

OILFIELD RESEARCH LABORATORIES

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

July 31, 1979

Pioneer Oil Company
5013 Sycamore
Shawnee Mission, Kansas 66205

Gentlemen:


Enclosed herewith are the results of tests run on the rotary core taken from the Adolph Lease, Well No. 1-P, Franklin County, Kansas, and submitted to our laboratory on July 25 and July 26, 1979.

The core was sampled by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Benjamin R. Pearman

BRP:dlb

5 c to Shawnee Mission, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Pioneer Oil Company Lease Adolph Well No. 1-P

Location 550' SNL & 1400' WEL

Section 29 Twp. 15S Rge. 20E County Franklin State Kansas

Name of Sand	-		Squirrel
Top of Core	-		726.0
Bottom of Core	-		763.0
Top of Sand	-		726.0
Bottom of Sand	-		763.0
Total Feet of Permeable Sand	-		35.6
Total Feet of Floodable Sand	-		

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
3 - 10	5.4	5.4
10 - 50	19.4	24.8
50 - 100	9.8	34.6
100 & Above	1.0	35.6

Average Permeability Millidarcys	-		40.3
Average Percent Porosity	-		20.8
Average Percent Oil Saturation	-		41.6
Average Percent Water Saturation	-		39.8
Average Oil Content, Bbls./A. Ft.	-		665.
Total Oil Content, Bbls./Acre	-		23,604.
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	-		

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LOG

Company Pioneer Oil Company Lease Adolph Well No. 1-P

<u>Depth Interval, Feet</u>	<u>Description</u>
726.0 - 737.2	Dark brown sandstone.
737.2 - 738.2	Gray sandy shale.
738.2 - 739.0	Dark brown sandstone.
739.0 - 739.4	Gray sandy shale.
739.4 - 760.6	Dark brown slightly shaly sandstone.
760.6 - 763.0	Dark carbonaceous sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Pioneer Oil Company

Lease Adolph

Well No. 1-P

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	726.5	19.0	38	52	90	560	18.	1.0	1.0	560	18.00
2	727.5	19.6	40	44	84	608	85.	1.0	2.0	608	85.00
3	728.5	18.7	43	42	85	624	23.	1.0	3.0	624	23.00
4	729.5	18.7	36	48	84	522	49.	1.0	4.0	522	49.00
5	730.5	19.4	40	43	83	602	10.	1.0	5.0	602	10.00
6	731.5	24.9	35	41	76	676	96.	1.0	6.0	676	96.00
7	732.5	23.5	50	33	83	912	94.	1.0	7.0	912	94.00
8	733.3	22.0	31	39	70	529	82.	1.0	8.0	529	82.00
9	734.5	21.9	45	32	77	765	99.	1.0	9.0	765	99.00
10	735.6	20.6	49	36	85	783	78.	1.0	10.0	783	78.00
11	736.5	21.5	45	37	82	751	42.	1.2	11.2	900	50.40
12	738.5	23.0	41	39	80	732	68.	0.8	12.0	577	54.40
13	739.5	20.1	45	41	86	702	19.	0.6	12.6	421	11.40
14	740.5	19.9	45	34	84	722	11.	1.0	13.6	722	11.00
15	741.5	19.4	50	37	87	753	28.	1.0	14.6	753	28.00
16	742.5	19.8	36	43	79	553	16.	1.0	15.6	553	16.00
17	743.5	19.9	41	40	81	633	13.	1.0	16.6	633	13.00
18	744.5	23.7	39	35	74	717	108.	1.0	17.6	717	108.00
19	745.5	17.9	42	48	90	583	14.	1.0	18.6	583	14.00
20	746.5	19.8	35	47	82	538	34.	1.0	19.6	538	34.00
21	747.5	17.4	28	61	89	378	18.	1.0	20.6	378	18.00
22	748.5	21.8	28	49	77	474	8.2	1.0	21.6	474	8.20
23	749.5	19.3	28	45	73	419	53.	1.0	22.6	419	53.00
24	750.5	20.4	45	40	85	712	55.	1.0	23.6	712	55.00
25	751.5	22.2	42	37	79	723	10.	1.0	24.6	723	10.00
26	752.5	23.1	36	35	71	645	44.	1.0	25.6	645	44.00
27	753.5	20.7	42	39	81	675	37.	1.0	26.6	675	37.00
28	754.5	19.3	35	51	86	524	18.	1.0	27.6	524	18.00
29	755.5	21.2	42	40	82	691	23.	1.0	28.6	691	23.00

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Pioneer Oil Company Lease Adolph Well No. 1-P

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.		
30	756.5	21.3	40	37	77	661	97.	1.0	29.6	661	97.00
31	757.5	21.2	44	38	82	724	13.	1.0	30.6	724	13.00
32	758.5	20.6	47	34	81	751	6.6	1.0	31.6	751	6.60
33	759.5	20.7	41	35	76	658	35.	1.0	32.6	658	35.00
34	760.5	20.5	44	33	77	699	31.	0.6	33.2	419	18.60
35	761.5	21.4	54	25	79	896	3.9	1.4	34.6	1,256	5.46
36	762.5	21.5	55	27	82	916	14.	1.0	35.6	1,916	14.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Adolph	Well No.		
Pioneer Oil Company			1-P		
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
726.0 - 739.0	12.0	61.5	738.80		
739.4 - 751.0	11.6	31.8	369.60		
751.0 - 763.0	12.0	26.8	321.66		
726.0 - 763.0	35.6	40.3	1,430.06		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
726.0 - 739.0	12.0	21.0	41.1	671	8,058
739.4 - 751.0	11.6	19.9	39.6	595	6,903
751.0 - 763.0	12.0	21.2	43.9	720	8,643
726.0 - 763.0	35.6	20.8	41.6	665	23,604