

OILFIELD RESEARCH LABORATORIES

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

August 27, 1982

Mark L. Haas Oil Company
711 South Grove
Yates Center, Kansas 66783

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Lauber Lease, Well No. 32-C, located in Woodson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on August 25, 1982.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/rmc

5 c to Yates Center, Kansas

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Company Mark L. Haas Oil Company Lease Lauber Well No. 32-C
 Location 990' ENL & 330' FWL, SE $\frac{1}{4}$
 Section 21 Twp. 25S Rge. 15E County Woodson State Kansas

Elevation, Feet
 Name of Sand..... Squirrel
 Top of Core 1170.0
 Bottom of Core 1183.3
 Top of Sand 1170.0
 Bottom of Sand 1183.3
 Total Feet of Permeable Sand 10.4

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	3.3	3.3
10 - 20	4.1	7.4
20 - 61	1.6	9.0
75 - 100	1.4	10.4

Average Permeability Millidarcys 25.7
 Average Percent Porosity 16.1
 Average Percent Oil Saturation 38.2
 Average Percent Water Saturation..... 43.6
 Average Oil Content, Bbls./A. Ft. 494.
 Total Oil Content, Bbls./Acre..... 5,824.

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LOGCompany Mark L. Haas Oil Company Lease Lauber Well No. 32-C

<u>Depth Interval, Feet</u>	<u>Description</u>
1170.0 - 1170.5	Dark brown sandstone.
1170.5 - 1171.7	Grayish brown very shaly sandstone.
1171.7 - 1176.6	Dark brown sandstone with widely scattered fine gray shale and micaceous partings.
1176.6 - 1178.0	Dark brown slightly shaly sandstone with scattered micaceous partings.
1178.0 - 1178.7	Dark brown sandstone.
1178.7 - 1179.0	Gray shale.
1179.0 - 1180.0	Dark brown sandstone with scattered fine micaceous partings.
1180.0 - 1180.6	Gray and brown finely laminated shale, mica, and sandstone.
1180.6 - 1183.3	Grayish brown very shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Mark L. Haas Oil Company Lease Lauber Well No. 32-C

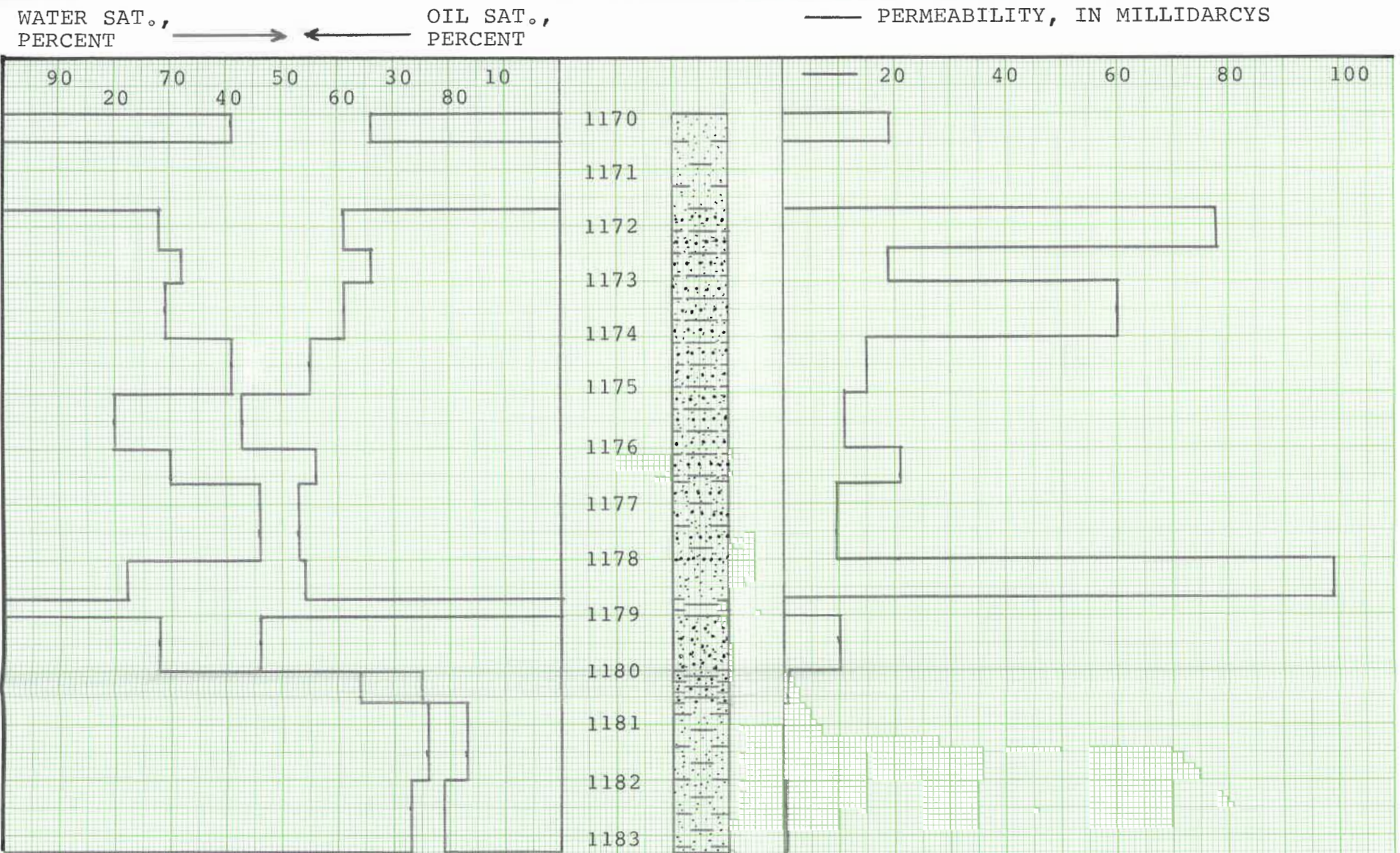
Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Oil Content Bbbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water			Ft.	Cum. Ft.		
1	1170.4	13.3	34	41	351	19.	0.5	0.5	176	9.50
2	1171.8	19.8	39	28	599	78.	0.7	1.2	419	54.60
3	1172.5	18.7	34	32	493	19.	0.6	1.8	296	11.40
4	1173.5	16.9	39	29	511	60.	1.0	2.8	511	60.00
5	1174.5	15.7	45	41	548	15.	1.0	3.8	548	15.00
6	1175.5	17.8	57	20	787	11.	1.0	4.8	787	11.00
7	1176.5	18.8	44	30	642	21.	0.6	5.4	385	12.60
8	1177.5	15.5	47	46	565	9.4	1.4	6.8	791	13.16
9	1178.6	21.4	46	22	764	99.	0.7	7.5	535	69.30
10	1179.5	16.8	54	28	704	10.	1.0	8.5	704	10.00
11	1180.5	16.1	25	64	312	0.96	0.6	9.1	187	0.58
12	1181.5	12.4	17	76	164	Imp.	1.4	10.5	230	0.00
13	1182.5	12.0	21	73	196	0.18	1.3	11.8	255	0.23

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Mark L. Haas Oil Company	Lease	Lauber	Well No.	32-C
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	
	1170.0 - 1180.0	8.5	31.4	266.56	
	1180.0 - 1183.3	1.9	0.43	0.81	
	1170.0 - 1183.3	10.4	25.7	267.37	

	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
	1170.0 - 1180.0	8.5	17.3	45.2	32.4	606	5,152
	1180.0 - 1183.3	3.3	12.9	20.0	72.6	204	672
	1170.0 - 1183.3	11.8	16.1	38.2	43.6	494	5,824



- KEY:
- SANDSTONE
 - SHALE
 - SHALY SANDSTONE
 - SANDSTONE WITH MICA AND SHALE PARTINGS
 - SANDSTONE WITH MICACEOUS PARTINGS
 - SHALY SANDSTONE WITH MICACEOUS PARTINGS
 - LAMINATED SANDSTONE, SHALE AND MICA

MARK L. HAAS OIL COMPANY

LAUBER LEASE WOODSON COUNTY, KANSAS WELL NO. 32-C

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS
1170.0 - 1180.0	8.5	17.3	45.2	32.4	31.4
1180.0 - 1183.3	3.3	12.9	20.0	72.6	0.43
1170.0 - 1183.3	11.8	16.1	38.2	43.6	25.7

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CHANUTE, KANSAS
AUGUST, 1982 PDC