



GULF MINERAL RESOURCES COMPANY
Petroleum Research Engineering

COMPANY GULF MINERAL RESOURCES COMPANY
WELL FOMANIA NO. 14
FIELD WILDCAT
COUNTY UTAH
LOCATION 450' FNL 975' FNL
SEC 33-T10S-R25E
DATE 10-5-73
FORMATION PARACHUTE
DRUG. FLD. AIR-MIST
REMARKS *SAMPLE NOT AVAILABLE FOR ASSAY
SEE SUPPLEMENTAL TABULATION
FILE NO. RP-2-CSA-149
ENGINEER R. MOHL
ELEV. 5900' GL
CORR. DIAMOND 3"

0146

OIL SHALE ASSAY

Sample Number	Depth, Feet	OIL		Oil Specific Gravity	WATER		Spent Shale Wt. %	Gas Plus Loss Wt. %	Tendency to Crake	REMARKS
		Gal/Ton	Wt. %		Gal/Ton	Wt. %				
1	361.0-62.5	15.5	5.9	.914	2.4	1.0	91.7	1.4	NIL	
2	362.5-64.0	10.5	4.1	.925	2.6	1.1	93.8	1.1	NIL	
3	364.0-65.5	6.2	2.4	.916	2.4	1.0	95.9	0.8	NIL	
4	365.5-67.0	8.4	3.2	.917	2.2	0.9	95.0	0.9	NIL	
5	367.0-68.5	14.4	5.5	.914	2.4	1.0	92.3	1.2	NIL	
6	368.5-70.0	10.3	4.0	.923	2.2	0.9	94.2	1.0	NIL	
7	370.0-71.5	9.8	3.8	.921	2.4	1.0	94.2	1.0	NIL	
8	371.5-72.5	14.8	5.7	.919	3.1	1.3	91.9	1.1	NIL	
9	372.5-74.0	1.0	0.4	.921	8.4	3.5	95.8	0.3	NIL	
10	374.0-75.0	3.0	1.1	.921	9.1	3.8	94.5	0.6	NIL	
11	375.0-76.5	10.8	4.1	.918	1.9	0.8	93.8	1.3	NIL	
12	376.5-78.0	14.1	5.4	.917	1.9	0.8	92.6	1.2	NIL	
13	378.0-79.5	17.0	6.5	.914	2.4	1.0	91.0	1.5	NIL	
14	379.5-81.0	12.8	4.9	.919	2.6	1.1	92.7	1.3	NIL	
15	381.0-82.5	8.8	3.4	.924	2.6	1.1	94.4	1.1	NIL	
16	382.5-84.0	9.3	3.6	.924	3.1	1.3	93.9	1.2	NIL	
17	384.0-85.5	12.4	4.8	.919	2.4	1.0	92.6	1.6	NIL	
18	385.5-87.0	7.5	2.9	.923	3.1	1.3	94.0	1.8	NIL	
19	387.0-88.5	9.2	3.5	.919	2.9	1.2	93.9	1.4	NIL	
20	388.5-90.0	7.8	3.0	.919	2.4	1.0	94.8	1.2	NIL	
21	390.0-91.5	15.1	5.8	.915	2.6	1.1	90.4	2.8	NIL	
22	391.5-93.0	8.4	3.2	.917	2.9	1.2	92.8	2.8	NIL	
23	393.0-94.0	21.8	8.3	.914	3.6	1.5	86.9	3.3	NIL	
24	394.0-95.0	12.9	4.9	.915	2.9	1.2	90.8	3.1	NIL	
25	395.0-96.5	11.9	4.6	.920	2.9	1.2	90.4	3.8	NIL	
26	396.5-98.0	12.7	4.9	.913	2.9	1.2	89.6	4.4	NIL	
27	398.0-99.5	20.7	7.8	.905	3.1	1.3	87.7	3.2	NIL	
28	399.5-00.7	13.9	5.3	.913	2.9	1.2	90.6	2.9	NIL	
29	400.7-01.3	26.8	10.1	.903	3.6	1.5	86.2	2.2	SLIGHT	
30	401.3-02.0	14.3	5.4	.906	2.9	1.2	89.1	4.3	NIL	
31	402.0-03.0	29.6	11.2	.904	3.8	1.6	83.3	3.9	NIL	
32	403.0-04.3	5.0	2.0	.927	3.1	1.3	94.8	2.0	NIL	

OIL SHALE ASSAY

RP-2-OSA-149
Page #2

Sample Number	Depth, Feet	OIL		Oil Specific Gravity	WATER		Spent Shale Wt. %	Gas Plus Loss Wt. %	Tendency to Coke	REMARKS
		Gal/Ton	Wt. %		Gal/Ton	Wt. %				
33	404.3-05.0	8.5	3.3	.914	2.2	0.9	91.5	4.3	NIL	
34	405.0-06.5	3.3	1.3	.925	2.4	1.0	93.9	3.8	NIL	
35	406.5-08.0	4.5	1.8	.933	2.6	1.1	93.5	3.7	NIL	
36	408.0-09.0	5.2	2.0	.933	2.6	1.1	93.0	3.9	NIL	
37	409.0-10.4	3.7	1.4	.920	2.4	1.0	95.8	1.8	NIL	
38	410.4-11.0									*
39	411.0-12.5	1.8	0.7	.920	3.4	1.4	95.4	2.5	NIL	
40	412.5-14.3	14.0	5.3	.900	3.6	1.5	90.7	2.6	NIL	
41	414.3-15.1	2.4	0.9	.908	2.4	1.0	94.1	4.0	NIL	
42	415.1-16.5	15.7	5.9	.905	3.6	1.5	90.1	2.5	NIL	
43	416.5-18.0	30.5	11.5	.903	4.8	2.0	82.7	3.8	SLIGHT	
44	418.0-19.4	13.3	5.1	.908	3.1	1.3	91.4	2.3	NIL	
45	419.4-20.1	15.0	5.7	.908	3.4	1.4	88.2	4.7	NIL	
46	420.1-21.5	15.1	5.8	.919	3.6	1.5	90.7	2.0	NIL	
47	421.5-23.0	27.7	10.6	.914	4.8	2.0	85.2	2.2	NIL	
48	423.0-24.4	27.0	10.3	.905	3.1	1.3	85.7	2.7	SLIGHT	
49	424.4-25.1	26.6	10.1	.905	3.8	1.6	83.5	4.9	SLIGHT	
50	425.1-26.5	44.8	16.9	.902	4.8	2.0	78.1	3.0	SLIGHT	
51	426.5-28.0	25.0	9.3	.891	3.8	1.6	86.9	2.2	NIL	
52	428.0-29.0	18.4	7.0	.905	3.8	1.6	88.9	2.6	NIL	
53	429.0-29.9	15.3	5.9	.914	3.6	1.5	90.3	2.4	NIL	
54	429.9-30.8	14.9	5.7	.908	3.1	1.3	88.6	4.5	NIL	
55	430.8-32.5	13.6	5.2	.912	2.4	1.0	91.2	2.6	NIL	
56	432.5-33.5	11.2	4.3	.913	3.1	1.3	91.7	2.7	NIL	
57	433.5-34.9	10.3	3.9	.908	1.9	0.8	92.5	2.8	NIL	
58	434.9-35.4	9.6	3.6	.910	6.7	2.8	89.8	3.8	NIL	
59	435.4-35.9	12.6	4.8	.901	1.9	0.8	92.7	1.8	NIL	
60	435.9-36.8	9.3	3.5	.899	2.2	0.9	91.1	4.5	NIL	
61	436.8-38.5	37.7	14.3	.907	3.8	1.6	80.9	3.2	SLIGHT	
62	438.5-40.0	18.9	7.1	.904	1.9	0.8	89.4	2.7	NIL	
63	440.0-41.5	31.2	11.7	.898	2.9	1.2	84.6	2.5	NIL	
64	441.5-43.0	37.8	14.3	.906	2.9	1.2	81.2	3.3	SLIGHT	
65	443.0-44.5	48.2	18.0	.897	3.1	1.3	75.9	4.8	MEDIUM	
66	444.5-45.2	62.4	23.4	.897	3.6	1.5	60.8	14.3	MEDIUM	
67	445.2-46.5	73.9	27.9	.904	5.8	2.4	61.8	7.9	HIGH	
68	446.5-48.0	75.2	28.3	.902	5.8	2.4	62.8	6.5	HIGH	
69	448.0-49.0	47.1	17.7	.902	3.4	1.4	74.5	6.4	MEDIUM	
70	449.0-50.5	51.0	19.3	.904	4.1	1.7	72.4	6.7	MEDIUM	
71	450.5-52.0	26.9	10.3	.917	3.6	1.5	85.8	2.4	NIL	
72	452.0-53.5	29.6	11.3	.912	2.6	1.1	84.6	3.1	NIL	

Sample Number	Depth, Feet	OIL		Oil Specific Gravity	WATER		Spent Shale Wt. %	Gas Plus Loss Wt. %	Tendency to Coke	REMARKS
		Gal/Ton	Wt. %		Gal/Ton	Wt. %				
73	453.5-54.9	17.4	6.7	.916	2.4	1.0	89.5	2.9	NIL	
74	454.9-55.6									*
75	455.6-57.0	16.8	6.4	.916	2.4	1.0	89.5	3.1	NIL	
76	457.0-58.5	21.9	8.3	.907	2.4	1.0	87.7	3.0	NIL	
77	458.5-60.0	33.9	12.9	.910	3.6	1.5	82.3	3.3	SLIGHT	
78	460.0-61.5	33.5	12.6	.901	3.1	1.3	83.3	2.8	SLIGHT	
79	461.5-63.0	20.1	7.5	.893	3.4	1.4	88.2	2.9	NIL	
80	463.0-64.0	45.8	17.3	.907	4.6	1.9	76.9	3.9	SLIGHT	
81	464.0-64.9	16.0	6.1	.915	3.4	1.4	88.1	4.4	NIL	
82	464.9-65.6	16.1	6.0	.899	2.4	1.0	87.6	5.4	NIL	
83	465.6-67.0	17.2	6.6	.912	3.6	1.5	88.2	3.7	NIL	
84	467.0-68.0	44.4	17.0	.915	4.8	2.0	77.4	3.7	MEDIUM	
85	468.0-69.5	12.4	4.8	.924	4.8	2.0	90.1	3.1	NIL	
86	469.5-71.0	12.2	4.7	.915	3.4	1.4	90.0	4.0	NIL	
87	471.0-72.5	20.0	7.5	.903	3.4	1.4	88.7	2.4	NIL	
88	472.5-73.5	40.0	15.1	.903	3.6	1.5	80.1	3.3	NIL	
89	473.5-74.7	24.9	9.3	.900	2.9	1.2	86.4	3.1	NIL	
90	474.7-75.5	33.2	12.2	.882	3.1	1.3	81.4	5.1	NIL	
91	475.5-77.0	29.1	10.9	.898	3.6	1.5	83.8	3.8	NIL	
92	477.0-78.5	22.7	8.6	.906	3.6	1.5	86.6	3.3	NIL	
93	478.5-80.0	23.1	8.7	.905	3.6	1.5	86.6	3.2	NIL	
94	480.0-81.5	16.8	6.4	.908	3.6	1.5	88.6	3.6	NIL	
95	481.5-83.0	10.0	3.8	.919	4.3	1.8	92.1	2.3	NIL	
96	483.0-84.6	16.4	6.2	.909	3.6	1.5	89.5	2.8	NIL	
97	484.6-85.5	19.0	7.3	.922	3.6	1.5	86.4	4.8	NIL	
98	485.5-87.0	9.5	3.6	.915	2.4	1.0	93.0	2.4	NIL	
99	487.0-88.0	6.6	2.5	.917	2.9	1.2	94.2	2.1	NIL	
100	488.0-89.5	4.0	1.5	.920	2.2	0.9	95.1	2.5	NIL	
101	489.5-90.3									*
102	490.3-91.5	16.8	6.3	.897	2.4	1.0	91.3	1.4	NIL	
103	491.5-92.5	7.7	3.0	.914	6.0	2.5	92.8	1.8	NIL	
104	492.5-93.5	11.5	4.4	.913	3.1	1.3	92.5	1.8	NIL	
105	493.5-95.0	22.8	8.8	.919	2.6	1.1	87.8	2.4	SLIGHT	
106	495.0-95.7									*
107	495.7-97.0	7.7	2.9	.907	2.2	0.9	94.5	1.7	NIL	
108	497.0-98.2	29.8	11.4	.914	2.9	1.2	85.0	2.4	SLIGHT	

*See Supplemental Tabulation



CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

COMPANY GULF MINERAL RESOURCES COMPANY
WELL BONANZA NO. 14
FIELD WILDCAT
COUNTY UTAH
LOCATION 450' FSL 975' FWL
SEC 33-T10S-R25E
DATE 2-25-74
FORMATION PARACHUTE
AIR-MIST
SUPPLEMENTAL TABULATION NO. 1
ENGINE RG
ELEV 5900' GL
CORES

OIL SHALE ASSAY

Sample Number	Depth, Feet	OIL		Oil Specific Gravity	WATER		Spent Shale Wt. %	Gas Plus Loss Wt. %	Tendency to Coke	REMARKS
		Gal/Ton	Wt. %		Gal/Ton	Wt. %				
38	410.4-411.0	4.7	1.9	.955	1.9	0.8	94.3	3.0	NIL	
74	454.9-455.6	22.3	8.7	.935	3.4	1.4	85.7	4.2	NIL	
101	489.5-490.3	12.1	4.7	.925	2.6	1.1	92.1	2.1	NIL	

SUPPLEMENTAL TABULATION NO. 1