

CORE ANALYSIS RESULTS

Company EL PASO NATURAL GAS COMPANY Formation GRANEROS File RP-3-1666
Well HUERTANO # 135 Core Type DIAMOND CONV. Date Report 8/18/62
Field BASIN DAKOTA Drilling Fluid OIL EMULSION MUD Analysts DEPPE
County SAN JUAN State NEW MEX. Elev. 6411 DF Location SEC 23 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 - GT 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 MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE			SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER		
1	6442-43	0.29	6.6	19.2	16.7	SANDSTONE	VERTICAL FRACTURE
2	6443-44	0.03	8.2	15.8	14.6	SANDSTONE	VERTICAL FRACTURE
3	6444-45	0.02	7.5	24.0	26.7	SANDSTONE	
4	6445-46	0.19	3.6	33.3	44.5	SANDSTONE	
5	6446-47	0.01	4.2	38.2	42.9	SANDSTONE	
6	6447-48	0.28	7.4	12.1	8.1	SANDSTONE	
7	6448-49	0.37	8.5	8.2	9.4	SANDSTONE	
8	6449-50	0.36	8.0	8.8	5.0	SANDSTONE	
9	6450-51	0.03	7.1	19.7	11.2	SANDSTONE	
10	6451-52	<0.01	4.3	48.9	32.5	SANDSTONE	
11	6452-53	<0.01	6.5	49.2	24.6	SANDSTONE	VERTICAL FRACTURE
12	6453-54	0.01	6.4	28.2	25.0	SANDSTONE	
13	6454-55	0.01	2.5	8.0	84.1	SANDSTONE	
14	6455-56	<0.01	4.4	11.3	86.4	SANDSTONE, SHALY	
15	6460-61	<0.01	4.1	4.9	92.5	SHALE, SANDY	VERTICAL FRACTURE
16	6465-66	<0.01	3.9	0.0	97.4	SHALE, SANDY	
17	6470-71	<0.01	4.0	5.0	92.6	SHALE, SANDY	
18	6475-76	<0.01	4.8	10.4	83.5	SHALE, SANDY	
19	6480-81	<0.01	5.0	0.0	84.0	SHALE, SANDY	
20	6483-84	<0.01	5.2	9.6	82.7	SHALE, SANDY	

6442-6451 This interval is with-in the limits normally associated with low capacity oil production. Formation treatment is needed, and a rapid drop in production can be expected due to low permeability. The characteristics of this interval are; Porosity (7.6% average), Residual Oil Saturation (15.4% average), Total Water Saturation (13.2% average) and Permeability (0.20 md/ft average). The two foot interval 6445-6447 was excluded from the averages.

6451-6484 The samples analyzed from this interval are essentially non-productive due to low permeability and porosity.

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SAND - SD SHALE - SH LIME - LM	DOLOMITE - DOL CHERT - CH GYPSUM - GYP	ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSILIFEROUS - FOSS	SANDY - SOY 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 MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
21	6536-37	0.07	9.8	11.2	33.7	SANDSTONE
22	6537-38	0.05	11.7	6.0	26.5	SANDSTONE
23	6538-39	0.06	9.8	9.2	25.5	SANDSTONE VERTICAL FRACTURE
24	6539-40	0.07	7.9	11.4	30.4	SANDSTONE VERTICAL FRACTURE
25	6540-41	0.07	7.6	9.2	35.4	SANDSTONE
26	6541-42	0.06	8.3	10.9	44.5	SANDSTONE
27	6542-43	0.02	7.6	11.8	71.0	SANDSTONE
28	6543-44	0.02	4.7	0.0	85.3	SANDSTONE
29	6544-45	<0.01	5.4	9.3	77.7	SANDSTONE, SHALY
30	6545-46	<0.01	6.2	3.2	90.4	SANDSTONE, SHALY
31	6546-47	<0.01	5.2	3.9	76.9	SANDSTONE, SHALY
32	6547-48	0.01	4.0	0.0	80.0	SANDSTONE, SHALY
33	6548-49	<0.01	5.8	3.4	74.2	SANDSTONE, SHALY
34	6549-50	0.01	4.7	0.0	78.8	SANDSTONE, SHALY
35	6550-51	<0.01	4.5	0.0	91.0	SANDSTONE, SHALY
36	6552-53	<0.01	5.3	0.0	64.2	SANDSTONE, SHALY
37	6553-54	0.02	3.5	0.0	74.4	SANDSTONE, SHALY
38	6555-56	<0.01	3.8	0.0	86.9	SANDSTONE, SHALY VERTICAL FRACTURE
39	6559-60	<0.01	4.8	4.1	75.6	SANDSTONE VERTICAL FRACTURE
40	6560-61	<0.01	5.2	0.0	66.5	SANDSTONE VERTICAL FRACTURE
41	6563-64	0.01	6.6	7.6	60.7	SANDSTONE VERTICAL FRACTURE
42	6564-65	<0.01	5.0	10.0	62.0	SANDSTONE VERTICAL FRACTURE
43	6566-67	<0.01	3.4	5.9	82.3	SANDSTONE
44	6567-68	<0.01	5.3	3.8	77.5	SANDSTONE
45	6568-69	<0.01	5.4	3.7	74.0	SANDSTONE, SHALY
46	6569-70	0.01	5.5	0.0	71.0	SANDSTONE, SHALY
47	6570-71	<0.01	4.9	0.0	91.9	SANDSTONE, SHALY
48	6571-72	<0.01	5.5	9.1	71.0	SANDSTONE, SHALY
49	6572-73	<0.01	4.8	0.0	83.4	SANDSTONE, SHALY
50	6573-74	<0.01	4.5	11.1	82.2	SANDSTONE, SHALY

6536-6543 This interval is capable of producing a very rich gas after successful formation treatment. The characteristics of this interval are: Porosity (9.0% average), Residual Oil Saturation (10.0% average), Total Water Saturation (38.1% average) and Permeability (0.06 md/ft average).

6543-6574 The samples analyzed from this interval are non-productive.

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