

CORE LABORATORIES, INC.
 Petroleum Reservoir Engineering
 DALLAS, TEXAS

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CORE ANALYSIS RESULTS

Company **THE ATLANTIC REFINING COMPANY** Formation **UPPER & LOWER TOCITO**
 Well **NAVAJO NO.29** Core Type **DIAMOND CORE**.
 Field **HORSESHOE GALLUP** Drilling Fluid **OIL EMULSION MUD**
 County **SAN JUAN** State **NEW MEX.** Elev. **5554 GR** Location **SEC 31 31N 16W**

File **RP-3-922**
 Date Report **2-11-59**
 Analysts **CLIFFORD**

Lithological Abbreviations

SAND-SH. SHALE-SH. LIME-LM	DO-UNITS LIGHT-CH. GYPSUM-GYP	ANHYDITE-ANHY. CONGLOMERATE-CONG. FOSSILIFEROUS-FOSS	SANDY-SH. SHALY-SHY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-CLN GRAIN-GRN GRANULAR-GRNL	BROWN-BRN GRAY-GRY VUGGY-VGT	FRAC-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY-SL/ VERY-V/ WITH-W/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY		POROSITY PERCENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		hor	vert		oil	water	
43	1263-64	0.08	0.06	11.2	4.5	76.8	
44	64-65	0.06	0.05	10.8	4.6	75.9	
45	65-66	0.06	0.02	9.4	5.3	73.4	
46	66-67	0.03	0.02	10.1	5.0	79.2	
47	67-68	0.04	0.02	9.5	5.3	84.2	
48	68-69	0.08	0.03	10.3	6.8	79.6	
49	69-70	0.11	0.04	9.2	5.4	90.2	
50	70-71	0.11	0.03	9.4	5.3	89.4	
51	71-72	0.06	0.02	9.2	5.4	89.1	UPPER TOCITO
52	72-73	0.41	0.07	10.8	4.6	85.2	LOWER TOCITO
53	73-74	0.09	0.08	10.4	6.7	82.7	
54	74-75	0.07	0.04	10.5	4.8	81.9	
55	75-76	0.31	0.09	10.4	6.7	86.5	
56	76-77	0.20	0.06	10.4	6.7	86.5	
57	77-78	0.36	0.10	11.5	7.8	85.2	
58	78-79	0.06	0.05	11.1	4.5	79.3	
59	79-80	0.12	0.10	8.3	6.0	79.5	
60	80-81	0.33	0.09	11.5	4.3	80.0	
61	81-82	0.04	0.04	8.3	6.5	81.9	
62	82-83	0.10	0.02	9.5	5.3	80.0	
63	83-84	0.38	0.07	10.1	6.9	81.2	
64	84-85	0.17	0.03	11.2	6.3	85.7	
65	85-86	0.19	0.09	9.3	9.7	74.2	
66	86-87	0.22	0.06	5.1	0.0	60.8	
67	87-88	0.47	0.09	11.2	6.3	89.3	
68	88-89	0.12	0.10	10.4	6.7	84.6	
69	89-90	0.04	0.02	2.7	0.0	70.4	
70	90-91	0.16	0.06	8.6	8.1	84.9	
71	91-92	0.15	0.13	9.9	5.1	86.9	
72	92-93	1.0	0.11	8.0	6.3	78.8	
73	93-94	0.07	0.05	6.8	0.0	67.6	
74	94-95	0.52	0.10	10.0	7.0	80.0	
75	95-96	0.26	0.13	6.4	7.8	78.1	
76	96-97	0.04	0.03	6.9	10.1	79.7	
77	97-98	0.80	0.34	15.3	13.1	30.1	
78	98-99	1.0	0.19	16.6	7.8	30.1	
79	1299-00	4.2	1.0	21.6	13.0	32.4	
80	1300-01	63	2.5	19.0	20.5	38.4	
81	01-02	0.17	0.04	6.7	10.4	71.6	
82	02-03	0.35	0.02	7.5	9.3	58.7	
83	03-04	0.45	0.16	12.1	14.9	57.9	
84	1304-05	0.62	0.13	11.2	14.3	39.3	

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Company **THE ATLANTIC REFINING COMPANY**
 Well **NAVAJO NO.29**
 Field **HORSESHOE GALLUP**
 County **SAN JUAN**

State **NEW MEX.**

Formation **UPPER & LOWER TOCITO**
 Core Type **DIAMOND CONV.**
 Drilling Fluid **OIL EMULSION MID**
 Flex **5554 GR.** Location **SEC 31 31W 16W**

File. **RP-3-922**
 Date Report **2-11-59**
 Analysts **CLIFFORD**

Lithological Abbreviations

SAND %	DO. OWHITE DO.	ANHYDRITE-ANHYD.	FORMATION	FINE-FN	CRYSTALLINE-ELM	BROWN-BRN	FRACTURED-FRAC	SLIGHTLY SL/
SHALE SH%	CHEAT CH	CONGLOMERATE-LONG	Core Type	MEDIUM-MED	GRAIN-GRN	GRAY-GY	LAMINATION-LAM	VERY V.
LIME LIM%	GYPSUM GYP	FOSIL-FERROUS-FOS	Drilling Fluid	COARSE-CSE	GRANULAR-GRNL	YUGGY-YGY	STYLOLITIC-STY	WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		hor	vert		oil	total water	
85	1305-06	0.80	0.67	12.5	9.6	60.8	
86	06-07	1.0	0.16	11.3	12.4	67.3	
87	07-08	0.34	0.27	10.8	11.1	63.9	
88	08-09	0.65	0.25	11.1	7.2	63.1	
89	09-10	0.12	0.04	11.7	6.0	75.2	
90	1310-11	0.04	0.01	10.1	6.9	87.1	

CORE LABORATORIES, INC.

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CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
27	1240-41	1.2	12.6	12.7	68.2	
28	41-42	0.09	11.9	11.8	65.6	3' 7 1 MD
29	42-43	0.05	12.1	9.9	62.0	273.2 MD FT
30	43-44	0.04	7.6	5.3	83.0	3' @ 91 MD
31	44-45	0.58	8.1	2.5	49.3	3' @ 16.5 70% PoZ
32	1245-46	0.06	2.8	7.1	42.9	

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