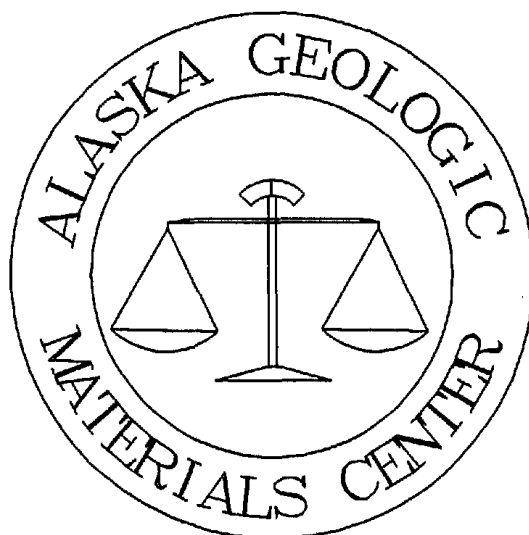


RockEval data from cuttings (580' - 11,060') and vitrinite reflectance maceral data from cuttings (1,890' - 11,060') of the Texaco Inc. West Kurupa Unit No. 1 well.



Received 20 October 1994

Total of 23 pages in report

Alaska Geologic Materials Center Data Report No. 235

Texaco West Kurupa No. 1											
RockEval Analysis by the U.S. Geological Survey, Branch of Petroleum Geology, Lakewood, CO											
depth (ft)	spl wt.	T-Max	S1	S2	S3	F1	S2/S3	FC	TOC	HI	CI
600'-580	118.6	434	0.09	0.6	0.7	0.13	0.85	0.05	0.92	65	76
1410'-1380	78.4	435	0.14	0.89	1.19	0.14	0.74	0.08	1.39	64	85
2310'-2290	102.1	432	0.23	1	2.35	0.19	0.42	0.1	1.45	68	162
2510'-2490	102.7	430	0.19	1.03	2.02	0.16	0.5	0.1	1.7	60	118
2710'-2690	103.4	436	0.15	0.86	1.81	0.15	0.47	0.08	1.76	48	102
3010'-2990	98.4	432	0.17	0.86	2.31	0.17	0.37	0.08	1.65	52	140
3260'-3240	118.9	431	0.16	0.82	2.22	0.16	0.36	0.08	1.62	50	137
3510'-3490	96.3	431	0.15	0.86	1.51	0.15	0.56	0.08	1.53	56	98
3760'-3740	142.7	422	0.18	2.17	1.51	0.08	1.43	0.19	1.94	111	77
4010'-3980	118.4	431	0.18	2.58	1.11	0.07	2.32	0.23	1.7	151	65
4360'-4340	151.8	430	0.13	0.92	0.81	0.12	1.13	0.08	1.07	85	75
4520'-4490	131.4	434	0.14	1.7	1.15	0.08	1.47	0.15	1.57	108	73
4760'-4740	143.3	431	0.23	1.64	1.25	0.12	1.31	0.15	1.69	97	73
5020'-4990	76.9	418	0.15	2.11	1.53	0.07	1.37	0.18	2.01	104	76
5260'-5240	79.6	428	0.18	1.46	1.25	0.11	1.16	0.13	1.67	87	74
5510'-5490	83.1	430	0.13	0.73	1.49	0.15	0.48	0.07	1.73	42	86
5750'-5730	66.2	422	0.18	2.08	1.38	0.08	1.5	0.18	2.13	97	64
6010'-5980	60.1	418	0.11	1.23	1.49	0.08	0.82	0.11	1.78	69	83
6260'-6240	124.6	456	0.2	0.81	1.7	0.2	0.47	0.08	1.63	49	104
6530'-6500	95	456	0.16	0.64	1.32	0.2	0.48	0.06	1.59	40	83
6750'-6730	117.3	462	0.15	0.57	1.26	0.21	0.45	0.06	1.26	45	100
7010'-6980	71.4	456	0.18	0.53	1.14	0.26	0.46	0.05	1.27	41	89
7200'-7180	142.3	452	0.18	0.78	1.09	0.19	0.71	0.08	1.53	50	71
7410'-7380	107.7	471	0.15	0.47	1.02	0.24	0.46	0.05	1.38	34	73
7600'-7570	148.5	491	0.16	0.45	1.21	0.27	0.37	0.05	1.35	33	89
8020'-7990	112.7	499	0.14	0.42	0.72	0.25	0.58	0.04	1.06	39	67
8250'-8230	152	471	0.14	0.48	0.75	0.23	0.64	0.05	1.2	40	62
8520'-8490	143.2	504	0.13	0.43	0.57	0.23	0.75	0.04	1.03	41	55
8750'-8730	163.9	498	0.15	0.74	0.56	0.17	1.32	0.07	1.07	69	52
9010'-8980	160.7	496	0.23	0.72	0.58	0.24	1.24	0.07	1.05	68	55
9520'-9490	116.1	510	0.12	0.56	0.65	0.18	0.86	0.05	0.96	58	67
10010'-9990	160.4	500	0.13	0.54	0.53	0.2	1.01	0.05	1	54	53
10260'-10240	156.3	496	0.14	0.78	0.8	0.15	0.97	0.07	1.22	63	65
10510'-10480	131.5	428	0.21	1.06	0.73	0.17	1.45	0.1	1.38	76	52
10760'-10740	135.3	487	0.16	0.56	0.76	0.22	0.73	0.06	1.07	52	71
11060'-11028	164.1	501	0.2	0.65	0.57	0.24	1.14	0.07	1.24	52	45

U.S. Geological Survey
Branch of Petroleum Geology
345 Middlefield Road, MS 999
Menlo Park, California 94025

MEMORANDUM

DATE: 9 VI 93

TO: Ken Bird

FROM: Mark Pawlewicz *Mark*

Maceral Vitrinite.

SUBJECT: Results of reflectance analysis, Texaco West Karupa #1.

The samples from the Texaco West Karupa #1 well, Alaska North Slope submitted for reflectance analysis have been completed and the results are presented.

The samples were processed by the crush and float method. For each sample approximately 20 grams were utilized for the concentration.

The samples exhibited a strong similarity in terms of amount and types of organic material (OM) present as a population of organic material persisted throughout a large segment of the samples in at least three situations. I would say that either the sampling method was weak or there was an extraordinary amount of caving throughout the entire borehole. The amount of OM repeated through multiple samples made the search for the indigenous OM quite time consuming.

The OM ranged, in type, from solid bitumen to inertinite. There was abundant OM in all of the samples, but the diversity of OM overall, and the relative lack of indigenous material, made the selection of particles for measurement more difficult. The scheme for selection of OM for reading was modified for these samples due to the amount of up-hole contamination. Usually with cuttings the perceived modal population is measured. For this borehole the highest non-recycled material was measured. Adherence to the other method would have resulted in a near-vertical trend line for the entire sample set due, again, to the amount of cavings material. Discriminating between indigenous and recycled OM required serious consideration.

Overall the samples were good, but difficult. I believe the percent composition of organic material for these samples will push

the rock-eval results towards lower values. A subjective estimate of the indigenous and recycled material per sample is no more than 15 percent for any sample; the balance of OM was the lower maturity cavings. Solid bitumen was uncommon in about 6 samples, and absent in the remainder.

Any questions should be directed to me at 8 303 236-5734.

File Name: 93026005

Channel Name: Alaska

Frequency

Description: 93 26-5 Alaska North Slope Texaco W. Karupa #1 1,890-910'

Comment 1: Very good sample. Abundant organics, very consistent.

Comment 2: Very little recycled material. Easy scan.

Comment 3:

Comment 4:

Comment 5:

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	0.61	0.61		
Max:	0.74	0.74		
Mean:	0.67	0.67		
StDev:	0.03	0.03		

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.68			
2				0.62			
3				0.68			
4				0.66			
5				0.71			
6				0.70			
7				0.64			
8				0.66			
9				0.68			
10				0.67			
11				0.63			
12				0.63			
13				0.68			
14				0.62			
15				0.69			
16				0.68			
17				0.68			
18				0.67			
19				0.67			
20				0.66			
21				0.62			
22				0.70			
23				0.62			
24				0.70			
25				0.62			
26				0.72			
27				0.74			
28				0.64			
29				0.61			
30				0.64			
31				0.62			
32				0.63			
33				0.66			
34				0.63			
35				0.71			
36				0.68			
37				0.65			
38				0.69			
39				0.71			
40				0.68			
41				0.64			
42				0.62			
43				0.71			
44				0.68			
45				0.73			
46				0.68			
47				0.66			
48				0.65			
49				0.65			
50				0.70			
51				0.67			

File Name: 93026007

Channel Name: Alaska

Frequency



Description: 93 26-7 Alaska North Slope Texaco W. Karupa #1 2,490-510'

Comment 1: Very good sample. Abundant organics, fairly consistent.

Comment 2: About 10% high rank recycled pieces.

Comment 3:

Comment 4:

Comment 5:

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	-0.61	2.0		
Max:	0.77	2.0		
Mean:	0.69			
StDev:	0.04			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.64			
2				0.68			
3				0.71			
4				0.67			
5				0.71			
6				0.72			
7				0.63			
8				0.74			
9				0.70			
10				0.72			
11				0.61			
12				0.65			
13				0.71			
14				0.75			
15				0.72			
16				0.64			
17				0.68			
18				0.71			
19				0.72			
20				0.71			
21				0.70			
22				0.66			
23				0.69			
24				0.71			
25				0.66			
26				0.73			
27				0.72			
28				0.64			
29				0.69			
30				0.70			
31				0.71			
32				0.69			
33				0.68			
34				0.77			
35				0.72			

26-7
 Alaska
 North Slope
 Texaco W. Karupa #1
 2,490-510'

File Name: 93026008

Channel Name: Alaska

Frequency

Description: 93 26-8 Alaska North Slope Texaco W. Karupa #1 2,090-700'

Comment 1: Very good sample. Abundant organics, a diverse organics

Comment 2: selection. About 12-15 percent recycled material.

Comment 3:

Comment 4:

Comment 5:

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	0.61			
Max:	0.88			
Mean:	0.71			
StDev:	0.06			

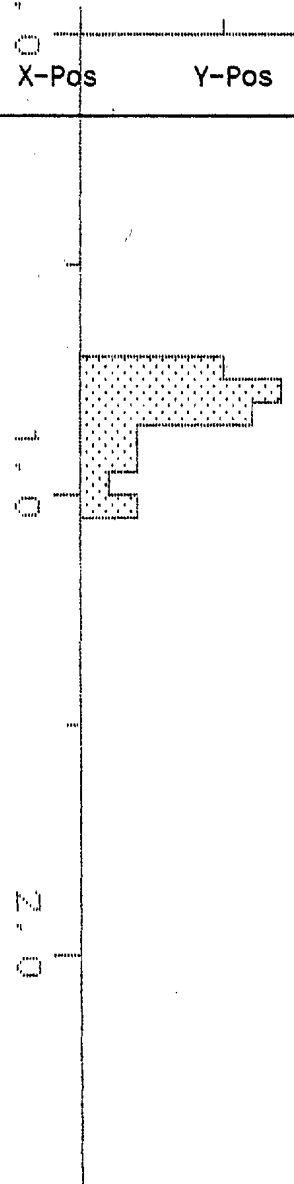
Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.67			
2				0.78			
3				0.68			
4				0.75			
5				0.74			
6				0.68			
7				0.72			
8				0.70			
9				0.75			
10				0.67			
11				0.67			
12				0.78			
13				0.68			
14				0.78			
15				0.65			
16				0.65			
17				0.65			
18				0.67			
19				0.61			
20				0.70			
21				0.62			
22				0.68			
23				0.71			
24				0.64			
25				0.72			
26				0.65			
27				0.78			
28				0.81			
29				0.80			
30				0.69			
31				0.63			
32				0.66			
33				0.88			
34				0.83			
35				0.74			
36				0.65			
37				0.65			
38				0.71			
39				0.78			
40				0.78			
41				0.70			

Frequency

Description: 93 26-10 Alaska N.Slope Texaco W.Karupa #1 3,240- 260'
 Comment 1: Abundant organics, but very diverse. Some obviously
 Comment 2: recycled mat'l, but additional higher rank OM
 Comment 3: that looks indigenous. Intermediate rank OM is most
 Comment 4: common, but is probably cavings material.
 Comment 5:
 Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	-0.73	2.0		
Max:	1.04	2.0		
Mean:	0.83			
StDev:	0.09			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.82			
2				0.81			
3				0.90			
4				0.77			
5				0.73			
6				0.82			
7				0.82			
8				0.78			
9				0.74			
10				0.94			
11				0.74			
12				0.78			
13	1.0			0.80			
14				0.86			
15				1.04			
16	1.0			0.78		0.09	
17				0.75			
18				0.84			
19				0.95			
20				1.01			
21				0.80			
22				0.98			
23				0.74			
24				0.73			
25				0.83			



26-10
 Alaska
 N. Slope
 Texaco
 W.Karupa
 #1 3,240- 260'
 0.09
 0.83
 1.04
 -0.73
 0.82
 0.81
 0.90
 0.77
 0.73
 0.82
 0.82
 0.78
 0.74
 0.94
 0.74
 0.78
 0.80
 0.86
 1.04
 0.78
 0.75
 0.84
 0.95
 1.01
 0.80
 0.98
 0.74
 0.73
 0.83

File Name: 93026011

Channel Name: Alaska

Frequency

Description: 93 26-11 Alaska N. Slope Texaco W. Karupa #1 3,490- 6100

Comment 1: Abundant OM, but it all looks like more of the same as

Comment 2: above. The material is too consistent with previous

Comment 3: samples to NOT be cavings. Higher Rm mat'l measured.

Comment 4: A long search for this mat'l, so fewer readings.

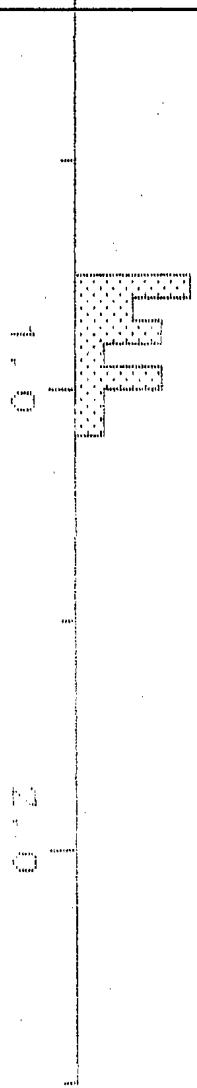
Comment 5:

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	0.76	2.0		
Max:	1.06			
Mean:	0.88			
StDev:	0.10			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.76			
2				0.95			
3				0.81			
4				0.89			
5				0.76			
6				0.92			
7				0.89			
8				0.98			
9				0.80			
10				0.77			
11				0.86			
12				1.04			
13				0.80			
14				1.06			
15				0.97			

Percent Rm



26-11 Alaska N. Slope Texaco

File Name: 93026013

Channel Name: Alaska

FREQUENCY

Description: 93 26-13 Alaska N.Slope Texaco W.Karupa #1 3,980- 4,010'

Comment 1: Abundant OM, but it all looks like more of the same as

Comment 2: above. The material is too consistent with previous

Comment 3: samples to NOT be cavings. Higher Rm mat'l measured.

Comment 4: A long search for this mat'l, so fewer readings.

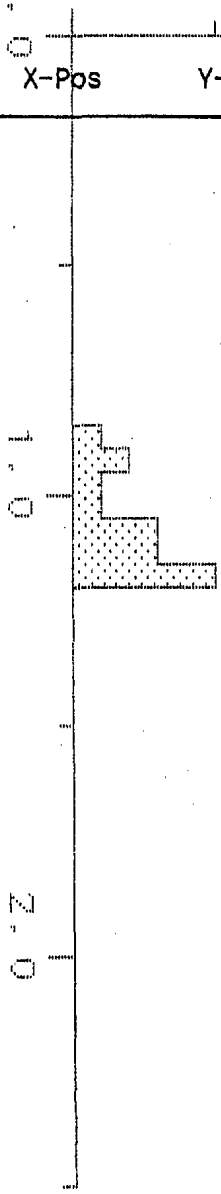
Comment 5: Solid bitumen is present in large size pieces.

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	0.89			
Max:	1.20			
Mean:	1.07			
StDev:	0.10			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.90			
2				0.89			
3				0.93			
4				1.11			
5				1.16			
6				1.11			
7				1.15			
8				1.20			
9				1.00			
10				1.07			
11				1.07			
12				1.05			
13	1.0			1.16			
14				1.20			
15				1.03			
16				1.17			

Rm



26-13 Alaska N.Slope Texaco
Ratio
0.07 SD
0.10

File Name: 93026015

Channel Name: Alaska

FREQUENCY

Description: 93 26-15 Alaska N. Slope Texaco W. Karupa #1 4,490-4,520'

Comment 1: Abundant diverse maturity OM. Plenty of mat'l with Rm.

Comment 2: values the same as for more shallow samples. Higher Rm

Comment 3: pieces measured.

Comment 4:

Comment 5: Solid bitumen is present in large size pieces.

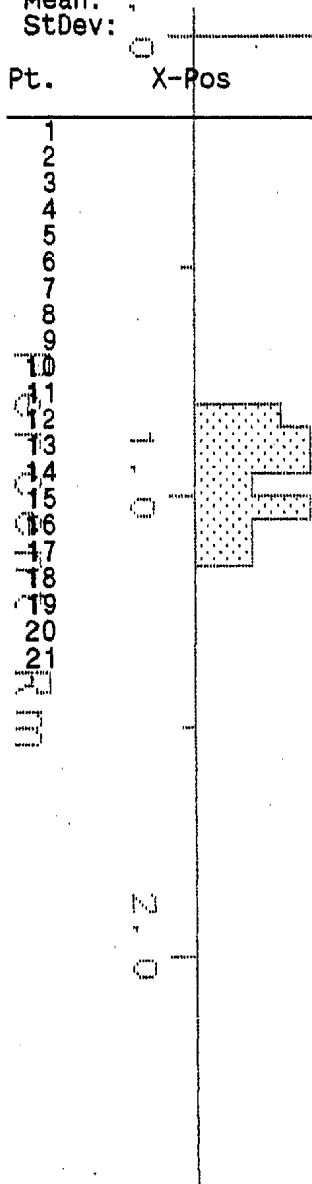
Comment 6:



26-15
Alaska
N. Slope
Texaco

	Meas1	Meas2	Ratio	Conc.
Min:	0.83	1.12		
Max:	1.12	2.0		
Mean:	0.96			
StDev:	0.10			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				0.99			
2				0.92			
3				0.83			
4				0.87			
5				0.86			
6				1.12			
7				1.05			
8				0.92			
9				0.88			
10				0.93			
11				1.05			
12				1.02			
13	1.0			1.09			
14				1.02			
15				0.99			
16				0.90		0.10	
17				0.85			
18				0.84			
19				1.10			
20				1.06			
21				0.86			



File Name: 93026017

Channel Name: Alaska Frequency

Description: 93 26-17 Alaska N. Slope Texaco W. Karupa #1 4,990-05,020'

Comment 1: Abundant diverse maturity OM. Plenty of mat'l with Rm

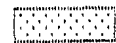
Comment 2: values the same as for more shallow samples. Higher Rm

Comment 3: pieces measured as being the indigenous OM population.

Comment 4:

Comment 5:

Comment 6:



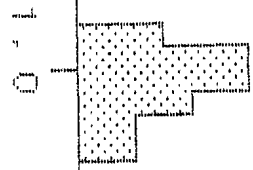
26-17
17
M

	Meas1	Meas2	Ratio	Conc.
Min:	0.93			
Max:	1.16			
Mean:	1.03			
StDev:	0.07			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.00			
2				1.03			
3				1.16			
4				1.14			
5				0.96			
6				0.99			
7				0.97			
8				0.93			
9				1.08			
10				0.95			
11				1.06			
12				1.02			
13				1.06			
14	1.0			1.01			
15	1.0			0.98			
16	1.0			1.04			
17	1.0			0.93			
18	1.0			1.14			
19	1.0			0.99			
20	1.0			1.05			
21	1.0			0.99			
22	1.0			1.04			
23	1.0			1.16			

Alaska N. Slope Texaco
1.03 SD
0.07

10
11
12
13
14
15
16
17
18
19
20
21
22
23



File Name: 93026019

Channel Name: Alaska

Frequency

Description: 93 26-19 Texaco W. Karupa #1 Alaska NSlope 5,490- 510 out

Comment 1: Abundant OM, but quite diverse. Much low rank material,

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Some high rank recycled OM, also. Indigenous

Comment 4: mat'l less common, requiring a long search. Some solid

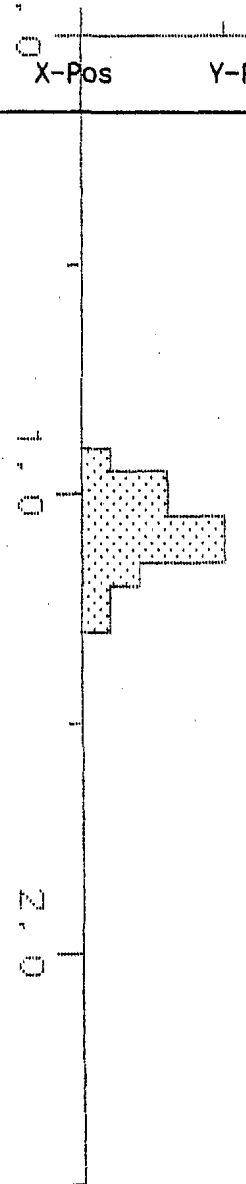
Comment 5: bitumen, in addition.

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	0.95			
Max:	1.27			
Mean:	1.09			
StDev:	0.09			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.11			
2				0.99			
3				0.98			
4				1.09			
5				1.10			
6				0.95			
7				1.00			
8				1.01			
9				1.05			
10				1.27			
11				1.21			
12				1.08			
13	1.0			1.13			
14	1.0			1.12			
15	1.0			1.14			
16	1.0			1.20			
17	1.0			1.18			
18	1.0			1.12			
19	1.0			1.08			
20	1.0			0.97			
21	1.0			1.04			

6-19
 Texaco
 W. Karupa
 #1
 AI



File Name: 93026021

Channel Name: Alaska

FREQUENCY

Description: 93 26-21 Texaco W. Karupa #1 Alaska NSlope 5,980-6,010 Cut

- Comment 1: Abundant OM, but quite diverse. Much low rank material,
- Comment 2: apparently cavings- material too much like that from
- Comment 3: above. Some high rank recycled OM, also. Indigenous
- Comment 4: mat'l less common, requiring a long search. Some solid
- Comment 5: bitumen.
- Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	0.98	2.0		
Max:	1.41	2.0		
Mean:	1.21			
StDev:	0.12			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.02			
2				1.19			
3				0.98			
4				1.07			
5				1.14			
6				1.30			
7				1.27			
8				1.31			
9				1.20			
10				1.12			
11				1.18			
12				1.37			
13				1.27			
14				1.21			
15				1.08			
16				1.07			
17				1.16			
18				1.03			
19				1.30			
20				1.27			
21				1.37			
22				1.41			
23				1.19			
24				1.18			
25				1.15			
26				1.41			
27				1.12			
28				1.23			
29				1.13			
30				1.22			
31				1.41			

1.0

2.0

26-21
 Texaco W. Karupa #1 Alaska NSlope 5,980-6,010 Cut

File Name: 93026023

Channel Name: Alaska

Frequency

Description: 93 26-23 Texaco W.Karupa #1 Alaska NSlope 6,500- 530

Comment 1: Abundant OM, but quite diverse. Much low rank material,

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Abundant high rank recycled OM, also. Indigenous

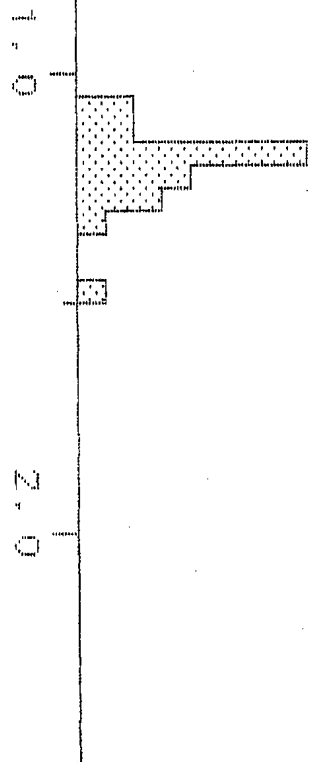
Comment 4: mat'l sparse requiring a long search. No bitumen

Comment 5: observed.

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	1.08	2.0		
Max:	1.47	2.0		
Mean:	1.21			
StDev:	0.09			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.15			
2				1.30			
3				1.18			
4				1.19			
5				1.08			
6				1.19			
7				1.11			
8				1.17			
9				1.47			
10				1.15			
11				1.10			
12				1.21			
13				1.27			
14				1.28			
15				1.16			
16						0.09	
17				1.19			
18				1.25			
19				1.16			
20				1.23			
21				1.28			
22				1.23			



26-23
 Texaco W. Karupa #1 AI
 SD

File Name: 93026025

Channel Name: Alaska

Frequency

Description: 93 26-25 Texaco W. Karupa #1 Alaska NSlope 6,980-7,010 cut

Comment 1: Abundant OM, but quite diverse. Much low rank material,

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Some high rank recycled OM, also. Indigenous

Comment 4: mat'l less common, requiring a long search. No bitumen

Comment 5: observed.

Comment 6:

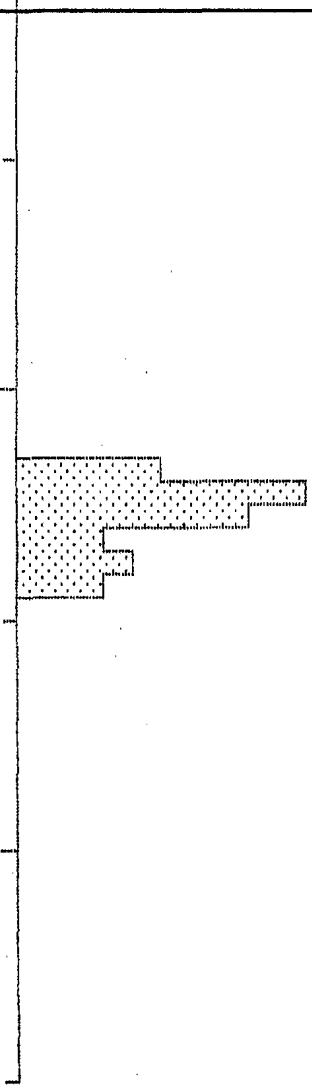
	Meas1	Meas2	Ratio	Conc.
Min:	1.15			
Max:	1.43			
Mean:	1.27			
StDev:	0.08			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.17			
2				1.28			
3				1.22			
4				1.20			
5				1.40			
6				1.26			
7				1.43			
8				1.29			
9				1.27			
10				1.23			
11				1.19			
12				1.33			
13				1.21			
14				1.20			
15				1.29			
16				1.31			
17				1.30			
18				1.42			
19				1.24			
20				1.38			
21				1.17			
22				1.33			
23				1.21			
24				1.38			
25				1.26			
26				1.21			
27				1.21			
28				1.40			
29				1.16			
30				1.15			
31				1.28			
32				1.25			
33				1.42			

93-25 Texaco W. Karupa #1 AI

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File Name: 93026027

Channel Name: Alaska

Frequency

Description: 93 26-27 Texaco W.Karupa #1 Alaska NSlope 7,380-7,410 Cut

Comment 1: Abundant OM, but quite diverse. Much low rank material,

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Some high rank recycled OM, also. Indigenous

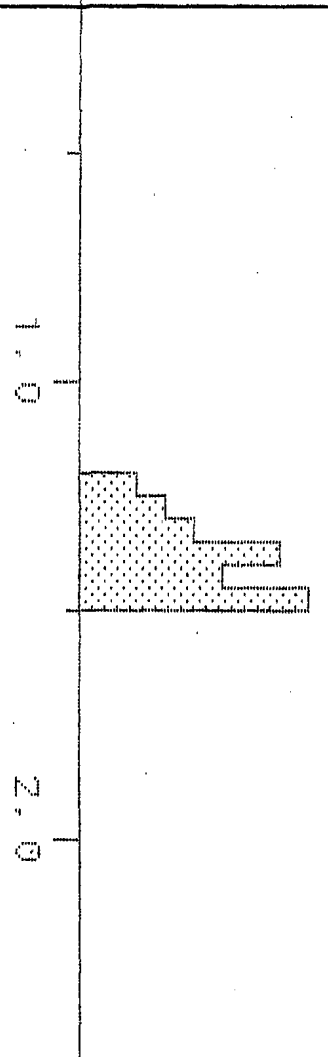
Comment 4: mat'l less common, requiring a long search. No bitumen

Comment 5: observed.

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	-1.21	2.0		
Max:	1.50	2.0		
Mean:	1.38			
StDev:	0.08			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.49			
2				1.42			
3				1.37			
4				1.48			
5				1.44			
6				1.38			
7				1.26			
8				1.46			
9				1.41			
10				1.48			
11				1.46			
12				1.31			
13				1.45			
14				1.34			
15				1.46			
16				1.39			
17				1.30			
18				1.43			
19				1.29			
20				1.36			
21				1.34			
22				1.37			
23				1.26			
24				1.23			
25				1.38			
26				1.50			
27				1.21			
28				1.44			
29				1.40			



93-27
 Texaco W. Karupa #1 Alaska
 NSlope 7,380-7,410 Cut
 SD 0.08

File Name: 93026029

Channel Name: Alaska

Description: 93 26-29 Texaco W. Karupa #1 Alaska NSlope 7,990-8,020 cut

Comment 1: Abundant OM, but quite diverse. Much low rank material,

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Some high rank recycled OM, also. Indigenous

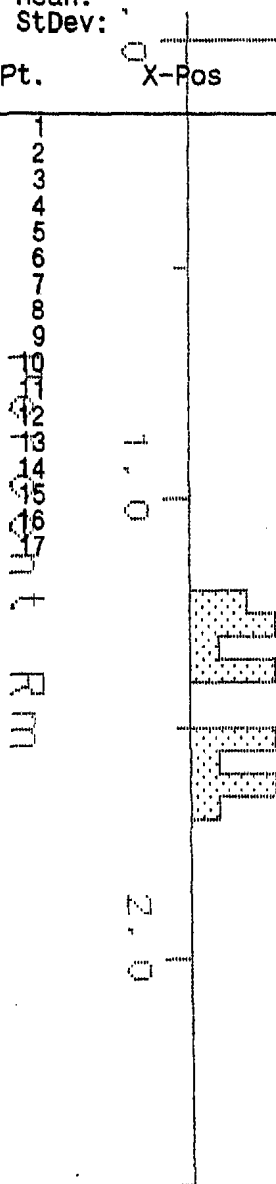
Comment 4: mat'l less common, requiring a long search. No bitumen

Comment 5: observed.

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	1.22			
Max:	1.67			
Mean:	1.43			
StDev:	0.16			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.23			
2				1.64			
3				1.35			
4				1.22			
5				1.52			
6				1.52			
7				1.62			
8				1.59			
9				1.29			
10				1.67			
11				1.52			
12				1.30			
13				1.32			
14				1.63			
15				1.35			
16				1.27			
17				1.36			



93-29
 Texaco W. Karupa #1 Alaska NSlope 7,990-8,020 cut

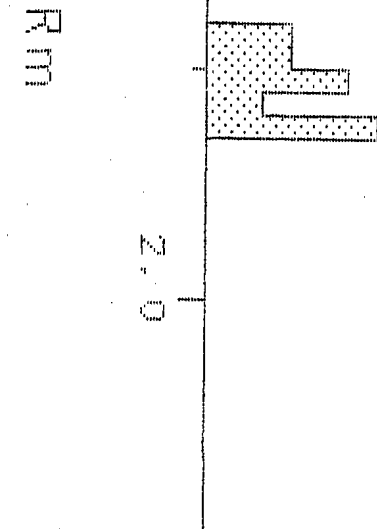
File Name: 93026031
 Channel Name: Alaska

Frequency

Description: 93 26-31 Texaco W.Karupa #1 Alaska NSlope 8,490-8,520 cut
 Comment 1: Abundant OM, but quite diverse. Much low rank material
 Comment 2: apparently cavings- material too much like that from
 Comment 3: above. Some high rank recycled OM, also. Indigenous
 Comment 4: mat'l less common, requiring a long search. No bitumen
 Comment 5: observed.
 Comment 6:

	Meas1	Meas2	Ratio	MF	Conc.
Min:	1.44	2.0			
Max:	1.64	2.0			
Mean:	1.54				
StDev:	0.07				

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.61			
2				1.61			
3				1.52			
4				1.55			
5				1.57			
6				1.64			
7				1.54			
8				1.49			
9				1.52			
10				1.62			
11				1.45			
12				1.63			
13				1.50			
14				1.59			
15				1.50			
16				1.50			
17				1.45			
18				1.44			
19				1.62			
20							



26-31
 Texaco W. Karupa #1 AI
 1.54 SD
 0.07

File Name: 93026034

Channel Name: Alaska

Description: 93 26-34 Texaco W.Karupa #1 Alaska NSlope 9,490-9,520 cut

Comment 1: Abundant OM, but quite diverse. Much low rank material.

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Some high rank recycled OM, also. Indigenous

Comment 4: mat'l rare, requiring a long search. No bitumen

Comment 5: observed.

Comment 6:

	Meas1	Meas2	Ratio	MT	Conc.
Min:	1.47	2.0			
Max:	1.77	2.0			
Mean:	1.61				
StDev:	0.10				

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.66			
2				1.77			
3				1.52			
4				1.58			
5				1.55			
6				1.47			
7				1.61			
8				1.74			

PERCENT RM

1.0

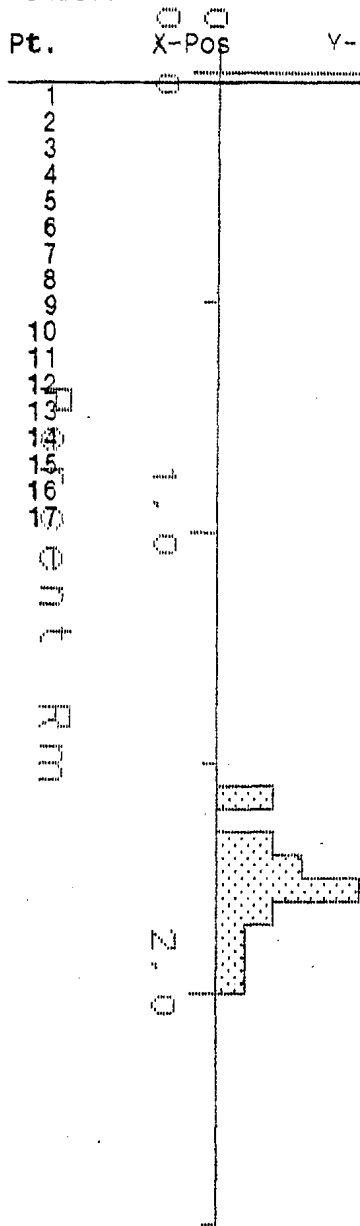
2.0

26-34
 Texaco W.Karupa #1 AI
 1.61 SD 0.10

- Comment 1: Abundant OM, but quite diverse. Much low rank material.
- Comment 2: apparently cavings material too much like that from
- Comment 3: above. Some high rank recycled OM, also. Indigenous
- Comment 4: mat'l rare, requiring a long search. No bitumen
- Comment 5: observed.
- Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	1.57			
Max:	1.96			
Mean:	1.76			
StDev:	0.10			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.66			
2				1.76			
3				1.94			
4				1.57			
5				1.72			
6				1.77			
7				1.85			
8				1.74			
9				1.78			
10				1.75			
11				1.84			
12				1.77			
13				1.70			
14				1.80			
15				1.96			
16				1.70			
17				1.60			



File Name: 93026038

Channel Name: Alaska

Frequency

Description: 93 26-38 Texaco W.Karupa #1 Alaska NSlope 10,740-760

Comment 1: Abundant OM, but quite diverse. Much low rank material,

Comment 2: apparently cavings- material too much like that from

Comment 3: above. Some high rank recycled OM, also. Indigenous

Comment 4: mat'l rare, requiring a long search. No bitumen

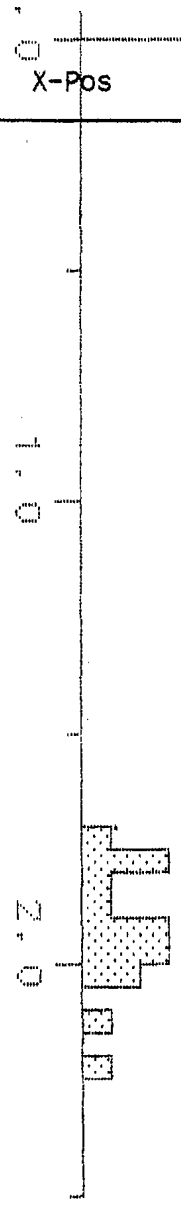
Comment 5: observed.

Comment 6:

	Meas1	Meas2	Ratio	Conc.
Min:	1.73			
Max:	2.21			
Mean:	1.93			
StDev:	0.13			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.92			
2				1.73			
3				1.93			
4				2.03			
5				2.21			
6				1.81			
7				2.11			
8				1.98			
9				1.77			
10				1.80			
11				2.03			
12				1.97			
13				1.78			
14				1.95			
15				1.87			
16				1.92			

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26-38
10,740-760
Texaco
W.Karupa
#1
Alaska
NSlope

File Name: 93026039
 Channel Name: Alaska

Frequency

XXXXXX

Description: Good sample. Organic material is common and fairly
 Comment 1: consistent. A bit of higher rank recycled pieces and
 Comment 2: some very low rank material, perhaps lignite additive.
 Comment 3:
 Comment 4:
 Comment 5: *Texaco W. Karuga #1 Alaska North slope*
 Comment 6: *11,028 - 60'*

	Meas1	Meas2	Ratio	Conc.
Min:	-1.78			
Max:	2.12			
Mean:	1.91			
StDev:	0.08			

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				2.00			
2				1.92			
3				1.95			
4				1.95			
5				1.81			
6				1.80			
7				1.94			
8				2.03			
9				1.91			
10				1.92			
11				1.90			
12				1.85			
13	2.0			1.88			
14				1.90			
15	0.0			1.85			
16				1.84			
17				1.88			
18				1.86			
19				1.94			
20				2.04			
21				1.98			
22				2.04			
23				1.80			
24				1.96			
25				1.96			
26				1.79			
27				2.12			
28				1.79			
29				1.94			
30				1.78			
31	4.0			1.90			

