TOC, Rock-Eval, vitrinite reflectance, and gas chromatography of cuttings from the following:

Chevron USA Inc. Jeanette Island No. 1 (9,850' – 11,200'),

Chevron USA Inc. Karluk No. 1 (8,900' – 10,400'),

Exxon Company U.S.A. OCS Y-0191-1 [BF-37-01] (8,400' – 9,360'), and

Husky Oil NPR Operations (U. S. Geological Survey) Ikpikpuk T. W. No. 1 (6,000' – 10,500').

Received 23 March 1999.

Total of 61 pages in report.

Alaska Geologic Materials Center Data Report No. 287

WESTPORT

TECHNOLOGY CENTER INTERNATIONAL

OCS 4191-1
BF-37-01, Karluk #1
Jeanette #1 and Ikpikt-01
Ikpikpak T.W. #1

TSE Data

Client ID	Depth (ft)	Lab Id (WFXXXX)	Sample Wt. (gms)	TSE Wt. (mgs)	%TSE	KG/Ton TSE
Ikpikt-01	6000-100	9126	43.781	15.2	0.0347	0.347
Ikpikt-01	6600-700	9127	62.37	14.4	0.023	0.23
Ikpikt-01	6700-900	9128	93.827	28.4	0.0302	0.302
BF-37-01	8400-550	9162	19.020	11.6	0.0609	0.609
BF-37-01	8550-800	9163	51.408	26.3	0.0511	0.511
BF-37-01	9090-360	9164	42.554	16.9	0.0397	0.397
Karluk #1	8900-150	9165	17.369	21.4	0.1232	1.232
Karluk #1	10200-400	9166	11.578	9.1	0.0786	0.786
Jeanette #1	9850-10150	9167	54.057	51.2	0.0947	0.947
Jeanette #1	10850-11200	9168	60.935	36.8	0.0603	0.603

SARA Data

Client ID	Depth (ft)	Lab Id (WFXXXX)	Saturate %	Aromatic %	Polar %	Asph. %
Ikpikt-01	6000-100	9126	44.9	24.0	24.0	7.1
Ikpikt-01	6600-700	9127	44.3	29.4	23.3	3.0
Ikpikt-01	6700-900	9128	38.6	32.2	24.4	4.9
BF-37-01	8400-550	9162	62.1	9.3	26.4	2.2
BF-37-01	8550-800	9163	67.5	12.5	19.5	0.5
BF-37-01	9090-360	9164	68.9	8.6	21.7	0.9
Karluk #1	8900-150	9165	63.1	13.7	22.6	0.7
Karluk #1	10200-400	9166	44.3	9.9	44.2	1.6
Jeanette #1	9850-10150	9167	53.0	19.6	27.1	0.3
Jeanette #1	10850-11200	9168	60.5	17.2	22.0	0.4

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

lkpikt-01 Kerogen Isotope Data

Client ID	Depth (ft)	Lab Id (WFXXXX)	Whole $\delta^{13}\text{C}(\text{‰})$	Kerogen $\delta^{13}\text{C}(\text{‰})$
lkpikt-01	8300-400	9140	-27.88	-27.17
lkpikt-01	8400-500	9141		-27.1
lkpikt-01	8500-600	9142		-26.63
lkpikt-01	8600-700	9143		-26.91
lkpikt-01	8700-800	9144		-26.55
lkpikt-01	8800-900	9145		-26.92
lkpikt-01	8900-9000	9146	-28.37	-28.04
lkpikt-01	9000-100	9147		-27.74
lkpikt-01	9100-200	9148		-27.47
lkpikt-01	9200-300	9149		-27.43
lkpikt-01	9300-400	9150	-27.47	-28.01
lkpikt-01	9700-800	9154	-28.23	-28.88
lkpikt-01	9900-10000	9156	-27.97	-27.98
lkpikt-01	10200-300	9159	-26.63	-29.02

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

lkpikt-01 RockEval/TOC and Carbonate Data

Client ID	Depth (ft)	SAMPLE ID (WFXMLXX)	TOC	S1	S2	S3	TMAX	HI	OI	S2/S3	PI	% CO3	%C*
lkpikt-01	7200-300	9129	1.68	0.23	2.01	0.45	439	120	27	4.47	0.10	84.93	10.19
lkpikt-01	7300-400	9130	1.77	0.21	1.83	0.41	441	103	23	4.46	0.10	84.95	10.19
lkpikt-01	7400-500	9131	1.32	0.21	1.03	0.33	444	78	25	3.12	0.17	86.40	10.37
lkpikt-01	7500-600	9132	2.01	0.38	2.25	0.45	443	112	22	5.00	0.14	89.27	10.71
lkpikt-01	7600-700	9133	1.85	0.40	2.17	0.56	443	117	30	3.88	0.16	88.59	10.63
lkpikt-01	7700-800	9134	1.51	0.36	1.69	0.55	443	112	36	3.07	0.18	87.56	10.57
lkpikt-01	7800-900	9135	1.49	0.31	1.43	0.54	447	96	36	2.65	0.18	88.53	10.68
lkpikt-01	7900-8000	9136	1.50	0.35	1.33	0.73	447	89	49	1.82	0.21	88.99	10.68
lkpikt-01	8000-100	9137	1.08	0.23	0.68	0.54	445	63	50	1.26	0.25	85.10	10.24
lkpikt-01	8100-200	9138	1.04	0.21	0.81	0.37	446	78	36	2.19	0.21	88.93	10.67
lkpikt-01	8200-300	9139	1.12	0.22	0.76	0.45	448	68	40	1.69	0.22	87.15	10.46
lkpikt-01	8300-400	9140	1.70	0.54	4.58	0.58	423	269	34	7.90	0.11	85.53	10.26
lkpikt-01	8400-500	9141	14.61	4.86	92.68	2.56	426	634	18	36.20	0.05	89.28	10.71
lkpikt-01	8500-600	9142	3.19	1.24	14.22	0.57	424	446	18	24.95	0.08	83.94	10.07
lkpikt-01	8600-700	9143	2.66	0.89	9.06	0.84	426	341	32	10.79	0.09	88.79	10.65
lkpikt-01	8700-800	9144	1.70	0.60	3.30	0.57	436	194	34	5.79	0.15	90.00	10.80
lkpikt-01	8800-900	9145	3.35	1.21	13.81	0.69	424	412	21	20.01	0.08	88.03	10.56
lkpikt-01	8900-9000	9146	3.40	1.23	14.26	0.53	426	419	16	26.91	0.08	89.71	10.77
lkpikt-01	9000-100	9147	2.33	1.11	10.16	0.58	421	436	25	17.52	0.10	91.27	10.95
lkpikt-01	9100-200	9148	1.77	0.83	6.43	0.59	420	363	33	10.90	0.11	87.77	10.53
lkpikt-01	9200-300	9149	1.39	0.54	3.17	0.59	423	228	42	5.37	0.15	88.28	10.59
lkpikt-01	9300-400	9150	1.74	0.59	3.95	0.70	431	227	40	5.64	0.13	90.47	10.86
lkpikt-01	9400-500	9151	1.33	0.41	1.32	0.36	452	99	27	3.67	0.24	90.52	10.86
lkpikt-01	9500-600	9152	1.30	0.46	1.64	0.39	445	126	30	4.21	0.22	90.46	10.86
lkpikt-01	9600-700	9153	1.10	0.31	0.97	0.61	454	88	55	1.59	0.24	90.86	10.90

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt-01 RockEval/TOC and Carbonate Data

Client ID	Depth (ft)	SAMPLE ID (WFXMLXX)	TOC	S1	S2	S3	TMAX	HI	OI	S2/S3	PI	% CO3	%C*
Ikpikt-01	9700-800	9154	1.61	0.60	3.99	0.53	423	248	33	7.53	0.13	87.98	10.56
Ikpikt-01	9800-900	9155	0.93	0.41	0.90	0.25	438	97	27	3.60	0.31	90.89	10.91
Ikpikt-01	9900-10000	9156	1.42	1.36	4.10	1.60	427	289	113	2.56	0.25	71.40	8.57
Ikpikt-01	10000-100	9157	0.92	0.50	1.97	0.62	429	214	67	3.18	0.20	87.16	10.46
Ikpikt-01	10100-200	9158	1.08	0.40	1.33	0.55	433	123	51	2.42	0.23	61.68	7.40
Ikpikt-01	10200-300	9159	6.18	3.10	4.96	0.36	468	80	6	13.78	0.38	41.62	4.99
Ikpikt-01	10300-400	9160	0.85	0.38	0.78	0.37	436	92	44	2.11	0.33	54.43	6.53
Ikpikt-01	10400-500	9161	1.25	0.28	0.93	0.67	427	74	54	1.39	0.23	83.24	9.99

TOC = weight percent organic carbon

S1,S2 = mg hydrocarbon/g rock

S3 = mg carbon dioxide/g rock

Tmax = Degree C

HI = $S2 \cdot 100 / TOC$

OI = $S3 \cdot 100 / TOC$

PI = $S1 / (S1 + S2)$

*Assumes 12% Carbon in Calcium Carbonate only

TSE Data Phase 2 lkpikt-01

Client ID	Depth (ft)	Lab Id (WFXMLXX)	Sample Wt. (gms)	TSE Wt. (mgs)	%TSE	KG/Ton TSE
lkpikt #1	6000-100	9126	43.781	15.2	0.0347	0.347
lkpikt #1	6600-700	9127	62.37	14.4	0.023	0.23
lkpikt #1	6700-900	9128	93.827	28.4	0.0302	0.302
lkpikt #1	8200-300	9139	44.8641	24.6	0.548	5.483
lkpikt #1	8300-400	9140	49.9036	227.0	4.549	45.488
lkpikt #1	8400-500	9141	41.3903	2904.4	70.171	701.710
lkpikt #1	8500-600	9142	38.2165	429.6	11.241	112.412
lkpikt #1	8600-700	9143	30.1832	220.9	7.319	73.186
lkpikt #1	8700-800	9144	26.2627	72.9	2.776	27.758
lkpikt #1	8800-900	9145	26.9829	476.2	17.648	176.482
lkpikt #1	8900-9000	9146	26.6080	285.3	10.722	107.223
lkpikt #1	9000-100	9147	24.0706	218.1	9.061	90.608
lkpikt #1	9100-200	9148	21.7971	119.0	5.459	54.594
lkpikt #1	9300-400	9150	23.4710	66.6	2.838	28.375
lkpikt #1	9700-800	9154	27.6599	69.6	2.516	25.163
lkpikt #1	900-1000	9156	17.3919	97.6	5.612	56.118
lkpikt #1	10200-300	9159	26.2053	112.1	4.278	42.778
BF-37-01	8400-550	9162	19.020	11.6	0.0609	0.609
BF-37-01	8550-800	9163	51.408	26.3	0.0511	0.511
BF-37-01	9090-360	9164	42.554	16.9	0.0397	0.397
Karluk #1	8900-150	9165	17.369	21.4	0.1232	1.232
Karluk #1	10200-400	9166	11.578	9.1	0.0786	0.786
Jeanette #1	850-1015	9167	54.057	51.2	0.0947	0.947
Jeanette #1	0850-1120	9168	60.935	36.8	0.0603	0.603

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

SARA Data

Client ID	Depth (ft)	Lab Id (WFXMLX)	Saturate %	Aromatic %	Polar %	Asph. %
lkpikt #1	6000-100	9126	44.9	24.0	24.0	7.1
lkpikt #1	6600-700	9127	44.3	29.4	23.3	3.0
lkpikt #1	6700-900	9128	38.6	32.2	24.4	4.9
lkpikt #1	8300-400	9140	50.7	16.0	10.5	22.7
lkpikt #1	8900-9000	9146	40.9	13.0	8.8	37.2
lkpikt #1	9300-400	9150	53.3	16.8	15.2	14.7
lkpikt #1	9700-800	9154	58.9	17.0	16.3	7.8
lkpikt #1	9900-10000	9156	61.2	20.5	14.0	4.3
lkpikt #1	10200-300	9159	51.9	33.3	13.6	1.2
BF-37-01	8400-550	9162	62.1	9.3	26.4	2.2
BF-37-01	8550-800	9163	67.5	12.5	19.5	0.5
BF-37-01	9090-360	9164	68.9	8.6	21.7	0.9
Karluk #1	8900-150	9165	63.1	13.7	22.6	0.7
Karluk #1	10200-400	9166	44.3	9.9	44.2	1.6
Jeanette #1	9850-10150	9167	53.0	19.6	27.1	0.3
Jeanette #1	10850-11200	9168	60.5	17.2	22.0	0.4

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt-01, BF-37-01, Karluk-1, Jeanette-1 RockEval/TOC of Extracted Samples

Client ID	Depth (ft)	SAMPLE ID (WFXMLXX)	TOC AND ROCK-EVAL DATA				TMAX	INTERPRETIVE RATIOS			
			TOC	S1	S2	S3		HI	OI	S2/S3	PI
Ikpikt-01	6000-100	9126	0.99	0.09	0.61	0.75	438	62	76	0.81	0.13
Ikpikt-01	6600-700	9127	1.12	0.08	0.63	0.72	435	56	64	0.88	0.11
Ikpikt-01	6700-900	9128	1.06	0.07	0.61	0.66	438	58	62	0.92	0.10
Ikpikt-01	8200-300	9139	0.98	0.10	0.71	0.46	448	72	47	1.54	0.12
Ikpikt-01	8300-400	9140	1.21	0.12	1.49	0.50	440	123	41	2.98	0.07
Ikpikt-01	8400-500	9141	1.30	0.23	2.29	0.41	439	176	32	5.59	0.09
Ikpikt-01	8500-600	9142	1.42	0.19	2.20	0.43	440	155	30	5.12	0.08
Ikpikt-01	8600-700	9143	1.70	0.21	2.85	0.80	442	168	47	3.56	0.07
Ikpikt-01	8700-800	9144	1.50	0.14	1.76	0.46	446	117	31	3.83	0.07
Ikpikt-01	8800-900	9145	1.80	0.25	2.81	0.61	440	156	34	4.61	0.08
Ikpikt-01	8900-9000	9146	1.66	0.33	2.72	0.43	446	164	26	6.33	0.11
Ikpikt-01	9000-100	9147	1.38	0.21	2.19	0.43	442	159	31	5.09	0.09
Ikpikt-01	9100-200	9148	1.03	0.16	1.54	0.44	436	150	43	3.50	0.09
BF-37-01	8400-550	9162	1.28	0.07	0.66	1.99	434	52	155	0.33	0.10
BF-37-01	8550-800	9163	0.98	0.08	0.53	0.96	434	54	98	0.55	0.13
BF-37-01	9090-360	9164	0.90	0.08	0.38	1.04	428*	42	116	0.37	0.17
Karluk #1	8900-150	9165	2.01	0.14	1.24	1.87	434	62	93	0.66	0.10
Karluk #1	10200-400	9166	1.45	0.10	0.62	1.89	438	43	130	0.33	0.14
Jeanette #1	9850-10150	9167	2.83	0.17	1.91	2.32	438	67	82	0.82	0.08
Jeanette #1	10850-11200	9168	1.71	0.17	1.12	1.08	438	65	63	1.04	0.13

TOC = weight percent organic carbon

HI = S2*100/TOC

S1,S2 = mg hydrocarbon/g rock

OI = S3*100/TOC

S3 = mg carbon dioxide/g rock

PI = S1/(S1+S2)

Tmax = Degree C

* Tmax data not reliable due to low kerpge S2 value

Vitrinite Reflectance Report

Attached are vitrinite reflectance histograms for samples WF9132, 9141, 9146 and 9159. Reflectance ranges from 0.63 to 0.88 Ro and placing those samples in the early to peak oil generation stage.

Sample ID: *WF9132*
Mean depth: *100*
Sample type: *CUTTINGS*

Indigenous population statistics
Mean: 0.63 Min: 0.55 Max: 0.71 Std. Dev.: 0.04 Count: 56

Total population statistics
Mean: 0.63 Min: 0.55 Max: 0.71 Std. Dev.: 0.04 Count: 56

01 - 0.55 <	21 - 0.61 <	41 - 0.66 <
02 - 0.56 <	22 - 0.62 <	42 - 0.67 <
03 - 0.57 <	23 - 0.62 <	43 - 0.67 <
04 - 0.57 <	24 - 0.62 <	44 - 0.68 <
05 - 0.57 <	25 - 0.62 <	45 - 0.68 <
06 - 0.57 <	26 - 0.62 <	46 - 0.68 <
07 - 0.58 <	27 - 0.63 <	47 - 0.69 <
08 - 0.58 <	28 - 0.63 <	48 - 0.69 <
09 - 0.58 <	29 - 0.63 <	49 - 0.70 <
10 - 0.59 <	30 - 0.63 <	50 - 0.70 <
11 - 0.59 <	31 - 0.63 <	51 - 0.70 <
12 - 0.59 <	32 - 0.64 <	52 - 0.70 <
13 - 0.60 <	33 - 0.64 <	53 - 0.70 <
14 - 0.60 <	34 - 0.64 <	54 - 0.70 <
15 - 0.60 <	35 - 0.65 <	55 - 0.71 <
16 - 0.60 <	36 - 0.65 <	56 - 0.71 <
17 - 0.60 <	37 - 0.65 <	
18 - 0.61 <	38 - 0.65 <	
19 - 0.61 <	39 - 0.66 <	
20 - 0.61 <	40 - 0.66 <	

Note: Reflectance values rounded to nearest hundredth, [<] indicates indigenous reflectance value

Sample ID: *WF9141*
Mean depth: *100*
Sample type: *CUTTINGS*

Indigenous population statistics

Mean: 0.64 Min: 0.50 Max: 0.79 Std. Dev.: 0.09 Count: 30

Total population statistics

Mean: 0.67 Min: 0.50 Max: 0.89 Std. Dev.: 0.11 Count: 35

01 - 0.50 <	21 - 0.69 <
02 - 0.51 <	22 - 0.71 <
03 - 0.51 <	23 - 0.72 <
04 - 0.51 <	24 - 0.72 <
05 - 0.52 <	25 - 0.73 <
06 - 0.54 <	26 - 0.74 <
07 - 0.57 <	27 - 0.76 <
08 - 0.57 <	28 - 0.77 <
09 - 0.57 <	29 - 0.77 <
10 - 0.58 <	30 - 0.79 <
11 - 0.60 <	31 - 0.80
12 - 0.60 <	32 - 0.81
13 - 0.61 <	33 - 0.81
14 - 0.63 <	34 - 0.88
15 - 0.65 <	35 - 0.89
16 - 0.65 <	
17 - 0.66 <	
18 - 0.68 <	
19 - 0.68 <	
20 - 0.69 <	

Note: Reflectance values rounded to nearest hundredth, [<] indicates indigenous reflectance value

Sample ID: *WF9146*
Mean depth: *100*
Sample type: *CUTTINGS*

Indigenous population statistics

Mean: 0.68 Min: 0.55 Max: 0.79 Std. Dev.: 0.06 Count: 40

Total population statistics

Mean: 0.70 Min: 0.46 Max: 0.91 Std. Dev.: 0.09 Count: 47

01 - 0.46	21 - 0.70 <	41 - 0.78 <
02 - 0.55 <	22 - 0.70 <	42 - 0.80
03 - 0.56 <	23 - 0.71 <	43 - 0.80
04 - 0.57 <	24 - 0.71 <	44 - 0.85
05 - 0.59 <	25 - 0.71 <	45 - 0.86
06 - 0.60 <	26 - 0.71 <	46 - 0.90
07 - 0.61 <	27 - 0.71 <	47 - 0.91
08 - 0.62 <	28 - 0.72 <	
09 - 0.62 <	29 - 0.72 <	
10 - 0.62 <	30 - 0.72 <	
11 - 0.62 <	31 - 0.72 <	
12 - 0.63 <	32 - 0.74 <	
13 - 0.64 <	33 - 0.74 <	
14 - 0.65 <	34 - 0.74 <	
15 - 0.65 <	35 - 0.74 <	
16 - 0.66 <	36 - 0.75 <	
17 - 0.67 <	37 - 0.77 <	
18 - 0.67 <	38 - 0.77 <	
19 - 0.68 <	39 - 0.78 <	
20 - 0.70 <	40 - 0.78 <	

Note: Reflectance values rounded to nearest hundredth, [<] indicates indigenous reflectance value

Sample ID: *WF9159*
Mean depth: *100*
Sample type: *CUTTINGS*

Indigenous population statistics
Mean: 0.88 Min: 0.75 Max: 0.98 Std. Dev.: 0.08 Count: 19

Total population statistics
Mean: 0.91 Min: 0.74 Max: 1.09 Std. Dev.: 0.11 Count: 25

01 - 0.74	21 - 1.02
02 - 0.75 <	22 - 1.05
03 - 0.76 <	23 - 1.07
04 - 0.78 <	24 - 1.08
05 - 0.78 <	25 - 1.09
06 - 0.80 <	
07 - 0.83 <	
08 - 0.83 <	
09 - 0.84 <	
10 - 0.87 <	
11 - 0.90 <	
12 - 0.91 <	
13 - 0.93 <	
14 - 0.93 <	
15 - 0.95 <	
16 - 0.95 <	
17 - 0.95 <	
18 - 0.96 <	
19 - 0.98 <	
20 - 0.98 <	

Note: Reflectance values rounded to nearest hundredth, [<] indicates indigenous reflectance value

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT 6000-100,,,

DATA FILE 9126_WHO.D,,,

CPI VALUE	1.22	PRISTANE/PHYTANE	1.55
N-C9/N-C19	0.00	PRISTANE/N-C17	0.61
N-C15/N-C25	5.58	PHYTANE/N-C18	0.98

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	15.25	468	0.082	172	0.132
N-C11	17.59	2288	0.401	816	0.628
N-C12	20.19	4450	0.781	1757	1.353
N-C13	22.61	6782	1.190	2490	1.917
N-C14	24.88	8106	1.422	2976	2.291
N-C15	27.03	7261	1.274	2471	1.902
N-C16	29.06	5202	0.913	1761	1.356
N-C17	30.99	5700	1.000	1299	1.000
N-C18	32.82	2298	0.403	804	0.619
N-C19	34.57	1986	0.348	569	0.438
N-C20	36.24	2517	0.442	743	0.572
N-C21	37.84	2191	0.384	761	0.586
N-C22	39.36	2495	0.438	859	0.661
N-C23	40.83	4017	0.705	1296	0.998
N-C24	42.24	1381	0.242	503	0.387
N-C25	43.59	1301	0.228	404	0.311
N-C26	44.90	611	0.107	205	0.158
N-C27	46.15	631	0.111	211	0.162
N-C28	47.36	804	0.141	228	0.176
N-C29	48.54	712	0.125	237	0.182
N-C30	49.67	373	0.065	129	0.099
N-C31	50.77	655	0.115	198	0.152
N-C32	51.83	392	0.069	102	0.079
N-C33	0.00	0	0.000	0	0.000
N-C34	0.00	0	0.000	0	0.000
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.18	3490		921	
Phytane	33.04	2252		580	

Ikpikt 6000-100

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt 6000-100

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT 6600-700,,,

DATA FILE 9127_WHO.D,,,

CPI VALUE	3.21	PRISTANE/PHYTANE	1.65
N-C9/N-C19	0.00	PRISTANE/N-C17	0.86
N-C15/N-C25	0.40	PHYTANE/N-C18	0.85

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	15.25	360	0.079	131	0.090
N-C11	17.59	2430	0.531	864	0.596
N-C12	20.19	4909	1.073	1974	1.362
N-C13	22.61	7399	1.618	2657	1.834
N-C14	24.88	9016	1.972	3328	2.297
N-C15	27.03	8534	1.866	2837	1.958
N-C16	29.06	6429	1.406	2078	1.434
N-C17	30.99	4573	1.000	1449	1.000
N-C18	32.83	2800	0.612	993	0.685
N-C19	34.57	3122	0.683	900	0.621
N-C20	36.24	2821	0.617	924	0.638
N-C21	37.84	3437	0.752	1019	0.703
N-C22	39.37	3132	0.685	1135	0.783
N-C23	40.84	6822	1.492	2050	1.415
N-C24	42.24	1971	0.431	723	0.499
N-C25	43.63	21290	4.656	6576	4.538
N-C26	44.90	1075	0.235	360	0.248
N-C27	46.15	1102	0.241	374	0.258
N-C28	47.36	1094	0.239	320	0.221
N-C29	48.53	950	0.208	309	0.213
N-C30	49.67	345	0.075	133	0.092
N-C31	50.77	741	0.162	211	0.146
N-C32	0.00	0	0.000	0	0.000
N-C33	0.00	0	0.000	0	0.000
N-C34	0.00	0	0.000	0	0.000
N-C35	54.76	576	0.126	127	0.088
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.18	3930		1155	
Phytane	33.05	2389		640	

Ikpikt 6600-700

Ikpikt 6600-700

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT 6700-900,,,

DATA FILE 9128_WHO.D,,,

CPI VALUE	1.24	PRISTANE/PHYTANE	1.77
N-C9/N-C19	0.02	PRISTANE/N-C17	0.82
N-C15/N-C25	3.83	PHYTANE/N-C18	0.76

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	11.67	159	0.012	68	0.018
N-C10	15.24	633	0.049	243	0.064
N-C11	17.59	3982	0.310	1458	0.383
N-C12	20.18	8808	0.685	3458	0.909
N-C13	22.61	15644	1.217	5820	1.529
N-C14	24.89	23000	1.790	8320	2.186
N-C15	27.04	23534	1.831	7348	1.931
N-C16	29.07	15185	1.182	5238	1.376
N-C17	30.99	12850	1.000	3806	1.000
N-C18	32.83	7838	0.610	2487	0.653
N-C19	34.57	9041	0.704	2421	0.636
N-C20	36.24	8850	0.689	2458	0.646
N-C21	37.84	8309	0.647	2750	0.723
N-C22	39.37	9240	0.719	3180	0.836
N-C23	40.84	13711	1.067	4104	1.078
N-C24	42.24	6769	0.527	2329	0.612
N-C25	43.59	6149	0.479	1934	0.508
N-C26	44.89	2842	0.221	975	0.256
N-C27	46.15	2971	0.231	948	0.249
N-C28	47.36	3070	0.239	740	0.194
N-C29	48.53	2486	0.193	794	0.209
N-C30	49.67	1090	0.085	379	0.100
N-C31	50.77	1780	0.139	534	0.140
N-C32	51.83	909	0.071	228	0.060
N-C33	52.86	1868	0.145	417	0.110
N-C34	53.86	1610	0.125	519	0.136
N-C35	54.76	856	0.067	252	0.066
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.18	10484		2855	
Phytane	33.05	5922		1399	

Ikpikt 6700-900

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt 6700-900

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT-01 8300-4,,,

DATA FILE 9140_WHO.D,,,

CPI VALUE	1.14	PRISTANE/PHYTANE	1.79
N-C9/N-C19	0.00	PRISTANE/N-C17	0.52
N-C15/N-C25	5.23	PHYTANE/N-C18	0.41

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	14.79	726	0.112	226	0.112
N-C11	17.59	4183	0.645	1532	0.759
N-C12	20.18	8593	1.325	3338	1.654
N-C13	22.61	12937	1.995	4922	2.439
N-C14	24.88	15922	2.455	5525	2.738
N-C15	27.03	13168	2.031	4056	2.010
N-C16	29.06	8192	1.263	2604	1.290
N-C17	30.99	6485	1.000	2018	1.000
N-C18	32.82	4664	0.719	1650	0.818
N-C19	34.57	4603	0.710	1483	0.735
N-C20	36.24	4064	0.627	1349	0.668
N-C21	37.84	4216	0.650	1429	0.708
N-C22	39.36	4294	0.662	1513	0.750
N-C23	40.83	5615	0.866	1927	0.955
N-C24	42.24	3206	0.494	1115	0.553
N-C25	43.59	2516	0.388	812	0.402
N-C26	44.89	1634	0.252	591	0.293
N-C27	46.15	1457	0.225	511	0.253
N-C28	47.36	1281	0.198	398	0.197
N-C29	48.54	1204	0.186	388	0.192
N-C30	49.67	757	0.117	242	0.120
N-C31	50.77	753	0.116	271	0.134
N-C32	51.84	929	0.143	197	0.098
N-C33	52.88	1788	0.276	354	0.175
N-C34	53.89	1580	0.244	318	0.158
N-C35	54.93	1912	0.295	301	0.149
N-C36	55.83	541	0.083	117	0.058
N-C37	56.71	1117	0.172	249	0.123
N-C38	57.62	753	0.116	217	0.108
N-C39	58.51	1850	0.285	384	0.190
N-C40	59.38	2303	0.355	508	0.252
N-C41	60.23	1597	0.246	607	0.301
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.17	3381		888	
Phytane	33.05	1892		476	

Ikpikt-01 8300-4

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt-01 8300-4

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT-01 8900-9,,,,

DATA FILE 9146_WHO.D,,,,

CPI VALUE	1.23	PRISTANE/PHYTANE	2.98
N-C9/N-C19	0.00	PRISTANE/N-C17	0.47
N-C15/N-C25	6.01	PHYTANE/N-C18	0.21

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	14.79	330	0.099	99	0.091
N-C11	17.59	2155	0.648	765	0.701
N-C12	20.18	4756	1.431	1890	1.732
N-C13	22.60	6512	1.959	2483	2.276
N-C14	24.88	6569	1.976	2398	2.198
N-C15	27.03	5508	1.657	1814	1.663
N-C16	29.06	3880	1.167	1336	1.225
N-C17	30.99	3324	1.000	1091	1.000
N-C18	32.83	2439	0.734	850	0.779
N-C19	34.57	2374	0.714	722	0.662
N-C20	36.24	1675	0.504	634	0.581
N-C21	37.84	1768	0.532	573	0.525
N-C22	39.36	1400	0.421	528	0.484
N-C23	40.83	2267	0.682	743	0.681
N-C24	42.24	931	0.280	366	0.335
N-C25	43.60	916	0.276	309	0.283
N-C26	44.90	713	0.215	240	0.220
N-C27	46.15	563	0.169	194	0.178
N-C28	47.36	546	0.164	192	0.176
N-C29	48.54	601	0.181	189	0.173
N-C30	49.68	295	0.089	128	0.117
N-C31	50.79	550	0.165	200	0.183
N-C32	51.83	1193	0.359	253	0.232
N-C33	52.90	1442	0.434	294	0.269
N-C34	53.89	1384	0.416	250	0.229
N-C35	54.95	1707	0.514	259	0.237
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.17	1552		411	
Phytane	33.05	520		191	

Ikpikt-01 8900-9

Ikpikt-01 8900-9

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT-01 9300-4,,,

DATA FILE 9150_WHO.D,,,

CPI VALUE 1.06
 N-C9/N-C19 0.00
 N-C15/N-C25 2.07

PRISTANE/PHYTANE 1.77
 PRISTANE/N-C17 0.37
 PHYTANE/N-C18 0.26

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	16.63	248	0.034	97	0.040
N-C11	17.59	1388	0.191	473	0.195
N-C12	20.18	3165	0.435	1275	0.525
N-C13	22.60	4972	0.683	1843	0.759
N-C14	24.88	6791	0.933	2478	1.021
N-C15	27.03	7869	1.082	2667	1.098
N-C16	29.06	6561	0.902	2439	1.005
N-C17	30.99	7276	1.000	2428	1.000
N-C18	32.83	5729	0.787	2076	0.855
N-C19	34.58	6231	0.856	1987	0.818
N-C20	36.25	5012	0.689	1718	0.708
N-C21	37.84	4763	0.655	1739	0.716
N-C22	39.37	4846	0.666	1710	0.704
N-C23	40.84	4403	0.605	1564	0.644
N-C24	42.24	4557	0.626	1325	0.546
N-C25	43.60	3796	0.522	1171	0.482
N-C26	44.91	2268	0.312	803	0.331
N-C27	46.16	1993	0.274	714	0.294
N-C28	47.38	1507	0.207	533	0.220
N-C29	48.55	1491	0.205	500	0.206
N-C30	49.68	938	0.129	325	0.134
N-C31	50.79	1167	0.160	378	0.156
N-C32	51.84	1433	0.197	265	0.109
N-C33	52.89	1340	0.184	250	0.103
N-C34	0.00	0	0.000	0	0.000
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.17	2656		785	
Phytane	33.05	1503		401

Ikpiikt-01 9300-4

Ikpikt-01 9300-4

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT-01 9700-8,,,

DATA FILE 9154_WHO.D,,,

CPI VALUE	1.00	PRISTANE/PHYTANE	1.51
N-C9/N-C19	0.00	PRISTANE/N-C17	0.41
N-C15/N-C25	4.40	PHYTANE/N-C18	0.30

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	14.79	460	0.034	155	0.035
N-C11	17.59	3786	0.282	1417	0.320
N-C12	20.19	10307	0.769	4070	0.918
N-C13	22.61	19168	1.429	6823	1.539
N-C14	24.89	21647	1.614	7854	1.772
N-C15	27.04	19028	1.419	6586	1.486
N-C16	29.07	14888	1.110	5320	1.200
N-C17	31.00	13409	1.000	4432	1.000
N-C18	32.84	12075	0.901	3809	0.859
N-C19	34.58	10934	0.815	3220	0.727
N-C20	36.25	8569	0.639	2844	0.642
N-C21	37.85	7281	0.543	2544	0.574
N-C22	39.38	7416	0.553	2536	0.572
N-C23	40.84	6489	0.484	2341	0.528
N-C24	42.25	6187	0.461	1772	0.400
N-C25	43.60	4327	0.323	1342	0.303
N-C26	44.91	2971	0.222	1038	0.234
N-C27	46.16	3505	0.261	877	0.198
N-C28	47.38	3613	0.269	773	0.174
N-C29	48.55	1846	0.138	588	0.133
N-C30	49.68	1198	0.089	417	0.094
N-C31	50.79	1596	0.119	432	0.097
N-C32	51.84	1602	0.119	322	0.073
N-C33	52.89	1719	0.128	356	0.080
N-C34	53.90	1112	0.083	244	0.055
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.18	5527		1520	
Phytane	33.06	3656		876	

Ikpikt-01 9700-8

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt-01 9700-8

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : IKPIKT-01 9900-1,,,,

DATA FILE 9156_WHO.D,,,,

CPI VALUE 1.35

PRISTANE/PHYTANE 0.65

N-C9/N-C19 0.00

PRISTANE/N-C17 0.67

N-C15/N-C25 0.16

PHYTANE/N-C18 1.06

<u>COMPOUND</u>	<u>RETENTION</u> <u>TIME</u>	<u>PEAK</u> <u>AREA</u>	<u>AREA</u> <u>N-C15=1</u>	<u>PEAK</u> <u>HEIGHT</u>	<u>HEIGHT</u> <u>N-C15=1</u>
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	0.00	0	0.000	0	0.000
N-C11	0.00	0	0.000	0	0.000
N-C12	0.00	0	0.000	0	0.000
N-C13	22.61	372	0.641	126	0.653
N-C14	24.89	464	0.800	183	0.948
N-C15	27.03	575	0.991	200	1.036
N-C16	29.07	468	0.807	177	0.917
N-C17	31.00	580	1.000	193	1.000
N-C18	32.83	568	0.979	202	1.047
N-C19	34.58	847	1.460	214	1.109
N-C20	36.25	690	1.190	237	1.228
N-C21	37.84	659	1.136	267	1.383
N-C22	39.37	796	1.372	306	1.585
N-C23	40.84	1056	1.821	329	1.705
N-C24	42.25	788	1.359	248	1.285
N-C25	43.63	3706	6.390	1044	5.409
N-C26	44.91	639	1.102	180	0.933
N-C27	46.17	905	1.560	155	0.803
N-C28	47.38	1969	3.395	459	2.378
N-C29	48.56	973	1.678	269	1.394
N-C30	49.99	1473	2.540	348	1.803
N-C31	50.79	1448	2.497	302	1.565
N-C32	51.85	995	1.716	243	1.259
N-C33	52.89	1544	2.662	318	1.648
N-C34	53.91	1401	2.416	242	1.254
N-C35	54.95	1115	1.922	200	1.036
N-C36	55.82	551	0.950	136	0.705
N-C37	56.73	662	1.141	163	0.845
N-C38	57.63	246	0.424	101	0.523
N-C39	58.52	711	1.226	164	0.850
N-C40	59.37	625	1.078	160	0.829
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.18	390		132	
Phytane	33.06	601		179	

Ikpikt-01 9900-1

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt-01 9900-1

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

SAMPLE : IKPIKT-01 10200-,,,,

DATA FILE 9159_WHO.D,,,

CPI VALUE 0.85

PRISTANE/PHYTANE 1.36

N-C9/N-C19 0.01

PRISTANE/N-C17 0.38

N-C15/N-C25 #DIV/0!

PHYTANE/N-C18 0.35

<u>COMPOUND</u>	<u>RETENTION</u> <u>TIME</u>	<u>PEAK</u> <u>AREA</u>	<u>AREA</u> <u>N-C15=1</u>	<u>PEAK</u> <u>HEIGHT</u>	<u>HEIGHT</u> <u>N-C15=1</u>
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	11.77	120	0.014	60	0.021
N-C10	14.80	1241	0.145	451	0.161
N-C11	17.59	5012	0.585	1847	0.658
N-C12	20.19	7602	0.887	3075	1.095
N-C13	22.61	9271	1.082	3584	1.276
N-C14	24.89	10335	1.206	3698	1.316
N-C15	27.04	10172	1.187	3211	1.143
N-C16	29.07	7490	0.874	2813	1.001
N-C17	31.00	8572	1.000	2809	1.000
N-C18	32.84	6856	0.800	2449	0.872
N-C19	34.58	8679	1.012	2343	0.834
N-C20	36.26	6164	0.719	2176	0.775
N-C21	37.85	6698	0.781	2141	0.762
N-C22	39.39	7823	0.913	2481	0.883
N-C23	40.86	11643	1.358	2863	1.019
N-C24	42.27	14836	1.731	3531	1.257
N-C25	0.00	0	0.000	0	0.000
N-C26	0.00	0	0.000	0	0.000
N-C27	0.00	0	0.000	0	0.000
N-C28	0.00	0	0.000	0	0.000
N-C29	0.00	0	0.000	0	0.000
N-C30	0.00	0	0.000	0	0.000
N-C31	0.00	0	0.000	0	0.000
N-C32	0.00	0	0.000	0	0.000
N-C33	0.00	0	0.000	0	0.000
N-C34	0.00	0	0.000	0	0.000
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38					

Ikpikt-01 10200-

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

Ikpikt-01 10200-

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

SAMPLE : BF37 8400-550',,,,

DATA FILE 9162_WHO.D,,,,

CPI VALUE	1.21	PRISTANE/PHYTANE	1.31
N-C9/N-C19	0.01	PRISTANE/N-C17	0.84
N-C15/N-C25	3.38	PHYTANE/N-C18	0.64

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	11.66	342	0.010	130	0.013
N-C10	15.25	491	0.015	156	0.015
N-C11	17.61	435	0.013	138	0.014
N-C12	20.19	2570	0.079	1060	0.104
N-C13	22.62	5237	0.161	1954	0.191
N-C14	24.90	13028	0.400	5054	0.495
N-C15	27.05	25964	0.797	8424	0.825
N-C16	29.09	30461	0.935	10060	0.986
N-C17	31.02	32592	1.000	10206	1.000
N-C18	32.85	32500	0.997	7498	0.735
N-C19	34.60	26551	0.815	5534	0.542
N-C20	36.27	16238	0.498	3908	0.383
N-C21	37.86	13639	0.418	4181	0.410
N-C22	39.39	15039	0.461	5126	0.502
N-C23	40.86	12375	0.380	4098	0.402
N-C24	42.26	6977	0.214	2457	0.241
N-C25	43.62	7672	0.235	2259	0.221
N-C26	44.91	2829	0.087	981	0.096
N-C27	46.17	3582	0.110	1215	0.119
N-C28	47.38	2593	0.080	788	0.077
N-C29	48.55	3766	0.116	1186	0.116
N-C30	49.69	1176	0.036	435	0.043
N-C31	50.79	2275	0.070	760	0.074
N-C32	51.85	1160	0.036	265	0.026
N-C33	52.88	2190	0.067	434	0.043
N-C34	53.89	309	0.009	98	0.010
N-C35	54.86	287	0.009	95	0.009
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.21	27323		6850	
Phytane	33.08	20834		4592	

BF37 8400-550'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

BF37 8400-550'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : BF37 8550-800',,,,

DATA FILE 9163_WHO.D,,,

CPI VALUE 1.17
N-C9/N-C19 0.02
N-C15/N-C25 6.16

PRISTANE/PHYTANE 1.47
PRISTANE/N-C17 0.64
PHYTANE/N-C18 0.59

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	11.66	326	0.009	122	0.010
N-C10	15.25	1804	0.051	718	0.061
N-C11	17.60	3893	0.110	1380	0.117
N-C12	20.19	5781	0.163	2314	0.197
N-C13	22.62	12463	0.351	4312	0.366
N-C14	24.90	27780	0.783	9952	0.845
N-C15	27.06	39692	1.119	13062	1.109
N-C16	29.09	36551	1.031	12583	1.069
N-C17	31.02	35469	1.000	11773	1.000
N-C18	32.85	26332	0.742	8161	0.693
N-C19	34.60	18945	0.534	5162	0.438
N-C20	36.27	11048	0.311	3607	0.306
N-C21	37.86	13293	0.375	4463	0.379
N-C22	39.39	17281	0.487	5489	0.466
N-C23	40.86	13845	0.390	4415	0.375
N-C24	42.26	7609	0.215	2527	0.215
N-C25	43.61	6440	0.182	2058	0.175
N-C26	44.91	3656	0.103	1163	0.099
N-C27	46.17	4642	0.131	1547	0.131
N-C28	47.38	3855	0.109	1097	0.093
N-C29	48.56	5495	0.155	1755	0.149
N-C30	49.69	1329	0.037	402	0.034
N-C31	50.79	2983	0.084	839	0.071
N-C32	51.84	1876	0.053	387	0.033
N-C33	52.89	3590	0.101	734	0.062
N-C34	53.90	564	0.016	162	0.014
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.20	22783		6256	
Phytane	33.08	15465		3526	

BF37 8550-800'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

BF37 8550-800'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : BF37 9090-360',,,,

DATA FILE 9164_WHO.D,,,,

CPI VALUE	1.12	PRISTANE/PHYTANE	1.33
N-C9/N-C19	0.00	PRISTANE/N-C17	0.66
N-C15/N-C25	5.74	PHYTANE/N-C18	0.63

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	15.24	535	0.019	200	0.022
N-C11	17.60	773	0.027	273	0.030
N-C12	20.19	1986	0.070	790	0.086
N-C13	22.61	5475	0.193	2047	0.223
N-C14	24.89	14105	0.497	5257	0.572
N-C15	27.04	22777	0.802	7797	0.849
N-C16	29.08	25268	0.890	8557	0.932
N-C17	31.01	28388	1.000	9183	1.000
N-C18	32.84	22468	0.791	6739	0.734
N-C19	34.59	19267	0.679	4323	0.471
N-C20	36.25	10756	0.379	3124	0.340
N-C21	37.85	9723	0.343	3328	0.362
N-C22	39.38	12307	0.434	4167	0.454
N-C23	40.84	9547	0.336	3159	0.344
N-C24	42.25	4633	0.163	1569	0.171
N-C25	43.60	3966	0.140	1231	0.134
N-C26	44.90	2049	0.072	700	0.076
N-C27	46.16	1914	0.067	706	0.077
N-C28	47.37	2554	0.090	490	0.053
N-C29	48.54	1638	0.058	534	0.058
N-C30	49.68	776	0.027	200	0.022
N-C31	50.78	904	0.032	315	0.034
N-C32	51.84	503	0.018	111	0.012
N-C33	52.88	994	0.035	202	0.022
N-C34	53.87	350	0.012	104	0.011
N-C35	54.77	685	0.024	173	0.019
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.19	18719		4711	
Phytane	33.07	14118		3206	

BF37 9090-360'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

BF37 9090-360'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

SAMPLE : KARLUK 8900-9150,,,

DATA FILE 9165_WHO.D,,,

CPI VALUE	1.42	PRISTANE/PHYTANE	2.21
N-C9/N-C19	0.00	PRISTANE/N-C17	0.90
N-C15/N-C25	20.90	PHYTANE/N-C18	0.76

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.62	200	0.010	142	0.022
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	15.24	820	0.039	311	0.048
N-C11	17.60	659	0.031	219	0.034
N-C12	20.18	2001	0.095	811	0.126
N-C13	22.61	10941	0.522	3884	0.602
N-C14	24.91	73388	3.500	22987	3.564
N-C15	27.07	100058	4.772	27380	4.245
N-C16	29.09	44095	2.103	13977	2.167
N-C17	31.01	20969	1.000	6450	1.000
N-C18	32.84	11240	0.536	3097	0.480
N-C19	34.58	8840	0.422	1998	0.310
N-C20	36.25	5909	0.282	1937	0.300
N-C21	37.85	4907	0.234	1585	0.246
N-C22	39.38	3047	0.145	1021	0.158
N-C23	40.84	4295	0.205	1267	0.196
N-C24	42.24	1540	0.073	444	0.069
N-C25	43.61	4788	0.228	1121	0.174
N-C26	44.90	933	0.044	294	0.046
N-C27	46.16	1864	0.089	662	0.103
N-C28	47.36	3045	0.145	396	0.061
N-C29	48.54	2055	0.098	623	0.097
N-C30	49.68	361	0.017	140	0.022
N-C31	50.78	1010	0.048	332	0.051
N-C32	51.82	770	0.037	147	0.023
N-C33	52.87	1049	0.050	243	0.038
N-C34	0.00	0	0.000	0	0.000
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.20	18802		4921	
Phytane	33.06	8522		2019	

KARLUK 8900-9150

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

KARLUK 8900-9150

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : KARLUK 10200-400,,,

DATA FILE 9166_WHO.D,,,

CPI VALUE	1.19	PRISTANE/PHYTANE	2.08
N-C9/N-C19	0.00	PRISTANE/N-C17	0.75
N-C15/N-C25	22.21	PHYTANE/N-C18	0.73

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	0.00	0	0.000	0	0.000
N-C11	0.00	0	0.000	0	0.000
N-C12	20.19	431	0.037	176	0.057
N-C13	22.61	4008	0.342	1525	0.498
N-C14	24.90	25079	2.141	8419	2.750
N-C15	27.05	32298	2.757	9347	3.054
N-C16	29.07	17911	1.529	5274	1.723
N-C17	31.00	11716	1.000	3061	1.000
N-C18	32.83	5800	0.495	1776	0.580
N-C19	34.58	4456	0.380	1142	0.373
N-C20	36.25	3856	0.329	1012	0.331
N-C21	37.84	2421	0.207	820	0.268
N-C22	39.37	1665	0.142	590	0.193
N-C23	40.84	2138	0.182	681	0.222
N-C24	42.24	1396	0.119	282	0.092
N-C25	43.61	1454	0.124	400	0.131
N-C26	44.90	490	0.042	156	0.051
N-C27	46.16	665	0.057	235	0.077
N-C28	47.36	499	0.043	145	0.047
N-C29	48.54	757	0.065	236	0.077
N-C30	49.56	356	0.030	106	0.035
N-C31	50.78	447	0.038	152	0.050
N-C32	0.00	0	0.000	0	0.000
N-C33	0.00	0	0.000	0	0.000
N-C34	0.00	0	0.000	0	0.000
N-C35	0.00	0	0.000	0	0.000
N-C36	0.00	0	0.000	0	0.000
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000

Pristane	31.19	8819	2103
Phytane	33.06	4247	952

KARLUK 10200-400

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

KARLUK 10200-400

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : JEAN 9850-10150',,,,

DATA FILE 9167_WHO.D,,,,

CPI VALUE	1.24	PRISTANE/PHYTANE	1.65
N-C9/N-C19	0.00	PRISTANE/N-C17	0.73
N-C15/N-C25	7.93	PHYTANE/N-C18	0.69

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	15.24	4327	0.045	1510	0.060
N-C11	17.60	8011	0.083	2395	0.096
N-C12	20.19	13649	0.142	5069	0.203
N-C13	22.68	85099	0.886	19439	0.778
N-C14	24.92	78268	0.815	24983	1.000
N-C15	27.08	124255	1.293	33818	1.354
N-C16	29.11	113258	1.179	30890	1.237
N-C17	31.04	96072	1.000	24979	1.000
N-C18	32.86	61531	0.640	15766	0.631
N-C19	34.60	46829	0.487	10815	0.433
N-C20	36.27	30509	0.318	8329	0.333
N-C21	37.86	23946	0.249	7060	0.283
N-C22	39.39	21645	0.225	6978	0.279
N-C23	40.85	23429	0.244	7404	0.296
N-C24	42.25	15613	0.163	5373	0.215
N-C25	43.61	15663	0.163	5219	0.209
N-C26	44.90	8439	0.088	2807	0.112
N-C27	46.17	10467	0.109	3440	0.138
N-C28	47.37	7509	0.078	2108	0.084
N-C29	48.55	12386	0.129	3196	0.128
N-C30	49.59	3478	0.036	565	0.023
N-C31	50.78	5039	0.052	1547	0.062
N-C32	51.84	1562	0.016	425	0.017
N-C33	52.88	4733	0.049	996	0.040
N-C34	53.88	683	0.007	173	0.007
N-C35	54.76	1325	0.014	360	0.014
N-C36	55.80	264	0.003	92	0.004
N-C37	56.72	880	0.009	130	0.005
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.22	70360		15811	
Phytane	33.08	42688		7764	

JEAN 9850-10150'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

JEAN 9850-10150'

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

WHOLE OIL GAS CHROMATOGRAPHY - N-ALKANES AND ISOPRENOIDS

SAMPLE : JEAN 10850-11200,,,

DATA FILE 9168_WHO.D,,,

CPI VALUE	1.64	PRISTANE/PHYTANE	1.77
N-C9/N-C19	0.00	PRISTANE/N-C17	0.90
N-C15/N-C25	3.32	PHYTANE/N-C18	0.72

COMPOUND	RETENTION TIME	PEAK AREA	AREA N-C15=1	PEAK HEIGHT	HEIGHT N-C15=1
N-C4	0.00	0	0.000	0	0.000
N-C5	0.00	0	0.000	0	0.000
N-C6	0.00	0	0.000	0	0.000
N-C7	0.00	0	0.000	0	0.000
N-C8	0.00	0	0.000	0	0.000
N-C9	0.00	0	0.000	0	0.000
N-C10	15.57	3821	0.103	1092	0.115
N-C11	17.60	14037	0.378	4934	0.521
N-C12	20.20	25547	0.688	9752	1.029
N-C13	22.63	75908	2.043	22620	2.387
N-C14	24.92	83479	2.247	27324	2.883
N-C15	27.06	79097	2.129	21917	2.312
N-C16	29.09	53048	1.428	13647	1.440
N-C17	31.02	37157	1.000	9478	1.000
N-C18	32.85	26280	0.707	6413	0.677
N-C19	34.59	27192	0.732	5357	0.565
N-C20	36.26	16050	0.432	4319	0.456
N-C21	37.85	13920	0.375	4152	0.438
N-C22	39.38	11180	0.301	3775	0.398
N-C23	40.85	15210	0.409	4739	0.500
N-C24	42.25	8210	0.221	2529	0.267
N-C25	43.62	23849	0.642	5854	0.618
N-C26	44.90	5340	0.144	1629	0.172
N-C27	46.16	7934	0.214	2680	0.283
N-C28	47.37	6459	0.174	1324	0.140
N-C29	48.55	7061	0.190	2168	0.229
N-C30	49.57	1323	0.036	229	0.024
N-C31	50.78	2996	0.081	932	0.098
N-C32	51.84	1398	0.038	292	0.031
N-C33	52.88	2817	0.076	556	0.059
N-C34	53.88	990	0.027	208	0.022
N-C35	54.76	355	0.010	114	0.012
N-C36	55.80	342	0.009	112	0.012
N-C37	0.00	0	0.000	0	0.000
N-C38	0.00	0	0.000	0	0.000
N-C39	0.00	0	0.000	0	0.000
N-C40	0.00	0	0.000	0	0.000
N-C41	0.00	0	0.000	0	0.000
N-C42	0.00	0	0.000	0	0.000
N-C43	0.00	0	0.000	0	0.000
N-C44	0.00	0	0.000	0	0.000
Pristane	31.20	33497		8029	
Phytane	33.07	18973		3550	

JEAN 10850-11200

WESTPORT TECHNOLOGY CENTER INTERNATIONAL

JEAN 10850-11200

WESTPORT TECHNOLOGY CENTER INTERNATIONAL