

**Table OA10. Oil type summary for oil seeps, stains and oils**

Sample Identification	Depth (ft)	Formation	Additional Information	Oil Type	Tally			Biodeg.	δ <sup>13</sup> C Arom	δ <sup>13</sup> C Sat	V//V+Ni	Sulfur	Sats/Arom	% HC	C19/C23 Tri	C24Tet / C23 Tri	Ts/Tm	
					P	J	M											
1	1 W. Mikkelsen	11359	Lisburne	oil stained rock - Flow test #4	P	8.5	3.0	0.5		P			P	P/J	P/J	P/J	P/M	
2	1 W. Mikkelsen	11705	Lisburne	oil stained rock - open hole DST	P	8.5	3.0	0.5		P			P	P/J	P/J	P/J	P/M	
3	13-9-19 Mikkelsen Bay	10468	Canning	oil - DST#7- 45bbbls 30°API	P	10.0	3.5	0.5		P	P	P	P	P/J	P/J	P/J	P/M	
4	13-9-19 Mikkelsen Bay	11870	Lisburne	oil - DST#4 - 8bbbls	P-12	9.5	4.0	0.5		P	J	P	P	P/J	P/J	P/J	P/M	
5	2 W. Mikkelsen	10501	Canning	oil stained sst - DST	P	7.0	4.0	1.0		P			P	P/J-9	P/J	P/J	P/M	
6	2 Point Thomson	11624	Canning	oil stained sst - test - 21°API	P/J	6.5	4.5	1.0		J	J		P	P/J	P/J	P/J	P/M	
7	18-9-23 West Staines	11672	Canning	oil stained sst - DST#10 27°API	J	3.0	9.0	0.0		J	J		J	P/J	P/J	P/J	J	
8	18-9-23 W Staines	12512	Hue	oil - DST#8 -26bbbls	P	10.5	3.0	0.5		P	P	P	P	P/J	P/J	P/J	P/M	
9	1 Point Thomson	11424	Canning	oil stained sst - DST#3 44°API	J	2.5	8.5	1.0		J	J		J	P/J	P/J	P/J	J	
10	1 Point Thomson	12848	Thomson	oil stained sst - prod test#2 - 45°API	J	3.5	8.0	0.5		J	J		P	P/J	P/J	P/J	J	
11	1 Point Thomson	13013	Thomson	oil stained conglm. prod. test#1 18°API	P/J	6.0	5.5	0.0		P/J	J		P	P/J-9	P/J	P/J	J	
12	F-1 Alaska State	12066	Canning	oil stained sst - test - 22°API	P	8.0	3.0	1.0		P	P		P	P/J	P/J	P/J	P/M	
13	F-1 Alaska State	13818	Thomson	oil stained congl. - test - 35°API	J	3.0	8.5	0.5		J	J		J	P/J	P/J	P/J	J	
14	3 Point Thomson	13872	Thomson	oil stained sst - test- 38°API	J	4.5	7.5	0.0		J	J		P	P/J-9	P/J	P/J	J	
15	C-1 Alaska State	13612	Thomson	oil stained sst - no test	P/J	7.0	5.0	0.0		P/J	P		P	P/J	P/J	P/J	J	
16	A-1 Alaska State	12575	Canning	oil stained sst - DST2 - 23°API	P	8.0	3.0	0.5		P			P	P/J	P/J	P/J	P/M	
17	D3 Put River	10417	Sadlerochit	oil - Prudhoe Bay field (R165-123)	P	9.5	4.0	0.5		P	P	P-4	P	P/J	P/J	P/J	P/M	
18	97DH88 Sagwon Bluffs	outcrop	Sagavanirktok	oil stained sst near Sagavanirktok River	J	2.5	10.5	0.0	Yes	J	J	J	J	P/J	J	P/J	J	
19	96RCB2 -Kavik	outcrop	Sagavanirktok	oil stained sst from Kavik area	J/M	0.0	2.5	2.5	Yes	J/M	J	3	J-6	M	9	M	11	
20	97DH38 "Navy" section	outcrop	Canning	oil stained sst near sample 21	P/J	3.5	3.0	0.5	Yes	P/J	J		P	P/J-9	P/J	P/J	P/M	
21	96RCB14B	outcrop	Sagavanirktok	oil stained sst from Canning River area	P/J	4.5	4.0	0.5	Yes	P/J	P	P/J	J-6	P-7	P/J-9	J	P/J	P/M
22	80/84 AMK-41	outcrop	Canning	oil stained sand - S. Katakturuk	J	1.5	5.5	2.0		J-0	J				M		J	
23	95DLG-2A1	outcrop	Sagavanirktok	oil stained sst from N. Katakturuk	P/J/M	3.0	2.0	2.5	Yes	J/M	P/J	P-1	P-5	P	9	M	11	
24	95DLG-6A	outcrop	Sagavanirktok	oil stained sst from Jago River	J	4.0	9.5	0.0	Yes	J	J	J	P-5	P	P/J	J	P/J	J
25	95DLG-MP1	outcrop	alluvium	oil seep from Manning Point	M	0.5	0.5	10.0	Yes	M	M	M-2	M	M	M		P/M	
26	95DLG-MP2	outcrop	alluvium	oil seep from Manning Point	M	0.5	0.5	13.0	Yes	M	M	M-2	M	M	M	M	P/M	
27	1 OCS Y-0943 (Aurora)	9634-71	Canning	oil stained siltstone/mudstone - composite	M	0.5	0.5	11.0		M	M		M	M	M	M	P/M	
28	97CRB17	outcrop	alluvium	oil stained sst - Angun Point	M	0.5	2.0	7.5	Yes	M	M	M	J/M-4,5	M-8	9	M	M	J-11

**P = Prudhoe** Range -> <-28.69 <-29.35 0.6 - 0.8 >0.9 0.9 - 1.7 60 - 84 0 - 0.15 0.2 - 0.46 0.5 - 0.9  
**J = Jago** Range -> -28.5 - -28.0 -29.35 - -28.81 0.3 - 0.5 0.5 - 1.0 1.71 - 2.5 60 - 84 0 - 0.3 0.2 - 0.46 0.9 - 1.5  
**M = Manning** Range -> >-27.77 >-28.81 M-2 <0.4 2.51 - 3.5 85 - 95 0.3 - 1.0 0.46 - 0.8 0.5 - 0.9

**Comments**

- 0 - Corrected isotope value (see text).
- 1 - V//V+Ni value greater than 0.75 limit for Prudhoe.
- 2 - Manning has very low Ni and V concentrations except Angun = 0.56.
- 3 - High Fe concentration interferred with Ni V measurements.
- 4 - Used published ratio rather than results of this study because data suspect.
- 5 - Biodegradation increased sulfur an unknown amount.
- 6 - Biodegradation.
- 7 - Biodegraded to below the Prudhoe range.
- 8 - Biodegraded to above the Manning range.
- 9 - Degraded HC content.
- 10 - Oleanane dissolved in oil from Canning country rock.
- 11 - Value offscale from figure, anomalously high due to biodegradation.
- 12 - May be separate oil type. See text.

	oleanane / hopane	C32/C30hopane	C35/C31-C35 hopane	C27 diasterane / sterane	normoretane /norhopane	API GOR
1	P/J	P/J	P/J	P	P	
2	P/J	P/J	P/J	P	P	
3	J	P/J	P	P	P/J	
4	P/J	P/J	P	P	P/J	P
5	J/M-10	P/J	P/J	P/J	P/J	P
6	J/M-10	P	P	P	P/J	P
7	J	P/J	J	P/J	P/J	P
8	P/J	P	P/J	P	P/J	P
9	J/M-10	P/J	J	J/M	P/J	
10	J	P/J	J	J/M	P/J	
11	P/J	P/J	P/J	P	P/J	
12	J/M-10	P	P/J	P	P/J	P
13	J	P/J	P/J	J/M	P/J	
14	J	P/J	P/J	P/J	P/J	
15	P/J	P	P/J	P/J	P/J	
16	J/M-10	P	P/J	P	P/J	P
17	P/J	P/J	P/J	P/J	P/J	P
18	P/J	P/J	J		P/J	
19						
20						
21						
22	M-10	P/J	P/J	J	P/J	
23	M-11			J-11		
24	J	P/J	J	J	P/J	
25	M	M		J/M	M	
26	M	M	M	J/M	M	
27	M	M	M	J/M	M	
28	M-11					
P =	0.0 - 0.03	0.32 - 0.85	0.09 - 0.14	0.5 - 1.0	0 - 0.18	<30, <1500
J =	0.0 - 0.06	0.32 - 0.52	0.08 - 0.12	0.9 - 1.6	0.06 - 0.18	>30, >1500
M =	>0.15	0.2 - 0.32	0.02 - 0.07	1.0 - 1.2	0.2 - 0.35	>30