

OIL SHALE ASSAY REPORT

PAGE 1 of 24

GEOKINETICS INC.
582 NORTH VERNAL AVENUE
P. O. BOX 889
VERNAL, UTAH 84078

Geokinetics #2-1
2-135-24E
K87

Date: 11 JUN 82

Lab #: 820392 - GK-86A-82

Project:

Core Hole: 2-1

Elevation: 6611.7'

Location:

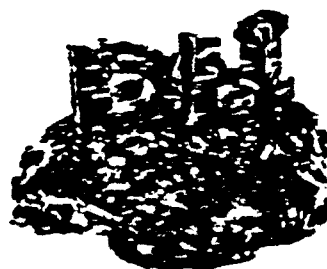
Remarks: 20 SAMPLES; AIR-DRIED

Sample Number	Client ID	Gallons/Ton		Weight Percent				Specific Gravity 60°/60°F	Tend to Coke
		Oil	Water	Oil	Water	Spent Shale	Gas+ Loss		
1	10.0 - 11.0	3.5 2	2.2	1.4	.9	97.1	.6	.920	N
2	11.0 - 12.0	5.1	2.2	2.0	.9	96.4	.7	.917	N
3	12.0 - 13.0	2.8 2	2.2	1.1	.9	97.2	.8	.920	N
4	13.0 - 14.0	1.7 2	2.0	.7	.9	98.1	.4	.920	N
5	14.0 - 15.0	1.3 2	1.9	.5	.8	98.4	.3	.920	N
6	15.0 - 16.0	1.5 2	2.0	.6	.9	98.3	.3	.920	N
7	16.0 - 17.0	8.7	2.5	3.3	1.1	94.3	1.4	.903	N
8	17.0 - 18.0	12.3	2.3	4.6	1.0	93.3	1.1	.902	N
9	18.0 - 19.0	29.8	3.2	11.2	1.3	85.1	2.3	.904	N
10	19.0 - 20.0	18.2	1.9	7.0	.8	89.7	2.5	.919	N
11	20.0 - 21.0	11.5	3.1	4.4	1.3	92.9	1.4	.914	N
12	21.0 - 22.0	10.6	2.3	4.0	1.0	94.1	.9	.908	N
13	22.0 - 23.0	15.4	3.6	5.9	1.5	91.7	.9	.914	N
14	23.0 - 24.0	25.2	3.9	9.7	1.6	86.7	2.0	.920	N
15	24.0 - 25.0	17.8	2.9	6.9	1.2	89.8	2.1	.923	N
16	25.0 - 26.0	27.2	2.4	10.3	1.0	86.6	2.1	.906	N
17	26.0 - 27.0	46.0	2.6	17.3	1.1	78.2	3.4	.904	N
18	27.0 - 28.0	37.9	2.2	14.2	.9	82.3	2.6	.897	N
19	28.0 - 29.0	18.2	2.2	6.9	.9	90.5	1.7	.905	N
20	29.0 - 30.0	15.1	2.2	5.8	.9	91.7	1.6	.914	N

Coking Tendency of Spent Shale:

N=none S=slight M=moderate H=heavy

a = Specific gravity estimated @ 0.920



Dickinson Laboratories, Inc.
COAL ANALYSTS

P.O. BOX 12006 • EL PASO TEXAS 79912 • (915) 864-9006

OIL SHALE ASSAY REPORT

PAGE 2 of 4

GEOKINETICS, INC.
582 N. Vernal Avenue
P.O. Box 889
Vernal, UT 84078

Date: 30 APR 82

Lab #: 820283 - GK #2-82

Project: W.D. 2-1

Core Hole: 2-1

Elevation:

Location:

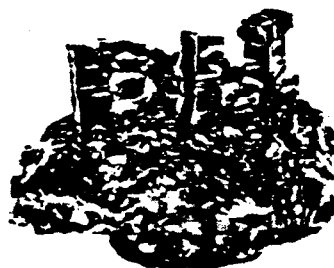
22 gpt

Remarks: 70 SAMPLES; AIR-DRIED.

Sample Number	Client ID	Gallons/Ton		Weight Percent				Specific Gravity 60°/60°F	Tend to Coke
		Oil	Water	Oil	Water	Spent Shale	Gas+ Loss		
1	30.0 - 31.0	10.0	1.9	3.8	.8	94.3	1.1	.917	N
2	31.0 - 32.0	18.7	1.9	7.1	.8	90.5	1.6	.909	N
3	32.0 - 33.0	16.4	1.4	6.2	.6	91.7	1.5	.907	N
4	33.0 - 34.0	9.5	1.4	3.6	.6	94.9	.9	.909	N
5	34.0 - 35.0	11.2	1.4	4.3	.6	94.2	.9	.910	N
6	35.0 - 36.0	7.2	4.1	2.7	1.7	94.8	.8	.917	N
7	36.0 - 37.0	9.6	1.2	3.6	.5	94.9	1.0	.910	N
8	37.0 - 38.0	7.8	1.2	2.9	.5	96.0	.6	.904	N
9	38.0 - 39.0	11.4	1.7	4.3	.7	93.8	1.2	.903	N
10	39.0 - 40.0	11.2	1.0	4.2	.4	94.5	.9	.906	N
11	40.0 - 41.0	27.2	1.9	10.4	.8	86.9	1.9	.913	N
12	41.0 - 42.0	33.0	2.2	12.6	.9	84.1	2.5	.911	N
13	42.0 - 43.0	20.6	1.2	7.7	.5	90.1	1.7	.895	N
14	43.0 - 44.0	23.9	1.2	9.0	.5	88.4	2.1	.904	N
15	44.0 - 45.0	38.1	1.7	14.5	.7	81.7	3.1	.909	N
16	45.0 - 46.0	33.6	1.3	12.7	.6	84.5	2.3	.905	N
17	46.0 - 47.0	49.0	2.0	18.4	.9	77.2	3.5	.901	S
18	47.0 - 48.0	47.1	1.9	17.8	.8	78.0	3.5	.903	S
19	48.0 - 49.0	61.3	3.1	23.1	1.3	71.2	4.4	.902	M
20	49.0 - 50.0	72.9	3.6	27.3	1.5	65.9	5.3	.898	M
21	50.0 - 51.0	51.3	2.6	19.4	1.1	74.9	4.6	.909	S
22	51.0 - 52.0	20.2	1.4	7.7	.6	89.9	1.8	.914	N
23	52.0 - 53.0	17.8	1.2	6.8	.5	91.3	1.5	.911	N
24	53.0 - 54.0	37.1	1.2	14.3	.5	80.9	4.2	.927	S
25	54.0 - 55.0	14.4	1.0	5.5	.4	92.6	1.5	.922	N

Coking Tendency of Spent Shale:

N=none S=slight M=moderate H=heavy



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Interval grade density
 28-75 27.75 gpt 37
 23-75 25.53 42
 30-75 24.83 45
 30-80 23.13 50
 30-85 22.26 55
 30-88 22.06 56

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PAGE ³ 2 of ⁴ 2

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Vernal, UT 84078

Date: 30 APR 82

Lab #: 820283 - GK #2-82

Project: W.D. 2-1

Core Hole: 2-1

Elevation:

Location:

Remarks: 70 SAMPLES; AIR-DRIED.

Sample Number	Client ID	Gallons/Ton		Weight Percent				Specific Gravity 60°/60°F	Tend to Coke
		Oil	Water	Oil	Water	Spent Shale	Gas+ Loss		
26	55.0 - 56.0	32.4	1.2	12.3	.5	85.0	2.2	.908	S
27	56.0 - 57.0	49.0	2.2	18.5	.9	77.3	3.3	.903	S
28	57.0 - 58.0	28.7	1.7	10.8	.7	86.2	2.3	.898	N
29	58.0 - 59.0	35.9	2.2	13.6	.9	82.5	3.0	.906	N
30	59.0 - 60.0	19.0	1.2	7.2	.5	90.7	1.6	.908	N
31	60.0 - 61.0	12.0	1.2	4.6	.5	93.5	1.4	.910	N
32	61.0 - 62.0	15.9	1.2	6.0	.5	91.7	1.8	.908	N
33	62.0 - 63.0	42.0	2.4	16.1	1.0	79.4	3.5	.919	N
34	63.0 - 64.0	12.8	1.7	4.9	.7	92.8	1.6	.913	N
35	64.0 - 65.0	8.9	1.0	3.4	.4	95.0	1.2	.916	N
36	65.0 - 66.0	16.3	1.0	6.2	.4	92.0	1.5	.904	N
37	66.0 - 67.0	36.8	1.9	14.0	.8	82.6	2.6	.912	N
38	67.0 - 68.0	29.6	1.0	11.1	.4	86.5	2.1	.895	N
39	68.0 - 69.0	21.2	1.2	8.0	.5	89.6	1.9	.905	N
40	69.0 - 70.0	28.1	1.7	10.5	.7	86.7	2.1	.898	N
41	70.0 - 71.0	15.5	1.4	5.9	.6	91.9	1.7	.906	N
42	71.0 - 72.0	9.5	1.2	3.6	.5	94.7	1.2	.916	N
43	72.0 - 73.0	9.8	1.0	3.7	.4	94.6	1.3	.917	N
44	73.0 - 74.0	14.9	1.4	5.7	.6	92.1	1.6	.913	N
45	74.0 - 75.0	17.4	1.4	6.7	.6	90.6	2.1	.922	N
46	75.0 - 76.0	7.5	1.4	2.9	.6	95.6	.9	.915	N
47	76.0 - 77.0	3.6	1.0	1.4	.4	97.6	.6	.920	N
48	77.0 - 78.0	7.6	1.4	2.9	.6	95.7	.8	.910	N
49	78.0 - 79.0	11.1	1.6	4.2	.7	94.0	1.2	.898	N
50	79.0 - 80.0	9.4	5.0	3.6	2.1	93.2	1.1	.917	N

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Date: 30 APR 82

Lab #: 820283 - GK #2-82

Project: W.D. 2-1

Core Hole: 2-1

Elevation:

Location:

Surface elev. 6611.4

Remarks: 70 SAMPLES; AIR-DRIED.

Sample Number	Client ID	Gallons/Ton		Weight Percent				Specific Gravity 60°/60°F	Tend to Coke
		Oil	Water	Oil	Water	Spent Shale	Gas+ Loss		
51	80.0 - 81.0	26.2	1.7	10.0	.7	87.2	2.1	.913	S
52	81.0 - 82.0	6.7	1.2	2.5	.5	96.0	1.0	.905	N
53	82.0 - 83.0	13.5	1.4	5.1	.6	92.7	1.6	.908	N
54	83.0 - 84.0	16.8	1.4	6.4	.6	91.5	1.5	.911	N
55	84.0 - 85.0	4.6	1.2	1.8	.5	96.9	.8	.920	N
56	85.0 - 86.0	10.9	4.3	4.2	1.8	92.8	1.2	.919	N
57	86.0 - 87.0	5.3	6.5	2.0	2.7	94.7	.6	.924	N
58	87.0 - 88.0	7.9	2.6	3.0	1.1	95.0	.9	.913	N
59	88.0 - 89.0	4.3	1.0	1.6	.4	97.3	.7	.920	N
60	89.0 - 90.0	5.5	.7	2.1	.3	96.6	1.0	.922	N
61	90.0 - 91.0	16.0	.7	6.1	.3	93.2	.4	.916	N
62	91.0 - 92.0	3.2	.7	1.2	.3	98.4	.1	.920	N
63	92.0 - 93.0	3.4	1.2	1.3	.5	97.8	.4	.920	N
64	93.0 - 94.0	9.9	1.0	3.8	.4	95.1	.7	.912	N
65	94.0 - 95.0	6.7	1.2	2.5	.5	96.2	.8	.907	N
66	95.0 - 96.0	16.3	1.2	6.1	.5	92.3	1.1	.897	S
67	96.0 - 97.0	6.6	1.0	2.5	.4	96.5	.6	.905	N
68	97.0 - 98.0	8.6	1.0	3.3	.4	95.6	.7	.907	N
69	98.0 - 99.0	2.4	1.7	.9	.7	97.8	.6	.920	N
70	99.0 - 100.0	4.8	1.0	1.8	.4	97.2	.6	.920	N

Coking Tendency of Spent Shale:

N=none S=slight M=moderate H=heavy

a = Specific gravity estimated @ 0.920