

DGS SAMPLE NO.	FORMATION	AGE	LOCATION	QUADRANGLE	LAT	LONG	INDICATORS OF ORGANIC CONTENT				THERMAL MATURITY			INDICATORS OF KEROGEN TYPE					COMMENTS					
							TOC	S1	S2	S3	Ro	T Max	TAI	S1/TOC	HI	OI	S2/S3	PI		% Lipids	% solid bitumen	% Humic & other	Pristane/ phytane	Probable kerogen type
APTIAN-ALBIAN STRATA																								
NANUSHUK GROUP--TOROK FORMATION																								
96 Mu 18	Nanushuk Group (Corwin Fm.)	Albian	Tupikchak syncline	DeLong Mtn D1	68.961	-162.529	1.38	0.05	0.40	0.80	0.65	448	n.d.	4	41	58	0.70	0.08	15	85				
96 Mu 12	Torok Fm., top	Aptian/Albian?	Kukpowruk River	DeLong Mtn D2	68.773	-163.155	1.12	0.09	0.43	0.63	1.04	471	n.d.	8	38	56	0.68	0.17	5	95				
96 Mu 5	Torok Fm. upper (?)	Aptian/Albian?	NW of Poko Mtn	DeLong Mtn D1	68.883	-162.512	1.78	0.10	0.44	0.78	0.90	467	n.d.	6	25	44	0.56	0.19	10	90				
96 Ha 9	Torok Fm.	Probable Aptian	W of Surprise Ck.	DeLong Mtn D2	68.853	-162.953	0.86	0.03	0.28	0.31	1.04	451	3 -	3	33	36	0.90	0.10	65	35				
96 Ha 11	Torok Fm.	Probable Aptian	W of Surprise Ck.	DeLong Mtn D2	68.853	-162.937	1.09	0.08	0.37	0.37	1.29	463	2 +, 3	7	34	34	1.00	0.18	15	85		Some recycled vitrinite		
96 Ha 14	Torok Fm.	Probable Aptian	W of Surprise Ck.	DeLong Mtn D2	68.801	-162.765	1.12	0.06	0.90	0.78	1.33	478	2 +, 3 2 +, 3	5	36	70	0.51	0.13	20	80				
96 Ha 15	Torok Fm.	Probable Aptian	W of Surprise Ck.	DeLong Mtn D2	68.833	-162.783	0.99	0.11	0.34	0.27	1.19	472	nd 3 -	11	34	27	1.26	0.24	25	75				
96 Ha 18	Torok Fm.	Probable Aptian	W of Surprise Ck.	DeLong Mtn D2	68.854	-162.888	1.16	0.10	0.45	0.40	71.42	470	nd	9	39	34	1.13	0.18	10	90		Lipid-rich vitrinite & recycled vitrinite		
93 Mu 101	Torok Fm.	Aptian	Eagle Creek	DeLong Mtn C2	68.739	-162.896	1.30	0.31	0.41	0.34	1.47	479	3.0	24	32	26	1.21	0.43	55	45	2.4	Type III	Highly mature gas source	
93 Mu 88-1	Torok Fm.	Aptian	Tingmerkpuk River	DeLong Mtn C1	68.686	-162.258	1.06	0.15	0.36	0.06	1.19	475	3-, 3	14	34	6	6.00	0.29	55	45				
96 Mu 35-4	Torok Fm.	Aptian/Albian?	Thetis Ridge	DeLong Mtn C5	68.685	-164.595	0.96	0.05	0.43	0.39	0.61	440	3 2+	5	45	41	1.10	0.10	25	75				
96 Mu 14	Torok Fm.	Possible Aptian	Driftwood anticline, south flank	Misheguk Mtn D4	68.837	-161.271	0.88	0.25	0.47	0.27	0.89	459	n.d.	28	53	31	1.74	0.35	15	85				
LOWER BROOKIAN (MT. KELLY GRAYWACKE)																								
96 Ha 25	Lower Brookian	Probable Aptian	Spike/Illigluk Creek	Misheguk Mtn C5	68.694	-161.759	1.07	0.06	0.26	0.37	1.65	496	n.d.	6	24	35	0.70	0.19	35	65				
96 Ha 66	Lower Brookian	Probable Aptian	Spike Creek	Misheguk Mtn C5	68.620	-161.799	1.25	0.10	0.52	0.59	71.20	473	3 -	8	42	47	0.88	0.16	30	70				
96 TM 29-B	Lower Brookian	Aptian/Albian?	Illigluk Creek	Misheguk Mtn C5	68.699	-161.727	1.12	0.06	0.34	0.43	1.72	499	n.d.	5	30	38	0.79	0.15	10	90				
96 TM 56-A	Lower Brookian	Aptian/Albian?	Illigluk Creek	Misheguk Mtn C5	68.660	-161.512	0.45	0.05	0.07	0.39	1.72	498	n.d.	11	16	87	0.18	0.42	20	80				
96 Ha 58	Lower Brookian	Probable Aptian	Upper Pitmegea River	DeLong Mtn C4	68.622	-163.836	0.90	0.02	0.24	0.32	1.67	499	n.d.	2	27	36	0.75	0.08	10	90				
96 Mu 30-2	Poss. lower Brookian	Prob. Aptian to Albian	Pitmegea tributary	DeLong Mtn C4	68.634	-163.861	1.12	0.04	0.39	0.28	0.74	446	n.d.	4	35	25	1.39	0.09	10	90				
96 Ha 49	Torok Fm. (?)	Probable Aptian	NE of Thetis Ridge	DeLong Mtn C5	68.711	-164.496	1.23	0.04	0.34	0.57	1.18?	421	n.d. 2 +	3	28	46	0.60	0.11	20	80		Lipid-rich & recycled vitrinite		
96 Ha 45	Torok Fm. (?)	Possible Hauterivian	NE of Thetis Ridge	DeLong Mtn C5	68.694	-164.541	1.15	0.06	0.51	0.61	1.20	460	3 -	5	44	53	0.84	0.11	20	80				
94 Mu 43-16	Lower Brookian	Hauterivian	Tingmerkpuk River measured section	DeLong Mtn C1	68.562	-162.376	1.80	0.08	0.70	0.62	1.29	469	3-, 3	4	39	34	1.13	0.10	70	30				
NEOCOMIAN STRATA																								
96 Mu 33-5	Pebble Shale	No older than Hauterivian	Thetis Creek	DeLong Mtn C5	68.672	-164.780	18.65	0.77	52.11	0.84	0.96? B Ro 1.03	435	3 -	4	279	5	62.04	0.01	30	60	1.9	Type II	Excellent mature oil-prone source rock. Contains lipid-rich vitrinite. Sample contains solid bitumen and frequent floating quartz grains. See biomarker report.	
96 Mu 35-2	Pebble Shale	Poss. Hauterivian forams, prob Aptian-Albian paly	Thetis Ridge	DeLong Mtn C5	68.681	-164.609	12.86	0.75	60.09	1.48	70.75	434	3 -	6	467	12	40.60	0.01	90	10	2.7	Type I	Excellent mature oil-prone source rock. Contains common floating quartz grains.	
94 Mu 72-1	Pebble Shale	Prob. Neocomian (undifferentiated)	Ipevik River	DeLong Mtn C5	68.595	-164.425	22.34	3.72	142.99	1.46	70.69	431	2+, 3-	17	640	7	97.94	0.03	90	10	3.0	Type I	Excellent mature oil-prone source rock. Resampled locality. Contains 2 ammonite fragments. Floating quartz grains. See biomarker report.	
93 Mu 87	Lower Brookian	Hauterivian-Barreman	Upper Eagle Creek	DeLong Mtn C1	68.514	-162.551	1.81	0.23	0.55	0.52	1.47	483	3 -	13	30	29	1.06	0.29	65	5	30			
93 Mu 93	Lower Brookian	Hauterivian-Barreman	Tingmerkpuk Mtn., south side	DeLong Mtn C1	68.554	-162.419	1.69	0.26	0.76	0.26	1.17	469	3 -	15	45	15	2.92	0.25	70	5	25	1.3	Mixed type II / III	Highly mature low yield oil and gas source. T Max unreliable because of low S2 peak.
94 Mu 43-1	Lower Brookian	Valanginian	Tingmerkpuk River measured section	DeLong Mtn C1	68.562	-162.376	0.43	0.01	0.07	0.22	1.78	504	3	2	16	51	0.32	0.13	60	40				
93 RKC 22-153-B	Tingmerkpuk Ss.	Neocomian	Tingmerkpuk Mtn. measured section	DeLong Mtn C1	68.567	-162.463	1.19	0.04	0.26	0.03	1.57	465	3 -	3	22	3	8.67	0.13	55	5	40	2.0	Mixed type II / III Oil and gas source	Highly mature low yield oil and gas source. T Max unreliable because of low S2 peak.
93 RKC 22-138-B	Tingmerkpuk Ss.	Valanginian	Tingmerkpuk Mtn. measured section	DeLong Mtn C1	68.567	-162.463	1.27	0.08	0.41	0.13	1.57	453	3 -	6	32	0	0.00	0.16	65	5	30			
93 RKC 22-72-B	Tingmerkpuk Ss.	Valanginian	Tingmerkpuk Mtn. measured section	DeLong Mtn C1	68.567	-162.463	1.32	0.05	0.41	0.08	1.46	455	2+, 3- 2+	4	31	0	0.00	0.11	65	5	30			
93 RKC 22-43-B	Tingmerkpuk Ss.	Valanginian	Tingmerkpuk Mtn. measured section	DeLong Mtn C1	68.567	-162.463	1.50	0.07	0.31	0.13	1.43	476	2+, 3-	5	21	9	2.38	0.11	75	5	20			
93 RKC 22-36-B	Kingak Shale, top	Neocomian	Tingmerkpuk Mtn. measured section	DeLong Mtn C1	68.567	-162.463	1.84	0.08	0.56	0.04	1.43	468	2+, 3- 2+	4	30	2	14.00	0.13	70	5	25	5.1	Mixed type II / III Oil and gas source	Highly mature low yield oil and gas source. T Max unreliable because of low S2 peak.
93 RKC 22-12-B	Kingak Shale, upper	Neocomian	Tingmerkpuk Mtn. measured section	DeLong Mtn C1	68.567	-162.463	0.18	0.01	0.01	0.03	-	477	-	6	6	17	0.33	0.50						
93 Mu 84	Kingak Shale	Neocomian	Tingmerkpuk Mtn., southwest side	DeLong Mtn C1	68.559	-162.468	0.41	0.01	0.00	0.11	-	449	2.5-3.0	2	0	27	0.00	1.00						
93 Mu 104	Kingak Shale	Neocomian	Kukpowruk River	DeLong Mtn C2	68.506	-162.883	0.36	0.03	0.05	0.06	-	426	3.5?	8	14	17	0.83	0.38						
93 Mu 104-6	Kingak Shale	Neocomian	Kukpowruk River	DeLong Mtn C2	68.505	-162.883	0.14	0.01	0.00	0.02	-	296**	-	7	0	14	0.00	1.00						
94 Mu 65-A	Kingak Shale	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	1.38	0.07	0.38	0.64	1.14	464	3 -, 2 +	5	28	46	0.59	0.16	20	80			Some lipid-rich vitrinite & recycled vitrinite	
94 Mu 65-U1	Kingak Sh. limestone coquina	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	0.16	0.01	0.00	0.24	-	-	3	6	0	150	0.00	1.00	T	T				
94 Mu 65-U3	Kingak Sh. limestone coquina	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	0.23	0.02	0.00	0.18	1.72?	-	3 +	9	0	78	0.00	1.00	T	T				
94 Mu 65-U8	Kingak Sh. limestone coquina	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	0.10	0.02	0.02	0.10	-	276**	-	20	20	100	0.20	0.50	T	T				
94 Mu 65-U2J	Kingak Sh. limestone coquina	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	0.14	0.01	0.00	0.14	-	-	2+, 3	7	0	100	0.00	1.00	T	T				
94 Mu 65-U19	Kingak Sh. limestone coquina	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	0.06	0.00	0.00	0.17	-	-	2 +	0	0	283	0.00	-	90	10				
94 Mu 65-U28	Kingak Sh. limestone coquina	Valanginian	Thetis Creek measured section	DeLong Mtn C5	68.651	-164.751	0.20	0.03	0.00	0.11	-	-	-	15	0	55	0.00	1.00	T	T				
96 Mu 28-3	Kingak Sh. limestone coquina	Valanginian	Upper Ipevik River measured section	DeLong Mtn C3	68.554	-163.696	0.12	0.00	0.00	0.22	? 1.82	-	nd	0	0	183	0.00	-	T	T				
96 Mu 28-4	Kingak Sh. limestone coquina	Valanginian	Upper Ipevik River measured section	DeLong Mtn C3	68.554	-163.696	0.11	0.01	0.00	0.11	-	-	3	9	0	100	0.00	1.00	T	T				
96 Mu 28-6	Kingak Sh. limestone coquina	Valanginian	Upper Ipevik River measured section	DeLong Mtn C3	68.554	-163.696	0.24	0.02	0.00	0.42	1.87	-	3 +	8	0	175	0.00	1.00	30	70				
NEOCOMIAN-JURASSIC STRATA																								
96 Mu 57-4	Kingak Shale	Cretaceous/Jurassic undifferentiated	Kukpowruk River	DeLong Mtn C2	68.529	-163.266	2.94	0.11	5.23	0.39	71.08	437	2+, 3-	4	178	13	13.41	0.02	80	10	10			
96 Ha 37	Kingak Shale	Late Jurassic to Early Cretaceous	Pitmegea tributary	DeLong Mtn C4	68.608	-163.857	2.92	0.10	0.86	0.56	1.81	497	3-, 3+ 3+	3	29	19	1.54	0.10	80	15	5			
96 Mu 33-1	Kingak Shale	Indeterminate	Thetis Creek	DeLong Mtn C5	68.667	-164.768	4.22	0.09	7.48	0.14	70.77	438	2+	2	177	3	53.43	0.01	85	5	10			
96 Mu 33-7	Kingak Shale	Late Jurassic (Oxfordian)	Thetis Creek	DeLong Mtn C5	68.672	-164.780	3.12	0.09	4.09	0.43	B ? 0.99	439	2 +	3	131	14	9.51	0.02	75	20	5		Sample contains solid bitumen	
96 Mu 52-1	Kingak Shale	Late Jurassic (?)																						