

OILFIELD RESEARCH LABORATORIES

813 EAST SIXTH
OKMULGEE, OKLAHOMA
PHONE: 1486

- REGISTERED ENGINEERS -

Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: 728

January 5, 1968/

Dr. Joseph H. Giesen
34 Gilman Street
Waterville, Maine

Dear Sir:

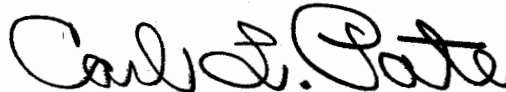
Enclosed herewith are the results of tests run on the 3" Rotary core samples taken from the Hayden Heirs Lease, Well No. 14, Chautauqua County, Kansas, and submitted to our laboratory on December 30, 1960.

This core was sampled and the samples were sealed in cans by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Carl L. Pate

CLP:db

1 c. - Mr. E.M. Lorette

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Dr. Joseph H. Giesen Lease Hayden Heirs Well No. 14

Location ¹³⁵⁰ 1030' W of E Line and 70' S of N Line, SE 1/4 N 1/2 NE 1/4

Section 29 Twp. 33S Rge. 12E County Chautauqua State Kansas

Name of Sand	-	Peru
Top of Core	-	939.0
Bottom of Core	-	951.0
Top of Sand	(Received)	939.0
Bottom of Sand	(Received)	951.0
Total Feet of Permeable Sand	-	3.0
Total Feet of Floodable Sand	-	-

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
--	------	----------

Effective Average/Permeability Millidarcys	-	0.200
Average Percent Porosity	-	17.1
Average Percent Oil Saturation	-	42.5
Average Percent Water Saturation	-	41.2
Average Oil Content, Bbls./A. Ft.	-	567.
Total Oil Content, Bbls./Acre	-	6,807.
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 Dr. Joseph H. Giesen Lease Hayden Heirs Well No. 14

Depth Interval, Description
Feet

939.0 - 949.0 - Grayish brown shaley sandstone.

949.0 - 951.0 - Dark carbonaceous shaley sandstone.

Oilfield Research Laboratories
RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Dr. Joseph H. Giesen Lease Hayden Heirs Well No. 14

Effective

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			Ft.	Cum. Ft.		
1	939.5	16.1	41	36	512	0.300	1.0	1.0	512	
2	940.5	16.1	47	31	588	0.300	1.0	2.0	588	
3	941.5	17.0	47	36	620	Imp.	1.0	3.0	620	
4	942.5	14.9	27	47	324	0.003	1.0	4.0	324	
5	943.5	17.7	47	39	646	Imp.	1.0	5.0	646	
6	944.5	17.0	35	49	462	Imp.	1.0	6.0	462	
7	945.5	18.0	47	38	657	Imp.	1.0	7.0	657	
8	946.5	19.4	51	36	768	Imp.	1.0	8.0	768	
9	947.5	16.8	35	52	456	Imp.	1.0	9.0	456	
10	948.5	16.5	39	49	499	Imp.	1.0	10.0	499	
11	949.5	16.8	41	48	535	Imp.	1.0	11.0	535	
12	950.5	18.0	53	34	740	Imp.	1.0	12.0	740	
Total							-----		6,807	

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III -- B

Company Dr. Joseph H. Giesen Lease Hayden Heirs Well No. 14

Depth Interval, Feet	Feet of Core Analyzed	Average Effective Permeability, Millidarcys	Permeability Capacity Ft. x Md.
939.0 - 943.0	3.0	0.200	

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
939.0 - 951.0	12.0	17.1	42.5	41.2	567	6,807