APPENDIX D - ROCK-EVAL ANALYSES

Measured parameters for Rock-Eval-6

Parameter	Units	Mode	Description
S1	Mg HC/g rock	Pyrolysis	Free hydrocarbons
S2	Mg HC/g rock	Pyrolysis	Oil generation potential
Tpeak	°C	Pyrolysis	Temperature for S2 maximum release
S3	mgCO_2/g rock	Pyrolysis	CO_2 from organic source
S3CO	mgCO/g rock	Pyrolysis	CO from organic source
S4CO_2	mgCO_2/g rock	Oxidation	CO_2 from organic source
S4CO	mgCO/g rock	Oxidation	CO from organic source
S5	mgCO_2/g rock	Oxidation	CO_2 from mineral source
S5CO	mgCO/g rock	Oxidation	CO from mineral source

Calculated parameters from Rock-Eval-6

Parameter	Unit	Formula	Name
Tmax	°C	Calculated from TpS2-	Tmax
PI		S1/(S1+S2)	Production Index
PC	Wt %	Calculated from S1, S2, S3, S3CO, S3'CO	Pyrolysable organic carbon
RC CO	Wt %	Calculated from S4CO	Residual organic carbon (CO)
RC CO_2	Wt %	Calculated from S4CO_2	Residual organic carbon (CO_2)
RC	Wt %	RC CO + RC CO_2	Residual organic carbon
TOC	Wt %	PC + RC	Total organic carbon
HI	Mg HC/g TOC	S2*100/TOC	Hydrogen Index
OI	Mg CO_2/g TOC	S3*100/TOC	Oxygen Index
OI CO	Mg CO/g TOC	S3CO*100/TOC	Oxygen Index CO
MinC	Wt %	pyroMinC + oxiMinC	Mineral Carbon

Table D1. Rock-Eval-6 analyses for samples collected from Coal River area (NTS 95D).

Sample	UTM E (m)	UTM N (m)	UTM Zone	Rock Type	Unit	Qty (mg)	S1 (mg HC/g rock)	S2 (mg HC/g rock)	PI	S3	Tmax (°C)	Tpeak (°C)	S3CO (mg CO/g rock)	PC (wt %)	TOC (wt %)	RC (wt %)	HI (mg HC/g TOC)	OICO (mg CO/g TOC)	OI	MinC (wt %)	S4CO	S4CO_2	RCCO (wt %)	RCCO_2 (wt %)
9107					**standard**	70.7	0.73	12.13	0.06	0.51	441	478	0.21	1.10	5.10	4.00	238	4	10	4.3	18.6	117.3	0.800	3.20
09CYA010-1	579 525	6 708 840	9N	black silty shale	SDRR	70.3	0.02	0.06	0.22	1.04	610	647	0.05	0.04	1.77	1.73	3	3	59	6.0	7.9	51.0	0.340	1.39
09LP039-2	579 916	6 716 388	9N	black silty shale	SDRR	70.4	0.00	0.00	0.70	0.18	296	333	0.00	0.00	0.18	0.18	0	0	100	0.0	0.9	5.3	0.040	0.14
09LP074-1	623 195	6 684 500	9N	black silty shale	SDRR	70.0	0.00	0.00	0.18	0.42	480	517	0.02	0.01	0.28	0.27	0	7	150	11.9	0.6	9.2	0.020	0.25
09LP058-1	559 154	6 658 253	9N	limestone	SDRR contaminated	70.5	0.01	0.10	0.08	0.52	389	426	0.13	0.03	1.08	1.05	9	12	48	0.1	4.0	32.1	0.170	0.88
9107					**standard**	70.9	0.67	11.78	0.05	0.49	441	478	0.24	1.07	5.07	4.00	232	5	10	4.3	18.3	117.9	0.780	3.22
09LP062-1	617 826	6 683 313	9N	silty shale	SDRR	70.5	0.01	0.01	0.32	0.32	485	522	0.02	0.01	0.27	0.26	4	7	119	13.0	0.8	8.4	0.030	0.23
09RAS106-1	647 762	6 668 800	9N	black silty shale	DMBR	70.8	0.01	0.06	0.13	1.64	516	553	0.26	0.07	3.69	3.62	2	7	44	0.2	12.7	112.5	0.550	3.07
09LP093-2	658 912	6 734 865	9N	black silty shale	SMRB	70.7	0.01	0.01	0.34	1.22	503	540	0.19	0.05	2.27	2.22	0	8	54	0.1	6.3	71.6	0.270	1.95
09LP077-1	657 060	6 712 865	9N	mudstone	SMRB	50.2	0.01	0.02	0.20	1.99	500	537	0.31	0.08	7.36	7.28	0	4	27	0.2	31.3	217.8	1.340	5.94
9107					**standard**	70.6	0.72	12.11	0.06	0.50	442	479	0.19	1.10	5.02	3.92	241	4	10	4.4	18.3	115.0	0.780	3.14
10TOA035	559 765	6 660 180	9N	black silty shale	SDRR	70.0	0.01	0.02	0.44	2.48	412	451	0.67	0.12	3.49	3.37	1	19	71	0.4	12.3	104.1	0.530	2.84
9107					**standard**	70.7	0.63	11.89	0.05	0.47	441	480	0.16	1.07	5.04	3.97	236	3	9	4.4	18.4	116.6	0.790	3.18