



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

June 12, 1981

Empire Oil & Gas
Greg Schneider
3025 South Parker Road
Suite 1221
Aurora, Colorado 80014

Gentlemen:

Attached hereto are the results of tests run on the rotary core taken from the Hallacy Lease, Well No. 1, located in the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ in Section 34, T-29S, R-24E, in Crawford County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on June 4, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

4 c to Aurora, Colorado
1 c to Jubal Terry
Holiday Inn, Room 139
Pittsburg, Kansas 66762

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LOG

Name Empire Oil & Gas Lease Hallacy Well No. 1

Depth Interval,
Feet

Description

CHEROKEE SAND

293.0 - 302.3	Grayish light brown shaly sandstone.
302.3 - 304.1	Brown sandstone.
304.1 - 305.2	Brown shaly sandstone.
305.2 - 306.6	Grayish light brown shaly sandstone.
306.6 - 312.9	Very light brown and gray laminated sandstone and shale.
312.9 - 314.8	Brown sandstone.
314.8 - 318.4	Light brown and gray laminated sandstone and shale.
318.4 - 319.7	Coal.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1

Company Empire Oil & Gas Lease Hallacy Well No. 1

Sample No.	Depth, Feet	Porosity Percent	Percent Saturation			Oil Content Bbls. / A Ft.	Perm., Mill.
			Oil	Water	Total		
1	293.5	8.0	12	83	95	74	Imp.
2	294.5	16.1	11	80	91	137	0.80
3	295.5	16.9	10	82	92	131	3.0
4	296.5	17.2	1	93	94	13	4.1
5	297.5	16.0	7	88	95	87	0.71
6	298.5	14.5	3	94	97	34	0.73
7	299.5	18.0	8	90	98	112	1.3
8	300.6	15.8	12	84	96	147	0.56
9	301.5	15.0	4	80	84	47	3.7
10	302.5	15.3	41	46	87	487	49.
11	303.6	20.1	22	56	78	343	50.
12	304.5	11.9	53	43	96	489	1.2
13	305.4	17.0	9	87	96	119	6.2
14	306.5	15.9	6	87	93	74	1.8
15	307.5	16.4	14	69	83	178	5.6
16	308.5	16.7	14	78	92	181	4.5
17	309.6	16.5	19	69	88	243	3.3
18	310.5	11.0	8	88	96	68	0.54
19	311.5	16.3	14	83	97	177	11.
20	312.6	10.3	31	65	96	240	8.3
21	313.5	15.4	52	38	90	621	46.
22	314.5	16.0	48	36	84	596	15.
23	315.5	12.8	7	90	97	70	Imp.
24	316.5	12.3	12	83	95	115	Imp.
25	317.3	13.7	7	90	97	74	Imp.