



OILFIELD RESEARCH LABORATORIES

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

December 20, 1982

Shamrock Drilling
Route 1, Box 39
Mapleton, Kansas 66754

Gentlemen:

Attached hereto are the results of tests run on the rotary core taken from the Laughlin Lease, Well No. 2, located 990' from the South Line and 660' from the West Line in the Southwest $\frac{1}{4}$ of Section 28, T-25S, R-21E, Allen County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and submitted to our laboratory on December 16, 1982.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/rmc

5 c to Mapleton, Kansas

LOGCompany Shamrock Drilling Lease Laughlin Well No. 2

<u>Depth Interval, Feet</u>	<u>Description</u>
	<u>BARTLESVILLE SANDSTONE</u>
724.0 - 724.5	Brown sandstone.
724.5 - 725.1	Gray shale with scattered brown sandstone partings.
725.1 - 728.6	Brown sandstone.
728.6 - 729.0	Alternate layers of brown sandstone and gray shale.
729.0 - 729.4	Gray sandy shale.
729.4 - 730.0	Alternate layers of gray shale and brown sandstone.
730.0 - 730.3	Gray sandy shale.
730.3 - 730.7	Alternate layers of gray shale and brown sandstone.
730.7 - 731.2	Grayish light brown shaly sandstone with fine shale partings.
731.2 - 731.8	Alternate layers of brown sandstone and gray shale.
731.8 - 732.2	Grayish light brown shaly sandstone with fine shale partings.
732.2 - 732.6	Alternate layers of brown sandstone and gray shale.
732.6 - 733.1	Light gray and dark gray laminated sandstone and shale.
733.1 - 733.6	Alternate layers of gray shale and brown sandstone.
733.6 - 734.3	Grayish brown slightly calcareous slightly shaly sandstone.
734.3 - 734.5	Grayish light brown very shaly sandstone.
734.5 - 736.6	Brown sandstone with scattered shale partings.
736.6 - 737.7	Grayish brown and dark gray laminated sandstone and shale.

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Continued

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Company Shamrock Drilling Lease Laughlin Well No. 2

<u>Depth Interval, Feet</u>	<u>Description</u>
737.7 - 737.9	Grayish brown very shaly sandstone.
737.9 - 738.9	Grayish brown and dark gray laminated sandstone and shale.
738.9 - 741.1	Light gray and dark gray laminated sandstone and shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1

Company Shamrock Drilling Lease Laughlin Well No. 2

Sample No.	Depth, Feet	Porosity Percent	Percent Saturation			Oil Content Bbbs. / A. Ft.	Permeability, Millidarcys
			Oil	Water	Total		
1	724.4	16.8	52	36	88	678	145.
2	725.4	21.9	38	50	88	646	259.
3	726.5	19.6	43	49	92	654	169.
4	727.4	19.2	32	37	69	477	346.
5	728.5	19.0	57	19	76	840	226.
6	729.7	17.0	31	33	64	409	33.
7	730.6	16.6	31	45	76	399	37.
8	731.6	16.7	36	37	73	466	76.
9	732.5	16.0	39	41	80	484	39.
10	733.8	9.5	36	40	76	262	6.8
11	734.7	16.4	54	38	92	687	47.
12	735.5	16.1	53	32	85	662	36.
13	736.5	14.6	52	24	76	589	35.
14	737.8	11.7	43	33	76	390	2.7