

OILFIELD RESEARCH LABORATORIES

813 EAST SIXTH
OKMULGEE, OKLAHOMA
PHONE: 1488

- REGISTERED ENGINEERS -

Chanute, Kansas
November 5, 1957

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: 728

Mack C. Colt
Iola, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the 2 11/16" Rotary core taken from the Monroe Lease, Well No. 17-A, Anderson County, Kansas, and submitted to our laboratory by Mr. Roy Brower on October 31, 1957.

If this well is completed, it is recommended that the pipe be perforated at the following depths, 720.5 to 722.0, 724.0 to 725.0, 727.0 to 729.0, and 732.5 to 733.0 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

CLP:eda

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Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Mack C. Colt Lease Monroe Well No. 17-A

Location E¹/₂, SE¹/₄

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

Name of Sand	-	Bartlesville
Top of Core	-	702.0
Bottom of Core	-	746.0
Good		
Top of Sand	-	714.2
Bottom of Sand	-	736.4
Total Feet of Permeable Sand	-	15.0
	-	(Analyzed)
Total Feet of Floodable Sand	-	13.7

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

	-	
Effective		
Average Permeability Millidarcys	-	6.18
Average Percent Porosity	-	20.0
Average Percent Oil Saturation	-	46.6
Average Percent Water Saturation	-	39.9
Average Oil Content, Bbls./A. Ft.	-	5,423.
Total Oil Content, Bbls./Acre	-	
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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LOGCompany Mack C. Colt Lease Monroe Well No. 17-A

Depth Interval, Feet	Description
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702.0 - 704.4 - Shaley sandstone.

704.4 - 714.2 - Shale.

714.2 - 716.9 - Light to brown fine grained laminated micaceous sandstone.

716.9 - 717.4 - Dark brown fine grained micaceous carbonaceous sandstone.

717.4 - 718.0 - Sandy shale.

718.0 - 718.6 - Brown fine grained laminated micaceous shaley sandstone.

718.6 - 720.0 - Brown fine grained micaceous sandstone.

720.0 - 721.4 - Dark brown fine grained micaceous slightly carbonaceous sandstone.

721.4 - 721.6 - Brown fine grained laminated micaceous shaley sandstone.

721.6 - 722.8 - Brown fine grained micaceous sandstone.

722.8 - 723.6 - Sandy shale.

723.6 - 725.5 - Dark brown fine grained micaceous slightly carbonaceous sandstone.

725.5 - 726.5 - Grayish light brown fine grained laminated micaceous sandstone.

726.5 - 730.0 - Dark brown fine grained micaceous carbonaceous sandstone.

730.0 - 730.3 - Laminated sandy shale.

730.3 - 730.5 - Shale.

730.5 - 731.0 - Dark carbonaceous sandstone.

731.0 - 731.3 - Brown fine grained laminated micaceous shaley sandstone.

731.3 - 731.4 - Dark brown fine grained micaceous sandstone.

731.4 - 731.8 - Laminated sandy shale.

731.8 - 733.5 - Dark brown fine grained micaceous carbonaceous sandstone.

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-2-

733.5 - 734.0 - Dark carbonaceous sandstone.

734.0 - 735.0 - Brown fine grained laminated micaceous sandstone.

735.0 - 736.4 - Dark carbonaceous sandstone.

736.4 - 746.0 - Shale.

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RESULTS OF PERMEABILITY AND POROSITY TESTS

TABLE I A

Company Mack G. Colt Lease Monroe Well No. 17-A

Effective

Sample No.	Depth, Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
1	715.1	1.57	1.1	1.1		
2	716.1	Imp.	1.3	2.4		
3	717.1	5.24	0.5	2.9		
4	718.1	Imp.	0.6	3.5		
5	719.1	Imp.	1.4	4.9		
6	720.1	7.00	0.6	5.5		
7	721.1	10.97	0.8	6.3		
8	722.1	9.30	1.2	7.5		
10	724.1	9.10	1.0	8.5		
11	725.1	8.70	0.9	9.4		
12	726.1	0.152	1.0	10.4		
13	727.1	7.31	1.1	11.5		
14	728.1	7.88	1.0	12.5		
15	729.1	8.21	1.4	13.9		
16	730.1	0.354	0.3	14.2		
17	731.1	Imp.	0.3	14.5		
18	732.1	11.88	0.8	15.3		
19	733.1	9.06	0.9	16.2		
20	734.1	0.371	1.0	17.2		
21	735.1	0.694	0.6	17.8		
22	736.1	1.54	0.8	18.6		

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SUMMARY OF PERMEABILITY & POROSITY TESTS

TABLE II A

Company, <u>Mack G. Colt</u>	Lease <u>Monroe</u>	Well No. <u>17-A</u>			
<u>Depth Interval, Feet</u>	<u>Feet of Core Analyzed</u>	<u>Average Air Permeability, Millidarcys</u>	<u>Average Effective Permeability, Millidarcys</u>	<u>Permeability Capacity Ft. x Md.</u>	<u>Average Percent Porosity</u>
714.5 - 736.4	15.0	-	6.18	-	-

RESULTS OF SATURATION TESTS

TABLE II

Company Mack C. Colt Lease Monroe Well No. 17-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	715.1	19.1	46	46	92	682	1.1	1.1	750
2	716.1	17.9	47	44	91	653	1.3	2.4	848
3	717.1	23.5	63	25	88	1,148	0.5	2.9	574
4	718.1	16.6	53	37	90	683	0.6	3.5	410
5	719.1	21.4	45	32	77	747	1.4	4.9	1,046
6	720.1	18.9	37	50	87	542	0.6	5.5	325
7	721.1	19.7	37	42	79	566	0.8	6.3	453
8	722.1	22.3	49	40	89	848	1.2	7.5	1,017
							Total - - - - -		5,423

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Mack C. Colt Lease Monroe Well No. 17-A

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
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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
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714.5 - 722.8	7.5	20.0	46.6	39.9	724	5,423
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MACK C. COLT
MONROE 17-A

715.1

716.1

717.1

718.1

719.1

720.1

721.1

722.1

723.1

724.1

725.1

726.1

727.1

728.1

729.1

730.1

731.1

732.1

733.1

734.1

735.1

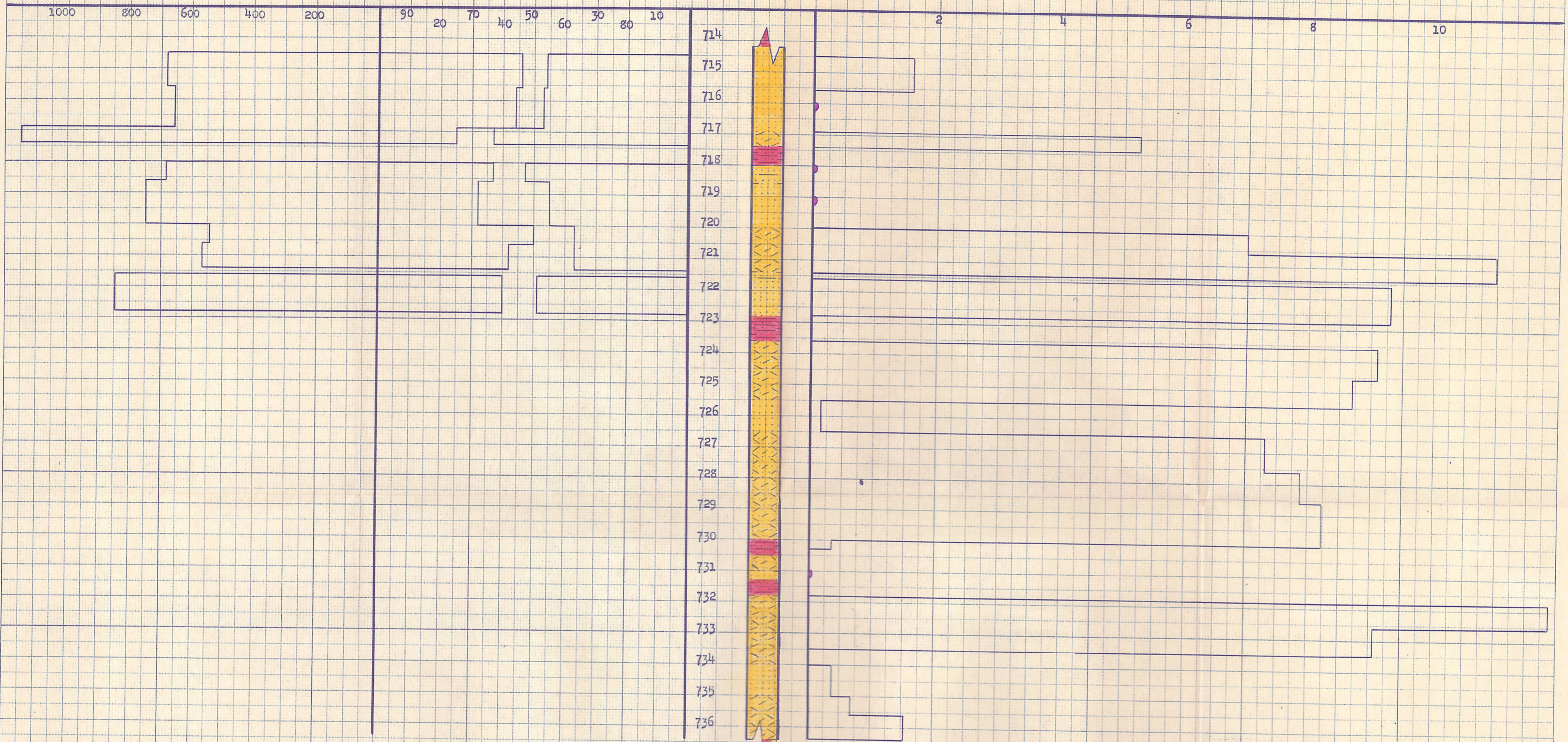
736.1



OIL CONTENT,
BBLs./A. FT.



WATER SAT.,
PERCENT



OIL SAT.,
PERCENT

EFFECTIVE PERMEABILITY, IN MILLIDARCYs



KEY:
 SANDSTONE
 CARBONACEOUS SANDSTONE

 SHALEY SANDSTONE
 SHALE

 SANDY SHALE
 IMPERMEABLE TO WATER

MACK C. COLT
 MONROE LEASE WELL NO. 17-A
 ALLEN COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLs./A. FT.	TOTAL OIL CONTENT BBLs./ACRE	AVG. EFFECTIVE PERMEABILITY, MILLIDARCYs
714.5 - 722.8	7.5	20.0	46.6	39.9	724	5,423	6.18

OILFIELD RESEARCH LABORATORIES
 CHANUTE, KANSAS
 NOVEMBER, 1957.

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

STANDARD
 MILLIMETER
 CROSS SECTION