

OILFIELD RESEARCH LABORATORIES

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

March 6, 1980

Jim's Water Service, Inc.
P.O. Box 3076
Inglewood, Colorado 80111

Gentlemen:

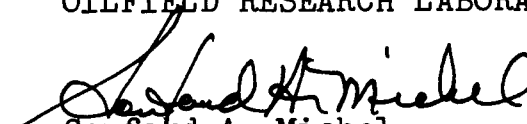
Enclosed herewith are the results of tests run on the rotary core taken from the Shireman Lease, Well No. 5, Bourbon County, Kansas, and submitted to our laboratory on February 28, 1980.

The core was sampled and sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Sanford A. Michel

SAM/tem
4 c to Inglewood, Colorado
1 c to Erie, Kansas

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

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GENERAL INFORMATION & SUMMARY

Company Jim's Water Service, Inc. Lease Shireman Well No. 5

Location 1270' N & 2680' W SE Corner

Section 24 Twp. 27S Rge. 21E County Bourbon State Kansas

Elevation, Feet

Name of Sand

Tucker

Top of Core

645.0

Bottom of Core

654.0

Top of Sand

646.0

Bottom of Sand

654.0

Total Feet of Permeable Sand

6.1

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 6

2.6

2.6

6 - 12

1.7

4.3

45 & Above

1.8

6.1

Average Permeability Millidarcys

17.7

Average Percent Porosity

17.8

Average Percent Oil Saturation

36.9

Average Percent Water Saturation

32.5

Average Oil Content, Bbls./A. Ft.

51.5

Total Oil Content, Bbls./Acre

3,653.

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LOG

Name Jim's Water Service, Inc. Lease Shireman Well No. 5

<u>Depth Interval, Feet</u>	<u>Description</u>
645.0 - 646.0	Gray sandy shale.
646.0 - 647.1	Brown shaly sandstone.
647.1 - 648.9	Dark brown sandstone.
648.9 - 650.8	Brown and gray laminated sandstone and shale.
650.8 - 651.7	Gray laminated sandstone and shale.
651.7 - 654.0	Brown and gray laminated sandstone and shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Jim's Water Service, Incorporated Lease Shireman Well No. 5

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	646.6	15.9	20	38	58	247	5.0	1.1	1.1	272	5.50
2	647.6	15.8	34	40	74	417	45.	0.9	2.0	375.	40.50
3	648.7	18.0	50	27	77	698	47.	0.9	2.9	628	42.30
4	649.5	17.2	41	31	72	547	11.	1.0	3.9	547	11.00
5	650.6	16.2	40	33	73	503	0.80	0.9	4.8	453	0.72
6	651.8	17.0	41	32	73	541	1.6	0.6	5.4	325	0.96
7	652.7	18.6	33	35	68	476	10.	0.7	6.1	333	7.00
8	653.6	23.2	40	24	64	720	Imp.	1.0	7.1	720	0.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

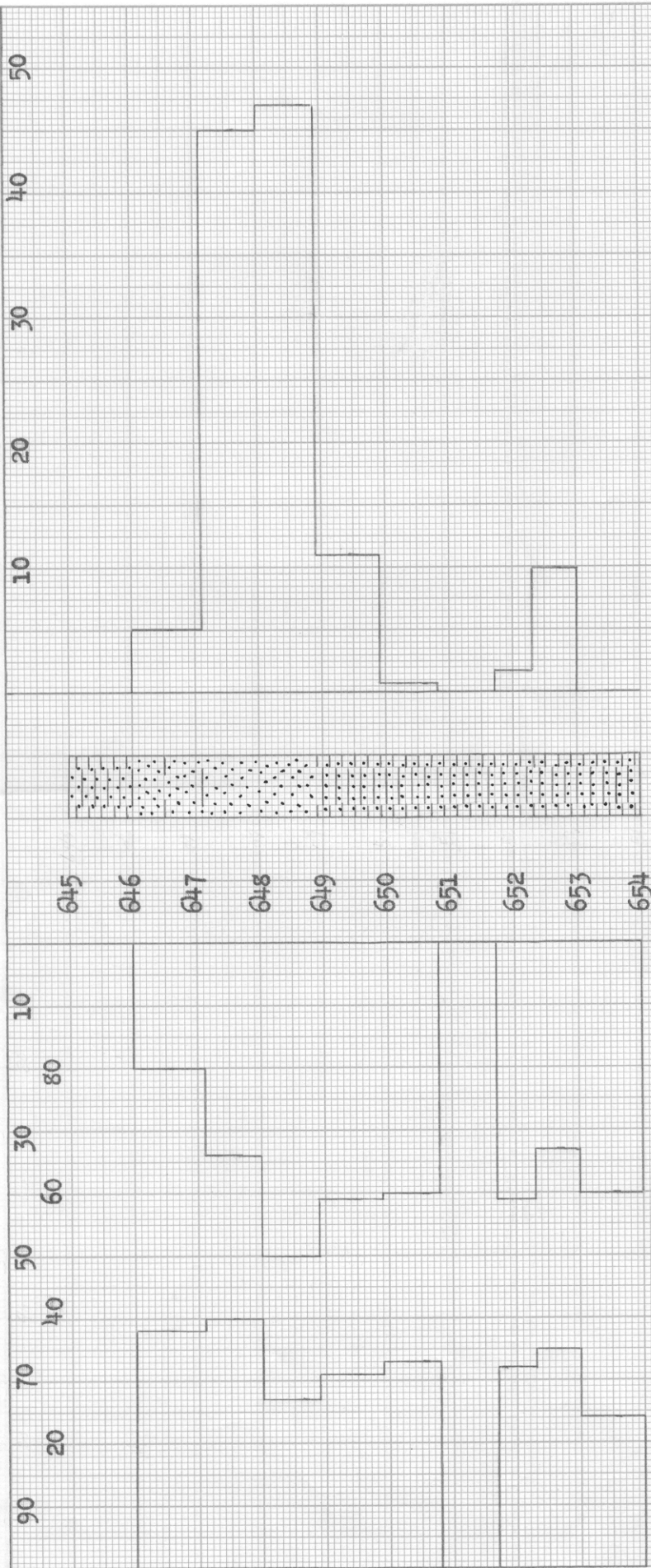
TABLE III

Company	Jim's Water Service, Incorporated		Lease	Shireman		Well No.	5
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.			
	646.0 - 654.0	6.1	17.7	107.98			
	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
	646.0 - 654.0	7.1	17.8	36.9	32.5	515	3,653

WATER SAT., PERCENT

OIL SAT., PERCENT

PERMEABILITY, IN MILLIDARCYS



KEY:

SANDSTONE

SANDY SHALE

SHALY SANDSTONE

LAMINATED SANDSTONE AND SHALE

JIM'S WATER SERVICE, INC.

SHIREMAN LEASE

BOURBON COUNTY, KANSAS

WELL NO. 5

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS
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