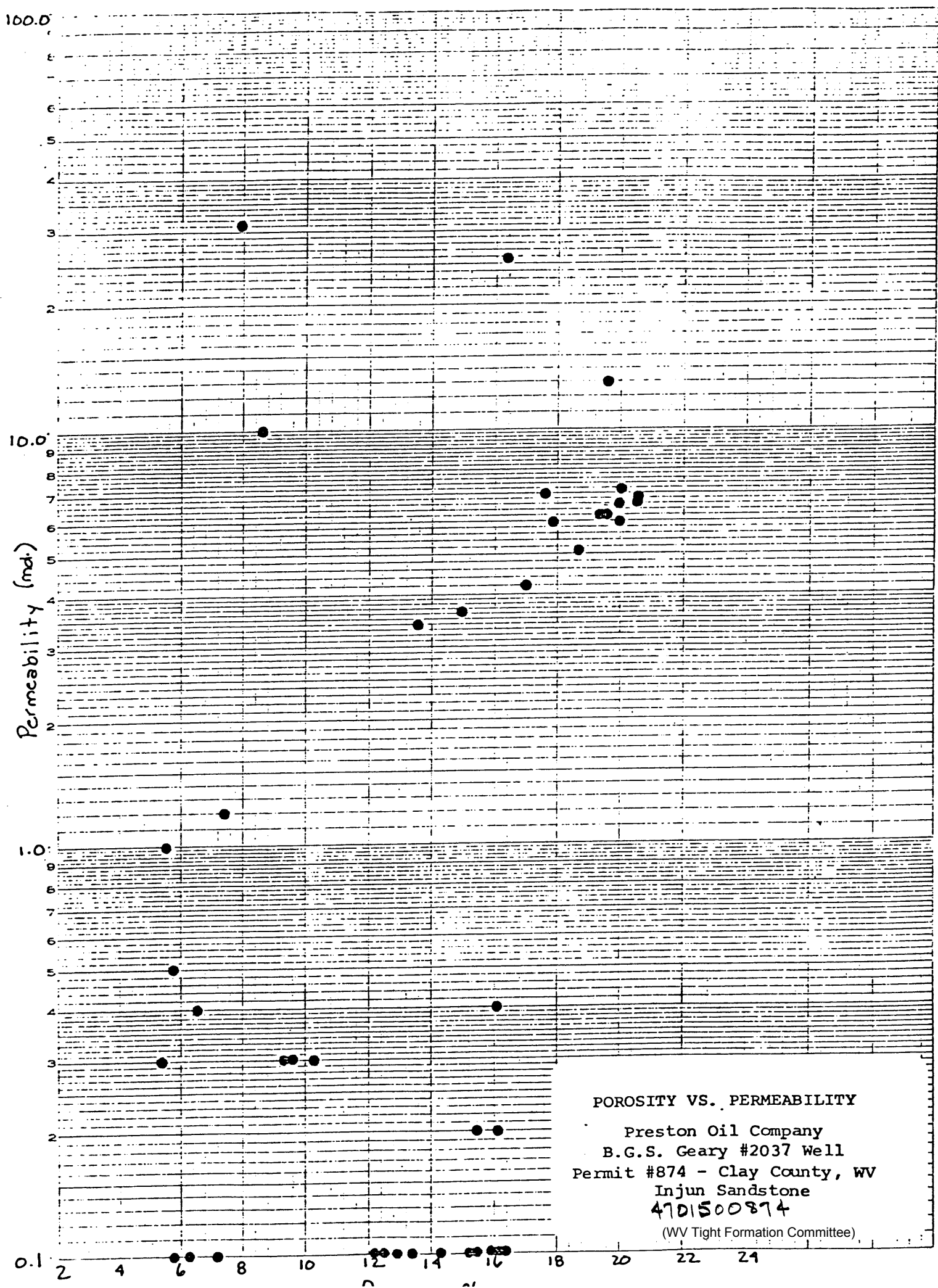


PERMEABILITY MEASUREMENTS MADE BY THE  
SEMI-LOGARITHMIC METHOD  
7 CYCLES X 10 DIVISIONS PER INCH



PERMEABILITY MEASUREMENTS MADE BY THE  
SEMI-LOGARITHMIC METHOD  
7 CYCLES X 10 DIVISIONS PER INCH

**PERMEABILITY VS. POROSITY**

Preston Oil Company  
B.G.S. Geary #2037 Well  
Permit #874 - Clay County, WV  
Injun Sandstone  
4701500874  
(WV Tight Formation Committee)

41-54

Clay-874  
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CORE ANALYSIS RESULTS

Company PRESTON OIL COMPANY Formation BIG INJUN File CP-1-6914  
Well B. G. S. GEARY NO. 2037 Core Type DIAMOND Date Report 3-24-69  
Field GRANNYS CREEK Drilling Fluid \_\_\_\_\_ Analysts BOYLE  
County CLAY State W. VA. Elev. \_\_\_\_\_ Location \_\_\_\_\_

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 MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		PERM. MAX.	PERM. 90°		OIL	TOTAL WATER	
WHOLE CORE ANALYSIS							
	cc1	cc11		cc21	cc311		
1	1806.0-07.0	0.1*		10.8	4.9	66.7	Sd, congl
2	07.0-08.0	8.7*		12.2	8.4	60.7	Sd, congl
3	08.0-09.0	1.7*		15.7	12.9	61.7	Sd, congl
4	09.0-10.0	16 *		16.1	11.4	55.9	Sd, sl/congl
5	10.0-11.0	26.0	25.0	16.4	13.4	58.5	Sd
6	11.0-12.0	0.3	0.3	10.3	10.7	61.4	Sd, sl/congl
7	12.0-13.0	0.4*		7.9	10.3	64.9	Sd, congl
8	13.0-14.0	0.3	0.2	9.4	6.8	72.5	Sd, congl
9	14.0-15.0	1.2	1.2	7.5	19.0	58.1	Sd
10	15.0-16.0	0.3	0.3	5.5	5.1	67.4	Sd
11	16.0-17.0	0.3	0.3	9.7	16.4	67.1	Sd
12	17.0-18.0	0.1	0.1	5.7	4.9	66.7	Sd
13	18.0-19.0	0.5	0.5	5.8	5.3	47.7	Sd
14	19.0-20.0	<0.1	<0.1	6.3	7.7	58.7	Sd
15	20.0-21.0	0.4	0.3	6.5	8.7	59.3	Sd, silty
16	21.0-22.0	0.4*		4.5	4.5	46.2	Sd
17	22.0-23.0	31	31.0	7.9	9.8	35.4	Sd, sl/shy, congl
18	23.0-24.0	10	5.2	8.6	6.0	42.4	Sd, sl/lmy, congl
19	24.0-25.0	1.9*		9.0	9.0	51.3	Sd, sl/lmy, sl/shy, congl
20	25.0-26.0	4.2	4.2	17.0	8.5	54.8	Sd, sl/shy, silty
21	26.0-27.0	3.4	2.9	13.7	12.6	55.4	Sd, silty, sl/congl
22	27.0-28.0	5.1	4.8	18.6	8.9	53.8	Sd, silty
23	28.0-29.0	13.0	12.0	19.2	8.1	52.8	Sd, silty
24	29.0-30.0	6.7	6.4	20.0	8.5	53.0	Sd, silty
25	30.0-31.0	6.2	5.9	19.6	9.3	52.0	Sd, silty
26	31.0-32.0	6.9	6.5	20.5	7.6	54.5	Sd, silty
27	32.0-33.0	6.7	6.4	20.4	7.1	54.1	Sd, silty
28	33.0-34.0	6.0	5.7	20.0	10.2	52.9	Sd, silty
29	34.0-35.0	5.9	5.7	18.7	4.6	53.9	Sd, silty
30	35.0-36.0	7.2	7.0	20.1	9.2	52.6	Sd, silty
31	36.0-37.0	6.1	5.9	19.6	6.7	51.3	Sd, silty
32	37.0-38.0	3.6	3.6	14.9	9.3	53.2	Sd, sl/shy, silty
33	38.0-39.0	1.9*		19.7	4.5	59.6	Sd, silty
34	39.0-40.0	0.2*		19.5	3.9	63.3	Sd, silty
35	40.0-41.0	0.2*		21.1	6.2	55.3	Sd, silty
36	41.0-42.0	0.7	0.7	17.7	15.3	53.0	Sd, silty
37	42.0-43.0	<0.1*		18.0	8.9	69.0	Sd, silty, vert frac
38	43.0-44.0	0.2	0.2	16.1	7.0	74.8	Sd, silty
39	44.0-45.0	0.2	0.2	15.5	11.5	68.1	Sd, silty
40	45.0-46.0	0.1	0.1	15.6	5.4	79.2	Sd, silty
41	46.0-47.0	0.1	0.1	16.0	6.5	79.5	Sd, sl/shy, silty

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CORE LABORATORIES, INC.  
 Petroleum Reservoir Engineering  
 DALLAS, TEXAS

File CP-1-6914 Page No. 2

Well B. G. S. Geary No. 2037

## CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		MAX.	90°		OIL	TOTAL WATER	
42	1847.0-48.0	0.4	0.2	16.1	5.4	84.7	Sd, sl/shy, silty
43	48.0-49.0	0.1	<0.1	14.4	6.0	84.6	Sd, sl/shy, silty
44	49.0-50.0	<0.1	<0.1	13.5	6.9	69.9	Sd, sl/shy, silty
45	50.0-51.0	0.1	0.1	16.1	13.9	64.4	Sd, silty
46	51.0-52.0	0.1	0.1	15.7	10.5	67.2	Sd, silty
47	52.0-53.0	0.1	0.1	16.2	10.8	63.4	Sd, silty
48	53.0-53.5	0.1	<0.1	16.0	3.6	70.8	Sd, silty
	53.5-54.0						Sh.
49	54.0-55.0	<0.1	<0.1	5.8	5.3	72.7	Siltstone, shy
50	55.0-56.0	<0.1	<0.1	7.2	0.0	84.7	Siltstone
51	56.0-57.0	<0.1	<0.1	12.5	1.2	86.6	Sd, v/silty
52	57.0-58.0	0.1	<0.1	16.1	1.8	83.5	Sd, silty
53	58.0-59.0	<0.1	<0.1	13.0	0.0	84.8	Sd, silty
54	59.0-60.0	<0.1	<0.1	12.5	0.0	87.4	Sd, silty
55	60.0-61.0	<0.1*		14.2	0.0	86.0	Sd, silty
56	1861.0-62.0	<0.1	<0.1	12.3	0.0	91.9	Sd, silty

\*DENOTES PLUG PERMEABILITY.