

1047
E-416
CORE ANALYSIS RESULTS

Company	DELHI-TAYLOR OIL CORPORATION	Formation	GRANEROS	File	RP-3-1241
Well	Star MICHEMER #31	Core Type	DIAMOND CONV.	Date Report	8/11/60
Field	UNDESIGNATED DAKOTA	Drilling Fluid	OIL EMULSION MUD	Analysts	ENGLISH
County	SAN JUAN	State	N. MEXICO	Elev	6023 Gr. Location
					SEC15 T28N R9W

Lithological Abbreviations

SANDY SS SANDY SH SANDY LM	DOLOMITE DOL CHERT CH GYPSUM GYP	ANHYDRITE ANHY CONGLOMERATE CONG FOSSILIFEROUS FOSS	SANDY SDY SHALY SHY LIMY LMY	FINE FN MEDIUM MED COARSE CSE	CRYSTALLINE XLN GRAIN GRN GRANULAR GRNL	BROWN BRN GRAY GRY UGGY UGY	FRACTURED FRAC LAMINATION LAM STYLOLITIC STY	SLIGHTLY-GLY VERY-V/
----------------------------------	--	---	------------------------------------	-------------------------------------	---	-----------------------------------	--	-------------------------

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	6657-58	0.01	3.8	5.3	79.1	Vertical Fracture
2	6659-60	<0.01	4.1	4.9	85.4	" "
3	6661-62	0.02	3.9	5.1	84.6	" "
4	6663-64	<0.01	3.7	5.4	89.2	" "
5	6665-66	<0.01	3.6	5.6	91.6	" "
6	6667-68	<0.01	4.1	5.5	82.8	" "
7	6669-70	0.04	4.3	11.6	81.3	" "
8	6671-72	<0.01	3.8	5.3	81.6	" "
9	6673-74	0.01	4.9	3.5	63.3	" "
10	6675-76	<0.01	7.7	4.0	27.3	" "
11	6677-78	0.02	5.9	3.6	33.9	" "
12	6679-80	<0.01	6.7	3.6	35.8	" "
13	6682-83	<0.01	3.2	3.2	90.6	" "
14	6686-87	<0.01	3.7	13.5	81.1	" "

6657-6687 The samples analysed within this interval have the properties of non-productive sandstone. The samples 6675-76, 6677-78 and 6679-80 have porosity and saturations favorable for gas production. However, the permeability of these samples will only support low capacity gas production into the fracture system.

CORE ANALYSIS RESULTS

Company **DRILL-TAYLOR OIL CORPORATION** Formation **DAKOTA** File **RP-3-1241**
Well **# 1 MICHENER** Core Type **DIAMOND CONV.** Date Report **8/12/60**
Field **UNDESIGNATED - DAKOTA** Drilling Fluid **OIL EMULSION MUD** Analysts **ENGLISH**
County **SAN JUAN** State **N. MEXICO** Elev **6023 Gr.** Location **Sec 15 T28N R9W**

Lithological Abbreviations

SHALE SD SCALE SH LIME LM	DOLOMITE LOL CHERT CH GYPSUM GY	ANHYDRITE ANHY CONGLOMERATE CON FOSSILIFEROUS FOS	SANDY SDY SHALY SHY LIMY LMY	FINE FN MEDIUM MED COARSE CSE	CRYSTALLINE CLN GREEN GRN GRANULAR GRN	BROWN BRN GRAY GRV VUGGY VUG	FRACTURED FRAC LAMINATION LAM STYLOLITIC STY	SLIGHTLY SL VERY V/ WITH W/
SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RES DUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS		
				OIL	TOTAL WATER			
15	6601-94	<0.01	3.7	13.5	78.3	Vertical Fracture		
16	6602-03	0.02	4.5	11.1	77.9	"	"	
17	6603-10	0.01	4.6	10.9	76.1	"	"	
18	6611-15	0.01	3.7	13.5	67.6	"	"	
19	15-16	1.3	6.1	3.3	29.5	"	"	
20	16-17	0.15	10.2	2.0	22.5	"	"	
21	17-18	0.04	4.1	0.0	39.0	"	"	
22	18-19	0.09	7.9	6.3	59.5	"	"	
23	19-20	0.07	5.5	3.6	50.9	"	"	
24	20-21	0.26	3.7	5.4	67.6	"	"	
25	21-22	0.13	6.5	3.1	64.6	"	"	
26	22-23	0.09	5.1	3.9	47.1	"	"	
27	23-24	1.0	4.0	5.0	64.9	"	"	
28	24-25	0.07	4.0	5.0	60.1	"	"	
29	25-26	0.08	5.1	3.9	60.8	"	"	
30	26-27	0.08	4.9	4.1	69.3	"	"	
31	27-28	0.05	5.2	3.8	65.3	"	"	
32	28-29	0.08	6.1	3.3	62.3	"	"	
33	29-30	0.02	4.6	0.0	69.6	"	"	
34	30-31	0.07	2.2	0.0	59.1	"	"	
35	31-32	0.04	4.6	0.0	71.7	"	"	
36	32-33	0.29	3.7	0.0	78.4	"	"	
37	33-34	0.27	3.5	0.0	94.3	"	"	
38	34-35	* 88	3.0	0.0	83.3	"	"	* PERMEABILITY THROUGH A SMALL FRACTURE
39	35-36	0.01	3.0	0.0	89.9	"	"	
40	36-37	0.05	1.6	0.0	93.3	"	"	
41	37-38	0.12	2.9	0.0	86.1	"	"	
42	38-39	0.01	3.5	5.7	77.2	"	"	
43	39-40	0.01	4.2	4.8	78.6	"	"	
44	40-41	0.01	3.1	6.5	80.6	"	"	
45	41-42	0.01	2.4	8.3	87.4	"	"	
46	42-43	0.02	4.1	4.9	90.2	"	"	
47	43-44	0.02	2.2	9.3	82.0	"	"	
48	44-45	0.02	3.8	5.3	86.7	"	"	

6693-6615 The samples analyzed within this interval are non-productive.

6615-6630 This interval has low porosity (5.3% average) and low permeability (0.13 md./ft. average). The saturations (residual oil 3.5% average and total water 55.5% average) show the interval to be non-productive.

6630-6645 This interval is essentially non-productive.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. and its officers and employees, and no responsibility or warranty is made by Core Laboratories, Inc. as to the productivity, proper use or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE ANALYSIS RESULTS

Company **DELHI-TAYLOR OIL CORPORATION** Formation **DAKOTA** File **RP-3-1241**
Well **# 1 MICHEMER** Core Type **DIAMOND CONV.** Date Report **8/13/60**
Field **UNDERSATURATED DAKOTA** Drilling Fluid **OIL EMULSION MUD** Analysts **ENGLISH**
County **SAN JUAN** State **N. MEXICO** Elev **6023 Gr.** Location **SIG15 128N 89W**

Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
49	6745-46	<0.01	3.6	0.0	83.9	Vertical Fracture
50	46-47	<0.01	3.9	0.0	87.2	
51	47-48	<0.01	3.7	0.0	92.0	
52	48-49	<0.01	3.7	0.0	89.1	
53	49-50	<0.01	2.8	0.0	89.2	
54	50-51	<0.01	3.2	0.0	87.5	
55	51-52	<0.01	1.0	0.0	80.0	
56	52-53	<0.01	2.8	0.0	92.9	
57	6769-70	<0.01	4.3	0.0	88.4	Vertical Fracture
58	6777-78	<0.01	3.8	0.0	86.8	
59	78-79	0.04	3.9	0.0	82.0	
60	79-80	<0.01	2.9	0.0	69.1	
61	80-81	0.03	3.1	0.0	51.7	
62	81-82	0.02	6.1	8.2	37.7	
63	82-83	0.06	4.2	4.8	64.4	
64	6786-87	<0.01	3.0	0.0	93.4	Vertical Fracture
65	87-88	0.09	4.3	11.6	70.0	
66	88-89	<0.01	2.0	0.0	60.1	
67	89-90	0.03	3.6	0.0	55.5	
68	90-91	0.02	4.4	0.0	84.1	
69	6798-99	0.23	2.4	0.0	95.9	
70	6798-99	<0.01	5.8	0.0	89.6	
71	99-6800	<0.01	3.6	0.0	75.1	
72	6800-01	<0.01	5.9	0.0	79.7	

6745-6801 The samples analyzed within this interval are essentially non-productive. There will be a small amount of gas fed into the fracture system from the interval 6781-6783 and further testing should be done to evaluate the fractures.

CORE ANALYSIS RESULTS

Company DEWEY-TAYLOR OIL CORPORATION Formation DABOTA File DE-1-1241
Well # 1, MOCHNER Core Type DIAMOND CONV. Date Report 6/14/60
Field UNDESIGNATED - DAKOTA Drilling Fluid OIL EMULSION MUD Analysts ENGLEN
County SAN JUAN State N. MEXICO Elev. 6023 Gr. Location SEC 15 128N 89W

Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
73	6807-08	0.15	4.5	15.6	78.0	
74	08-09	0.15	2.4	29.1	66.7	
75	09-10	0.09	2.7	25.9	70.4	
76	10-11	0.03	2.7	18.5	77.9	
77	6817-18	<0.01	3.3	15.2	81.9	
78	18-19	<0.01	2.1	9.5	85.7	
79	19-20	0.01	1.9	10.5	84.1	Vertical Fracture
80	20-21	0.04	4.6	15.2	69.6	" "
81	21-22	<0.01	3.3	0.0	72.7	" "
82	22-23	0.02	2.8	0.0	98.5	
83	23-24	<0.01	2.9	6.9	79.4	
84	24-25	0.01	2.6	0.0	84.5	
85	25-26	<0.01	2.4	0.0	92.0	" "
86	26-27	<0.01	1.3	0.0	92.2	" "
87						
87	6833-34	0.02	2.6	0.0	96.4	" "
88	6838-39	<0.01	3.0	6.7	83.4	
89	39-40	0.13	4.6	0.0	93.5	
90	40-41	0.01	6.5	0.0	90.9	
91	41-42	0.01	5.3	0.0	79.2	
92	42-43	0.30	6.4	3.1	75.0	
93	43-44	0.62	3.5	5.7	82.7	
94	6845-46	0.05	4.5	4.4	84.5	" "
95	46-47	0.06	8.4	0.0	61.9	" "
96	48-48	0.54	11.6	0.0	44.8	" "
97	48-49	3.5	11.3	1.8	59.2	" "
98	6851-52	0.09	7.8	0.0	44.9	
99	52-53	0.14	2.0	0.0	50.0	
100	53-54	0.02	2.3	8.7	25.0	
101	54-55	<0.01	1.5	0.0	60.0	
102	55-56	0.07	7.7	2.6	57.2	
103	56-57	0.01	7.2	2.8	61.1	
104	57-58	0.05	6.9	2.9	53.6	
105	58-59	0.13	9.0	2.2	58.9	
106	59-60	0.48	10.5	1.9	32.4	
107	60-61	0.16	11.4	1.8	42.1	
108	61-62	0.17	11.6	0.0	37.1	
109	62-63	0.13	10.5	4.8	31.4	

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation, as to the productivity, proper operations, or production of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE ANALYSIS RESULTS

Company **DELM-TAYLOR OIL CORPORATION** Formation **DAKOTA** File **RP-3-1241**
Well **# 1 MECHEMER** Core Type **DIAMOND CONV.** Date Report **8/14/60**
Form **UNDESIGNATED DAKOTA** Drilling Fluid **OIL INSULATION MUD** Analysts **REMLER**
County **SAN JUAN** State **N.MEXICO** Elev **6023 Gr.** Location **SEC15 T28N R9W**

Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
110	6863-14	0.03	6.1	8.2	64.0	Vertical Fracture
111	64-15	0.01	7.0	2.9	90.0	
112	6870-71	0.02	4.1	17.1	80.5	
113	71-72	0.01	3.9	12.8	84.6	
114	72-73	<0.01	2.1	0.0	95.5	
115	6874-75	0.03	4.3	16.3	69.8	
116	75-76	<0.01	2.9	17.2	79.4	
117	76-77	<0.01	4.5	15.6	77.8	
118	6879-80	0.04	2.7	18.5	78.0	
119	6882-83	<0.01	1.6	0.0	94.0	

6807-6846 This interval is essentially non-productive .

6846-6849 This interval has good porosity (10.4% average) and low permeability (1.4 md./ft. average) . The saturations (residual oil 0.6% average and total water 55.3% average) show the interval to be capable of producing gas . A formation treatment will depend upon the effectiveness of the vertical fractures .

6851-6865 This interval has fair porosity (7.2% average) and low permeability (0.11 md./ft. average) . The saturations (residual oil 2.6% average and total water 47.7% average) show the interval to be capable of producing gas . A formation treatment will depend upon the effectiveness of the vertical fractures .

6865-6883 The samples analyzed within this interval have the properties of non-productive Dakota formation .

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or performance of any oil, gas or other mineral well or used in connection with which such report is made or relied upon.

CORE ANALYSIS RESULTS

Company **DELL-TAYLOR OIL CORPORATION** Formation **DAKOTA** File **RP-3-1241**
Well **# 1 MICHEMER** Core Type **DIAMOND CONV.** Date Report **8/16/60**
Field **UNDESIGNATED DAKOTA** Drilling Fluid **OIL EMULSION MUD** Analysts **ENGLISH**
County **SAN JUAN** State **N. MEXICO** Elev. **6023** Cr. Location **SEG15 T26N R9W**

Lithological Abbreviations

BRIDG. SD. BRIDG. SD. DOLOMITE-DOL. ANHYDRITE-ANHY. SANDY-SDY. FINE FN. CRYSTALLINE-XLN. BROWN-BRN. FRACTURED-FRAC. SLIGHTLY-SL.
SHALE-SH. CHERT-CH. GYPSUM-GYP. CONGLOMERATE-CONG. SHALY-SHY. MEDIUM-MED. GRAIN-GRN. GRAY-GY. LAMINATION-LAM. VERT. V/
LIMB-LB. GYPSUM-GYP. FOSSILIFEROUS-FOSS. LIMY-LMY. COARSE-COE. GRANULAR-GRNL. VUGGY-VGY. STYLOLITH-STY. WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PERCENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
120	6884-87	<0.01	3.5	14.3	82.9	
121	87-88	0.11	2.8	7.1	78.6	
122	84-89	<0.01	3.5	5.7	91.6	
123	6890-91	<0.01	5.2	9.6	82.7	Vertical Fracture
124	91-92	0.01	4.6	0.0	95.7	" "
125	92-93	0.01	4.7	0.0	97.8	" "
126	93-94	<0.01	3.2	0.0	97.1	" "
127	6900-01	0.01	3.8	0.0	47.4	}
128	01-02	<0.01	2.6	0.0	38.3	
129	02-03	0.02	3.5	5.7	71.6	
130	03-04	0.01	3.8	5.3	65.7	
131	04-05	0.03	3.8	5.3	47.4	
132	05-06	0.01	3.3	0.0	36.3	
133	06-07	0.01	3.1	0.0	64.6	
134	07-08	0.01	3.2	0.0	37.5	
135	08-09	0.05	3.8	0.0	39.4	
136	09-10	0.06	4.3	0.0	32.5	
137	10-11	0.13	5.5	0.0	32.7	
138	11-12	3.9	6.8	0.0	26.5	
139	12-13	0.56	6.4	0.0	21.8	
140	13-14	0.38	6.1	0.0	19.6	
141	14-15	1.6	6.7	0.0	23.9	
142	15-16	0.56	6.6	0.0	27.2	
143	16-17	12	8.0	0.0	22.5	
144	17-18	15	7.5	0.0	21.3	
145	18-19	7.1	7.8	0.0	23.1	
146	19-20	3.3	5.7	0.0	21.0	

6886-6909 This interval is essentially non-productive .

6909-6920 The saturations of total water within this interval are within the range associated with gas production . However , the absence of any residual oil saturation indicates that the gas was probably in solution with water . There is evidence of a good fracture system , which could be the reservoir and the means of passage to the well bore for fluids within the fractures . Further testing should be done to evaluate the fractures . The matrix will contribute some water to any production from the fractures .

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, they are made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation, as to the productivity, proper operation, or maintenance of any oil, gas or other mineral well or sand in connection with which, such report is filed or relied upon.