CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

PRELIMINARY REPORT

CORE ANALYSIS RESULTS

Company ROGER C. HANKS | Formation CISCO | File WP-1-6539
Well PENNY FEDERAL NO. 1 | Core Type DIAMOND 4 3/8" | Date Report 5-11-71
Field UNDESIGNATED (CISCO) | Drilling Fluid SALT BASE MUD | Analysts ANTWINE
County EDDY State N. M. Elev. Location 660' FSL 1980' FWL, SEC 23-20-24

Lithological Abbreviations

SAND-SD, SHALE-SH, LIME-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-GY, VUGGY-VGY | FRACTURED-FRAC, LAMINATION-LAM, STYLOLITIC-STY | SLIGHTLY-SL/, VERY-V/, WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS MAX. 900		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE OIL	RESIDUAL SATURATION PER CENT PORE TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
		WHOLE-CORE ANALYSIS	*-INDICATES MATRIX PERMEABILITY				
1	7662.0-63.4	<0.1	<0.1	5.4	0.0	37.0	Dolomite, vgy, calcite
2	63.4-64.7	0.4	0.4	4.2	0.0	34.5	Dolomite, vgy
3	64.7-66.4	<0.1	<0.1	2.9	0.0	31.0	Dolomite, vgy
4	66.4-68.0	<0.1	<0.1	1.4	0.0	41.5	Dolomite, sl/vgy
5	68.0-69.5	<0.1	<0.1	2.4	0.0	34.5	Dolomite, sl/vgy
6	69.5-70.6	<0.1	<0.1	3.4	0.0	29.9	Dolomite, vert frac, sl/vgy
7	70.6-72.1	0.2	<0.1	4.4	0.0	27.7	Dolomite, vert frac, sl/vgy, sty
8	72.1-73.4	<0.1	<0.1	3.5	0.0	24.8	Dolomite, vert frac, sl/vgy, sty
9	73.4-74.8	<0.1	<0.1	2.9	0.0	34.6	Dolomite, vert frac, sl/vgy, sty
10	7674.8-76.0	<0.1	<0.1	2.5	0.0	32.7	Dolomite, sl/vgy, sty
	7676.0-77.0						Kept by Client
11	7677.0-78.5	<0.1	<0.1	2.0	0.0	35.3	Dolomite, sl/vgy, sty
12	78.5-79.5	<0.1	<0.1	3.4	0.0	20.7	Dolomite, sl/vgy, sty
13	79.5-80.5	<0.1	<0.1	3.5	0.0	25.2	Dolomite, sl/vgy, sty
14	7680.5-82.0	<0.1	<0.1	3.9	0.0	21.8	Dolomite, sl/vgy, sty
	7682.0-88.0						Dolomite, calcite
15	7688.0-89.7	<0.1	<0.1	1.7	0.0	36.7	Dolomite, vert frac
16	89.7-91.5	<0.1	<0.1	2.8	0.0	14.0	Dolomite, sl/vgy, sty
17	91.5-92.7	<0.1	<0.1	2.5	0.0	30.1	Dolomite, vgy, sty
18	92.7-94.2	<0.1	<0.1	1.7	0.0	32.1	Dolomite, frac, sty
19	94.2-95.2	<0.1	<0.1	2.5	0.0	22.9	Dolomite, vert frac, vgy, sty
20	95.2-96.5	9.3	0.1	1.5	0.0	18.2	Dolomite, sl/frac, sty
21	96.5-97.6	<0.1	<0.1	3.5	0.0	14.3	Dolomite
22	97.6-99.0	<0.1	<0.1	3.2	0.0	16.7	Dolomite, sty
23	99.0-00.5	<0.1	<0.1	2.6	0.0	22.3	Dolomite, vert frac, sty
24	7700.5-02.0	<0.1	<0.1	4.1	0.0	19.8	Dolomite, sty
25	7702.0-03.0	<0.1	<0.1	3.6	0.0	20.2	Dolomite, sty
26	03.0-04.5	<0.1	*	2.8	0.0	38.7	Dolomite, vert frac, sl/vgy
27	04.5-06.0	0.3	0.2	4.4	2.5	35.5	Dolomite, sl/vgy, ch, frac
28	06.0-07.1	<0.1	<0.1	4.2	1.5	39.4	Dolomite, sl/vgy
29	07.1-08.6	22	2.1	3.6	2.3	26.9	Dolomite, sl/vgy
30	08.6-10.0	10	0.5	3.9	1.3	35.8	Dolomite, sl/vgy, frac
31	7710.0-11.4	0.3	<0.1	5.1	1.5	24.1	Dolomite, sl/vgy