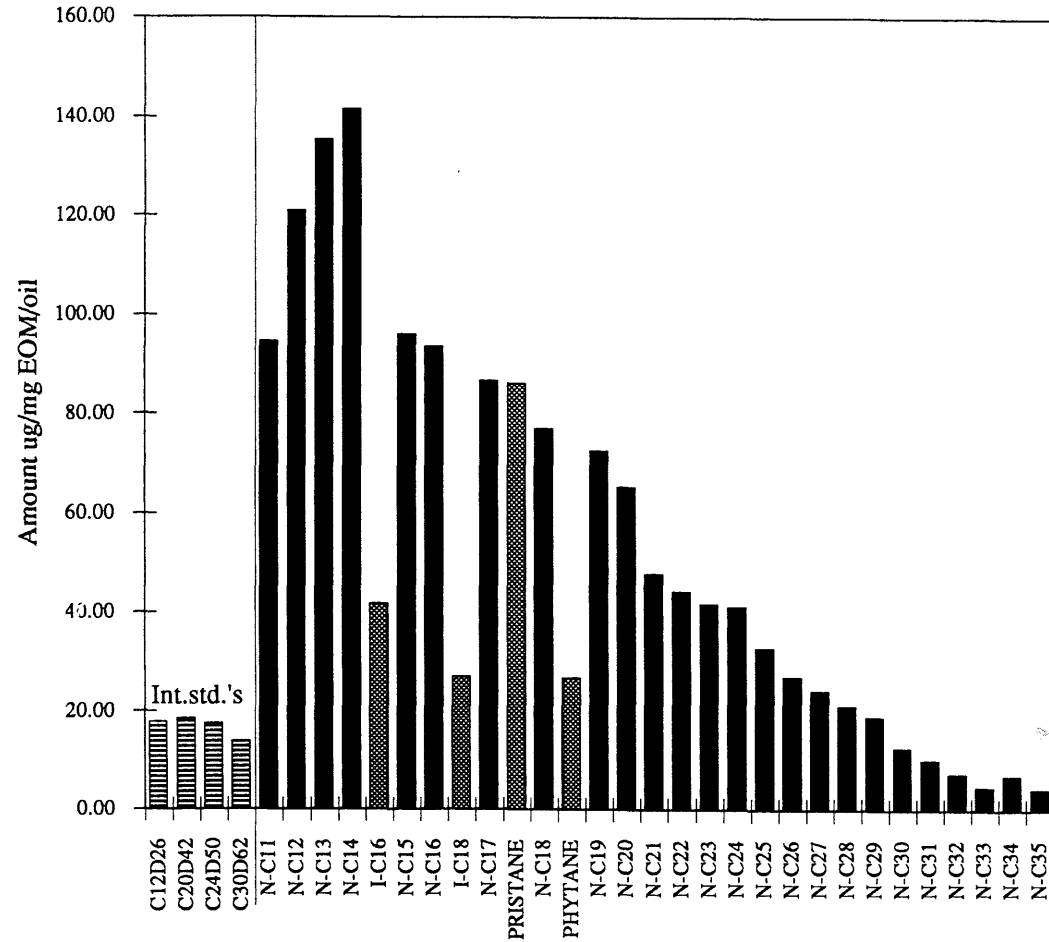
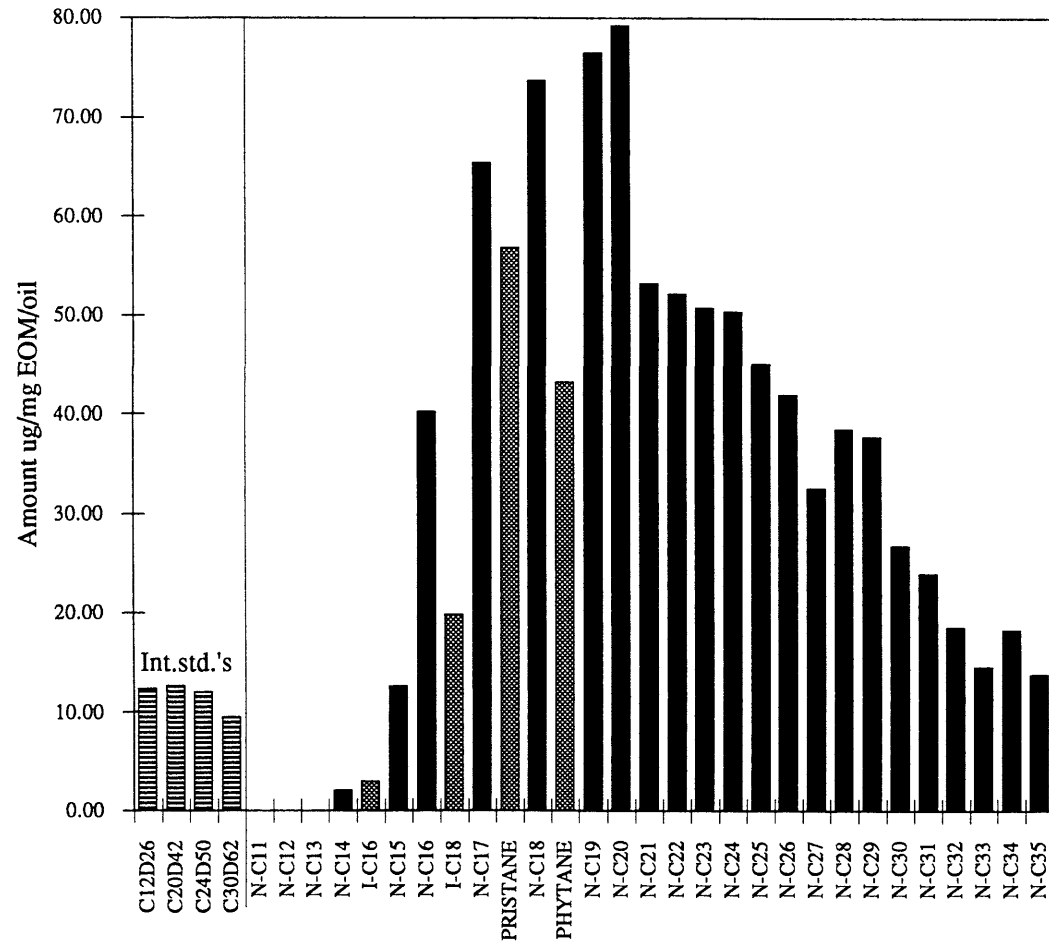


**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



		Name	ug/mg	Area
Sample:	2409.40	C12D26	17.93	159.92
Name:	0	C20D42	18.46	277.58
NH proj.:	0	C24D50	17.53	335.19
Instrument:	sat	C30D62	13.88	247.81
Analysis:	a3009oil	N-C11	94.52	843.04
Seq.# :	0	N-C12	120.89	1078.22
30/9-9		N-C13	135.28	1206.54
		N-C14	141.51	1262.07
		I-C16	41.62	625.80
		N-C15	96.02	1443.67
		N-C16	93.56	1406.77
		I-C18	27.03	406.44
		N-C17	86.58	1301.85
		PRISTANE	86.14	1295.14
		N-C18	76.96	1157.18
		PHYTANE	26.68	401.14
		N-C19	72.47	1089.64
		N-C20	65.23	980.84
		N-C21	47.80	914.17
		N-C22	44.21	845.39
		N-C23	41.66	796.78
		N-C24	41.11	786.25
		N-C25	32.76	626.44
		N-C26	26.94	515.13
Peak ratios:		N-C27	24.22	463.09
<i>Pr/nC17</i>	0.99	N-C28	21.04	375.60
<i>Ph/nC18</i>	0.35	N-C29	18.94	338.07
<i>(Pr/nC17)/(Ph/nC18)</i>	2.87	N-C30	12.58	224.56
<i>Pr/Ph</i>	3.23	N-C31	10.20	181.99
<i>nC17/(nC17+nC27)</i>	0.78	N-C32	7.36	131.41
<i>CPI-1</i>	1.06	N-C33	4.68	83.51
<i>CPI-2 (nC26:nC27)</i>	0.95	N-C34	6.91	123.28
		N-C35	4.30	76.80

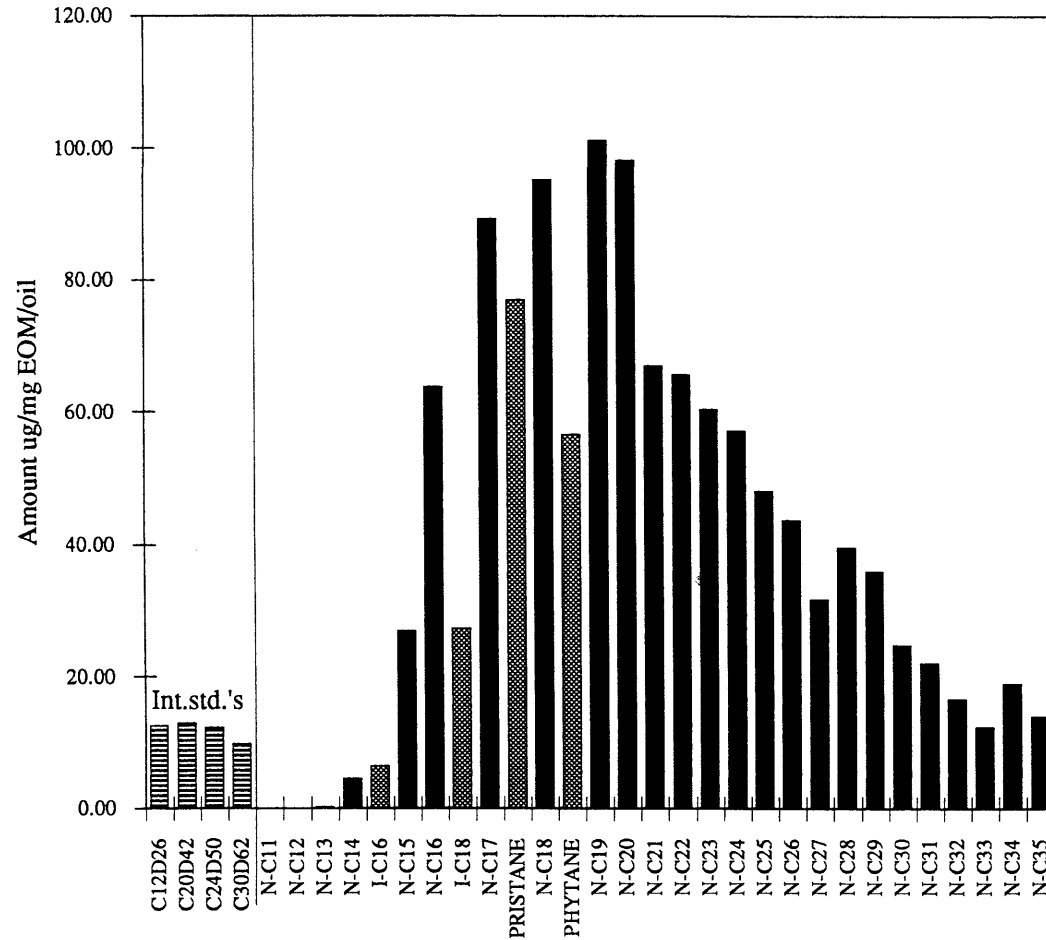
**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



	Sample:	2554.50	Name	ug/mg	Area
	Name:	0	C12D26	12.31	47.87
	NH proj.:	0	C20D42	12.68	80.73
	Instrument:	sat	C24D50	12.04	112.39
	Analysis:	a3009oil	C30D62	9.53	70.91
	Seq.# :	0	N-C11	0.00	0.00
30/9-11A					
			N-C12	0.00	0.00
			N-C13	0.00	0.00
			N-C14	2.07	8.03
			I-C16	2.96	18.83
			N-C15	12.58	80.09
			N-C16	40.19	255.85
			I-C18	19.78	125.91
			N-C17	65.41	416.46
			PRISTANE	56.83	361.81
			N-C18	73.76	469.60
			PHYTANE	43.21	275.07
			N-C19	76.52	487.18
			N-C20	79.20	504.24
			N-C21	53.21	496.74
			N-C22	52.20	487.33
			N-C23	50.73	473.62
			N-C24	50.35	470.11
			N-C25	45.13	421.34
			N-C26	41.93	391.44
			N-C27	32.56	303.94
			N-C28	38.47	286.11
			N-C29	37.70	280.36
			N-C30	26.79	199.22
			N-C31	23.98	178.32
			N-C32	18.48	137.43
			N-C33	14.49	107.78
			N-C34	18.28	135.97
			N-C35	13.76	102.34

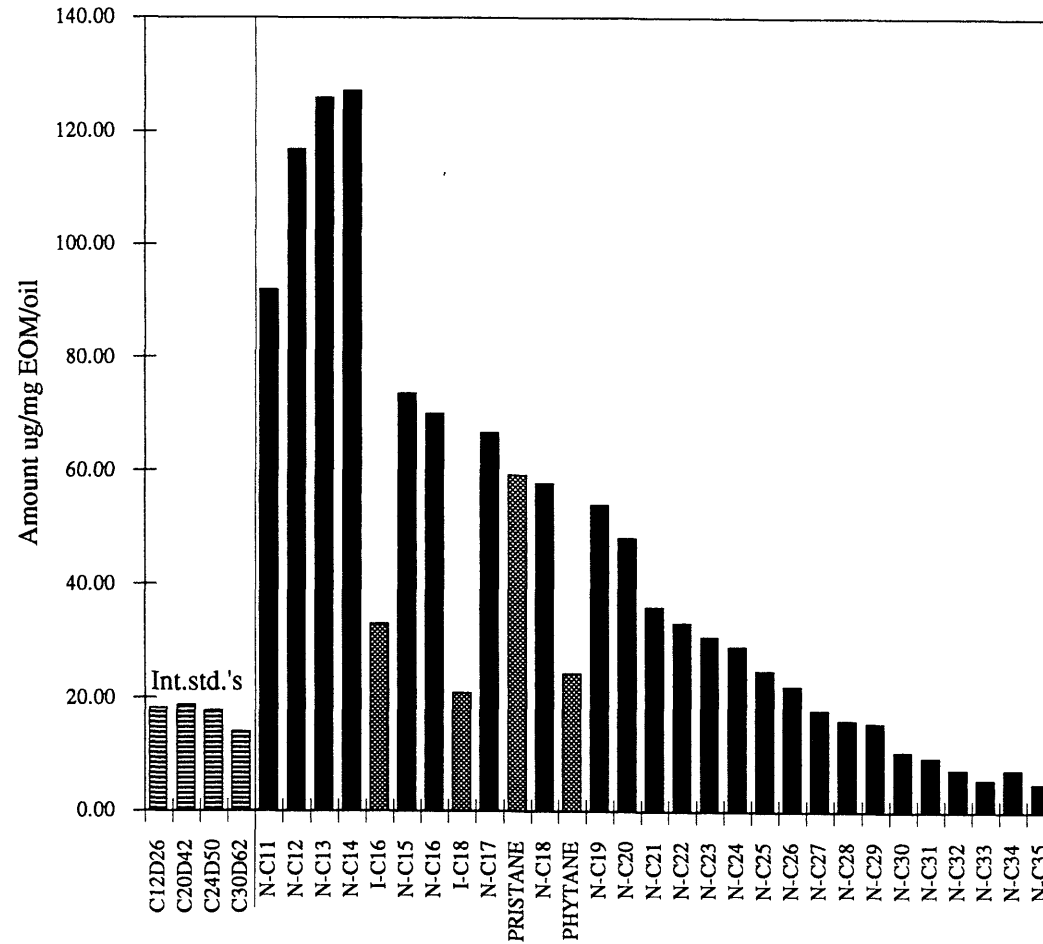
Peak ratios:	
Pr/nC17	0.87
Ph/nC18	0.59
(Pr/nC17)/(Ph/nC18)	1.48
Pr/Ph	1.32
nC17/(nC17+nC27)	0.67
CPI-1	1.00
CPI-2 (nC26:nC27)	0.87

**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



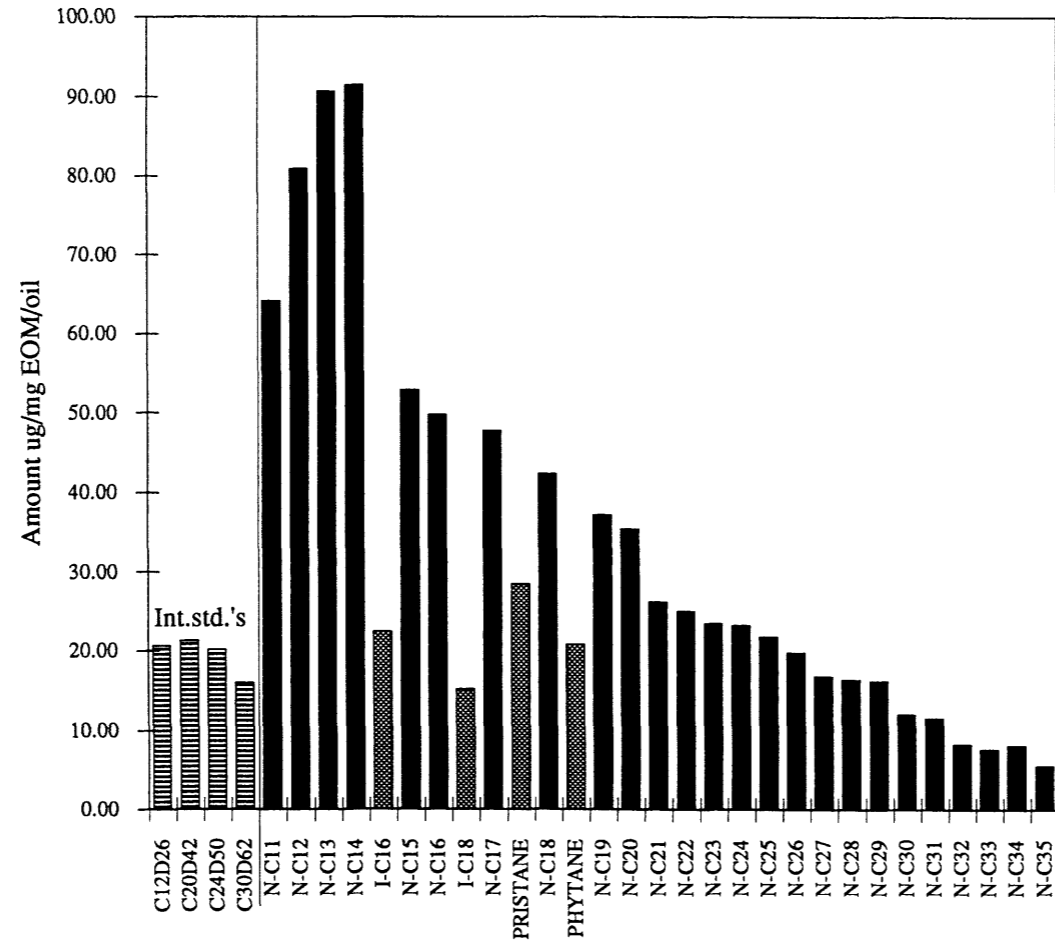
		Name	ug/mg	Area
Sample:	2568.75	C12D26	12.63	116.68
Name:	0	C20D42	13.00	190.76
NH proj.:	0	C24D50	12.35	257.99
Instrument:	sat	C30D62	9.78	160.53
Analysis:	a3009oil	N-C11	0.00	0.00
Seq.# :	0	N-C12	0.00	0.00
30/9-11A		N-C13	0.22	2.07
		N-C14	4.53	41.87
		I-C16	6.46	94.76
		N-C15	26.85	393.86
		N-C16	63.78	935.63
		I-C18	27.29	400.30
		N-C17	89.26	1309.48
		PRISTANE	77.04	1130.22
		N-C18	95.24	1397.27
		PHYTANE	56.52	829.11
		N-C19	101.16	1484.04
		N-C20	98.25	1441.29
		N-C21	67.06	1401.47
		N-C22	65.68	1372.58
		N-C23	60.38	1261.89
		N-C24	57.11	1193.38
		N-C25	48.13	1005.87
		N-C26	43.71	913.53
Peak ratios:		N-C27	31.74	663.35
	Pr/nC17	0.86	N-C28	39.58
	Ph/nC18	0.59	N-C29	35.92
	(Pr/nC17)/(Ph/nC18)	1.45	N-C30	24.77
	Pr/Ph	1.36	N-C31	22.12
	nC17/(nC17+nC27)	0.74	N-C32	16.72
	CPI-1	0.97	N-C33	12.44
	CPI-2 (nC26:nC27)	0.84	N-C34	18.97
			N-C35	14.03

**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



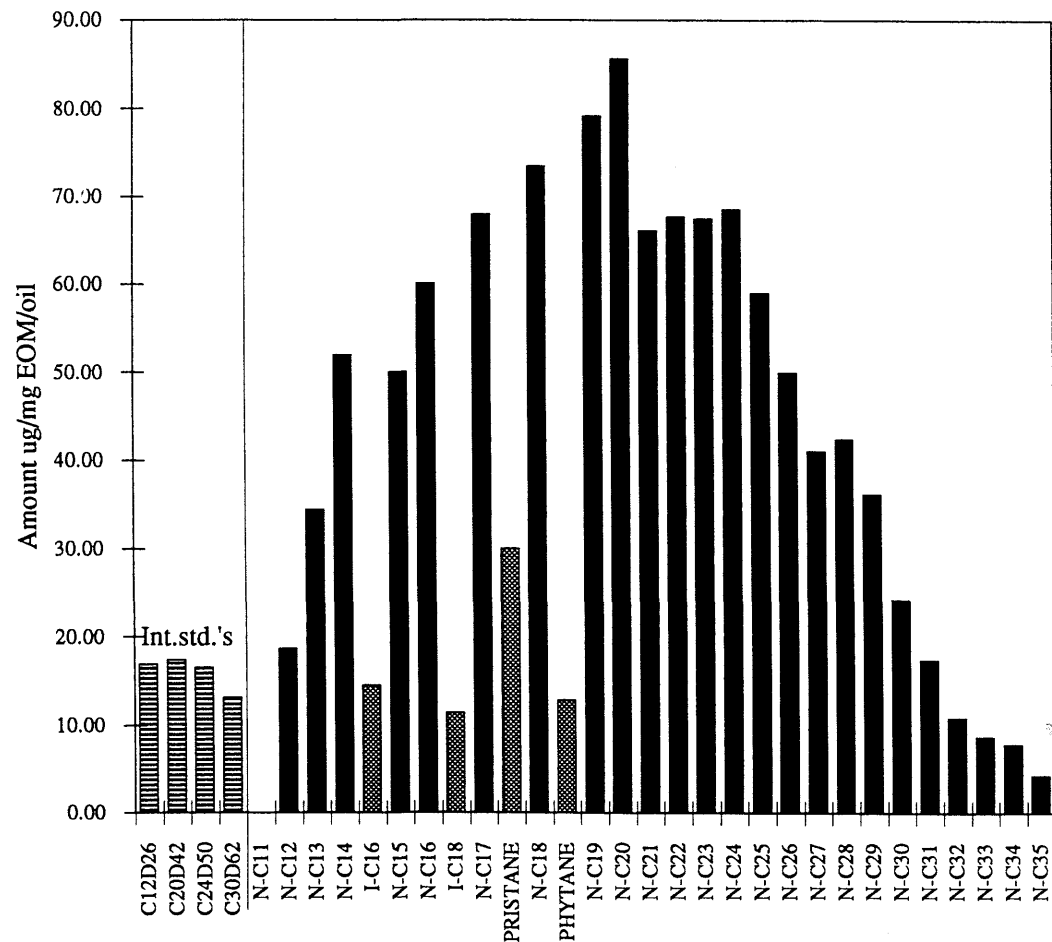
		Name	ug/mg	Area
Sample:	2263.50	C12D26	18.20	131.23
Name:	0	C20D42	18.74	252.88
NH proj.:	0	C24D50	17.79	300.98
Instrument:	sat	C30D62	14.09	229.78
Analysis:	a3009oil	N-C11	91.95	663.07
Seq.# :	0	N-C12	116.81	842.40
30/9-15		N-C13	125.96	908.36
		N-C14	127.13	916.82
		I-C16	32.91	444.14
		N-C15	73.62	993.73
		N-C16	70.03	945.24
		I-C18	20.86	281.53
		N-C17	66.64	899.43
		PRISTANE	59.25	799.67
		N-C18	57.82	780.45
		PHYTANE	24.24	327.12
		N-C19	54.12	730.54
		N-C20	48.27	651.50
		N-C21	36.02	609.52
		N-C22	33.21	561.84
		N-C23	30.74	520.05
		N-C24	28.98	490.39
		N-C25	24.86	420.71
		N-C26	22.12	374.20
		N-C27	18.01	304.69
		N-C28	16.20	264.16
		N-C29	15.74	256.68
		N-C30	10.69	174.32
		N-C31	9.68	157.82
		N-C32	7.56	123.25
		N-C33	5.78	94.19
		N-C34	7.49	122.24
		N-C35	5.08	82.87
Peak ratios:				
Pr/nC17	0.89	N-C27	18.01	304.69
Ph/nC18	0.42	N-C28	16.20	264.16
(Pr/nC17)/(Ph/nC18)	2.12	N-C29	15.74	256.68
Pr/Ph	2.44	N-C30	10.69	174.32
nC17/(nC17+nC27)	0.79	N-C31	9.68	157.82
CPI-1	1.04	N-C32	7.56	123.25
CPI-2 (nC26:nC27)	0.90	N-C33	5.78	94.19
		N-C34	7.49	122.24
		N-C35	5.08	82.87

**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



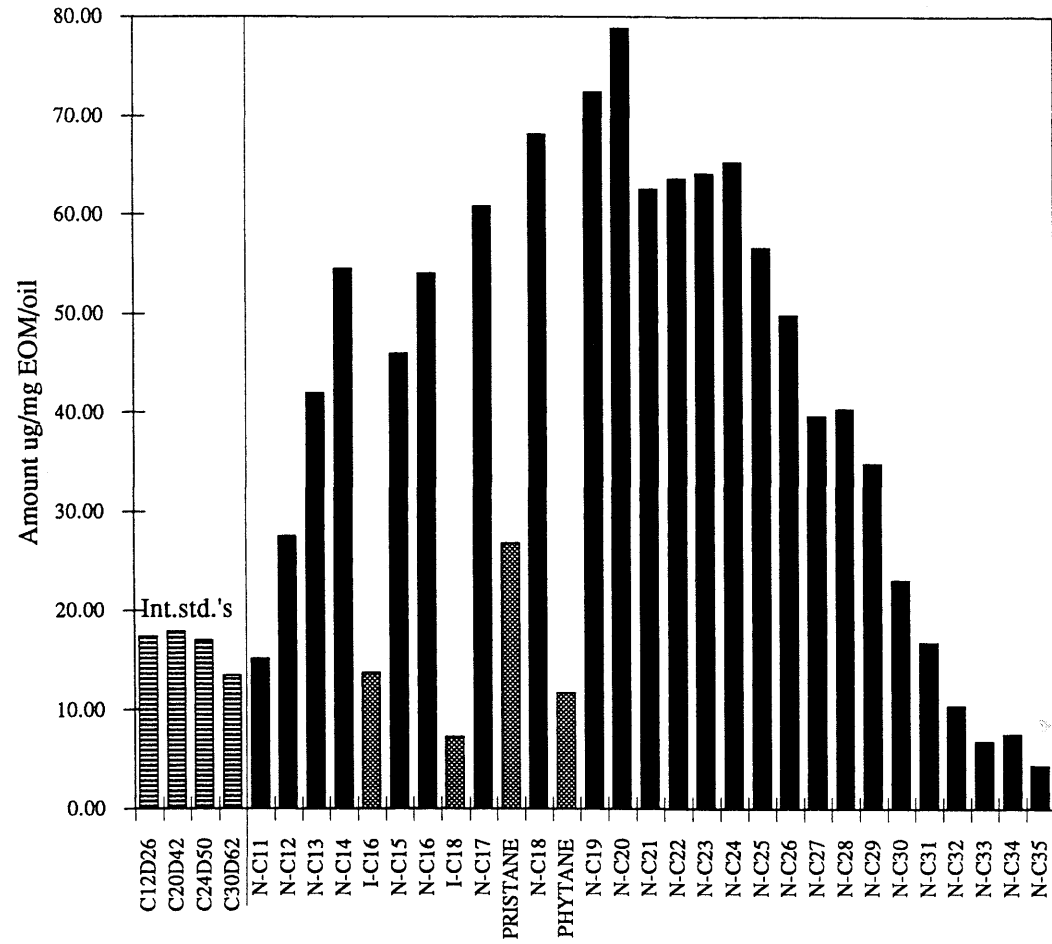
		Name	ug/mg	Area
Sample:	biom_b2	C12D26	20.66	31.48
Name:	0	C20D42	21.27	58.40
NH proj.:	0	C24D50	20.19	64.48
Instrument:	sat	C30D62	15.99	46.09
Analysis:	a3009oil	N-C11	64.11	97.72
Seq.# :	0	N-C12	80.85	123.23
		N-C13	90.71	138.24
		N-C14	91.44	139.36
		I-C16	22.40	61.50
		N-C15	52.83	145.07
		N-C16	49.74	136.57
		I-C18	15.22	41.78
		N-C17	47.74	131.09
		PRISTANE	28.46	78.15
		N-C18	42.34	116.26
		PHYTANE	20.79	57.08
		N-C19	37.22	102.21
		N-C20	35.41	97.24
		N-C21	26.17	83.56
		N-C22	24.93	79.61
		N-C23	23.47	74.95
		N-C24	23.18	74.01
		N-C25	21.80	69.63
		N-C26	19.71	62.95
Peak ratios:		N-C27	16.81	53.66
Pr/nC17	0.60	N-C28	16.36	47.14
Ph/nC18	0.49	N-C29	16.19	46.65
(Pr/nC17)/(Ph/nC18)	1.21	N-C30	12.06	34.75
Pr/Ph	1.37	N-C31	11.58	33.38
nC17/(nC17+nC27)	0.74	N-C32	8.31	23.95
CPI-1	1.05	N-C33	7.60	21.91
CPI-2 (nC26:nC27)	0.92	N-C34	8.14	23.45
		N-C35	5.55	15.99

**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



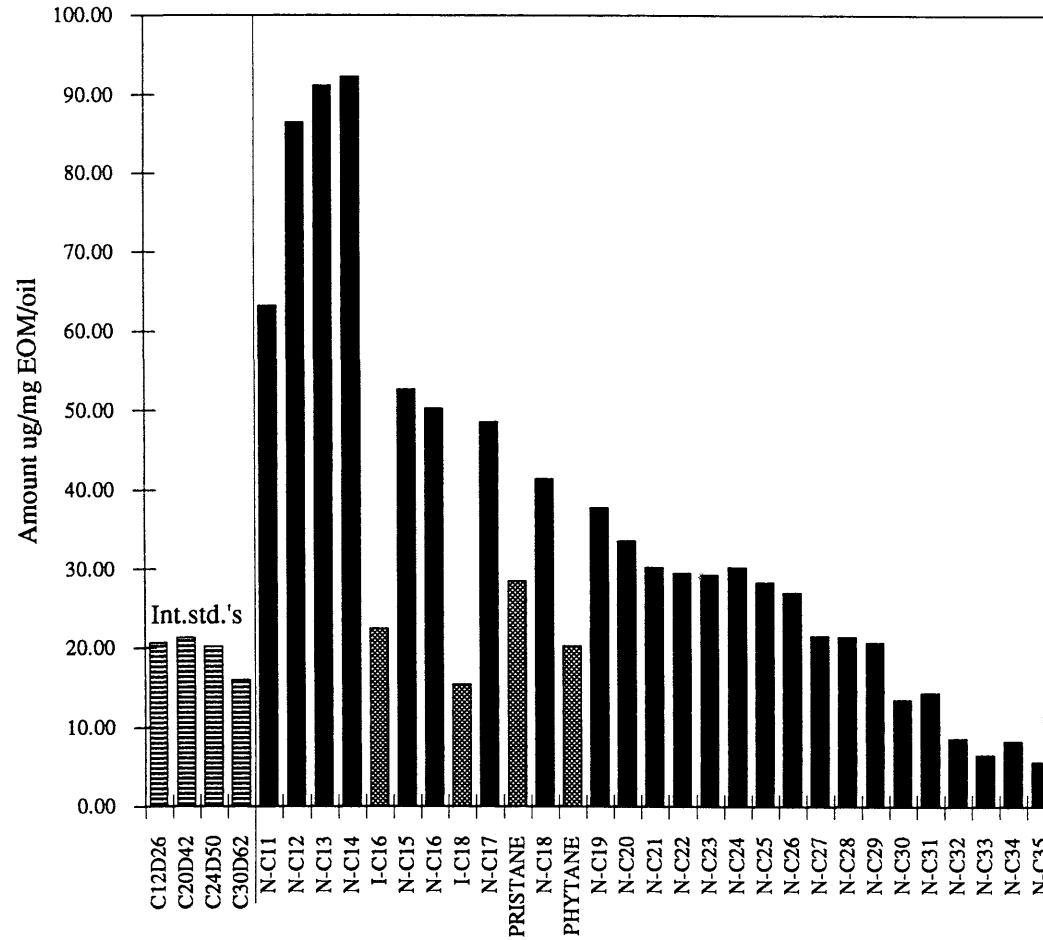
		Name	ug/mg	Area
Sample:	2465.50	C12D26	16.95	67.06
Name:	0	C20D42	17.45	100.32
NH proj.:	0	C24D50	16.57	127.15
Instrument:	sat	C30D62	13.13	84.76
Analysis:	a3009oil	N-C11	0.00	0.00
Seq.# :	0	N-C12	18.62	73.66
30/9-15		N-C13	34.42	136.18
		N-C14	51.95	205.52
		I-C16	14.52	83.44
		N-C15	50.00	287.36
		N-C16	60.05	345.16
		I-C18	11.45	65.81
		N-C17	67.97	390.70
		PRISTANE	29.99	172.40
		N-C18	73.46	422.24
		PHYTANE	12.84	73.80
		N-C19	79.16	455.00
		N-C20	85.66	492.34
		N-C21	66.05	506.76
		N-C22	67.65	519.01
		N-C23	67.46	517.56
N-C24	68.55	525.98		
N-C25	58.96	452.40		
Peak ratios:		N-C26	49.95	383.25
Pr/nC17	0.44	N-C27	41.00	314.59
Ph/nC18	0.17	N-C28	42.35	273.49
(Pr/nC17)/(Ph/nC18)	2.52	N-C29	36.11	233.17
Pr/Ph	2.34	N-C30	24.13	155.80
nC17/(nC17+nC27)	0.62	N-C31	17.35	112.01
CPI-1	1.02	N-C32	10.83	69.95
CPI-2 (nC26:nC27)	0.90	N-C33	8.70	56.19
		N-C34	7.77	50.21
		N-C35	4.25	27.45

**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



		Name	ug/mg	Area
Sample:	2471.00	C12D26	17.36	63.18
Name:	0	C20D42	17.87	98.49
NH proj.:	0	C24D50	16.97	122.21
Instrument:	sat	C30D62	13.44	82.75
Analysis:	a3009oil	N-C11	15.11	55.00
Seq.# :	0	N-C12	27.51	100.13
30/9-15		N-C13	41.95	152.71
		N-C14	54.50	198.38
		I-C16	13.69	75.47
		N-C15	45.95	253.25
		N-C16	54.05	297.84
		I-C18	7.23	39.84
		N-C17	60.79	335.02
		PRISTANE	26.78	147.61
		N-C18	68.08	375.17
		PHYTANE	11.70	64.50
		N-C19	72.40	398.98
		N-C20	78.83	434.44
		N-C21	62.51	450.22
		N-C22	63.60	458.10
		N-C23	64.15	462.03
N-C24	65.30	470.32		
N-C25	56.58	407.50		
Peak ratios:		N-C26	49.88	359.23
Pr/nC17	0.44	N-C27	39.62	285.36
Ph/nC18	0.17	N-C28	40.36	248.53
(Pr/nC17)/(Ph/nC18)	2.56	N-C29	34.83	214.48
Pr/Ph	2.29	N-C30	23.07	142.08
nC17/(nC17+nC27)	0.61	N-C31	16.73	103.00
CPI-1	1.01	N-C32	10.44	64.31
CPI-2 (nC26:nC27)	0.89	N-C33	6.79	41.79
		N-C34	7.52	46.28
		N-C35	4.34	26.71

**Absolute amounts of saturated hydrocarbons,
based on peak area from GC/FID detection**



		Name	ug/mg	Area
Sample:	biom_b2	C12D26	20.66	97.87
Name:	0	C20D42	21.27	184.51
NH proj.:	0	C24D50	20.19	186.56
Instrument:	sat	C30D62	15.99	134.35
Analysis:	satgnar	N-C11	63.17	299.29
Seq.# :	0	N-C12	86.52	409.94
		N-C13	91.12	431.72
		N-C14	92.30	437.31
		I-C16	22.38	194.16
		N-C15	52.59	456.23
		N-C16	50.20	435.51
		I-C18	15.42	133.74
		N-C17	48.49	420.69
		PRISTANE	28.40	246.33
		N-C18	41.34	358.64
		PHYTANE	20.26	175.72
		N-C19	37.76	327.56
		N-C20	33.61	291.54
		N-C21	30.22	279.22
		N-C22	29.51	272.68
		N-C23	29.23	270.04
		N-C24	30.20	279.03
		N-C25	28.30	261.48
		N-C26	26.98	249.27
		N-C27	21.44	198.05
		N-C28	21.35	179.36
		N-C29	20.67	173.66
		N-C30	13.49	113.31
		N-C31	14.38	120.79
		N-C32	8.59	72.12
		N-C33	6.47	54.37
		N-C34	8.29	69.61
		N-C35	5.60	47.00
Peak ratios:				
		Pr/nC17	0.59	
		Ph/nC18	0.49	
		(Pr/nC17)/(Ph/nC18)	1.20	
		Pr/Ph	1.40	
		nC17/(nC17+nC27)	0.69	
		CPI-1	1.06	
		CPI-2 (nC26:nC27)	0.89	

REPORT: Isotopanalyser	
CLIENTS: Norsk Hydro	
RESPONSIBLE TECHNICIANS: Trine Øyås Rita P. Moe	
DATE:05.05.94	GEOLAB PROJECT:62137 CLIENTS REF.:FB26913

Table 1A: Tabulation of carbon isotope data on oils for NORSK HYDRO, FB 26913

<u>Well</u>	<u>Descript.</u>	<u>Whole oil</u>	<u>Topped oil</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>NSO</u>	<u>Asphaltenes</u>	<u>Sample</u>
30/9-15	MDT	-	-	-28.39	-28.30	-28.00	-27.85	K23/0001
30/9-6	DST 1	-	-	-28.67	-28.55	-28.18	-27.89	K21/0001
30/9-9	DST 1	-	-	-28.20	-28.01	-27.69	-27.13	F36/0056

Table 1B: Tabulation of cv values from carbon isotope data for NORSK HYDRO, FB 26913

<u>Well</u>	<u>Descript.</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>cv value</u>	<u>Sample</u>
30/9-15	MDT	-28.39	-28.30	-2.65	K23/0001
30/9-6	DST 1	-28.67	-28.55	-2.50	K21/0001
30/9-9	DST 1	-28.20	-28.01	-2.49	F36/0056

Table 1A: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 30/9-15

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>EOM</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>NSO</u>	<u>Asphaltenes</u>	<u>Kerogen</u>	<u>Sample</u>
2263.50	oil	bulk	-	-28.39	-28.30	-28.00	-27.85	-	0001-0
2465.50	swc	bulk	-	-27.89	-26.85	-	-	-	0002-0
2471.00	swc	bulk	-	-27.90	-26.16	-	-	-	0003-0

Table 1B: Tabulation of cv values from carbon isotope data for well NOCS 30/9-15

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>cv value</u>	<u>Sample</u>
2263.50	oil	bulk	-28.39	-28.30	-2.65	0001-0
2465.50	swc	bulk	-27.89	-26.85	-0.70	0002-0
2471.00	swc	bulk	-27.90	-26.16	0.86	0003-0

Table 1A: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 30/9-5

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>EOM</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>NSO</u>	<u>Asphaltenes</u>	<u>Kerogen</u>	<u>Sample</u>
2455.30	ccp	bulk	-	-27.84	-26.19	-	-	-	0002-0
2455.80	ccp	bulk	-	-28.95	-26.02	-	-	-	0003-0

Table 1B: Tabulation of cv values from carbon isotope data for well NOCS 30/9-5

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>cv value</u>	<u>Sample</u>
2455.30	ccp	bulk	-27.84	-26.19	0.64	0002-0
2455.80	ccp	bulk	-28.95	-26.02	3.83	0003-0

Table 1A: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 30/9-11A

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>EOM</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>NSO</u>	<u>Asphaltenes</u>	<u>Kerogen</u>	<u>Sample</u>
2554.50	ccp	bulk	-	-28.97	-28.92	-	-	-	0001-0
2568.75	ccp	bulk	-	-29.15	-28.92	-	-	-	0002-0