



OILFIELD RESEARCH LABORATORIES

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

February 14, 1979

Diamond Oil Producers, Inc.
114 South Depot
Cherryvale, Kansas 67335

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Mattox A Lease, Well No. 3, Labette County, Kansas, and submitted to our laboratory on February 9, 1979.

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


Benjamin R. Pearman

SAM:km
5 c to Cherryvale, Kansas

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GENERAL INFORMATION & SUMMARY

Company	<u>Diamond Oil Producers, Inc.</u>	Lease	<u>Mattox A</u>	Well No.	<u>3</u>
Location	<u>1,485' WEL & 825' NSL SE NW</u>				
Section	<u>7</u>	Twp.	<u>33S</u>	Rge.	<u>18E</u>
		County	<u>Labette</u>	State	<u>Kansas</u>
Name of Sand					Bartlesville
Top of Core					585.0
Bottom of Core					619.0
Top of Sand					586.3
Bottom of Sand					618.2
Total Feet of Permeable Sand					24.5
Total Feet of Floodable Sand					
Distribution of Permeable Sand:					
Permeability Range Millidarcys	Feet	Cum. Ft.			
0 - 10	14.1	14.1			
10 - 20	2.6	16.7			
20 - 50	5.3	22.0			
50 & Above	2.5	24.5			
Average Permeability Millidarcys					22.4
Average Percent Porosity					15.2
Average Percent Oil Saturation					23.4
Average Percent Water Saturation					56.0
Average Oil Content, Bbls./A. Ft.					263.
Total Oil Content, Bbls./Acre					6,778.
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 Diamond Oil Producers, Inc. Lease Mattox A Well No. 3

<u>Depth Interval, Feet</u>	<u>Description</u>
585.0 - 586.3	Gray laminated shale.
586.3 - 586.8	Gray very shaly sandstone.
586.8 - 591.3	Gray sandy shale.
591.3 - 596.5	Gray slightly shaly sandstone.
596.5 - 599.9	Gray laminated very shaly sandstone.
599.9 - 601.5	Gray laminated sandy shale.
601.5 - 603.0	Light brown and gray slightly shaly sandstone.
603.0 - 604.0	Brown sandstone.
604.0 - 605.0	Light brown sandstone.
605.0 - 606.8	Light brown and gray slightly shaly sandstone.
606.8 - 608.0	Light brown sandstone.
608.0 - 608.7	Light brown and gray laminated slightly shaly sandstone.
608.7 - 609.7	Gray laminated very shaly sandstone.
609.7 - 611.8	Light brown and gray slightly shaly sandstone.
611.8 - 613.2	Light brown sandstone.
613.2 - 617.0	Light brown and gray slightly shaly sandstone.
617.0 - 618.2	Brown sandstone.
618.2 - 619.0	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Diamond Oil Producers, Inc. Lease Mattox A Well No. 3

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	586.5	14.0	4	87	91	0.46	0.5	0.5	22	0.23
2	591.7	16.9	2	65	67	42.	0.7	1.2	18	29.40
3	592.5	18.7	31	55	86	24.	1.0	2.2	450	24.00
4	593.5	19.8	3	59	62	49.	1.0	3.2	46	49.00
5	594.5	20.1	7	53	60	123.	1.0	4.2	109	123.00
6	595.5	20.9	7	47	54	95.	1.0	5.2	114	95.00
7	596.4	18.8	8	52	60	74.	0.5	5.7	59	37.00
8	597.5	14.2	4	74	78	0.78	1.5	7.2	66	1.17
9	598.7	11.7	8	86	94	0.45	1.0	8.2	73	0.45
10	599.5	15.1	18	65	83	1.4	0.9	9.1	190	1.26
11	601.7	14.2	14	60	74	3.1	0.5	9.6	77	1.55
12	602.5	14.7	28	49	77	7.6	1.0	10.6	319	7.60
13	603.5	13.3	34	38	72	14.7	1.0	11.6	351	14.00
14	604.5	14.4	22	58	80	8.7	1.0	12.6	246	8.70
15	605.5	14.9	30	50	80	7.5	1.0	13.6	347	7.50
16	606.5	15.8	29	54	83	2.6	0.8	14.4	285	2.08
17	607.5	15.6	33	48	81	9.0	1.2	15.6	479	10.80
18	608.3	9.5	6	89	95	8.8	0.7	16.3	31	6.16
19	609.4	8.9	2	92	94	Imp.	1.0	17.3	14	0.00
20	610.5	14.0	23	55	78	4.5	1.0	18.3	250	4.50
21	611.5	15.3	41	38	79	20.	1.1	19.4	536	22.00
22	612.5	15.4	38	41	79	27.	1.4	20.8	636	37.80
23	613.5	15.3	31	49	80	14.	0.8	21.6	294	11.20
24	614.5	15.1	32	51	83	9.4	1.0	22.6	375	9.40
25	615.5	11.6	42	40	82	6.5	1.0	23.6	378	6.50
26	616.5	14.4	29	55	84	3.8	1.0	24.6	324	3.80
27	617.5	16.8	44	35	79	35.	1.2	25.8	689	42.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.	
Diamond Oil Producers, Inc.		Mattox A		3	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
586.3 - 599.9	9.1	39.6	360.48		
601.5 - 618.2	15.7	12.5	195.59		
586.3 - 618.2	24.8	22.4	556.07		

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
586.3 - 599.9	9.1	17.0	9.4	64.2	126	1,147
601.5 - 618.2	16.7	14.2	29.5	51.6	337	5,631
586.3 - 618.2	25.8	15.2	23.4	56.0	263	6,778