

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

Company Mitchell Energy Corp. Formation Dakota Page 1 of 2
Well Rosa Unit #81 Cores Two-Dia. Conv. 4" File RP-3-3093
Field Wildcat Drilling Fluid Fresh gel Date Report 6-21-81
County Rio Arriba State New Mexico Elevation 6483 GL Analysts Scott
Location NE, NE Sec. 7-31N-4W Remarks _____

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION
		HORIZONTAL	VERTICAL		OIL % VOLUME	TOTAL WATER % PORE	

CONVENTIONAL ANALYSIS

8098-8109	-	-	-	-	-	-	SHALE-NO ANALYSIS
1 8109-10	0.36	*	4.0	2.5	80.0		SHALE-BLK, vf gr sl/sd
2 8110-11	<0.01	<0.01	2.2	4.5	54.5		SD-GRY, vf gr, carb
3 8111-12	0.05	0.02	10.3	1.0	44.7		SD-GRY, vf gr, carb, vert frac
4 8112-13	0.03	0.03	8.0	1.3	38.8		SD-GRY, vf gr, carb, vert frac
5 8113-14	0.04	0.02	8.1	1.2	38.3		SD-GRY, vf gr, carb, vert frac
6 8114-15	0.05	0.05	9.1	2.2	49.5		SD-GRY, vf gr, carb
7 8115-16	0.06	0.01	7.8	1.3	37.2		SD-GRY, vf gr, carb
8 8116-17	0.01	0.01	4.5	2.2	66.7		SD-GRY, vf gr, carb
9 8117-18	<0.01	<0.01	1.9	0.0	52.6		SD-DK GRY, vfgr, shy, vert frac
10 8118-19	<0.01	<0.01	1.9	5.3	52.6		SD-DK GRY, vfgr, shy, vert frac
11 8119-20	<0.01	<0.01	1.6	0.0	50.0		SD-DK GRY, vfgr, shy, vert frac
12 8120-21	<0.01	<0.01	2.6	3.8	80.8		SD-DK GRY, vfgr, shy, vert frac
13 8121-22	<0.01	<0.01	1.9	0.0	84.2		SD-DK GRY, vfgr, shy, vert frac
14 8122-23	0.01	*	0.9	0.0	66.7		SD-DK GRY, vfgr, shy, vert frac
15 8123-24	1.12**	0.01	1.2	0.0	33.3		SD-GRY, vfgr, sl/shy, vert frac
16 8124-25	<0.01	<0.01	1.1	0.0	54.5		SD-GRY, vfgr, sl/shy, vert frac
17 8125-26	<0.01	<0.01	1.6	0.0	75.0		SD-DK GRY, vfgr, shy, vert frac
18 8126-27	<0.01	*	0.7	0.0	61.4		SD-DK GRY, vfgr, shy, vert frac
19 8127-28	<0.01	*	1.7	0.0	47.1		SD-DK GRY, vfgr, shy, vert frac
20 8128-29	<0.01	<0.01	0.7	0.0	28.6		SD-DK GRY, vfgr, shy, vert frac
8129-63	-	-	-	-	-		DRILLED-NO ANALYSIS
21 8163-64	<0.01	<0.01	1.1	0.0	54.6		SD-GRY, vfgr, sl/shy, vert frac
22 8164-65	<0.01	<0.01	1.7	0.0	58.8		SD-GRY, vfgr, sl/shy, vert frac
23 8165-66	<0.01	<0.01	1.7	0.0	58.8		SD-GRY, vfgr, sl/shy, vert frac
24 8166-67	<0.01	<0.01	2.0	0.0	60.0		SD-GRY, vfgr, sl/shy, vert frac
25 8167-68	<0.01	<0.01	1.3	0.0	0.0		SD-GRY, vfgr, sl/shy
26 8168-69	<0.01	<0.01	1.9	0.0	73.7		SD-GRY, vfgr, sl/shy, pyr
27 8169-70	<0.01	<0.01	2.0	0.0	50.0		SD-GRY, vfgr, sl/shy, vert frac
28 8170-71	0.01	<0.01	0.6	0.0	33.3		SD-GRY, vfgr, sl/shy, pyr
29 8171-72	<0.01	<0.01	1.3	0.0	69.2		SD-DK GRY, vfgr, shy, pyr
30 8172-73	0.07	<0.01	1.3	0.0	61.5		SD-DK GRY, vfgr, shy

* SAMPLE NOT SUITABLE FOR ANALYSIS

** FRACTURE

NOTE:

(1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.

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		HORIZONTAL	VERTICAL		OIL % VOLUME	% PORE TOTAL WATER % PORE		

CONVENTIONAL ANALYSIS

31	8173-74	*	*	1.9	5.3	84.2	SD-DK GRY, vfgr, shy
32	8174-75	0.47**	0.03	1.1	0.0	18.2	SD-DK GRY, vfgr, shy, vert frac
33	8175-76	0.01	0.02	1.0	0.0	20.0	SD-DK GRY, vfgr, shy, pyr
	8176-83	-	-	-	-	-	RUBBLE/SHALE-NO ANALYSIS
34	8183-84	2.2	<0.01	0.6	0.0	33.3	SD-DK GRY, vfgr, shy
35	8184-85	0.02	0.03	1.1	0.0	18.2	SD-GRY, vfgr, sl/shy

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