U-698 .3 GEOLAB NOR

REPORT:

DATA REPORT
Well NOCS 34/7-19

CLIENT(S):

Saga Petroleum a.s.

RESPONSIBLE SCIENTIST:

Kjell Arne Bakken

RESPONSIBLE TECHNICIAN:

M. Sandstad

DATE: 07.02.92

GEOLAB PROJECT: 526181

CLIENTS REF.: IO-AK-91-02021

Analysis type	No of samples
MPLC/HPLC separation	13
GC - whole oil	1
Saturated hydrocarbon GC	11
Aromatic hydrocarbon GC	11
Vitrinite reflectance	11
Carbon isotope composition C_{15}+ fractions	11
Carbon isotopes gases	1
Deuterium isotope gases	1
GC - MS of saturated and aromatic HC	11
Gravity, S, Ni, V	1

Table 1 a: Weight of EOM and Chromatographic Fraction for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	Rock Extracted (g)	EOM (mg)	Sat (mg)	Aro (mg)	Asph (mg)	NSO (mg)	HC (mg)	Non-HC (mg)	TOC(e) (%)	Sample
2455.00	ccp	S/Sst	4.0	60.6	34.5	14.6	4.6	6.9	49.1	11.5	-	0001-1L
2456.00	ccp	S/Sst	4.1	45.6	25.4	12.2	3.6	4.4	37.6	8.0	-	0002-1L
2457.00	ccp	S/Sst	3.7	36.6	20.4	9.6	3.1	3.5	30.0	6.6	-	0003-1L
2459.00	ccp	S/Sst	9.6	96.7	53.0	24.6	11.0	8.1	77.6	19.1	-	0004-1L
2462.00	ccp	S/Sst	7.5	85.6	48.8	22.1	6.4	8.3	70.9	14.7	-	0005-1L
2463.00	ccp	S/Sst	7.6	76.2	43.1	19.8	5.8	7.5	62.9	13.3	-	0006-1L
2465.00	ccp	S/Sst	5.1	62.3	36.8	17.0	5.3	3.2	53.8	8.5	-	0007-1L
2468.00	ccp	S/Sst	6.3	75.9	40.5	19.7	8.0	7.7	60.2	15.7	-	0008-1L
2468.30	oil	bulk	-	46.3	27.9	11.7	1.9	4.8	39.6	6.7	-	0025-0B
2470.00	ccp	S/Sst	12.5	71.6	37.5	18.3	7.5	8.3	55.8	15.8	-	0009-1L
2473.00	ccp	S/Sst	12.4	63.4	32.0	16.4	7.8	7.2	48.4	15.0	-	0010-1L
2475.00	ccp	S/Sst	20.0	64.3	31.7	16.1	7.5	9.0	47.8	16.5	-	0011-1L
2480.00	ccp	S/Sst	41.5	68.8	33.2	18.9	5.9	10.8	52.1	16.7	-	0012-1L
2484.00	ccp	S/Sst	12.2	22.1	9.8	6.0	1.3	5.0	15.8	6.3	-	0013-1L

Table 1 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2455.00	ccp	S/Sst	15187	8646	3659	1152	1729	12305	2882	0001-1L
2456.00	ccp	S/Sst	11259	6271	3012	888	1086	9283	1975	0002-1L
2457.00	ccp	S/Sst	9891	5513	2594	837	945	8108	1783	0003-1L
2459.00	ccp	S/Sst	10072	5520	2562	1145	843	8083	1989	0004-1L
2462.00	ccp	S/Sst	11413	6506	2946	853	1106	9453	1959	0005-1L
2463.00	ccp	S/Sst	9986	5648	2595	760	982	8243	1743	0006-1L
2465.00	ccp	S/Sst	12120	7159	3307	1031	622	10466	1653	0007-1L
2468.00	ccp	S/Sst	11971	6388	3107	1261	1214	9495	2476	0008-1L
2468.30	oil	bulk	-	-	-	-	-	-	-	0025-0B
2470.00	ccp	S/Sst	5727	3000	1464	600	663	4463	1264	0009-1L
2473.00	ccp	S/Sst	5112	2580	1322	629	580	3903	1209	0010-1L
2475.00	ccp	S/Sst	3215	1585	805	375	450	2390	825	0011-1L
2480.00	ccp	S/Sst	1659	800	455	142	260	1256	402	0012-1L
2484.00	ccp	S/Sst	1814	804	492	106	410	1297	517	0013-1L

Table 1 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2455.00	ccp	S/Sst	-	-	-	-	-	-	-	0001-1L
2456.00	ccp	S/Sst	-	-	-	-	-	-	-	0002-1L
2457.00	ccp	S/Sst	-	-	-	-	-	-	-	0003-1L
2459.00	ccp	S/Sst	-	-	-	-	-	-	-	0004-1L
2462.00	ccp	S/Sst	-	-	-	-	-	-	-	0005-1L
2463.00	ccp	S/Sst	-	-	-	-	-	-	-	0006-1L
2465.00	ccp	S/Sst	-	-	-	-	-	-	-	0007-1L
2468.00	ccp	S/Sst	-	-	-	-	-	-	-	0008-1L
2468.30	oil	bulk	-	-	-	-	-	-	-	0025-0B
2470.00	ccp	S/Sst	-	-	-	-	-	-	-	0009-1L
2473.00	ccp	S/Sst	-	-	-	-	-	-	-	0010-1L
2475.00	ccp	S/Sst	-	-	-	-	-	-	-	0011-1L
2480.00	ccp	S/Sst	-	-	-	-	-	-	-	0012-1L
2484.00	ccp	S/Sst	-	-	-	-	-	-	-	0013-1L

Table 1 d: Composition of material extracted from the rock (%) for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	Sat / EOM	Aro / EOM	Asph / EOM	NSO / EOM	HC / EOM	Non-HC / EOM	Sat / Aro	HC / Non-HC	Sample
2455.00	ccp	S/Sst	56.93	24.09	7.59	11.39	81.02	18.98	236.30	426.96	0001-1L
2456.00	ccp	S/Sst	55.70	26.75	7.89	9.65	82.46	17.54	208.20	470.00	0002-1L
2457.00	ccp	S/Sst	55.74	26.23	8.47	9.56	81.97	18.03	212.50	454.55	0003-1L
2459.00	ccp	S/Sst	54.81	25.44	11.38	8.38	80.25	19.75	215.45	406.28	0004-1L
2462.00	ccp	S/Sst	57.01	25.82	7.48	9.70	82.83	17.17	220.81	482.31	0005-1L
2463.00	ccp	S/Sst	56.56	25.98	7.61	9.84	82.55	17.45	217.68	472.93	0006-1L
2465.00	ccp	S/Sst	59.07	27.29	8.51	5.14	86.36	13.64	216.47	632.94	0007-1L
2468.00	ccp	S/Sst	53.36	25.96	10.54	10.14	79.31	20.69	205.58	383.44	0008-1L
2468.30	oil	bulk	60.26	25.27	4.10	10.37	85.53	14.47	238.46	591.04	0025-0B
2470.00	ccp	S/Sst	52.37	25.56	10.47	11.59	77.93	22.07	204.92	353.16	0009-1L
2473.00	ccp	S/Sst	50.47	25.87	12.30	11.36	76.34	23.66	195.12	322.67	0010-1L
2475.00	ccp	S/Sst	49.30	25.04	11.66	14.00	74.34	25.66	196.89	289.70	0011-1L
2480.00	ccp	S/Sst	48.26	27.47	8.58	15.70	75.73	24.27	175.66	311.98	0012-1L
2484.00	ccp	S/Sst	44.34	27.15	5.88	22.62	71.49	28.51	163.33	250.79	0013-1L

Table 2 : Saturated Hydrocarbon Ratios for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	Pristane nC17	Pristane Phytane	Pristane + Phytane nC17 + nC18	Phytane nC18	CPI	Sample
2455.00	ccp	S/Sst	0.61	1.53	0.53	0.45	1.01	0001-1L
2456.00	ccp	S/Sst	0.62	1.53	0.54	0.46	1.00	0002-1L
2459.00	ccp	S/Sst	0.66	1.45	0.59	0.52	1.02	0004-1L
2462.00	ccp	S/Sst	0.62	1.45	0.54	0.46	1.04	0005-1L
2465.00	ccp	S/Sst	0.61	1.43	0.54	0.46	1.00	0007-1L
2468.00	ccp	S/Sst	0.59	1.48	0.51	0.43	1.00	0008-1L
2468.30	oil	bulk	0.60	1.49	0.52	0.44	1.04	0025-0B
2473.00	ccp	S/Sst	0.63	1.33	0.56	0.49	1.04	0010-1L
2475.00	ccp	S/Sst	0.60	1.44	0.53	0.46	1.00	0011-1L
2480.00	ccp	S/Sst	0.58	1.47	0.51	0.43	1.03	0012-1L
2484.00	ccp	S/Sst	0.77	1.50	0.69	0.59	1.02	0013-1L

Table 3 : Aromatic Hydrocarbon Ratios for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2455.00	ccp	S/Sst	0.94	2.08	0.22	1.27	0.88	1.10	0.93	-	4.64	1.29	0001-1L
2456.00	ccp	S/Sst	0.91	1.96	0.20	1.30	0.90	1.11	0.94	-	5.65	1.37	0002-1L
2459.00	ccp	S/Sst	1.00	1.98	0.24	1.26	0.91	1.09	0.95	-	4.44	1.05	0004-1L
2462.00	ccp	S/Sst	1.01	2.08	0.26	1.25	0.92	1.10	0.95	-	-	-	0005-1L
2465.00	ccp	S/Sst	0.97	1.70	0.24	1.24	0.91	1.10	0.95	-	-	-	0007-1L
2468.00	ccp	S/Sst	0.93	1.84	0.22	1.28	0.90	1.10	0.94	-	-	-	0008-1L
2468.30	oil	bulk	1.06	2.06	0.29	0.97	0.82	0.97	0.89	0.67	4.96	1.12	0025-0B
2473.00	ccp	S/Sst	0.99	1.82	0.24	1.22	0.89	1.08	0.93	-	4.83	1.19	0010-1L
2475.00	ccp	S/Sst	1.05	2.12	0.26	1.25	0.85	1.02	0.91	0.54	5.15	1.51	0011-1L
2480.00	ccp	S/Sst	1.09	2.00	0.30	1.22	0.84	1.04	0.90	-	4.70	1.24	0012-1L
2484.00	ccp	S/Sst	1.11	2.07	0.27	1.26	0.86	1.06	0.92	-	4.82	1.43	0013-1L

Table 4a : Tabulation of carbon isotope data for EOM/EOM - fractions or Oils for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	EOM/Oil	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
2455.00	ccp		-28.64	-29.09	-28.03	-27.88	-28.03	-	0001-1L
2456.00	ccp		-28.65	-29.14	-28.03	-27.87	-27.99	-	0002-1L
2459.00	ccp		-28.65	-29.10	-28.04	-27.84	-28.05	-	0004-1L
2462.00	ccp		-28.55	-28.97	-28.07	-28.01	-28.00	-	0005-1L
2465.00	ccp		-28.57	-28.97	-27.96	-27.77	-27.94	-	0007-1L
2468.00	ccp		-28.58	-29.04	-27.99	-27.89	-27.91	-	0008-1L
2468.30	oil		-28.52	-28.90	-27.92	-28.03	-27.73	-	0025-0B
2473.00	ccp		-28.62	-29.07	-28.06	-28.09	-27.97	-	0010-1L
2475.00	ccp		-28.74	-29.30	-28.29	-28.25	-27.68	-	0011-1L
2480.00	ccp		-29.18	-29.60	-28.89	-28.69	-28.33	-	0012-1L
2484.00	ccp		-29.21	-29.58	-28.93	-28.75	-27.82	-	0013-1L

Table 4b : Tabulation of cv values from carbon isotope data for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Interpretation	Sample
2455.00	ccp		-29.09	-28.03	-0.28	Marine	0001-1L
2456.00	ccp		-29.14	-28.03	-0.15	Marine	0002-1L
2459.00	ccp		-29.10	-28.04	-0.28	Marine	0004-1L
2462.00	ccp		-28.97	-28.07	-0.67	Marine	0005-1L
2465.00	ccp		-28.97	-27.96	-0.43	Marine	0007-1L
2468.00	ccp		-29.04	-27.99	-0.32	Marine	0008-1L
2468.30	oil		-28.90	-27.92	-0.52	Marine	0025-0B
2473.00	ccp		-29.07	-28.06	-0.40	Marine	0010-1L
2475.00	ccp		-29.30	-28.29	-0.32	Marine	0011-1L
2480.00	ccp		-29.60	-28.89	-0.90	Marine	0012-1L
2484.00	ccp		-29.58	-28.93	-1.04	Marine	0013-1L

Table 5a: Isotope GC Analysis of Headspace Gas for Well 34/7-19.

Depth	C1	C2	C3	i-C4	n-C4
Test no.2	-45.5	-33.1	-31.4	-35.2	-31.7

Table 5b: Hydrogen Isotope Values for Headspace Methane

34/7-19, test no 2, A-15779 : -205 delta D SMOW

Table 6A: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	B/A	B/B+A	B B+E+F	C/E	C/C+E	X/E	Z/E	Z/C	Z/Z+E	Q/E	E/E+F	C+D C+D+E+F	D+F/C+E	J1 J1+J2%	Sample
2455.00	S/Sst	0.75	0.43	0.11	0.41	0.29	0.10	0.14	0.35	0.13	0.08	0.92	0.30	0.09	59.47	0001-1
2456.00	S/Sst	0.68	0.41	0.11	0.42	0.30	0.10	0.15	0.37	0.13	0.08	0.92	0.30	0.09	58.67	0002-1
2459.00	S/Sst	0.73	0.42	0.11	0.42	0.30	0.11	0.16	0.37	0.13	0.07	0.91	0.30	0.10	58.35	0004-1
2462.00	S/Sst	0.70	0.41	0.11	0.42	0.30	0.10	0.14	0.33	0.12	0.08	0.92	0.30	0.09	58.16	0005-1
2465.00	S/Sst	0.71	0.41	0.10	0.40	0.29	0.10	0.14	0.36	0.13	0.07	0.92	0.29	0.09	58.85	0007-1
2468.00	S/Sst	0.66	0.40	0.10	0.41	0.29	0.09	0.13	0.33	0.12	0.07	0.93	0.30	0.08	59.25	0008-1
2468.30	DST2	0.70	0.41	0.12	0.42	0.30	0.08	0.15	0.36	0.13	0.11	0.93	0.30	0.08	59.74	0025-0
2473.00	S/Sst	0.67	0.40	0.10	0.41	0.29	0.09	0.14	0.34	0.12	0.08	0.93	0.30	0.08	59.50	0010-1
2475.00	S/Sst	0.71	0.41	0.10	0.41	0.29	0.07	0.15	0.36	0.13	0.08	0.94	0.30	0.08	60.43	0011-1
2480.00	S/Sst	0.76	0.43	0.10	0.43	0.30	0.06	0.18	0.42	0.15	0.06	0.93	0.31	0.10	59.34	0012-1
2484.00	S/Sst	0.90	0.47	0.11	0.44	0.31	0.06	0.18	0.41	0.15	0.07	0.91	0.32	0.12	59.24	0013-1

Table 6B: Variation in Sterane Distribution (peak height) SIR for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
2455.00	S/Sst	0.78	45.47	75.73	1.41	0.77	0.36	0.24	0.61	0.83	2.86	0001-1
2456.00	S/Sst	0.77	44.82	75.57	1.31	0.78	0.34	0.23	0.61	0.81	2.80	0002-1
2459.00	S/Sst	0.75	42.09	75.13	1.28	0.78	0.30	0.20	0.60	0.73	2.61	0004-1
2462.00	S/Sst	0.75	46.80	75.99	1.18	0.77	0.34	0.23	0.61	0.88	2.97	0005-1
2465.00	S/Sst	0.76	43.11	74.98	1.28	0.78	0.33	0.22	0.60	0.76	2.63	0007-1
2468.00	S/Sst	0.75	47.47	76.33	1.24	0.77	0.33	0.22	0.62	0.90	3.07	0008-1
2468.30	DST2	0.80	42.40	75.46	1.44	0.78	0.48	0.33	0.61	0.74	2.67	0025-0
2473.00	S/Sst	0.78	44.74	76.40	1.32	0.78	0.33	0.22	0.62	0.81	2.93	0010-1
2475.00	S/Sst	0.74	45.99	75.58	1.17	0.77	0.30	0.21	0.61	0.85	2.87	0011-1
2480.00	S/Sst	0.68	44.09	75.10	1.02	0.77	0.29	0.20	0.60	0.79	2.70	0012-1
2484.00	S/Sst	0.63	42.90	73.81	0.91	0.77	0.28	0.19	0.58	0.75	2.47	0013-1

Ratio1: a / a + j
Ratio2: q / q + t * 100%
Ratio3: 2(r + s)/(q + t + 2(r + s)) * 100%
Ratio4: a + b + c + d / h + k + l + n
Ratio5: r + s / r + s + q

Ratio6: u + v / u + v + q + r + s + t
Ratio7: u + v / u + v + i + m + n + q + r + s + t
Ratio8: r + s / q + r + s + t
Ratio9: q / t
Ratio10: r + s / t

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Table 6C: Variation in Triaromatic Sterane Distribution for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
2455.00	S/Sst	0.53	0.56	0.30	0.26	0.36	0001-1
2456.00	S/Sst	0.49	0.51	0.28	0.25	0.35	0002-1
2459.00	S/Sst	0.53	0.52	0.30	0.28	0.39	0004-1
2462.00	S/Sst	0.52	0.54	0.30	0.26	0.39	0005-1
2465.00	S/Sst	0.51	0.51	0.29	0.26	0.38	0007-1
2468.00	S/Sst	0.46	0.48	0.29	0.25	0.37	0008-1
2468.30	DST2	0.59	0.60	0.35	0.32	0.42	0025-0
2473.00	S/Sst	0.51	0.54	0.29	0.26	0.35	0010-1
2475.00	S/Sst	0.49	0.52	0.28	0.24	0.35	0011-1
2480.00	S/Sst	0.49	0.51	0.34	0.24	0.84	0012-1
2484.00	S/Sst	0.39	0.41	0.20	0.18	0.27	0013-1

Ratio1: a1 / a1 + g1
Ratio2: b1 / b1 + g1
Ratio3: a1 + b1 / a1 + b1 + c1 + d1 + e1 + f1 + g1
Ratio4: a1 / a1 + e1 + f1 + g1
Ratio5: a1 / a1 + d1

Table 6D: Variation in Monoaromatic Sterane Distribution for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Sample
2455.00	S/Sst	0.42	0.29	0.27	0.24	0001-1
2456.00	S/Sst	0.38	0.29	0.24	0.22	0002-1
2459.00	S/Sst	0.41	0.29	0.26	0.23	0004-1
2462.00	S/Sst	0.41	0.30	0.26	0.23	0005-1
2465.00	S/Sst	0.43	0.30	0.27	0.24	0007-1
2468.00	S/Sst	0.40	0.28	0.25	0.22	0008-1
2468.30	DST2	0.41	0.30	0.27	0.23	0025-0
2473.00	S/Sst	0.41	0.28	0.26	0.23	0010-1
2475.00	S/Sst	0.40	0.28	0.25	0.22	0011-1
2480.00	S/Sst	0.39	0.27	0.24	0.21	0012-1
2484.00	S/Sst	0.35	0.26	0.21	0.19	0013-1

Ratio1: A1 / A1 + E1
Ratio2: B1 / B1 + E1

Ratio3: A1 / A1 + E1 + G1
Ratio4: A1+B1 / A1+B1+C1+D1+E1+F1+G1+H1+I1

Table 6E: Aromatisation of Steranes for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Sample
2455.00	S/Sst	0.51	0.89	0001-1
2456.00	S/Sst	0.50	0.90	0002-1
2459.00	S/Sst	0.50	0.90	0004-1
2462.00	S/Sst	0.50	0.91	0005-1
2465.00	S/Sst	0.51	0.91	0007-1
2468.00	S/Sst	0.51	0.91	0008-1
2468.30	DST2	0.55	0.86	0025-0
2473.00	S/Sst	0.50	0.90	0010-1
2475.00	S/Sst	0.48	0.89	0011-1
2480.00	S/Sst	0.51	0.89	0012-1
2484.00	S/Sst	0.43	0.90	0013-1

Ratio1: $$\frac{C1+D1+E1+F1+G1+H1+I1}{C1+D1+E1+F1+G1+H1+I1 + c1+d1+e1+f1+g1}$$

Ratio2: g1 / g1 + I1

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Depth unit of measure: m

Depth	Lithology	p	q	r	s	t	a	b	z	c	Sample
		x	d	e	f	g	h	i	j1		
		j2	k1	k2	l1	l2	m1	m2			
2455.00	S/Sst	20508.00	18039.10	7444.30	12969.00	4663.10	39743.80	29686.50	31292.90	89476.00	0001-1
		21959.00	9784.50	217160.00	17933.80	99682.00	68141.80	12137.00	68576.20		
		46732.50	49895.00	34038.60	30442.10	21744.70	34438.50	21249.00			
2456.00	S/Sst	20284.30	18010.00	8407.70	12730.00	3453.80	42652.40	29170.90	34604.10	93967.10	0002-1
		22020.00	9874.20	223872.80	18157.00	106046.80	70586.60	13135.40	69701.00		
		49103.80	51339.10	35507.00	33539.00	22209.80	35103.80	22813.40			
2459.00	S/Sst	26494.80	24867.20	10553.30	19280.30	6552.00	62762.60	46037.50	52065.90	141171.00	0004-1
		36688.00	17164.80	334823.31	31326.30	152625.00	108583.90	21373.00	105265.20		
		75125.70	77445.90	56161.60	49448.00	33872.90	49083.20	33593.30			
2462.00	S/Sst	18452.50	15925.00	7328.30	10995.00	3881.00	38174.40	26718.90	29301.00	88155.70	0005-1
		20494.50	8621.10	207704.00	16845.00	90972.00	64954.30	10776.80	63410.20		
		45608.40	47343.60	31357.50	29169.00	19896.00	30364.60	20577.00			
2465.00	S/Sst	18353.70	16168.00	6849.90	11750.00	3160.80	39404.80	27925.50	31979.80	89232.60	0007-1
		22044.40	9826.30	222127.59	18039.60	96515.50	70433.10	12581.20	69173.60		
		48371.50	49178.80	33246.40	30932.00	22315.70	31940.20	22297.70			

Depth unit of measure: m

Depth	Lithology	p	q	r	s	t	a	b	z	c	Sample
		x	d	e	f	g	h	i	j1		
		j2	k1	k2	l1	l2	m1	m2			
2468.00	S/Sst	14159.50	11536.10	5261.00	7379.30	2649.90	29151.80	19208.50	21084.90	64309.10	0008-1
		13951.00	6646.00	157100.59	11191.40	70183.70	48064.50	8300.10	46759.00		
		32155.80	33223.80	22497.20	21616.90	14121.70	21939.00	15238.00			
2468.30	DST2	14576.50	11292.90	6557.10	9089.00	3101.00	21148.20	14717.50	15978.00	44205.40	0025-0
		8748.10	3999.20	104223.40	7956.50	38864.30	26775.30	4306.80	24680.40		
		16630.50	16217.80	9258.50	9156.30	5007.40	7954.50	4879.30			
2473.00	S/Sst	13373.10	12544.40	5596.60	8051.50	3108.50	30120.00	20257.00	23072.20	68035.70	0010-1
		15366.00	6924.70	166558.80	12068.40	76006.90	51471.30	9255.70	51181.90		
		34832.40	35533.40	26515.50	22933.60	14900.50	25123.00	16967.60			
2475.00	S/Sst	11609.80	10829.90	4472.90	6356.50	2276.40	23992.50	17002.50	20541.30	57618.00	0011-1
		10145.10	6206.00	139301.41	9045.00	58698.30	40293.80	5572.60	38290.30		
		25068.60	27336.50	17530.10	15715.80	9218.40	15485.90	9337.40			
2480.00	S/Sst	12565.00	10685.40	5459.30	7590.80	2191.80	29339.30	22195.70	32796.90	77956.30	0012-1
		10811.30	12333.00	183105.59	14129.30	73991.80	52360.40	7971.50	49849.30		
		34161.40	38757.00	25853.90	20620.20	13740.50	20542.80	12414.50			

Depth unit of measure: m

Depth	Lithology	p	q	r	s	t	a	b	z	c	Sample
			x	d	e	f	g	h	i	j1	
		j2	k1	k2	l1	l2	m1	m2			
2484.00	S/Sst	41044.90	31828.00	14807.30	26578.00	8185.00	70922.30	63971.10	82480.00	202493.80	0013-1
		28019.10	33771.30	461071.50	42835.10	201575.59	143926.80	26236.80	136560.00		
		93972.30	103898.10	72682.00	60799.00	46293.00	57419.50	40482.90			

Table 6G: Raw GCMS sterane data (peak height) SIR for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
2455.00	S/Sst	33802.10	13564.40	65719.20	41737.20	14490.60	15717.40	26345.10	15981.00	18849.20	0001-1
		37468.10	30136.30	18126.60	28970.70	10495.20	11430.00	20526.50	24249.40		
		9729.00	15151.30	29580.00	22400.00	18170.90					
2456.00	S/Sst	32739.00	13849.40	65290.30	42301.50	13073.30	14935.20	25674.80	17801.40	19847.90	0002-1
		42570.30	30108.10	19100.50	30002.70	9737.50	12987.00	21349.20	24346.40		
		10079.70	16021.70	30929.80	24361.80	19723.80					
2459.00	S/Sst	39701.50	19259.70	92532.90	61018.70	23142.70	22834.30	42543.10	26968.80	30870.80	0004-1
		62972.70	48486.40	30357.70	43674.90	16807.00	21709.60	32061.60	38923.40		
		16820.70	23384.20	45690.80	38243.50	32174.20					
2462.00	S/Sst	29883.60	12037.80	57568.20	25073.10	11707.20	14448.20	24554.80	16769.50	19249.80	0005-1
		36367.40	27855.00	18950.80	27977.10	9742.40	11626.30	18124.90	22443.30		
		7887.30	14539.90	27636.30	21517.00	16528.20					
2465.00	S/Sst	28712.00	13920.00	60991.50	40327.20	14166.70	16096.10	27432.80	17991.40	18896.30	0007-1
		41227.50	29250.80	18825.20	31825.40	9857.60	13137.90	20184.70	27253.30		
		9106.80	15048.50	29420.60	22882.00	19857.70					

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
2468.00	S/Sst	20473.30	9074.30	44678.90	29048.30	8559.30	10764.20	19342.40	11801.20	13801.70	0008-1
		30675.20	22377.70	15227.20	23414.20	6458.60	8435.20	14381.80	17333.60		
		6692.80	10897.40	20792.20	16220.80	12057.30					
2468.30	DST2	24631.70	10393.10	40068.60	22492.60	7462.10	9987.10	15669.60	9785.80	10407.60	0025-0
		24143.90	16407.50	10113.10	16215.80	5377.20	6437.20	9697.00	11101.90		
		4043.50	6426.80	12622.60	10686.60	8730.30					
2473.00	S/Sst	24254.90	8917.10	49182.10	31322.20	10147.20	11071.70	18916.70	13895.80	14524.90	0010-1
		31016.80	24321.40	13683.10	23205.40	7305.90	9430.40	15726.30	17977.00		
		7199.50	11436.30	22863.10	18524.20	14127.20					
2475.00	S/Sst	20727.40	7505.30	38295.20	22551.40	7323.30	8541.10	14866.10	9339.90	13250.00	0011-1
		25729.50	19694.60	13220.50	18721.60	6479.10	9054.50	14451.90	17346.10		
		5200.00	11634.70	21457.70	17695.60	13664.10					
2480.00	S/Sst	29833.00	12130.00	45825.70	30599.50	9388.70	8980.30	18292.00	12378.60	21887.70	0012-1
		38450.80	30868.60	21956.70	23579.40	7811.20	15004.50	22838.90	2605.80		
		10949.50	18093.20	34014.30	27876.00	22946.60					

Table 6G: Raw GCMS sterane data (peak height) SIR for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
2484.00	S/Sst	76586.50	39397.40	105787.90	68778.00	25599.20	28815.70	52297.50	35189.90	62122.80	0013-1
		100415.20	84030.40	62981.60	60524.30	22524.40	42986.30	67313.80	68433.80		
		31975.50	51984.00	93804.90	76949.70	69181.70					

Table 6H: Raw GCMS trioaromatic sterane data (peak height) for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
2455.00	S/Sst	334834.00	372617.31	143552.00	588969.38	342800.81	308942.81	297512.50	0001-1
2456.00	S/Sst	313180.00	336312.91	137922.00	584163.63	331792.00	290707.19	327948.81	0002-1
2459.00	S/Sst	317917.91	302112.00	125107.20	488750.50	282757.81	257728.00	280435.31	0004-1
2462.00	S/Sst	315029.59	340179.69	129981.10	497606.50	297457.31	293080.00	294883.19	0005-1
2465.00	S/Sst	273664.00	274717.09	128606.30	445013.31	287104.00	236866.09	265051.41	0007-1
2468.00	S/Sst	182665.00	197335.30	72864.00	311722.59	176896.00	158481.20	211064.09	0008-1
2468.30	DST2	328474.19	344602.41	106760.80	452381.81	243207.80	222245.70	228201.30	0025-0
2473.00	S/Sst	209897.00	231552.00	92256.00	397677.69	208423.50	195816.91	200375.20	0010-1
2475.00	S/Sst	239078.91	265319.41	110953.80	443922.31	255901.09	243588.00	248011.50	0011-1
2480.00	S/Sst	276736.00	296810.31	152570.41	52044.40	285564.31	317267.69	287437.69	0012-1
2484.00	S/Sst	390611.00	427033.50	274777.69	1081173.38	596152.50	625582.38	616874.69	0013-1

Table 6I: Raw GCMS monoaromatic sterane data (peak height) for Well NOCS 34/7-19

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
2455.00	S/Sst	353930.00	196164.80	281626.69	223592.59	483539.00	81648.00	461088.00	207980.41	36614.50	0001-1
2456.00	S/Sst	276149.31	187886.59	255012.50	214307.59	459826.91	83224.00	428251.31	206682.70	35713.10	0002-1
2459.00	S/Sst	278505.09	160949.50	215320.00	191426.00	398035.31	72616.60	383144.81	169850.70	31528.00	0004-1
2462.00	S/Sst	273162.69	168874.80	233358.09	202512.91	391132.19	72478.00	397534.81	176357.30	29373.80	0005-1
2465.00	S/Sst	280202.69	159220.41	229712.50	183559.80	367320.31	67350.60	372926.00	171088.00	26955.10	0007-1
2468.00	S/Sst	170906.30	103569.70	141704.50	124598.10	260405.41	45510.20	245475.20	114764.50	20324.80	0008-1
2468.30	DST2	293005.41	180603.00	261441.20	202625.20	415223.41	63721.00	392249.81	179006.20	37811.10	0025-0
2473.00	S/Sst	207360.00	116608.40	181307.80	129847.50	299045.50	54884.00	294786.91	131292.30	23352.00	0010-1
2475.00	S/Sst	217275.41	124848.00	186556.70	140117.30	324677.09	55240.00	317320.31	140891.09	30846.00	0011-1
2480.00	S/Sst	199322.70	114880.00	169693.41	140684.20	305402.31	53721.90	312308.00	133209.30	34476.00	0012-1
2484.00	S/Sst	345301.31	226010.41	334480.00	320720.00	644576.00	100288.00	628998.81	275061.31	68242.00	0013-1

Table 7 : Thermal Maturity Data for well NOCS 34/7-19

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	Tmax (°C)	Sample
1255.00	swc	bulk	0.23	7	0.05	-	-	-	0014-0B
1500.00	swc	bulk	NDP	-	-	-	-	-	0015-0B
1688.00	swc	bulk	NDP	-	-	-	-	-	0016-0B
1780.00	swc	bulk	0.46	3	0.01	-	-	-	0017-0B
1807.50	swc	bulk	0.45	7	0.05	-	-	-	0018-0B
1845.00	swc	bulk	0.48	4	0.03	-	-	-	0019-0B
1930.00	swc	bulk	0.51	3	0.04	-	-	-	0020-0B
1970.00	swc	bulk	0.54	6	0.05	-	-	-	0021-0B
2370.00	swc	bulk	0.55	6	0.04	-	-	-	0022-0B
2658.00	swc	bulk	0.53	4	0.05	-	-	-	0023-0B
2760.00	swc	bulk	0.60	5	0.05	-	-	-	0024-0B

Table 8: Nickel, Vanadium and Sulphur Content plus Density

Oil 34/7-19, DST-2

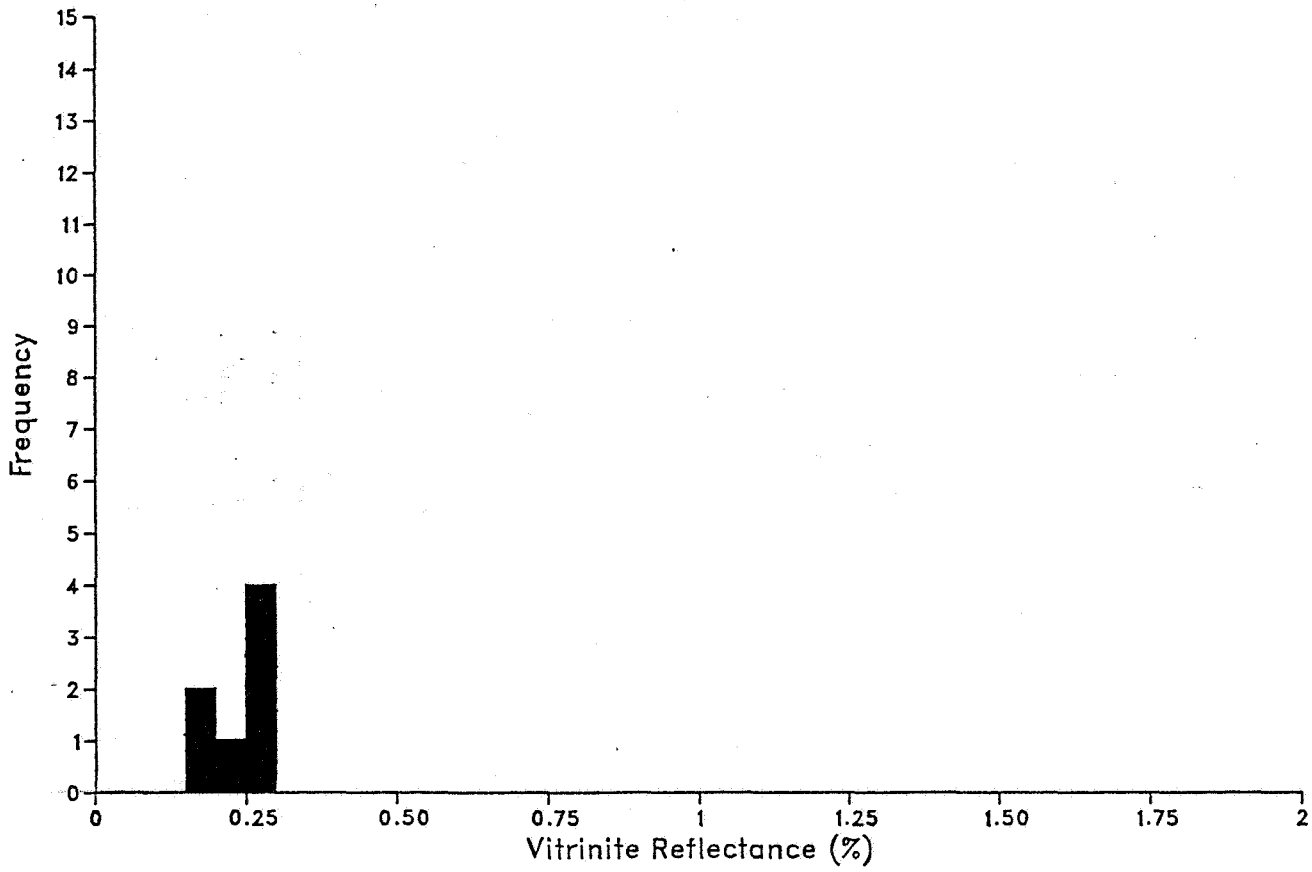
Sample	Ni ppm	V ppm	S %	Density g/cc
Topped oil	3.8	3.9	0.35	0.8641
Whole oil	3.3	3.4	0.28	0.8393

SECTION 2: VITRINITE REFLECTANCE HISTOGRAMS

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 1255.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.150 to 0.300):	0.23	0.05	7

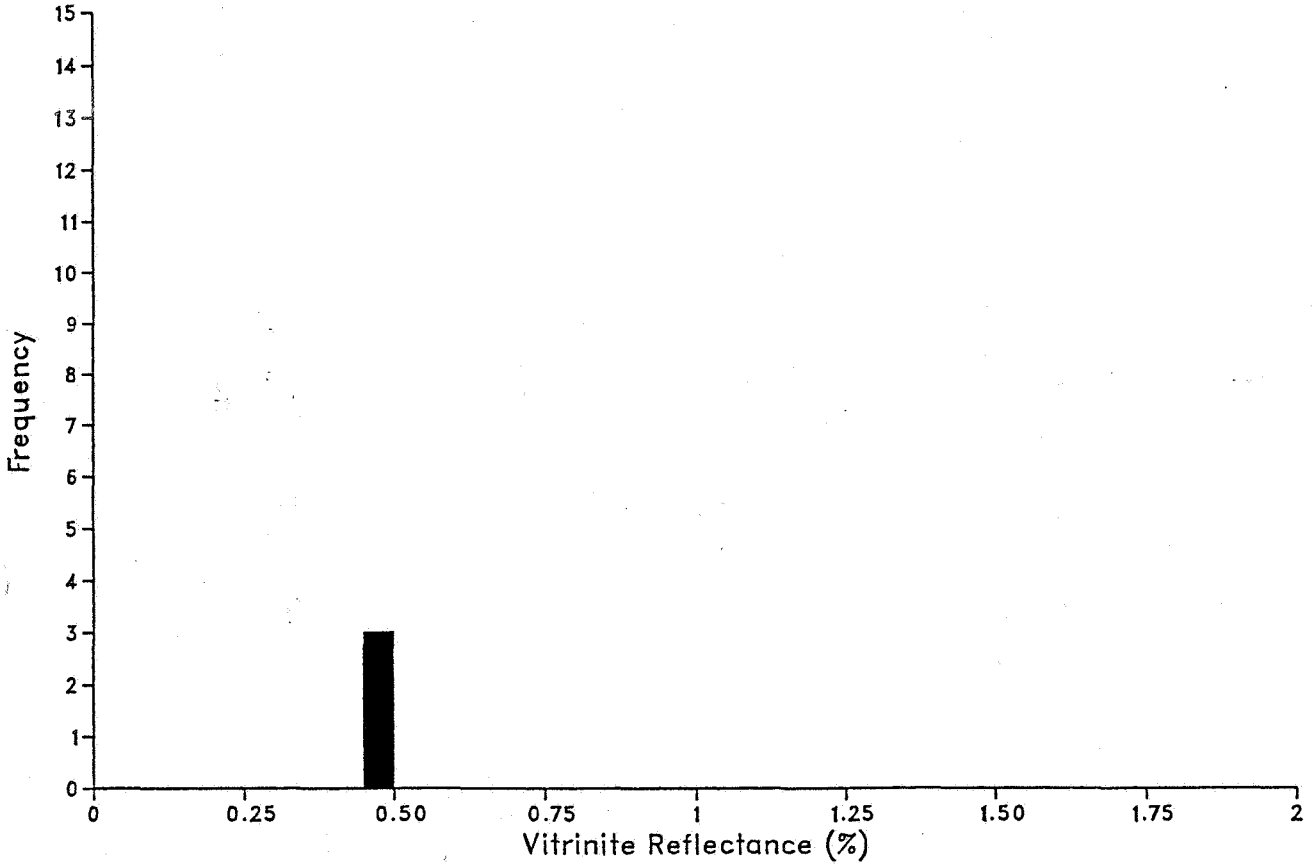
Readings:

0.160 0.178 0.247 0.255 0.256 0.273 0.273

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 1780.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.500):	0.46	0.01	3

Readings:

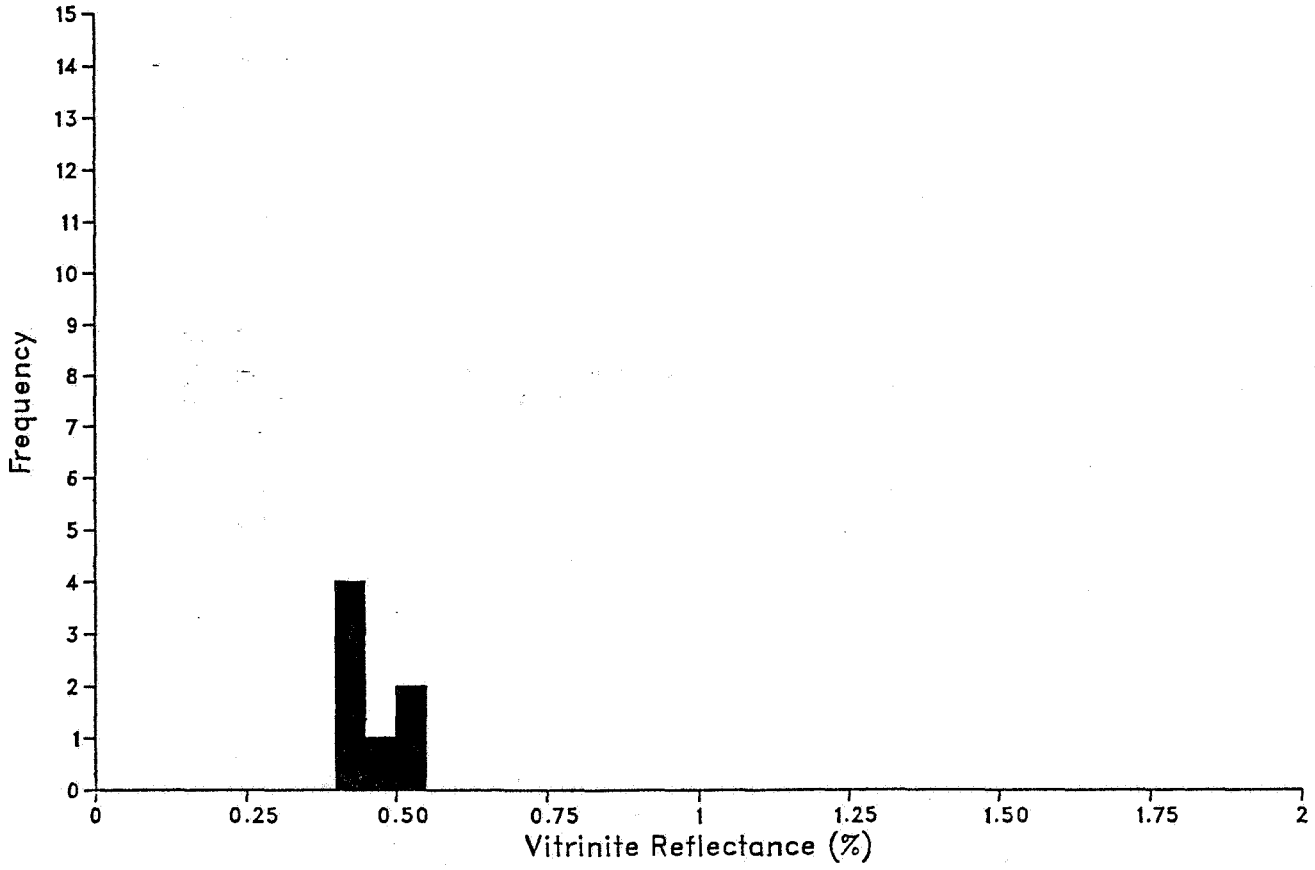
0.455 0.466 0.468

GEOLAB NOR a/s – Geochemical Laboratories of Norway

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 1807.50(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.400 to 0.550):	0.45	0.05	7

Readings:

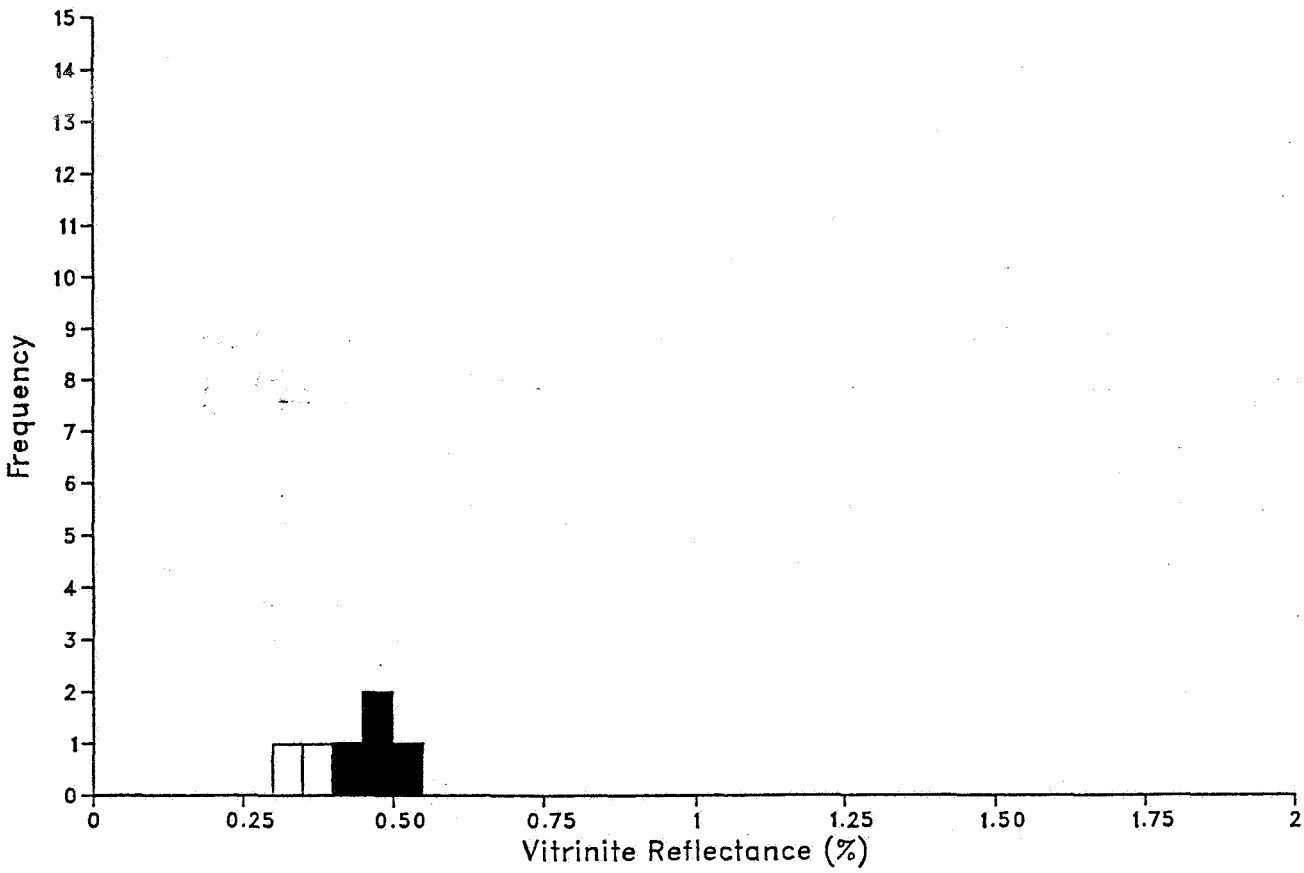
0.355 0.407 0.416 0.424 0.427 0.473 0.516 0.517

GEOLAB NOR a/s – Geochemical Laboratories of Norway

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 1845.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.400 to 0.550):	0.48	0.03	4
Population Two (from 0.300 to 0.400):	0.35	0.02	2

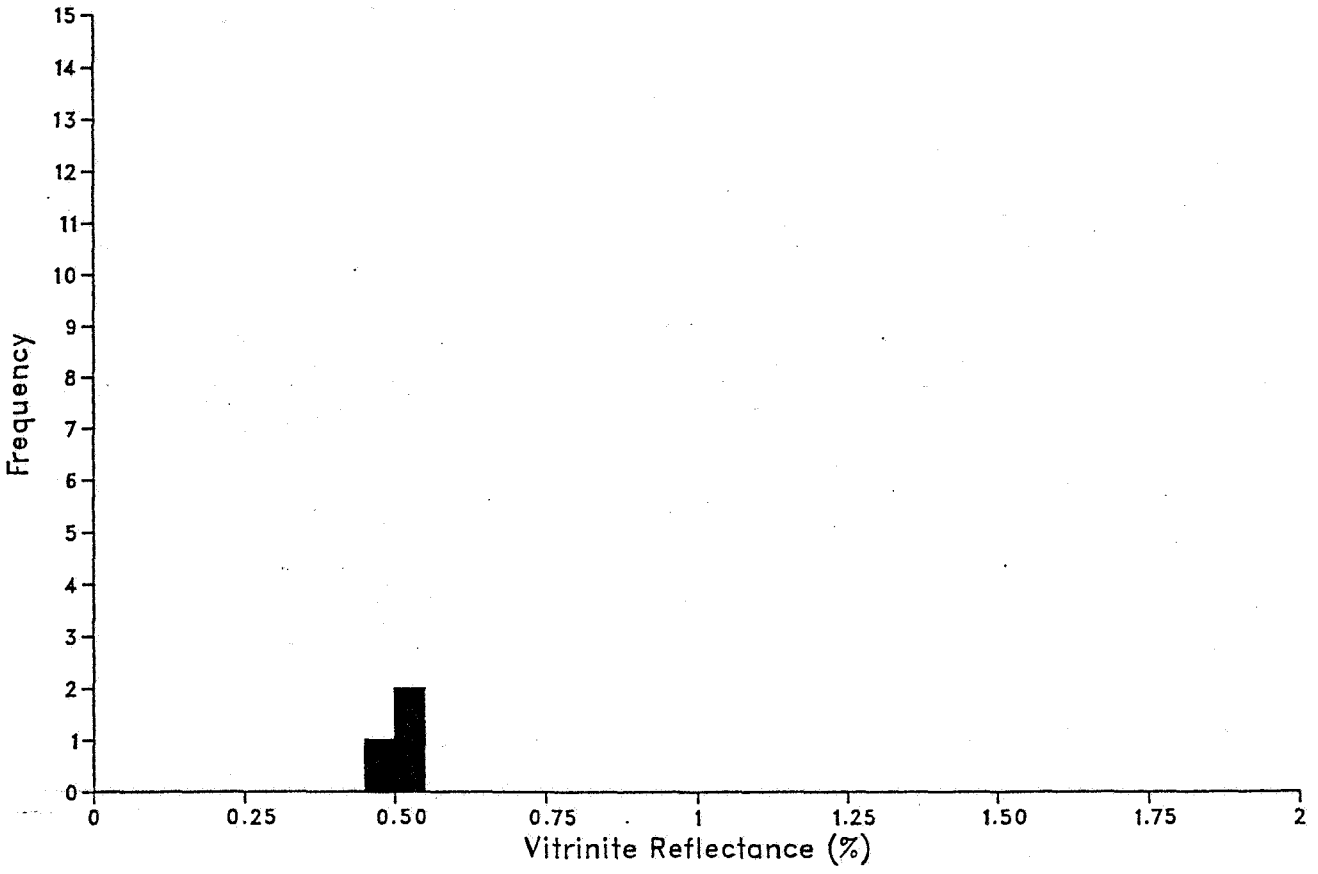
Readings:

0.339 0.366 0.440 0.454 0.499 0.509 0.592

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 1930.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.550):	0.51	0.04	3

Readings:

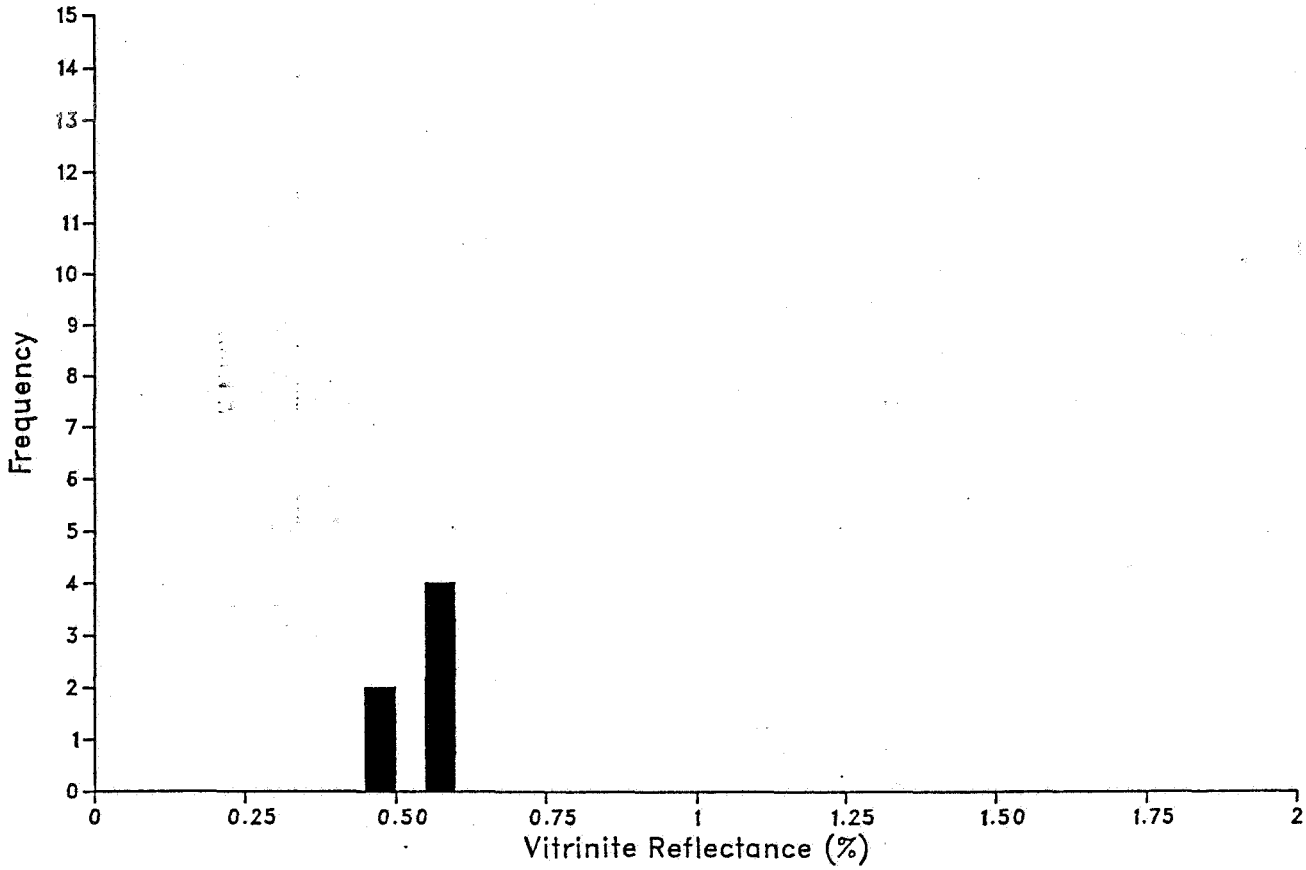
0.466 0.528 0.539 0.754

GEOLAB NOR a/s – Geochemical Laboratories of Norway

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 1970.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.600):	0.54	0.05	6

Readings:

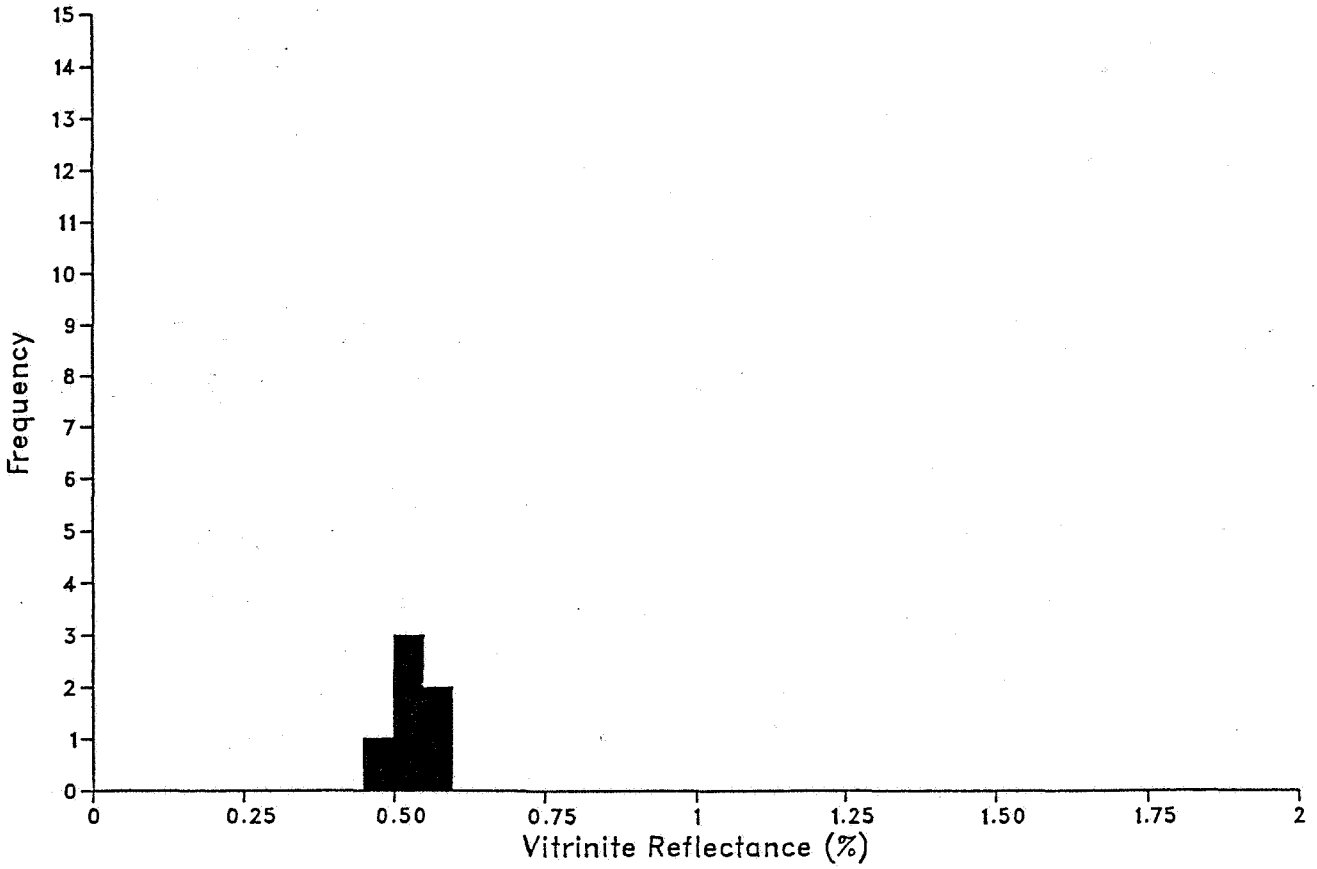
0.378 0.426 0.432 0.453 0.491 0.554 0.566 0.569 0.586

GEOLAB NOR a/s – Geochemical Laboratories of Norway

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 2370.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.600):	0.55	0.04	6

Readings:

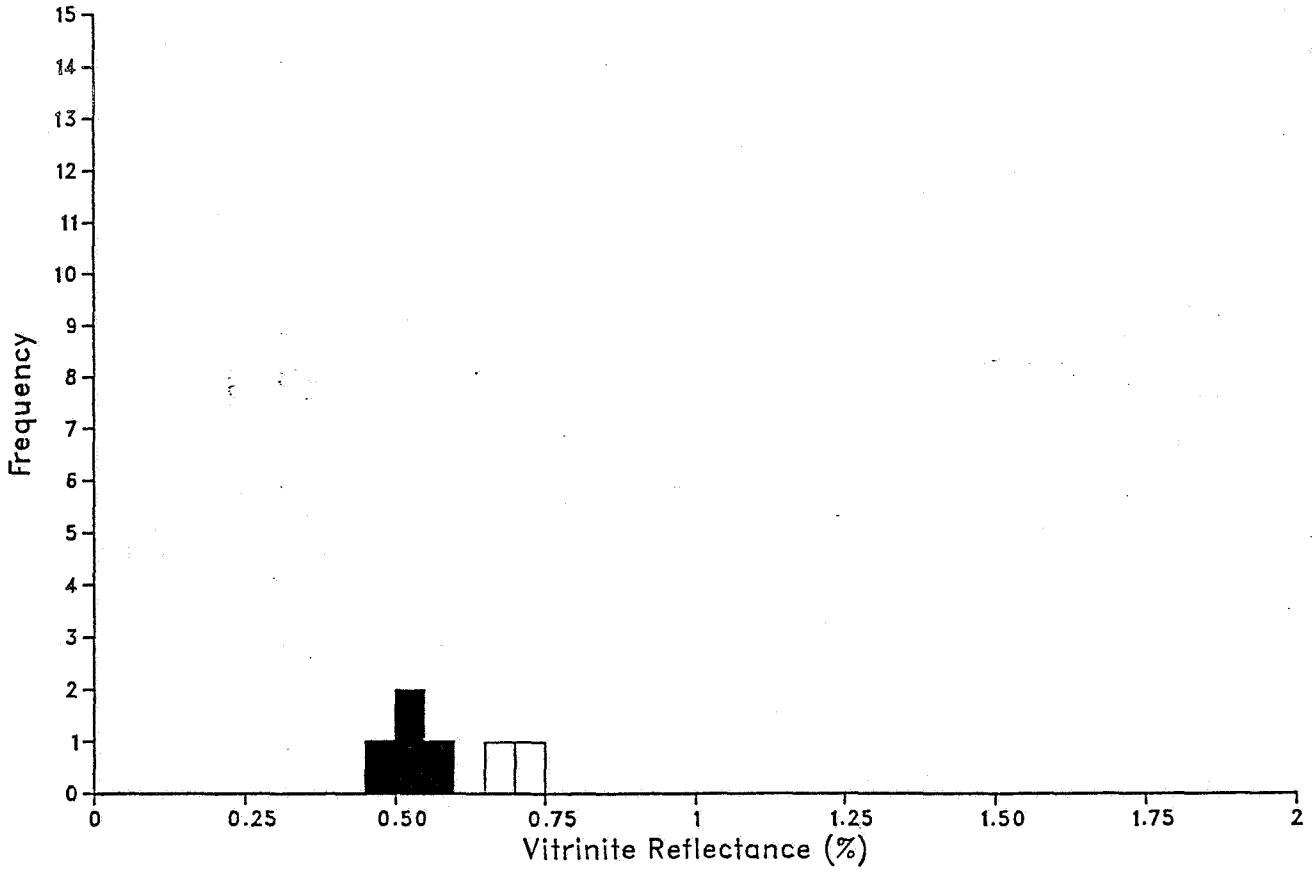
0.369 0.496 0.505 0.548 0.549 0.584 0.589 0.663

GEOLAB NOR a/s – Geochemical Laboratories of Norway

Vitrinite Reflectance Histogram

GEOLAB NOR

Well: NOCS 34/7-19
Depth: 2658.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.600):	0.53	0.05	4
Population Two (from 0.650 to 0.750):	0.71	0.03	2

Readings:

0.386 0.492 0.511 0.538 0.597 0.691 0.733