

# OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

January 18, 1966

Four States Oil & Gas Company  
& Layton Oil Company  
P.O. Box 263  
Independence, Kansas

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Sallee Lease, Well No. P-26, Allen County, Kansas, and submitted to our laboratory on January 13, 1966.

This core was sampled and the samples sealed in plastic bags by a representative of the client. The first five samples were taken after the core was received in the laboratory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Benjamin R. Pearman*  
Benjamin R. Pearman

BRP:rf

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Sallee P-26

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Four States Oil & Gas Co.

Company & Layton Oil Company Lease Sallee Well No. P-26

Location 990' EWL & 1640' NSL, NW

Section 14 Twp. 25S Rge. 19E County Allen State Kansas

Name of Sand	Bartlesville
Top of Core	840.0
Bottom of Core	886.0
Top of Sand (Tested)	840.0
Bottom of Sand	885.5
Total Feet of Permeable Sand	42.3
Total Feet of Floodable Sand	-

Distribution of Permeable Sand:

Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	8.0	8.0
10 - 50	12.0	20.0
50 - 100	9.8	29.8
100 & above	12.5	42.3

Average Permeability Millidarcys	70.6
Average Percent Porosity	20.0
Average Percent Oil Saturation	66.3
Average Percent Water Saturation	21.6
Average Oil Content, Bbls./A. Ft.	1,033.
Total Oil Content, Bbls./Acre	45,734.
Average Percent Oil Recovery by Laboratory Flooding Tests	-
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	-
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	-
Total Calculated Oil Recovery, Bbls./Acre	-
Packer Setting, Feet	-
Viscosity, Centipoises @	-
A. P. I. Gravity, degrees @ 60 °F	-
Elevation, Feet	-

## OILFIELD RESEARCH LABORATORIES

-LOG-

Company Four States Oil & Gas Co.  
& Layton Oil Company Lease Sallee Well No. P-26

Depth Interval, Description  
Feet

840.0 - 847.5 - Dark brown, laminated, shaly sandstone.

847.5 - 848.8 - Gray shaly sandstone.

848.8 - 864.5 - Dark brown, slightly shaly sandstone.

864.5 - 883.6 - Brown to dark, carbonaceous, laminated, shaly sandstone.

883.6 - 885.5 - Gray shaly sandstone.

885.5 - 886.0 - Shale.

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**RESULTS OF SATURATION & PERMEABILITY TESTS**

**TABLE 1-B**

Four States Oil & Gas Company  
& Layton Oil Company

Company \_\_\_\_\_

Lease \_\_\_\_\_

Sallee \_\_\_\_\_

Well No. P-26 \_\_\_\_\_

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbbs. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	840.1	22.9	21	74	95	373	153.	0.6	0.6	224	91.80
2	841.1	20.2	58	37	95	911	93.	1.0	1.6	911	93.00
3	842.1	16.0	58	38	96	721	25.	1.0	2.6	721	25.00
4	843.1	23.8	52	24	76	962	102.	1.0	3.6	962	102.00
5	844.1	18.5	57	36	93	820	85.	1.0	4.6	820	85.00
6	845.1	22.5	50	35	85	873	75.	1.0	5.6	873	75.00
7	846.1	22.0	47	33	80	801	156.	1.0	6.6	801	156.00
8	847.0	23.3	50	31	81	903	178.	0.9	7.5	812	160.20
9	849.1	22.5	74	23	97	1,292	51.	0.8	8.3	1,034	40.80
10	850.1	21.4	70	23	93	1,162	60.	1.0	9.3	1,162	60.00
11	851.1	17.5	65	32	97	881	16.	1.0	10.3	881	16.00
12	852.1	21.0	79	16	95	1,287	156.	1.0	11.3	1,287	156.00
13	853.1	23.1	70	15	85	1,254	161.	1.0	12.3	1,254	161.00
14	854.1	20.7	75	17	92	1,204	90.	1.0	13.3	1,204	90.00
15	855.1	20.6	74	23	97	1,182	51.	1.0	14.3	1,182	51.00
16	856.1	20.3	78	15	93	1,228	38.	1.0	15.3	1,228	38.00
17	857.1	18.2	71	27	98	1,002	38.	1.0	16.3	1,002	38.00
18	858.1	20.6	68	13	81	1,088	9.6	1.0	17.3	1,088	9.60
19	859.1	21.1	74	10	84	1,212	145.	1.0	18.3	1,212	145.00
20	860.1	21.2	78	15	93	1,282	88.	1.0	19.3	1,282	88.00
21	861.1	20.6	67	12	79	1,070	133.	1.0	20.3	1,070	133.00
22	862.1	20.9	69	11	80	1,118	181.	1.0	21.3	1,118	181.00
23	863.1	21.4	67	18	85	1,111	19.	1.0	22.3	1,111	19.00
24	864.1	18.6	73	23	96	1,053	5.6	0.9	23.2	949	5.04

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**RESULTS OF SATURATION & PERMEABILITY TESTS**

TABLE 1-B

Company Four States Oil & Gas Company  
& Layton Oil Company Lease Sallee Well No. P-26

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.		
25	865.1	17.2	67	30	97	894	0.80	1.1	24.3	984	0.88
26	866.1	23.2	61	14	75	1,098	8.2	1.0	25.3	1,098	8.20
27	867.1	21.1	64	19	83	1,048	92.	1.0	26.3	1,048	92.00
28	868.1	21.5	79	10	89	1,318	16.	1.0	27.3	1,318	16.00
29	869.1	17.0	68	24	92	896	29.	1.0	28.3	896	29.00
30	870.1	18.2	74	21	95	1,046	22.	1.0	29.3	1,046	22.00
31	871.1	17.2	78	20	98	1,042	19.	1.0	30.3	1,042	19.00
32	872.1	18.1	67	25	92	941	151.	1.0	31.3	941	151.00
33	873.1	22.6	85	11	96	1,490	172.	1.0	32.3	1,490	172.00
34	874.1	20.9	85	13	98	1,378	153.	1.0	33.3	1,378	153.00
35	875.1	21.8	82	14	96	1,387	92.	1.0	34.3	1,387	92.00
36	876.1	23.2	78	12	90	1,405	13.	1.0	35.3	1,405	13.00
37	877.1	20.0	73	14	87	1,132	49.	1.0	36.3	1,132	49.00
38	878.1	19.6	67	16	83	1,018	119.	1.0	37.3	1,018	119.00
39	879.1	19.6	75	21	96	1,141	18.	1.0	38.3	1,141	18.00
40	880.1	17.9	74	18	92	1,028	7.2	1.0	39.3	1,028	7.20
41	881.1	18.6	65	23	88	939	4.2	1.0	40.3	939	4.20
42	882.1	17.9	58	24	82	805	2.3	1.0	41.3	805	2.30
43	883.1	15.7	53	26	79	645	1.2	1.0	42.3	645	1.20
44	884.1	15.2	62	26	88	731	Imp.	1.0	43.3	731	0.00
45	885.1	17.7	6	12	18	82	Imp.	0.9	44.2	74	0.00
								Total-----		45,734	

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### SUMMARY OF PERMEABILITY & SATURATION TESTS

**TABLE III**

Four States Oil & Gas Company  
 & Layton Oil Company

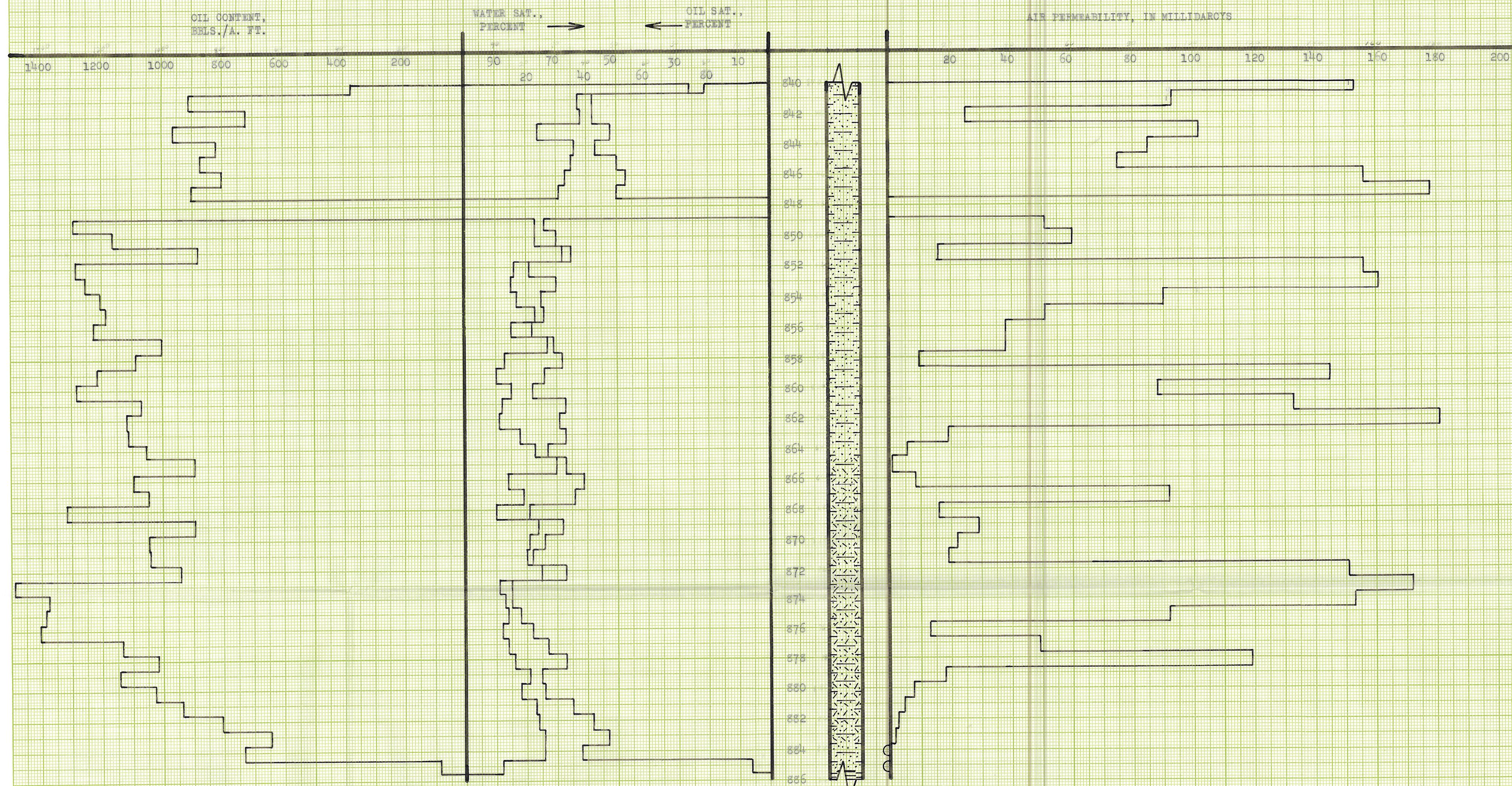
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Company \_\_\_\_\_ Lease Sallee Well No. P-26

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
840.0 - 847.5	7.5	105.0	788.00
848.8 - 864.5	15.7	78.5	1,231.44
864.5 - 885.5	19.1	50.6	968.98
840.0 - 885.5	42.3	70.6	2,988.42

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 Bbls./Acre
840.0 - 847.5	7.5	21.0	50.6	37.0	816	6,124
848.8 - 864.5	15.7	20.6	72.0	18.2	1,150	18,064
864.5 - 885.5	21.0	19.2	67.9	18.8	1,025	21,546
840.0 - 885.5	44.2	20.0	66.3	21.6	1,033	45,734

K&S STANDARD CROSS SECTION  
MILLIMETER



### FOUR STATES OIL & GAS COMPANY & LAYTON OIL COMPANY

SALLEE LEASE      WELL NO. P-26  
ALLEN COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBL./A. FT.	TOTAL OIL CONTENT BBL./ACRE	AVG. AIR PERMEABILITY, MILLIDARCS
840.0 - 847.5	7.5	21.0	50.6	37.0	816	6,124	105.0
848.8 - 864.5	15.7	20.6	72.0	18.2	1,150	18,004	72.5
864.5 - 885.5	21.0	19.2	67.9	18.8	1,025	21,546	50.6
840.0 - 885.5	44.2	20.0	66.3	21.6	1,033	45,734	70.6

KEITHLEY & ESSER CO.  
MADE IN U.S.A.

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CHANUTE, KANSAS  
JANUARY, 1966