



POROSITY VS. PERMEABILITY
Preston Oil Company
Well #V-2020
Permit #733-Clay County, WV
Injun Sandstone
4101560133
(WV Tight Formation Committee)

42-54

C199-105

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

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CORE ANALYSIS RESULTS

CP-1-4875

Company THE PRESTON OIL COMPANY Formation AS NOTED File CP-10-1015
Well V-2020 Core Type DIAMOND Date Report 9-11-63
Field GRANNYS CREEK Drilling Fluid AS NOTED Analysts WELBORNE-
County CLAY State W. VIRG. Elev. 1208' Location - BOYLE

Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS			
		PERM. MAX.	PERM. 90°		OIL	TOTAL WATER				
		SAND-SB SHALE-SH LIME-LM	DOLomite-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-SBY SHALY-SHY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-XLM GRAIN-GRN GRANULAR-GRNL	BROWN-BRN GRAY-GY YUGGY-VGY	FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY-SL/ VERY-V/ WITH-W/

BIG LIME FORMATION - WHOLE CORE ANALYSIS - OIL EMULSION MUD DRILLING FLUID

1	2031.0-32.7	<0.1	<0.1	0.9	0.0	58.6	Lm
2	32.7-34.4	<0.1	<0.1	0.8	0.0	26.8	Lm
3	34.4-36.0	<0.1	<0.1	1.0	0.0	79.2	Lm
4	36.0-37.8	<0.1	<0.1	1.7	0.0	59.0	Lm, shy
5	37.8-39.5	<0.1	<0.1	1.0	0.0	77.0	Lm
6	39.5-41.2	<0.1	<0.1	0.9	0.0	50.0	Lm, sl/shy
7	41.2-42.3	<0.1	<0.1	1.3	0.0	33.0	Lm, sl/shy
8	42.3-43.4	<0.1	<0.1	1.1	0.0	59.8	Lm
9	43.4-44.9	<0.1	<0.1	2.6	5.0	89.2	Lm, sl/chalky
10	2044.9-46.0	<0.1	<0.1	11.2	37.9	52.3	Lm, chalky

BIG INJUN SAND FORMATION - CONVENTIONAL ANALYSIS - CRUDE OIL DRILLING FLUID

11	2046.0-47.0	0.1		10.5	46.7	25.7	Sd, fn grn
12	47.0-48.0	28		18.4	69.5	15.2	Sd, fn grn
13	48.0-49.0	0.4		14.4	61.1	16.0	Sd, fn grn
14	49.0-50.0	0.1		15.0	64.7	17.3	Sd, fn grn
15	50.0-51.0	0.4		17.2	57.5	18.0	Sd, fn grn
16	51.0-52.0	2.2		10.9	45.0	35.8	Sd, fn grn
17	52.0-53.0	0.1		10.5	28.6	32.4	Sd, fn grn
18	53.0-54.0	3.8		12.5 A	39.2	33.6	Sd, fn grn
19	54.0-55.0	22		15.3 B	62.8	12.4	Sd, fn grn
20	55.0-56.0	0.1		7.5	26.7	20.0	Sd, med-cse grn
21	56.0-57.0	1.1		12.0	56.7	12.5	Sd, fn grn
22	57.0-58.0	1.3		15.2	50.6	21.7	Sd, fn grn
23	58.0-59.0	2.9		12.1	32.2	33.9	Sd, fn grn
24	59.0-60.0	17		10.9	45.0	13.8	Sd, cse grn
25	60.0-61.0	0.1		7.9	25.3	25.3	Sd, med-cse grn
26	61.0-62.0	11		21.9 C	58.8	19.2	Sd, fn grn
27	62.0-63.0	0.1		20.9 D	52.5	21.0	Sd, fn grn
28	63.0-64.0	8.8		19.7	56.3	22.6	Sd, fn grn
29	64.0-65.0	53		8.1	58.0	12.3	Sd, cse grn
30	65.0-66.0	282		8.3	48.2	8.4	Sd, cse grn
31	66.0-67.0	0.1		8.8	21.6	21.6	Sd, fn grn

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CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
32	2067.0-68.0	490	10.7	55.2	4.7	Sd, cse grn
33	68.0-69.0	192	18.4	65.7	8.7	Sd, cse grn
34	69.0-70.0	0.1	16.1	33.5	34.8	Sd, fn grn
35	70.0-71.0	0.1	20.4	28.0	28.0	Sd, fn grn
36	71.0-72.0	2.9	19.4	35.6	33.0	Sd, fn grn, sl/shy
37	72.0-73.0	3.0	22.1	29.4	27.6	Sd, fn grn
38	73.0-74.0	4.4	21.0	33.8	31.9	Sd, fn grn
39	74.0-75.0	3.7	21.8	34.8	26.6	Sd, fn grn
40	75.0-76.0	<0.1	18.7	39.0	25.6	Sd, fn grn
41	76.0-77.0	5.2	18.9	38.0	33.3	Sd, fn grn
42	77.0-78.0	17	19.7	28.5	31.4	Sd, fn grn
43	78.0-79.0	2.6	19.5	36.4	36.4	Sd, fn grn
44	79.0-80.0	54	21.3	43.6	28.4	Sd, fn grn
45	80.0-81.0	0.4	19.2	26.0	31.8	Sd, fn grn, sl/shy
46	81.0-82.0	3.0	19.4	38.1	37.2	Sd, fn grn
47	82.0-83.0	3.6	20.5	24.4	33.2	Sd, fn grn
48	83.0-84.0	6.3	22.9	30.5	35.8	Sd, fn grn
49	84.0-85.0	3.3	22.0	52.8	28.2	Sd, fn grn
50	85.0-86.0	4.9	22.3	53.0	30.5	Sd, fn grn
51	86.0-87.0	1.2	21.5	53.5	39.7	Sd, fn grn
52	87.0-88.0	2.7	19.2	46.8	33.3	Sd, fn grn
53	88.0-89.0	0.1	13.9	20.8	26.6	Sd, fn grn
54	89.0-90.0	<0.1	17.8	18.5	46.6	Sd, v/fn grn
55	90.0-91.0	<0.1	17.9	10.6	58.1	Sd, v/fn grn
56	91.0-92.0	<0.1	15.3	11.1	79.0	Sd, v/fn grn
57	2092.0-92.6	<0.1	14.3	7.7	81.2	Sd, v/fn grn
	2092.6-93.5					Sh
58	2093.5-94.0	<0.1	15.9	13.8	56.0	Sd, v/fn grn
59	94.0-95.0	<0.1	19.1	11.5	52.8	Sd, v/fn grn
60	95.0-96.0	<0.1	9.7	11.3	44.3	Sd, siltstone
61	96.0-97.0	<0.1	17.1	9.4	53.4	Sd, v/fn grn
62	97.0-98.0	<0.1	4.9	4.1	77.6	Sd, v/fn grn
63	2098.0-99.5	<0.1	4.3	0.0	86.1	Sd, v/fn grn
	2099.5-00.5					Sh
64	2100.5-01.0	<0.1	4.8	0.0	85.3	Siltstone
65	2101.0-02.8	<0.1	11.4	0.0	89.4	Siltstone
	2102.8-04.0					Sh
66	2104.0-05.0	<0.1	8.7	0.0	87.2	Siltstone
	2105.0-05.4					Sh, red
67	2105.4-06.0	<0.1	5.5	0.0	83.7	Siltstone

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CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	

68	2106.0-07.0	<0.1	4.3	0.0	83.6	Siltstone
69	2107.0-08.0	<0.1	8.9	0.0	96.5	Siltstone

THIS IS THE FINAL REPORT.

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