.4	394	0.19	0.31	36113.3	47651.6	19.3	2.8	85.8	0.9	4.2	0.5	0.2	0.0	7.0	0.0	0.0	3.7	0.4	12.1	0.0	2159	100.8	2.7	2.7	-50.9	-3.0							1.050
1380	420.7	390	0.19	0.31	12540.0	59400.0	37.3	2.8	18.8	2.2	0.6	0.9	1.1	0.1	0.4	0.6	0.1	3.2	0.2	0.5	0.5	1481	8.7	0.8	0.8									
1440	439.0	366	0.17	0.33	8110.8	56644.9	54.5	3.8	1.4	0.6	0.1	0.4	0.5	0.1	0.1	0.3	0.1	4.3	0.5	2.0	1.6	973	2.3	0.9	0.9	-52.2	-4.4							1.050
1500	457.3	458	0.22	0.28	23473.2	56692.4	41.9	3.2	1.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.7	0.1	0.1	0.1	1258	4.4	1.4	1.4									
1560	475.6	476	0.23	0.27	9442.1	41856.2	24.3	10.4	65.3	1.5	11.2	6.1	0.3	0.0	3.5	2.6	0.5	4.1	0.2	0.3	0.2	1206	43.5	17.7	17.7	-53.2	-4.1							1.052
1620	493.9	456	0.22	0.28	8375.9	22704.9	3.9	0.8	1.4	0.6	0.9	0.3	0.4	0.0	0.0	0.1	0.2	3.1	0.1	0.2	0.0	4852	2.3	0.9	0.9									
1680	512.2	422	0.20	0.30	14241.6	67577.0	32.9	6.8	3.8	8.1	3.5	4.3	7.7	0.3	0.0	2.4	1.4	13.7	0.6	2.3	1.1	1701	0.5	0.6	0.6	-55.8	-4.8							1.054
1740	530.5	426	0.20	0.30	15248.5	31038.9	16.1	4.7	1.5	2.6	0.1	1.8	1.4	0.2	0.1	1.1	0.3	9.6	1.0	3.1	3.4	1493	0.6	1.3	1.3									
1800	548.8	452	0.22	0.28	12939.0	43579.9	21.5	1.8	0.3	0.3	0.3	0.1	0.1	0.0	0.0	0.1	0.2	2.6	0.1	0.0	0.2	1870	0.9	1.1	1.1	-57.3	-4.4							1.056
1860	567.1	476	0.23	0.27	10020.9	45075.9	35.0	25.3	7.7	11.9	0.1	4.4	5.8	0.6	0.0	1.4	0.6	15.4	1.3	2.3	2.3	748	0.6	0.8	0.8									
1920	585.4	392	0.19	0.31	8990.4	44196.8	15.2	2.7	2.6	0.3	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.3	0.0	0.3	0.0	2457	9.6	3.5	3.5	-56.2	5.2							1.065
1980	603.7	384	0.18	0.32	31843.1	33907.0	8.2	3.5	2.0	0.3	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.6	0.1	0.2	0.2	2905	7.3	1.2	1.2									
2040	622.0	367	0.17	0.33	43157.4	37257.9	147.6	36.2	19.8	27.8	0.4	11.9	8.7	0.7	0.1	0.1	0.3	5.3	1.3	1.5	1.5	203	0.7	1.4	1.4	-58.2	-3.1							1.059
2100	640.2	448	0.21	0.29	39412.2	38377.5	389.7	119.8	65.9	94.2	2.2	46.7	38.9	2.3	0.9	3.3	1.4	22.1	3.3	0.5	0.8	75	0.7	1.2	1.2									
2160	658.5	400	0.19	0.31	35880.0	54762.5	926.3	407.9	202.7	231.4	3.3	133.8	88.4	7.8	3.0	31.4	14.2	57.7	23.3	35.0	30.2	41	0.9	1.5	1.5	-56.9	-2.1	-35.1	-31.2			-30.1		1.058
2220	676.8	374	0.18	0.32	40252.7	56671.9	1118.8	714.0	226.5	283.0	3.1	144.9	118.8	6.4	0.7	35.0	13.5	69.5	17.1	23.7	18.3	31	0.8	1.2	1.2									
2280	695.1	484	0.23	0.27	39573.2	58003.3	1637.2	1168.3	183.8	412.9	60.9	81.2	63.4	5.2	9.0	18.2	8.6	34.3	7.0	7.4	10.4	21	0.4	1.3	1.3	-57.9	-3.1	-34.4	-30.2	-30.8		-30.0		1.058
2340	713.4	408	0.19	0.31	16852.5	50982.4	1757.6	1252.5	46.3	149.2	1.1	4.6	2.8	1.7	0.0	0.6	0.3	10.7	0.6	0.5	0.2	17	0.3	1.6	1.6									
2400	731.7	439	0.21	0.29	28462.3	51677.5	1624.2	986.2	23.8	47.8	0.6	5.4	5.3	0.9	0.1	1.6	0.4	15.1	0.8	3.1	2.1	20	0.5	1.0	1.0	-54.5	-3.2	-34.4	-31.4			-30.7		1.054
2460	750.0	467	0.22	0.28	22121.5	36303.3	1245.9	662.9	46.6	34.8	0.5	7.7	3.8	0.9	0.1	1.9	0.5	19.9	0.6	5.8	2.8	19	1.3	2.0	2.0									
2520	768.3	478	0.23	0.27	28360.7	60575.8	2188.7	880.7	82.4	29.8	0.1	6.2	1.9	0.4	0.0	0.8	0.4	9.3	0.2	0.6	0.2	20	2.8	3.3	3.3	-54.2	-2.9	-34.5	-32.0					1.054
2580	786.6	467	0.22	0.28	20286.4	33569.3	1144.8	364.5	50.2	16.8	1.0	8.2	2.3	0.6	0.1	1.9	0.3	16.7	0.6	4.7	2.9	22	3.0	3.6	3.6									
2640	804.9	510	0.24	0.26	19185.9	29975.3	602.5	114.4	23.8	6.3	0.9	4.9	0.8	0.1	0.1	0.5	0.3	4.6	0.2	0.7	0.2	42	3.8	6.0	6.0	-50.2		-34.4	-32.2					
2700	823.2	427	0.20	0.30	481.5	45579.7	1344.6	168.1	54.0	16.0	3.4	12.8	3.6	0.3	0.2	1.5	0.7	12.7	0.4	1.2	0.4	30	3.4	3.6	3.6	-49.4	-5.7	-34.5	-32.9					

## Spark DD9 cuttings

Depth ft.	Depth m	Sed. Wt. gm	Sample Vol. L	Hdspc L	CO <sub>2</sub> μL/L	C <sub>1</sub> μL/L	C <sub>2</sub> μL/L	C <sub>2</sub> H <sub>4</sub> μL/L	C <sub>3</sub> μL/L	C <sub>3</sub> H <sub>6</sub> μL/L	iC <sub>4</sub> μL/L	nC <sub>4</sub> μL/L	iC <sub>5</sub> μL/L	nC <sub>5</sub> μL/L	C <sub>6</sub> + μL/L	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰
300	91.5	371	0.18	0.32	146	7668	9.9	0.0	3.5	1.1	0.4	0.9	0.0	0.0	3.5	574.0	0.4	52.4		
360	109.8	353	0.17	0.33	178	8392	547.9	3.2	114.9	212.3	303.5	162.9	165.9	85.3	114.9	12.7	1.9	47.2	-71.9	
420	128.0	329	0.16	0.34	241	607	8.3	0.0	3.1	1.5	0.0	1.1	0.7	0.9	3.1	53.3	0.0	2.5		
480	146.3	346	0.16	0.34	203	18231	2.2	0.0	3.3	0.0	0.0	0.0	0.0	0.0	3.3	3318.5		89.6	-70.2	
540	164.6	335	0.16	0.34	192	12080	14.3	0.0	3.4	0.9	0.6	0.6	0.0	0.0	3.4	681.9	1.0	62.9		
600	182.9	311	0.15	0.35	309	14400	10.9	0.0	3.6	1.0	0.0	0.7	0.0	0.0	3.6	993.4	0.0	46.6	-72.2	
660	201.2	246	0.12	0.38	392	18139	17.0	0.0	4.9	1.0	0.0	0.7	0.0	0.0	4.9	828.4	0.0	46.3		
720	219.5	376	0.18	0.32	251	15846	7.3	0.0	2.5	0.5	0.0	0.0	0.0	0.0	2.5	1607.3		63.1	-69.5	
780	237.8	375	0.18	0.32	324	25200	15.8	0.0	2.9	0.9	0.0	0.7	0.5	0.0	2.9	1346.2	0.0	77.8		
840	256.1	339	0.16	0.34	273	41947	37.1	0.0	3.4	2.3	0.6	1.0	0.0	0.8	3.4	1036.3	0.6	153.8	-65.2	
900	274.4	241	0.11	0.39	604	33166	140.3	0.0	8.7	6.7	2.3	1.7	2.7	0.7	8.7	222.5	1.4	54.9		
960	292.7	278	0.13	0.37	472	42488	51.1	0.0	4.2	3.3	0.0	0.0	1.1	0.8	4.2	768.8		90.0	-61.2	
1080	329.3	374	0.18	0.32	596	54044	60.9	0.0	2.3	2.3	0.0	0.0	0.0	0.0	2.3	854.3		90.6	-61.3	
1140	347.6	415	0.20	0.30	520	41619	91.3	0.0	1.4	6.7	0.5	0.9	0.5	0.3	1.4	448.8	0.5	80.0		
1200	365.9	378	0.18	0.32	764	52978	307.4	0.0	4.6	16.2	2.5	1.8	2.3	0.9	4.6	169.8	1.4	69.3	-59.6	
1260	384.1	382	0.18	0.32	857	38821	227.0	0.9	3.1	11.7	0.3	1.7	1.6	0.0	3.1	168.7	0.2	45.3		
1320	402.4	302	0.14	0.36	867	40372	144.2	0.0	4.7	10.2	4.2	2.0	3.2	0.7	4.7	271.2	2.1	46.6	-58.9	
1380	420.7	398	0.19	0.31	295	45869	32.4	0.0	2.3	3.1	1.0	0.7	0.0	0.0	2.3	1320.8	1.5	155.6		
1440	439.0	397	0.19	0.31	493	47371	41.1	1.0	3.1	2.1	0.0	0.0	0.0	0.0	3.1	1070.6		96.0	-59.1	
1500	457.3	345	0.16	0.34	245	30857	58.9	0.0	4.5	3.3	0.6	0.0	0.6	0.4	4.5	487.1		125.8		
1560	475.6	402	0.19	0.31	210	26436	44.0	0.0	2.1	1.5	0.0	0.0	0.0	0.0	2.1	573.4		126.2	-58.2	
1620	493.9	319	0.15	0.35	596	39414	49.3	0.0	3.2	1.8	0.0	0.0	0.9	0.0	3.2	751.1		66.2		
1680	512.2	374	0.18	0.32	253	33800	28.9	0.0	3.3	1.8	0.0	0.0	0.0	0.0	3.3	1050.6		133.6	-59.3	
1740	530.5	294	0.14	0.36	257	15917	11.6	0.0	3.1	1.3	0.0	0.0	0.0	0.0	3.1	1086.0		61.9		
1800	548.8	259	0.12	0.38	305	19851	7.9	2.4	4.3	0.0	0.0	0.0	0.0	0.0	4.3	1625.0		65.0	-58.6	
1860	567.1	363	0.17	0.33	246	31984	3.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	6035.7		130.0		
1920	585.4	312	0.15	0.35	402	19633	27.4	0.0	3.1	0.7	0.0	0.0	0.0	0.0	3.1	643.4		48.8	-58.1	
1980	603.7	348	0.17	0.33	303	6919	18.8	0.0	2.2	0.8	0.0	0.0	0.0	0.0	2.2	329.8		22.9		
2040	622.0	311	0.15	0.35	380	17750	3.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	3.3	2766.7		46.7	-58.0	
2100	640.2	300	0.14	0.36	250	18725	3.5	0.0	3.5	0.8	0.0	0.0	0.0	0.0	3.5	2675.0		74.9		
2160	658.5	272	0.13	0.37	286	15045	15.7	1.4	2.6	0.9	0.0	0.0	0.0	0.0	2.6	821.9		52.6	-57.2	
2220	676.8	227	0.11	0.39	399	21246	50.0	0.0	4.0	1.1	0.0	0.0	0.0	0.0	4.0	393.3		53.3		
2280	695.1	348	0.17	0.33	262	21584	67.2	0.0	3.8	1.4	0.0	0.0	0.0	0.0	3.8	304.0		82.3	-56.1	
2340	713.4	354	0.17	0.33	177	26149	136.6	1.2	2.9	6.5	0.4	1.4	0.4	0.6	2.9	187.3	0.3	147.8		
2400	731.7	363	0.17	0.33	189	26117	253.6	2.6	5.1	20.6	4.4	2.5	1.7	0.6	5.1	101.0	1.8	138.0	-56.0	
2460	750.0	390	0.19	0.31	169	24708	200.9	1.5	3.6	25.6	5.8	2.7	1.7	0.7	3.6	120.9	2.1	146.0		
2520	768.3	383	0.18	0.32	209	29257	200.4	2.3	3.5	27.9	5.9	2.4	1.4	0.5	3.5	143.5	2.4	140.0	-55.4	-41.7
2580	786.6	380	0.18	0.32	176	25213	368.7	3.5	4.6	68.9	12.3	4.8	2.3	0.5	4.6	67.5	2.6	143.0		
2700	823.2	527	0.25	0.25	89.3	19054	292.6	3.1	3.3	50.4	6.4	4.0	2.0	0.7	3.3	64.4	1.6	213.3	-53.3	-40.3
2700	823.2	527	0.25	0.25	109	11512	266.6	0.5	3.7	52.4	12.6	6.0	2.5	0.4	3.7	42.6	2.1	105.5		
2760	841.5	417	0.20	0.30	137	30208	210.7	1.5	2.7	22.0	1.2	0.9	0.0	0.0	2.7	141.5	1.3	221.1	-53.7	-40.2
2820	859.8	431	0.21	0.29	144	39926	375.9	1.0	10.5	140.3	58.7	28.1	10.9	4.0	10.5	103.3	2.1	278.0		
2880	878.0	432	0.21	0.29	143	29469	784.9	2.9	20.3	316.0	222.6	126.5	36.8	13.4	20.3	36.6	1.8	206.0	-52.4	
2940	896.3	502	0.24	0.26	131	41810	173.8	0.5	12.1	66.8	57.0	33.3	17.5	6.4	12.1	224.9	1.7	319.2	-51.6	-39.6

Chemical analysis based on standards accurate to within 2%.

## Spark DD9 flowed gas Isotubes®

Sample Date	Gas Units	Sample Time	Depth Feet	Depth m	O <sub>2</sub> + Ar ppm	CO <sub>2</sub> ppm	N <sub>2</sub> ppm	CO ppm	C <sub>1</sub> ppm	C <sub>2</sub> ppm	C <sub>2</sub> H <sub>4</sub> ppm	C <sub>3</sub> ppm	C <sub>3</sub> H <sub>6</sub> ppm	iC <sub>4</sub> ppm	nC <sub>4</sub> ppm	iC <sub>5</sub> ppm	nC <sub>5</sub> ppm	C <sub>5</sub> + ppm	H <sub>2</sub> ppm	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δ <sup>13</sup> C <sub>2</sub> ‰	δ <sup>13</sup> C <sub>3</sub> ‰	
3/13/2008	2	21:30	318	97.0	220800	300	778800	0	54	0	0	0.8	0	0	0.2	0	0	0.8	768.9	67.5						
3/14/2008	2	7:45	400	122.0	221100	360	778400	0	91	0	0	0.7	0	0	0	0	0.7	991.5	130.0							
3/14/2008	2.2	0:00	500	152.4	221000	380	778500	0	123	0	0	1	0	0	0	0	1	617.4	123.0							
3/14/2008	1.4	10:07	600	182.9	221200	300	778400	0	53	0	0	65.5	0.8	0.4	1.9	1.6	2.9	65.5	761.5	0.8	0.2					
3/14/2008	1.7	11:43	700	213.4	221200	370	778200	0	240	0	0	0.8	0	0	0	0	0.8	574.4	300.0							
3/14/2008	4.7	13:30	800	243.9	220800	320	778600	0	314	0	0	1	0	0.2	0	0	0	1	682.3	314.0						
3/14/2008	2.6	15:00	900	274.4	221100	370	778300	0	261	0	0	0.7	0	0	0	0	0.7	552.1	372.9							
3/14/2008	3.4	16:30	1000	304.9	221200	390	778000	0	428	0	0	0.7	0	0	0	0	0.7	646.1	611.4							
3/14/2008	2.4	12:50	1100	335.4	221200	380	778100	0	325	0	0	0.5	0	0	0	0	0.5	824.7	650.0							
3/14/2008	2.9	19:30	1200	365.9	221000	400	778300	0	338	0.6	0	0.4	0	0	0	0	0.4	796.5	338.0							
3/14/2008	3.6	20:55	1300	396.3	221200	400	777600	0	784	1	0	0.5	0	0	0	0	0.5	721.5	522.7							-59.1
3/14/2008	2.7	22:08	1400	426.8	221000	400	778000	0	625	0	0	0.5	0	0	0	0	0.5	640.1	1250.0							-58.5
3/14/2008	0.2	23:24	1500	457.3	221400	330	778200	0	78	0	0	0.6	0	0	0	0	0.6	617.4	130.0							
3/15/2008	1	5:33	1700	518.3	221500	320	778000	0	224	0	0	0.7	0	0	0	0	0.7	659.5	320.0							
3/15/2008	4.1	7:08	1800	548.8	220900	370	777900	0	811	0	0	0.8	0	0	0	0	0.8	872	1013.8							-58.4
3/15/2008	4.1	8:39	1900	579.3	220500	360	778400	0	722	0	0	0.9	0	0	0	0	0.9	590.5	802.2							-58.4
3/15/2008	4	10:48	2000	609.8	221600	410	777900	0	140	0	0	0.5	0	0	0	0	0.5	636.9	280.0							0.3
3/15/2008	2	12:43	2100	640.2	221400	310	778200	0	77	0	0	0.9	0	0	0	0	0.9	691.5	85.6							0.2
3/15/2008	9	14:21	2200	670.7	219800	350	777600	0	2220	1	0	1.2	0	0	0	0	1.2	556.4	1009.1							-58.5
3/15/2008	6	16:27	2300	701.2	220500	340	777600	0	1570	3.2	0	1.2	0	0	0	0	1.2	715.9	356.8							-57.3
3/15/2008	1.7	18:05	2400	731.7	221100	560	778100	0	279	0.8	0	0.5	0	0	0	0	0.5	756.4	214.6							0.5
3/15/2008	8.3	20:16	2500	762.2	218800	350	778400	0	2480	7.6	0	0.6	0.6	0	0	0	0.6	665.2	302.4							7.1 -57.0 -44.5
3/15/2008	16.5	22:22	2600	792.7	217500	320	778500	0	3660	17.1	0	1.3	2.3	0.3	0.4	0	1.3	755	198.9	0.8						-57.1 -43.1
3/18/2008	74	11:12	2800	853.7	212400	240	771600	0	15700	56.5	0	1	9.9	1.7	1	0	0	1	652.3	273.0	1.7					65.4 -55.2 -40.7 -31.4
3/18/2008	43	12:10	2900	884.1	216800	300	776300	0	6580	18.6	0	0	4	1.3	1.4	0	0	0	770.9	353.8	0.9					21.9 -54.0 -39.8 -31.8
3/18/2008	0	0:00	3000	914.6	215000	280	774100	0	10600	23.4	0	1.5	5.7	2.8	1.9	0	0	1.5	472.9	425.7	1.5					-53.6 -40.2 -31.7

Chemical analysis based on standards accurate to within 2%.

in blue = carbon isotope data obtained via cryogenic enrichment



## Thetis Island 1 cuttings

Depth Feet	Depth (m)	C <sub>1</sub> ppm	C <sub>2</sub> ppm	C <sub>3</sub> ppm	iC <sub>4</sub> ppm	nC <sub>4</sub> ppm	iC <sub>5</sub> ppm	nC <sub>5</sub> ppm	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰	δDC <sub>1</sub> ‰
70	21.3	25	0	0	0	0	0	0				
160	48.8	262	8	0	0	0	0	0	32.75		-53.96	-146
270	82.3	60600	35	0	0	0	0	0	1731.43			
330	100.6	15200	10	0	0	0	0	0	1520.00		-73.98	-161
420	128.0	20200	43	0	0	0	0	0	469.77		-73.68	-219
615	187.5	139000	44	0	0	0	0	0	3159.09			
675	205.8	62900	58	0	0	0	0	0	1084.48		-67.12	-264
780	237.8	108000	103	0	0	0	0	0	1048.54			
860	262.2	115000	94	0	0	0	0	0	1223.40		-56.79	-234
860	262.2	3300	0	0	0	0	0	0			-57.79	-289
930	283.5	104000	27	0	0	0	0	0	3851.85			
990	301.8	60000	14	0	0	0	0	0	4285.71		-46.33	-217
1110	338.4	28800	10	0	0	0	0	0	2880.00		-53.57	-262
1200	365.9	76000	27	0	0	0	0	0	2814.81			
1260	384.1	88800	29	0	0	0	0	0	3062.07		-50.93	-287
1365	416.2	23800	4	0	0	0	0	0	5950.00		-51.8	-252
1380	420.7	76700	16	0	0	0	0	0	4793.75		-51.01	-281
1500	457.3	42400	5	0	0	0	0	0	8480.00			
1570	478.7	45400	6	0	0	0	0	0	7566.67		-50.17	-270
1670	509.1	60500	7	0	0	0	0	0	8642.86		-49.69	-296
1800	548.8	144000	14	0	0	0	0	0	10285.71		-49.6	-315
1860	567.1	94000	7	0	0	0	0	0	13428.57			
1965	599.1	90800	6	0	0	0	0	0	15133.33		-50.01	-292
2100	640.2	4550	0	0	0	0	0	0				
2250	686.0	20100	5	0	0	0	0	0	4020.00		-50.6	-241
2340	713.4	27100	3	0	0	0	0	0	9033.33			
2520	768.3	28600	2	0	0	0	0	0	14300.00		-69.47	-255
2640	804.9	5990	5	0	0	0	0	0	1198.00			
2705	824.7	14400	7	0	0	0	0	0	2057.14		-72.22	-199
2730	832.3	434	0	0	0	0	0	0			-66.24	-152
3120	951.2	6090	98	0	0	0	0	0	62.14		-66.47	-209
3330	1015.2	8000	317	9	0	0	0	0	24.54			
3600	1097.6	8420	1620	18	4	0	3	0	5.14			
3900	1189.0	19700	2420	644	4	3	6	3	6.43	1.33	-46.67	-201
4380	1335.4	52300	6800	4390	709	1020	98	43	4.67	0.70		
4500	1372.0	74100	17700	14100	3290	5960	1180	971	2.33	0.55	-41.67	-195

Chemical analysis based on standards accurate to within 2%.

Wainwright 1 flowed gas Isotubes®

Sample Date	Sample Time	Depth Feet	Depth m	Gas Units	O <sub>2</sub> + Ar ppm	CO <sub>2</sub> ppm	N <sub>2</sub> ppm	CO ppm	C <sub>1</sub> ppm	C <sub>2</sub> ppm	C <sub>2</sub> H <sub>4</sub> ppm	C <sub>3</sub> ppm	C <sub>3</sub> H <sub>6</sub> ppm	iC <sub>4</sub> ppm	nC <sub>4</sub> ppm	iC <sub>5</sub> ppm	nC <sub>5</sub> ppm	C <sub>6</sub> + ppm	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰
6/14/2007	13:57	100	30.5	0	213400	150	786400	40	29	1	0	0	0	0	0	0	0	1	29	0.2	
6/14/2007	23:00	200	61.0	35.9	217400	140	779200	70	3170	0	0	0	0	0	0	0	0	0		22.6	-60.3
6/15/2007	11:30	220	67.1	280	207300	150	773000	70	19500	0	0	0	0	0	0	0	0	0		130.0	-59.1
6/15/2007	14:53	250	76.2	1340	186300	160	754100	110	59300	0	0	0	0	0	0	0	0	0		370.6	-59.7
6/15/2007	22:05	320	97.6	195	200800	170	784100	90	14800	2	0	0	0	0	0	0	0	0	7400	87.1	-57.8
6/16/2007	6:52	400	122.0	46	200100	230	795200	40	4450	0	0	0	0	0	0	0	0	0		19.3	-57.5
6/16/2007	21:30	500	152.4	85	191700	290	801600	60	6390	1	0	0	0	0	0	0	0	0	6390	22.0	-56.9
6/17/2007	9:35	600	182.9	6.5	219700	390	779900	0	7	0	0	0	0	0	0	0	0	0		0.0	
6/17/2007	0:00	703	214.3	210	195400	340	746200	0	58100	0	0	0	0	0	0	0	0	0		170.9	-54.7
6/18/2007	0:00	805	245.4	80	204800	330	787600	130	7140	1	0	0	0	0	0	0	0	0	7140	21.6	-55.2
6/19/2007	0:00	900	274.4	998	194200	390	759400	30	46000	5	0	1	0	0	0	0	0	0	7667	117.9	-54.3
6/19/2007	7:45	985	300.3	3350	167900	390	699300	0	132400	0	0	0	0	0	0	0	0	0		339.5	-54.1
6/19/2007	21:40	1000	304.9	165	190500	350	795500	60	13600	1	0	0	0	0	0	0	0	0	13600	38.9	-54.4
6/20/2007	10:57	1100	335.4	247	195700	340	784600	0	19400	2	0	0	0	0	0	0	0	0	9700	57.1	-53.8
6/21/2007	11:55	1200	365.9	65	203900	350	788200	0	7570	1	0	0	0	0	0	0	0	0	7570	21.6	-53.8
6/21/2007	20:10	1250	381.1	1650	179500	490	722300	0	97700	0	0	0	0	0	0	0	0	0		199.4	-53.2
6/22/2007	5:50	1300	396.3	70	208200	400	787100	0	4250	1	0	0	0	0	0	0	0	0	4250	10.6	-54.3
6/24/2007	15:25	1400	426.8	50	203300	230	791700	0	4770	0	0	0	0	0	0	0	0	0		20.7	-53.6
6/26/2007	6:55	1500	457.3	41	219200	330	780300	0	184	0	0	0	0	0	0	0	0	0		0.6	
6/27/2007	13:59	1600	487.8	57	196600	440	797500	0	5460	1	0	0	0	0	0	0	0	0	5460	12.4	-52.2

Chemical analysis based on standards accurate to within 2%.

## Wainwright W-OC1-08 flowed gas Isotubes®

Sample Date	Sample Time	Depth Feet	Depth m	Gas Units	O <sub>2</sub> + Ar ppm	CO <sub>2</sub> ppm	N <sub>2</sub> ppm	CO ppm	C <sub>1</sub> ppm	C <sub>2</sub> ppm	C <sub>2</sub> H <sub>4</sub> ppm	C <sub>3</sub> ppm	C <sub>3</sub> H <sub>6</sub> ppm	iC <sub>4</sub> ppm	nC <sub>4</sub> ppm	iC <sub>5</sub> ppm	nC <sub>5</sub> ppm	C <sub>6</sub> + ppm	C <sub>1</sub> /C <sub>2</sub> +C <sub>3</sub> ratio	iC <sub>4</sub> /nC <sub>4</sub> ratio	C <sub>1</sub> /CO <sub>2</sub> ratio	δ <sup>13</sup> C <sub>1</sub> ‰
6/07/2008	16:24	120	36.6	6	219200	1300	779400	0	87	0.9	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	96.7		0.1	
6/07/2008	20:40	200	61.0	50	215700	1000	778200	0	5130	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5700.0		5.1	-60.6
6/08/2008	14:55	300	91.5	40	220700	500	775300	0	3480	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	4971.4		7.0	-59.6
6/08/2008	17:50	400	122.0	40	218300	540	776300	0	4860	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4860.0		9.0	-58.1
6/08/2008	22:05	510	155.5	930	193800	500	729100	0	76600	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28370.4		153.2	-58.5
6/09/2008	2:13	640	195.1	105	211200	510	776900	0	11400	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4956.5		22.4	-56.4
6/09/2008	3:30	700	213.4	290	214500	520	759500	0	25500	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8793.1		49.0	-57.4
6/09/2008	6:23	800	243.9	90	212700	540	778400	0	8320	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3466.7		15.4	-55.4
6/09/2008	11:45	900	274.4	76	211900	630	779900	0	7580	2.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	2707.1		12.0	-54.8
6/09/2008	21:51	1000	304.9	159	211200	450	774800	0	13500	1.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	9642.9		30.0	-53.4
6/10/2008	0:40	1100	335.4	173	203800	450	778800	0	16900	4.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	3449.0		37.6	-54.6
6/10/2008	3:53	1200	365.9	125	207900	500	779700	0	11900	5.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	2380.0		23.8	-54.2
6/10/2008	7:47	1300	396.3	192	205300	500	775800	0	18400	7.1	0.0	0.0	1.9	0.5	0.9	0.5	0.0	0.0	2591.5	0.6	36.8	-53.9
6/10/2008	14:00	1400	426.8	120	207400	620	780900	0	11100	3.9	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	2846.2		17.9	-53.2
6/10/2008	20:30	1500	457.3	194	206800	480	775300	0	17400	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3954.5		36.3	-53.4
6/11/2008	1:44	1600	487.8	127	208700	540	778800	0	12000	5.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	2181.8		22.2	-52.8
6/11/2008	8:22	1700	518.3	174	205400	600	778200	0	15800	12.2	0.0	0.0	0.5	0.2	0.0	0.2	0.0	0.0	1295.1		26.3	-52.3
6/12/2008	15:00	1800	548.8	180	212900	440	770800	0	15800	76.9	0.0	1.4	0.8	1.1	0.5	1.1	0.0	1.4	201.8	2.2	35.9	-49.4
6/12/2008	21:00	1900	579.3	138	208900	480	778200	0	12200	172.5	0.0	3.7	31.0	6.0	3.8	6.0	0.8	3.7	69.2	1.6	25.4	-48.3
6/13/2008	1:39	2000	609.8	125	207800	500	780100	0	11400	135.2	0.0	3.3	33.3	5.8	3.7	5.8	0.7	3.3	82.3	1.6	22.8	-47.6
6/13/2008	7:17	2100	640.2	154	205500	310	779700	0	14400	71.4	0.0	3.0	19.4	3.8	2.9	3.8	0.7	3.0	193.5	1.3	46.5	-47.3
6/13/2008	13:05	2200	670.7	153	207900	340	778800	0	12900	52.2	0.0	2.5	11.2	2.8	2.4	2.8	0.4	2.5	235.8	1.2	37.9	-48.3
6/13/2008	19:18	2300	701.2	119	207300	410	781800	0	10400	71.5	0.0	3.6	10.4	6.0	4.5	6.0	0.9	3.6	138.5	1.3	25.4	-48.1
6/14/2008	4:32	2400	731.7	113	210500	280	778600	0	10500	78.1	0.0	5.1	9.8	5.4	4.1	5.4	0.9	5.1	126.2	1.3	37.5	-47.4
6/14/2008	8:00	2450	747.0	102	210800	310	779300	0	9480	63.9	0.0	17.2	9.8	6.0	4.8	6.0	2.0	17.2	116.9	1.3	30.6	-47.0

Chemical analysis based on standards accurate to within 2%.