

CORE LABORATORIES, INC.
 Petroleum Reservoir Engineering
 DALLAS, TEXAS

Page No. **2****CORE ANALYSIS RESULTS**

Company **EL PASO NATURAL GAS COMPANY** Formation **DAKOTA** File **RP-3-1351**
 Well **HUERFANO # 125** Core Type **DIAMOND CONV.** Date Report **1/19/61**
 Field **BASIN DAKOTA** Drilling Fluid **OIL EMULSION MUD** Analysts **ENGLISH**
 County **SAN JUAN** State **N.MEXICO** Elev. **6569 DF** Location **SEC30 T26N R9W**

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/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
18	6586-87	0.02	3.9	12.8	64.2	Vertical Fracture
19	87-88	0.03	6.1	8.2	32.9	" "
20	88-89	0.02	6.9	10.1	34.7	" "
21	89-90	0.04	4.1	12.2	39.0	
22	90-91	0.02	7.0	7.1	34.4	
23	91-92	0.08	5.7	3.5	45.7	
24	92-93	0.08	3.7	18.9	54.1	
25	93-94	0.12	5.7	8.8	42.2	" "
26	94-95	0.01	1.4	0.0	28.5	" "
27	95-96	0.03	6.5	10.8	52.3	
28	96-97	0.09	8.3	6.0	26.5	
29	97-98	0.07	8.9	7.9	27.0	
30	98-99	0.01	5.0	10.0	44.1	
31	99-6600	0.02	7.8	6.4	40.9	
32	6600-01	0.02	7.5	6.7	42.6	
33	01-02	0.01	8.1	6.2	33.3	
34	02-03	0.01	7.5	6.7	33.3	" "
35	03-04	0.01	7.5	2.7	40.0	
36	04-05	0.01	4.2	4.8	57.2	
37	05-06	0.01	5.8	0.0	37.9	
38	06-07	0.01	4.5	0.0	86.6	
39	07-08	0.01	6.6	3.0	36.4	" "
40	08-09	0.01	5.2	3.8	59.6	" "
41	09-10	0.01	6.0	8.3	43.3	" "
42	10-11	0.01	4.5	4.4	77.9	" "
43	11-12	0.01	6.0	3.3	46.7	" "
44	12-13	0.01	5.7	3.5	49.2	" "
45	13-14	0.01	5.0	4.0	60.1	" "
46	14-15	0.01	5.3	3.8	56.6	
47	15-16	0.01	7.5	2.7	39.9	
48	16-17	0.01	7.5	2.9	32.1	
49	17-18	0.01	6.1	3.3	60.7	
50	18-19	0.01	4.8	4.2	50.0	
51	19-20	0.15	6.2	0.0	41.9	
52	20-21	0.01	6.3	3.2	41.3	
53	21-22	0.01	5.9	3.4	45.8	
54	22-23	0.02	5.6	12.5	42.8	
55	23-24	0.01	4.0	0.0	65.1	
56	24-25	0.01	5.1	3.9	35.3	
57	25-26	0.01	8.1	6.2	29.6	
58	26-27	0.03	6.1	0.0	36.1	

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CORE ANALYSIS RESULTS

Company **EL PASO NATURAL GAS COMPANY** Formation **DAKOTA** File **RP-3-1351**
Well **HUERFANO # 125** Core Type **DIAMOND CONV.** Date Report **1/19/61**
Field **BASIN DAKOTA** Drilling Fluid **OIL EMULSION MUD** Analysts **ENGLISH**
County **SAN JUAN** State **N. MEXICO** Elev. **6569 DF** Location **SEC 30 T26N R9W**

Lithological Abbreviations

SAND - SD	DOLOMITE - DOL	ANHYDRITE - ANHY	SANDY - SDY	FINE - FN	CRYSTALLINE - XLN	BROWN - BRN	FRACTURED - FRAC	SLIGHTLY - SL/
SHALE - SH	CHERT - CH	CONGLOMERATE - CONG	SHALY - SHY	MEDIUM - MED	GRAIN - GRN	GRAY - GY	LAMINATION - LAM	VERY - V/
LIME - LM	GYPSUM - GYP	FOSSILIFEROUS - FOSS	LIMY - LMY	COARSE - CSE	GRANULAR - GRNL	VUGGY - VGY	STYLOLITIC - STY	WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
6586-6587 This one-foot interval is essentially non-productive . 6587-6627 This interval has fair porosity (6.1% average) and low permeability (0.03 md./ft. average) . The saturations (residual oil 5.6% average and total water 42.0% average) show this interval to be capable of producing a very rich gas . The vertical fractures should increase the effective permeability . The one-foot intervals (6605-6606) , (6610-6611) and (6623-6624) were not included in the averages .						

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Page No. 1**CORE ANALYSIS RESULTS**

Company EL PASO NATURAL GAS COMPANY Formation GRANEROS File RP-3-1351
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 Field BASIN DAKOTA Drilling Fluid OIL EMULSION MUD Analysts ENGLISH
 County SAN JUAN State N.MEXICO Elev 6569 DF Location Sec 30 T26N R9W

Lithological Abbreviations

SAND - SD SHALE - SH LIME - LM	DOLOMITE - DOL CHERT - CH GYPSUM - GYP	ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSILIFEROUS - FOSS	SANDY - SDY SHALY - SHY LMY - 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/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
1	6525-26	<0.01	4.5	11.1	86.6	
2	26-27	0.12	7.1	40.9	52.1	
3	27-28	0.01	8.0	58.6	33.7	
4	28-29	0.01	10.2	42.1	34.4	Vertical Fracture
5	29-30	0.01	9.8	45.0	36.8	" "
6	30-31	0.02	5.6	8.9	80.4	" "
7	31-32	<0.01	5.5	9.1	85.6	
8	32-33	<0.01	4.8	4.4	79.2	
9	33-34	<0.01	4.3	0.0	95.3	
10	34-35	0.01	3.8	0.0	86.9	
11	35-36	0.01	4.9	0.0	93.9	
12	36-37	<0.01	5.0	0.0	91.9	
13	37-38	<0.01	5.1	0.0	92.2	
14	38-39	<0.01	5.6	0.0	89.3	
15	39-40	<0.01	5.6	3.6	84.0	
16	40-41	<0.01	6.0	3.3	90.0	
17	6551-52	<0.01	4.3	11.6	76.7	

6525-6527 This interval is essentially non-productive .

6527-6530 This interval has fair porosity (9.3% average) and low permeability (0.01 md./ft. average) . The saturations (residual oil 48.5% average and total water 34.9% average) show this interval to be capable of low-capacity oil production .. The vertical fractures may increase the effective permeability .

6530-6541 This interval is essentially non-productive .

6551-6552 This one-foot interval is essentially non-productive .

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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/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
59	6628-29	0.05	6.5	0.0	30.8	Vertical Fracture
60	29-30	0.01	6.1	3.3	26.2	" "
61	30-31	0.01	5.4	9.3	79.7	" "
62	31-32	<0.01	4.0	5.0	77.6	" "
63	32-33	<0.01	6.1	8.2	82.0	" "
64	33-34	0.01	9.2	7.6	37.0	" "
65	34-35	0.01	8.3	6.0	35.0	" "
66	35-36	<0.01	9.1	5.5	30.8	" "
67	36-37	<0.01	4.8	10.4	70.7	" "
68	37-38	<0.01	4.8	10.4	73.0	" "
69	38-39	<0.01	4.8	14.6	75.0	" "
70	39-40	0.01	4.6	15.2	71.0	" "
71	40-41	<0.01	5.0	18.0	76.0	" "
72	41-42	0.01	3.8	18.4	73.8	" "

6628-6630 This interval has low porosity (6.3% average) and low permeability (0.03 md./ft. average) . The saturations (residual oil 1.6% average and total water 28.5% average) show this interval to be capable of producing a rich gas . The vertical fractures should increase the effective permeability .

6630-6633 This interval is essentially non-productive .

6633-6636 This interval has fair porosity (8.9% average) and low permeability (0.01 md./ft. average) . The saturations (residual oil 6.4% average and total water 34.3% average) show this interval to be capable of producing a rich gas .

6636-6642 This interval is essentially non-productive .