

# OILFIELD RESEARCH LABORATORIES

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

June 5, 1980

Lincoln 77  
8485 Kathy Lane  
Lincoln, Nebraska 68526

Gentlemen:

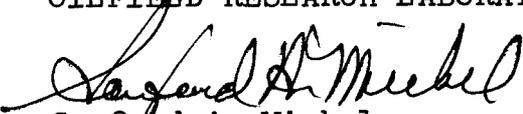
Enclosed herewith are the results of tests run on the rotary core taken from the Jerry Murray Lease, Well No. 8, Coffey County, Kansas, and submitted to our laboratory on May 20, 1980.

The core was sampled and sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Sanford A. Michel

SAM/tem

5 c to Lincoln, Nebraska

**Oilfield Research Laboratories**  
**GENERAL INFORMATION & SUMMARY**

Company Lincoln 77 Lease Jerry Murray Well No. 8  
 Location 220' NSL & 220' WEL, NW $\frac{1}{4}$   
 Section 13 Twp. 23S Rgs. 16E County Coffey State Kansas

Elevation, Feet . . . . .	
Name of Sand . . . . .	Lower Squirrel
Top of Core . . . . .	946.0
Bottom of Core . . . . .	959.0
Top of Sand . . . . .	941.9
Bottom of Sand . . . . .	945.0
Total Feet of Permeable Sand . . . . .	2.3

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 4	1.5	1.5
4 & Above	0.8	2.3

Average Permeability Millidarcys . . . . .	4.1
Average Percent Porosity . . . . .	17.2
Average Percent Oil Saturation . . . . .	41.9
Average Percent Water Saturation . . . . .	29.9
Average Oil Content, Bbls./A. Ft. . . . .	562.
Total Oil Content, Bbls./Acre . . . . .	1,292.

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LOGName Lincoln 77 Lease Jerry Murray Well No. 8

<u>Depth Interval, Feet</u>	<u>Description</u>
940.0 - 941.9	Gray sandy shale.
941.9 - 942.7	Brown shaly sandstone.
942.7 - 943.5	Gray sandy shale.
943.5 - 944.2	Brown shaly slightly calcareous sandstone.
944.2 - 945.0	Brown slightly shaly slightly calcareous sandstone.
945.0 - 959.0	Gray sandy shale.

## RESULTS OF SATURATION &amp; PERMEABILITY TESTS

TABLE 1-B

Company Lincoln 77Lease Jerry MurrayWell No. 8

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	942.5	14.8	43	33	76	494	2.3	0.8	0.8	395	1.84
2	943.7	17.7	36	33	69	494	1.1	0.7	1.5	346	0.77
3	944.5	19.3	46	24	70	689	8.6	0.8	2.3	551	6.88

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Lincoln 77 Lease Jerry Murray Well No. 8

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
941.9 - 945.0	2.3	4.1	9.49

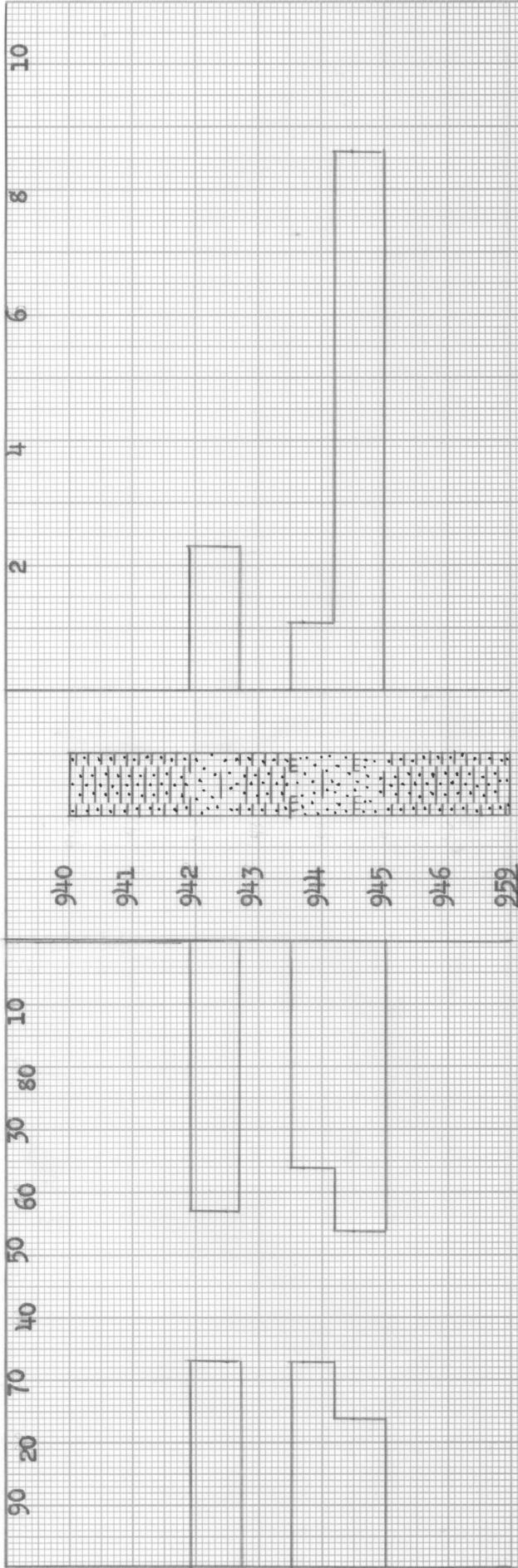
  

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbl./Acre
941.9 - 945.0	2.3	17.2	41.9	29.9	562	1,292

WATER SAT., PERCENT →

← OIL SAT., PERCENT

PERMEABILITY, IN MILLIDARCS



# LINCOLN 77

JERRY MURRAY LEASE  
COFFEY COUNTY, KANSAS  
WELL NO. 8

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY MILLIDARCS
941.9 - 945.0	2.3	17.2	41.9	29.9	4.1