● CORE ANALYSIS ● WATER REPRESSURING ENGINEERING ● WATER ANALYSIS ● FLOODING WATER TREATMENT ● SURVEYING

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

313 EAST SIXTH
OKMULGEE, OKLAHOMA
PHONE: 1486

Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: 728

November 23, 1957

Mr. Mack C. Colt
Iola, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the 2 7/16" Rotary core taken from the Monroe Lease, Well No. 18-A, Anderson County, Kansas, and submitted to our laboratory by Mr. C. G. Chauncey on November 15, 1957.

It is recommended that the pipe be perforated at the following intervals; 710.0 to 711.0, 713.0 to 715.0, 718.0 to 721.5 and 724.0 to 725.0 feet.

This core was sampled and the samples sealed in cans by a representative of Mack C. Colt.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

Carl L. Pate

CLP:cb

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Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Mack C. Colt Lease Monroe Well No. 18-A

Location E½, SE¼

Section 9 Twp. 22S Rge. 21E County Anderson State Kansas

Name of Sand	Bartlesville
Top of Core	704.0
Bottom of Core	734.0
Top of Pay Sand	709.4
Bottom of Pay Sand	726.0
Total Feet of Permeable Sand	15.4
Total Feet of Floodable Sand	14.4

Distribution of Permeable Sand:

Permeability Range Millidarcys	Feet	Cum. Ft.

Average Effective Permeability Millidarcys	4.56
Average Percent Porosity	20.4
Average Percent Oil Saturation	48.2
Average Percent Water Saturation	35.7
Average Oil Content, Bbls./A. Ft.	772.
Total Oil Content, Bbls./Acre	4,562.
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	

LOG

Company Mack C. Colt Lease Monroe Well No. 18-A

Depth Interval, Feet	Description
704.0 - 709.4	Alternate layers of light brown sandstone and shale.
709.4 - 711.0	Brown fine grained micaceous shaley sandstone.
711.0 - 711.7	Brown fine grained micaceous sandstone.
711.7 - 712.0	Laminated sandstone and shale.
712.0 - 716.0	Dark brown fine grained micaceous sandstone.
716.0 - 717.0	Laminated sandy shale.
717.0 - 722.5	Dark brown fine grained micaceous sandstone.
722.5 - 723.4	Laminated sandstone and shale.
723.4 - 726.0	Dark brown fine grained micaceous sandstone.
726.0 - 727.0	Dark brown fine grained laminated micaceous carbonaceous shaley sandstone.
727.0 - 729.0	Alternate layers of sandstone and shale.
729.0 - 734.0	Gray sandy shale.

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RESULTS OF PERMEABILITY AND POROSITY TESTS

TABLE I A

Company Mack C. Colt Lease Monroe Well No. 18-A

Sample No.	Depth, Feet	Effective Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
1	708.1	25.75	1.0	1.0		
2	710.1	0.417	1.6	2.6		
3	711.1	5.85	0.7	3.3		
4	712.1	5.16	0.6	3.9		
5	713.1	4.59	1.0	4.9		
6	714.1	2.66	1.0	5.9		
7	715.1	4.20	1.4	7.3		
8	717.1	13.10	0.6	7.9		
9	718.1	6.24	1.0	8.9		
10	719.1	5.92	1.0	9.9		
11	720.1	0.600	1.0	10.9		
12	721.1	0.916	1.0	11.9		
13	722.1	0.324	0.9	12.8		
15	724.1	0.170	1.2	14.0		
16	725.1	1.08	1.4	15.4		
17	726.1	Imp.	1.0	16.4		

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SUMMARY OF PERMEABILITY & POROSITY TESTS

TABLE II A

Company Mack C. Colt Lease Monroe Well No. 18-A

Depth Interval, Feet	Feet of Core Analyzed	Average Air Permeability, Millidarcys	Average Effective Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Percent Porosity
707.5 - 714.6	5.9	-	6.93	-	-
714.6 - 726.0	9.5	-	3.10	-	-
707.5 - 726.0	15.4	-	4.56	-	-

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RESULTS OF SATURATION TESTS

TABLE II

Company Mack C. Colt Lease Monroe Well No. 18-A

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water	Total		Ft.	Cum. Ft.	
1	708.1	18.1	23	58	81	323	1.0	1.0	323
2	710.1	20.8	43	41	84	694	1.6	2.6	1,110
3	711.1	21.7	50	34	84	842	0.7	3.3	589
4	712.1	21.3	53	25	78	876	0.6	3.9	526
5	713.1	20.7	63	22	85	1,012	1.0	4.9	1,012
6	714.1	20.5	63	26	89	1,002	1.0	5.9	1,002
							Total	- - - - -	4,562

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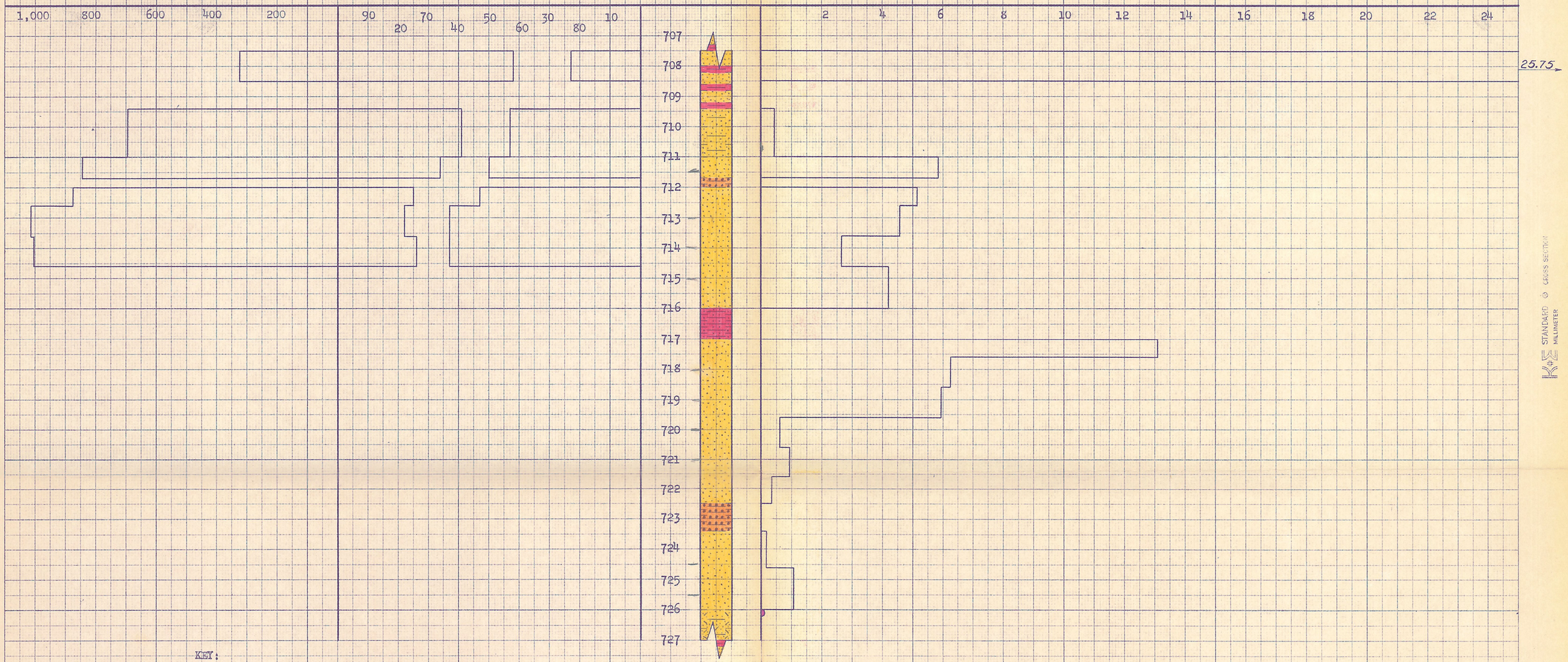
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Mack C. Colt Lease Monroe Well No. 18-A

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.

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
707.5 - 714.6	5.9	20.4	48.2	35.7	772	4,562



MACK C. COLT

MONROE LEASE WELL NO. 18-A
ANDERSON COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLS./A.FT.	TOTAL OIL CONTENT BBLS./ACRE	AVG. EFFECTIVE PERMEABILITY, MILLIDARCYS
707.5 - 714.6	5.9	20.4	48.2	35.7	772	4,562	6.93
714.6 - 726.0	9.5	-	-	-	-	-	3.10
707.5 - 726.0	15.4	-	-	-	-	-	4.56

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
NOVEMBER, 1957