

Porosity, permeability, and grain density determinations of the following Late Jurassic - Neocombian North Slope well and surface samples:

Amerada Hess Corp. Northstar No.1 well, core (9065'-9190');

ARCO Alaska Inc. Kuparuk River Unit 2X-2 well, core (6259'-6374');

ARCO Alaska Inc. Prudhoe Bay Unit DS2-14 well, core (8930'-8952');

Standard Alaska Production Co. Niakuk No.1-A well, core (9529'-10855');

Mobil Oil Corp. North Kuparuk State 26-12-12 well, core (6857'-6869');

Shell Oil Company West Mikkelsen Unit No.4 well, core (11322'-11659');

Standard Alaska Production Co. Ugnu No.1 well, core (6178' & 6192');

Sohio Alaska Petroleum Co. OCS Y-0334-1 (Mukluk No.1) well, core (7378'-7405');

Standard Alaska Production Co. Sag Delta No.8 well, core (9922'-9977.8');

Tenneco Oil Co. OCS Y-0338-1 (Phoenix No.1) well, core (7695'-7713');

Husky Oil NPR Operations Inc. (U.S.G.S.) Kuyanak No.1 well, core (5093.5'-5164.5');

Husky Oil NPR Operations Inc. (U.S.G.S.) Walakpa No.1 well, core (2064.8'-2077.1'); and

27 Kemik Sandstone ANWR surface samples collected by C.G. Mull of the State of Alaska Div. Geological & Geophysical Surveys in 1976, 1980, and 1984.

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SUMMARY OF CORE ANALYSIS RESULTS
NORTH SLOPE WELLS

Core Depth (ft)	Stratigraphic Unit	Ambient Porosity (%)	Ambient Air K (md)	In-situ Klinkenberg Permeability (md)	Grain Density (g/cc)
Amerada Hess Northstar #1					
9065	Kuparuk Fm.	18.4	151	98	2.63
9092	Kuparuk Fm.	14.1	68.7	48.9	2.62
9093	Kuparuk Fm.	16.2	149	98.1	2.66
9096	Kuparuk Fm.	15.4	32.2	24.9	2.65
9098	Kuparuk Fm.	14.9	10.8	8.01	2.62
9112	Kuparuk Fm.	9.0	0.213	0.0238	2.64
9140	Kuparuk Fm.	8.5			2.65
9158	Kuparuk Fm.	17.5	17.9	6.61	2.66
9159	Kuparuk Fm.	16.7	19.1	6.87	2.70
9162	Kuparuk Fm.	17.1	12.1	7.44	2.65
9190	Kuparuk Fm.	18.9	109	68.9	2.66
ARCO Kuparuk River Unit #2X2					
6259	Kuparuk Fm.	1.5			3.29
6296	Kuparuk Fm.	31.8			3.05
6301	Kuparuk Fm.	28.2			3.06
6303	Kuparuk Fm.	14.0			3.07
6308	Kuparuk Fm.	21.5			2.95
6317	Kuparuk Fm.	16.8			3.14
6323	Kuparuk Fm.	25.8			3.03
6330	Kuparuk Fm.	20.8			2.79
6335	Kuparuk Fm.	4.8			3.14
6368	Kuparuk Fm.	7.7			3.24
6371	Kuparuk Fm.	21.3			2.77
6372	Kuparuk Fm.	30.1			2.88
6373	Kuparuk Fm.	30.5			2.86
6374	Kuparuk Fm.	28.3			2.84
ARCO PBU DS 2-14					
8930	Put River Ss.	16.0			2.71
8933	Put River Ss.	17.4			2.76
8935	Put River Ss.	27.1			2.79
8941	Put River Ss.	27.9			2.68
8947	Put River Ss.	19.9			2.74
8952	Put River Ss.	15.6			3.03
BP Niakuk #1-A					
9529	Kuparuk Fm.	22.7			2.68
9532	Kuparuk Fm.	25.3			2.70
9535	Kuparuk Fm.	23.5			2.78
9535	Kuparuk Fm.	19.6			2.75
9538	Kuparuk Fm.	24.1			2.76
9540	Kuparuk Fm.	26.5			2.77
9543	Kuparuk Fm.	29.1			2.79
9548	Kuparuk Fm.	31.8			2.87
9551	Kuparuk Fm.	27.3			2.70
9555	Kuparuk Fm.	27.6			2.74
9560	Kuparuk Fm.	27.5			2.78
9562	Kuparuk Fm.	25.7			2.69
9568	Kuparuk Fm.	22.5			2.70
9576	Kuparuk Fm.	17.6			2.80
9579	Kuparuk Fm.	24.6			2.77
9580	Kuparuk Fm.	23.1			2.70
9581	Kuparuk Fm.	22.3			2.71
9587	Kuparuk Fm.	21.3			2.93
10804	Sag River Ss.	20.2			2.74
10810	Sag River Ss.	19.2			2.78
10826	Sag River Ss.	18.6			2.73
10834	Sag River Ss.	18.3			2.76

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10848	Sag River Ss.	14.5			2.76
10855	Sag River Ss.	13.6			2.76
Mobil N. Kuparuk State #1					
6857	Kuparuk Fm.	15.8			2.64
6861	Kuparuk Fm.	21.0			2.71
6869	Kuparuk Fm.	14.5			2.60
Shell W. Mikkelsen Bay #4					
11322	Kekituk Cgl.	9.6			2.55
11396	Kekituk Cgl.	9.9			2.61
11478	Kekituk Cgl.	12.9			2.64
11560	Kekituk Cgl.	17.3			2.71
11624	Kekituk Cgl.	13.8			2.70
11659	Kekituk Cgl.	17.5			2.70
Sinclair Ugnu #1					
6178	Kuparuk Fm.	14.8			2.68
6192	Kuparuk Fm.	23.1			2.77
Sohio OCS-Y-0334 #1 (Mukluk)					
7378	Ivishak Ss.	19.6			2.67
7382	Ivishak Ss.	23.8			2.65
7389	Ivishak Ss.	24.5			2.59
7397	Ivishak Ss.	16.6			2.52
7405	Ivishak Ss.	21.0			2.59
Sohio Sag Delta #8					
9922.0	Kuparuk Fm.	18.9	89.8	67.1	2.65
9925.8	Kuparuk Fm.	16.3	68.7	53.2	2.64
9932.3	Kuparuk Fm.	18.3	52.3	39.7	2.64
9938.4	Kuparuk Fm.	15.2	17.7	14.3	2.64
9941.4	Kuparuk Fm.	18.4	87.4	65.6	2.63
9945.8	Kuparuk Fm.	8.3	12.2	8.91	2.64
9947.1	Kuparuk Fm.	11.1	0.812	0.299	2.65
9955.4	Kuparuk Fm.	16.3	22.2	17.5	2.63
9958.4	Kuparuk Fm.	12.9	1.32	0.555	2.65
9960.1	Kuparuk Fm.	14.7	3.52	2.33	2.64
9974.2	Kuparuk Fm.	13.6	0.753	0.395	3.09
9977.8	Kuparuk Fm.	11.6	0.701	0.333	2.64
Tenneco OCS-Y-0338 #1 (Phoenix)					
7695	Sag River Ss.	7.1			2.60
7701	Sag River Ss.	16.4			2.62
7704	Sag River Ss.	15.8			2.78
7713	Sag River Ss.	25.8			2.70
U.S.G.S./NPR Husky Oil Kuyanak #1					
5093.5	Simpson Ss.	15.2	0.761	0.346	2.84
5099.5	Simpson Ss.	19.8	14.2	9.45	2.68
5104.5	Simpson Ss.	19.9	30.8	20.4	2.66
5108.5	Simpson Ss.	19.7	31.6	33.4	2.64
5114.5	Simpson Ss.	21.7	37.1	24.3	2.66
5128.5	Simpson Ss.	20.7	38.5	30.4	2.65
5139.5	Simpson Ss.	21.9	74.1	42.5	2.64
5142.5	Simpson Ss.	20.6	41.8	30.5	2.64
5153.2	Simpson Ss.	20.0	22.6	17.9	2.64
5160.5	Simpson Ss.	18.1	18.5	14.9	2.65
5164.5	Simpson Ss.	2.1			2.69

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U.S.G.S./NPR Husky Oil Walakpa #1					
2064.8	Walakpa Ss.	15.7			2.67
2065.4	Walakpa Ss.	21.6	31.2	23.9	2.66
2066.2	Walakpa Ss.	20.4	13.4	11.3	2.66
2073.0	Walakpa Ss.	19.1	10.9	8.71	2.65
2077.1	Walakpa Ss.	22.0	22.8	19.4	2.69
ANWR 76 AMu 11-3	Kemik Ss.	10.7	0.033	0.0052	2.68
ANWR 76 AMu 11-3 Ss	Kemik Ss.	8.7	0.437	0.0971	2.65
ANWR 76 AMu 11-3 Cgl	Kemik Ss.	7.2			2.64
ANWR 76 AMu 12-5	Kemik Ss.	3.4	0.064	0.0046	2.66
ANWR 76 AMu 15	Kemik Ss.	7.0			2.66
ANWR 76 AMu 30	Kemik Ss.	1.1			2.72
ANWR 76 AMu 31-2	Kemik Ss.	6.1	0.0377	0.0028	2.65
ANWR 76 AMu 32a	Kemik Ss.	7.2	0.048	0.0082	2.66
ANWR 76 AMu 32b	Kemik Ss.	7.2			2.84
ANWR 76 AMu 33Ss	Kemik Ss.	2.3	0.0166	0.00071	2.66
ANWR 76 AMu 33Cgl	Kemik Ss.	4.3			2.66
ANWR 76 AMu 69	Kemik Ss.	3.3	0.0192	0.0007	2.64
ANWR 76 AMu 72	Kemik Ss.	3.3	0.0257	0.0016	2.65
ANWR 76 AMu 108	Kemik Ss.	3.0	0.00905	0.00022	2.73
ANWR 76 AMu 116	Kemik Ss.	8.4	0.0245	0.0028	2.64
ANWR 76 AMu 117	Kemik Ss.	11.0	0.0157	0.0012	2.65
ANWR 76-78 AMu 12-5	Kemik Ss.	2.9			2.63
ANWR 80 AMu 3-4Ss	Kemik Ss.	2.7	0.0427	0.0012	2.66
ANWR 80 AMu 3-4Cgl	Kemik Ss.	2.1	0.0141	0.0005	2.66
ANWR 80 AMu 13-5	Kemik Ss.	6.4			2.66
ANWR 80 AMu 14-1a	Kemik Ss.	3.9	0.0068	0.0003	2.79
ANWR 80 AMu 14-8	Kemik Ss.	5.8	0.0356	0.0021	2.66
ANWR 80 AMu 14-10c	Kemik Ss.	6.3			2.75
ANWR 80 AMu 15-3	Kemik Ss.	9.4			2.57
ANWR 80 AMu 19-2	Kemik Ss.	8.1			2.65
ANWR 80 AMu 27-6	Kemik Ss.	10.7			2.72
ANWR 84 AMu 113-6	Kemik Ss.	4.2	0.0146	0.0015	2.65