Data Source	Sample Name	Latitude	Longitude	Sample date	Sample Time	GC Analysis date	Mass Spectrometer Date	He %	H_2 %	Ar %	O_2 %	CO_2 %	N_2 %	CO %	C_1 %	C_2 %	C_1/C_2	C_1/ Higher Chain	C_1/ C_2	C_2H_4 %	C_3 %	iC_4 %	nC_4 %	iC_5 %	nC_5 %	C_6+ %	$\delta^{13}C_1$ ‰	δDC_1 ‰	$\delta^{13}C_2$ ‰	δDC_2 ‰	$\delta^{13}C_3$ ‰	$\delta^{13}iC_4$ ‰	$\delta^{13}nC_4$ ‰	$\delta^{13}iC_5$ ‰	$\delta^{13}nC_5$ ‰	$\delta^{15}N$ ‰	$\delta^{13}CO2$ ‰	Specific Gravity	BTU	* Helium Dilution Factor
DEP (ISOTECH)		41.730917	-75.877441	1/21/2009	-	1/27/2009	1/28/2009	0.0017	-	0.945	20.83	0.050	75.53	-	2.60	0.0410	63.4146	60.7477	63.4146	0	0.0018	0	0	0	0	0	-32.04	-170.3	-	-	-	-	-	-	-	-	-	0.989	27	-
DEP (ISOTECH)		41.730917	-75.877441	10/6/2010	11:47	10/25/2010	10/26/2010	0.0081	-	0.326	2.4	0.06	21.36	-	74.58	1.26	59.19048	59.10603899	59.19047619	0	0.0018	0	0	0	0	0	-33.20	-186.9	-34.69	-	-	-	-	-	-	-	-	0.665	778	-
CABOT (GEOMARK)		41.730917	-75.877441	11/13/2010	4:55	-	-	-	-	-	-	0.075765	45.756413	-	53.279851	0.886909	60.07364	60.00179173	60.0736389	0	0.000779	0.000016	0.000033	0.000014	0.000019	0.000201	-33.46	-169.82	-35.42	-	-	-	-	-	-	-	-	0.748	-	-
CEC (ISOTECH)		41.730917	-75.877441	11/13/2010	-	-	-	0.0173	-	0.441	0.23	0.06	26.67	-	71.23	1.35	52.76296	52.76296296	52.76296296	0	0	0	0	0	0	0	-32.04	-178.7	-35.21	-	-	-	-	-	-	-	-	0.676	746	-
DEP (ISOTECH)		41.730252	-75.878313	10/6/2010	11:51	10/25/2010	10/27/2010	-	-	0.725	12.5	0.17	42.87	-	42.77	0.968	44.18388	44.1291787	44.1838843	0	0.0012	0	0	0	0	0	-30.53	-176.8	-34.46	-	-	-	-	-	-	-	-	0.812	450	0.33
CABOT (GEOMARK)		41.730252	-75.878313	11/9/2010	11:22	-	-	-	-	-	-	0.143291	22.038614	-	76.434626	1.382587	55.28377	55.24852816	55.2837731	0	0.000784	0.000009	0.000011	0.000019	0.000021	3.8E-05	-33.1	-172	-34.30	-	-	-	-	-	-	-	-	0.653	-	-
CEC (ISOTECH)		41.730252	-75.878313	11/9/2010	-	-	-	0.018	-	0.345	0.16	0.13	17.76	-	79.98	1.6	49.9875	49.9875	49.9875	0	0	0	0	0	0	0	-31.51	-182.3	-35.00	-	-	-	-	-	-	-	-	0.64	839	-
CABOT (GEOMARK)		41.732188	-75.875646	11/2/2010	2:45	-	-	-	-	-	-	0.005143	16.456598	-	82.448278	1.079603	76.36907	75.64194055	76.36907085	0	0.009532	0.000031	0.000175	0.0001	0.000033	0.000507	-32.7	-159.61	-35.38	-	-	-	-	-	-	-	-	0.627	-	-
CEC (ISOTECH)		41.732188	-75.875646	11/12/2010	-	-	-	0.0225	-	0.28	0.072	0.01	14.99	-	83.46	1.15	72.57391	71.94827586	72.57391304	0	0.01	0	0	0	0	0	-31.24	-174.4	-34.77	-	-	-	-	-	-	-	-	0.624	867	-
DEP (ISOTECH)		41.7325	-75.87811	1/21/2009	-	1/27/2009	1/28/2009	0.0029	-	0.913	20.38	0.040	73.84	-	4.74	0.0828	57.24638	55.05226481	57.24637681	0	0.0033	0	0	0	0	0	-31.24	-174.1	-	-	-	-	-	-	-	-	-	0.98	50	-
CEC (ISOTECH)		41.72514	-75.87694	11/9/2010	-	-	-	-	-	1.31	0.93	0.340	78.66	-	18.59	0.17	109.3529	109.3529412	109.3529412	0	0	0	0	0	0	0	-32.85	-175.4	-32.99	-	-	-	-	-	-	-	-	0.899	191	0.5
DEP (ISOTECH)		41.739438	-75.880332	1/21/2009	-	1/27/2009	1/28/2009	0.0186	-	0.572	11.53	0.32	45.69	-	41.07	0.767	53.54628	51.49197593	53.54628422	0	0.0263	0	0.0020	0	0.0023	0	-31.08	-172.7	-	-	-	-	-	-	-	-	-	0.818	430	-
DEP (ISOTECH)		41.739438	-75.880332	10/6/2010	11:35	10/22/2010	10/27/2010	0.0058	-	0.897	19.88	0.26	73.96	-	4.92	0.0796	61.80905	60.815822	61.80904523	0	0.0013	0	0	0	0	0	-36.83	-216.0	-38.21	-	-	-	-	-	-	-	-	0.979	51	-
CABOT (GEOMARK)		41.739438	-75.880332	11/7/2010	5:00	-	-	-	-	-	-	1.148641	86.201376	-	12.428479	0.21938	56.65274	56.10950141	56.6527441	0	0.001974	0.00001	0.000029	0.000032	0.000006	7.3E-05	-38.2	-193.0	-37.30	-	-	-	-	-	-	-	-	0.922	-	-
CEC (ISOTECH)		41.739438	-75.880332	11/7/2010	-	-	-	-	-	0.554	1.16	3.44	26.58	-	66.94	1.31	51.09924	50.71212121	51.09923664	0	0.01	0	0	0	0	0	-36.51	-206.7	-37.70	-	-	-	-	-	-	-	-	0.714	702	0.64
DEP (ISOTECH)		41.747461	-75.881937	1/8/2009	-	1/13/2009	1/13/2009	0.0265	-	0.317	6.28	0.28	25.32	-	66.51	1.22	54.51639	52.60202468	54.51639344	0	0.0418	0	0.0026	0	0	0	-31.03	-173.1	-34.80	-	-	-	-	-	-	-0.10	-	0.705	697	-
DEP (ISOTECH)		41.745527	-75.883131	1/12/2009	-	1/15/2009	1/15/2009	0.0245	0	0.404	8.26	0.27	33.47	0	56.47	1.06	53.27358	51.45799162	53.27358491	0	0.0355	0	0.0019	0	0	0	-30.66	-178.7	-34.82	-	-	-	-	-	-	-	-	0.749	592	-
CEC (ISOTECH)		41.745527	-75.883131	11/21/2010	-	-	-	-	-	1.63	18.84	1.77	77.43	-	0.32	0.01	32	32	32	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	1.008	3	0.76
CEC (ISOTECH)		41.72897	-75.87761	11/20/2010	-	-	-	-	-	0.626	0.46	0.22	34.41	-	63.01	1.27	49.61417	49.61417323	49.61417323	0	0	0	0	0	0	0	-30.98	-173.6	-34.61	-	-	-	-	-	-	-	-	0.712	661	-
CABOT (GEOMARK)		41.726167	-75.876278	11/5/2010	2:30	-	-	-	-	-	-	0.177492	92.351943	-	7.443546	0.026275	283.2939	275.4930234	283.2938535	0	0.000661	0.00001	0.000002	0.000007	0.000001	6.3E-05	-39.2	-187	-30.20	-	-	-	-	-	-	-	-	0.937	-	-
CEC (ISOTECH)		41.726167	-75.876278	11/9/2010	-	-	-	-	-	0.98	2.38	0.33	57.37	-	38.8	0.14	277.1429	277.1428571	277.1428571	0	0	0	0	0	0	0	-38.35	-199.8	-35.99	-	-	-	-	-	-	-	-	0.816	396	0.38
DEP (ISOTECH)		41.73688	-75.85845	10/6/2010	12:30	10/25/2010	10/26/2010	0.0023	-	0.538	5.32	0.077	36.6	-	57.45	0.011	5222.727	5222.727273	5222.727273	0	0	0	0	0	0	0	-34.71	-194.6	-	-	-	-	-	-	-	-	-	0.74	582	-
DEP (ISOTECH)		41.73688	-75.85845	6/16/2010	10:17	8/25/2010	8/25/2010	0.001	-	0.906	19.9	0.05	75	-	4.27	0				0	0	0	0	0	0	0	-35.5	-195	-	-	-	-	-	-	-	-	-	0.981	43	-
DEP (ISOTECH)	Ex. 6 - Personal Privacy	41.735943	-75.859781	6/16/2010	11:25	8/25/2010	8/25/2010	0.006	-	0.919	20.4	0.04	76	-	2.13	0				0	0	0	0	0	0	0	-45.83	-276.8	-	-	-	-	-	-	-	-	-	0.99	22	-
DEP (ISOTECH)		41.737409	-75.859662	8/18/2010	10:20	8/25/2010	8/26/2010	0.015	0.0207	0.892	20.1	0.04	74	-	4.66	0.1	46.6	46.6	46.6	0	0	0	0	0	0	0	-46.83	-280.8	-	-	-	-	-	-	-	-	-	0.979	48	-
CABOT (GEOMARK)		41.737409	-75.859662	11/10/2010	5:05	-	-	-	-	-	-	0.070121	87.429089	-	12.281995	0.215525	56.98641	56.13471514	56.98640529	0	0.002745	0.000007	0.000127	0.000053	0.00002	0.000318	-46.44	-253.71	-41.90	-	-	-	-	-	-	-	-	0.917	-	-
CEC (ISOTECH)		41.737409	-75.859662	11/10/2010	-	-	-	-	-	0.202	0.53	0.12	7.98	-	89.37	1.77	50.49153	49.65	50.49152542	0	0.03	0	0	0	0	0	-45.72	-274.3	-41.81	-	-	-	-	-	-	-	-	0.602	938	0.52
DEP (ISOTECH)		41.744645	-75.879534	1/7/2009	-	1/13/2009	1/13/2009	0.0186	0.021	0.043	0.95	0.04	3.67	-	93	2.03	45.81281	43.60260678	45.81280788	0	0.1	0	0.0029	0	0	0	-29.91	-161.1	-35.92	-	-	-	-	-	-	-1.33	-	0.585	983	-
DEP (ISOTECH)		?	?	1/13/2009	-	1/13/2009	1/13/2009	0.0190	0.0222	0.0378	0.830	0.034	3.26	-	93.69	2.03	46.15271	44.54852361	46.15270936	0	0.07	0	0.0031	0	0	0	-29.96	-161.1	-35.87	-	-	-	-	-	-	-	-	0.583	988	-
DEP (ISOTECH)		41.682514	-75.936428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-27.62	-157.9	-	-	-	-	-	-	-	-	-	-	-	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/3/2011	19:12	-	-	-	0	-	-	2.66	-	-	89.45	3.48	25.70402	11.33713561	25.70402299	0	2.29	0.25	1.12	0.24	0.29	0.22	-29.8	-172	-36	-	-32.1	-	-	-	-	-	-	0.6542	1099.2	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/6/2011	17:00	-	-	-	0.0842	-	-	0.14	-	-	87.77	3.61	24.31302	23.85054348	24.31301939	0	0.07	0	0	0	0	0	-22.5	-167	-33.3	-	-	-	-	-	-	-	-	0.5326	979.3	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/3/2011	20:45	-	-	-	0	-	-	0.51	-	-	94.76	4.48	21.15179	20.07627119	21.15178571	0	0.16	0.01	0.04	0.01	0.01	0.01	-22.7	-166	-36.6	-	-34.2	-	-	-	-	-	-	0.5835	1043.4	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/6/2011	17:05	-	-	-	0	-	-	0.17	-	-	88.53	11.14	7.947038	7.841452613	7.947037702	0	0.15	0	0	0	0	0	-2.9	-163	-31.7	-	-34.1	-	-	-	-	-	-	0.6111	1095.3	-
CABOT (WEATHERFORD)	5)	41.653575	-75.867589	8/3/2011	22:24	-	-	-	0	-	-	0.43	-	-	95.81	3.71	25.8248	25.48138298	25.82479784	0	0.05	0	0	0	0	0	-22.4	-162	-34.9	-	-35.3	-	-	-	-	-	-	0.5765	1034.7	-
CABOT (WEATHERFORD)	5)	41.653575	-75.867589	8/6/2011	17:08	-	-	-	0	-	-	0.11	-	-	88.49	11.21	7.893845	7.762280702	7.893844781	0	0.19	0	0	0	0	0	-5.1	-162	-32.1	-	-34.1	-	-	-	-	-	-	0.6112	1097	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/4/2011	17:36	-	-	-	0	-	-	0.2	-	-	96.55	3.19	30.26646	29.79938272	30.26645768	0	0.05	0	0	0	0	0	-24.3	-171	-34.9	-	-	-	-	-	-	-	-	0.5719	1033	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/6/2011	22:13	-	-	-	0	-	-	0.09	-	-	92.96	6.87	13.5313	13.33715925	13.53129549	0	0.08	0	0	0	0	0.02	-2.8	-159	-31.6	-	-	-	-	-	-	-	-	0.5889	1062.5	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/4/2011	19:07	-	-	-	0	-	-	0.18	-	-	96.19	3.52	27.3267	26.64542936	27.32670455	0	0.09	0	0	0	0	0	-27.3	-163	-35.5	-	-35.4	-	-	-	-	-	-	0.574	1036.9	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/6/2011	22:15	-	-	-	0	-	-	0.12	-	-	91.34	8.37	10.91278	10.72065728	10.91278375	0	0.15	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	0.5972	1074.9	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/4/2011	20:13	-	-	-	0	-	-	0.3	-	-	96.14	3.51	27.39031	27.00561798	27.39031339	0	0.05	0	0	0	0	0	-25.4	-168	-35.9	-	-35.8	-	-	-	-	-	-	0.5743	1034.4	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/6/2011	22:17	-	-	-	0	-	-	0.15	-	-	90.52	9.21	9.828447	9.691648822	9.82844734	0	0.13	0	0	0	0	0	-8.2	-162	-31.9	-	-	-	-	-	-	-	-	0.6012	1080.4	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/4/2011	21:20	-	-	-	0	-	-	0.62	-	-	93.33	5.95	15.68571	15.45198675	15.68571429	0	0.09	0	0	0	0	0	-21.6	-165	-34.7	-	-34.7	-	-	-	-	-	-	0.5897	1050.3	-
CABOT (WEATHERFORD)		41.653575	-75.867589	8/8/2011	23:54	-	-	-	0	-	-	0.15	-	-	85.36	14.25	5.990175	5.890959282	5.990175439	0	0.24	0	0	0	0	0	-8.1	-158	-31.6	-	-33.9	-	-	-	-	-	-	0.6267	1120.5	-