

# OILFIELD RESEARCH LABORATORIES

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

March 20, 1981

Diamond B Industries  
R R # 1  
Paola, Kansas 66071

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Henning Lease, Well No. DH-12, located in Miami County, Kansas.

The core was sampled and sealed in plastic by a representative of the client and was submitted to our laboratory on March 9, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

1 c to Paola, Kansas  
4 c to Pierre, South Dakota

- REGISTERED ENGINEERS -

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

**Oilfield Research Laboratories**  
**GENERAL INFORMATION & SUMMARY**

Company Diamond B Industries Lease Henning Well No. DH-12  
 Location \_\_\_\_\_  
 Section 23 Twp. 16S Rge. 21E County Miami State Kansas

Elevation, Feet .....	
Name of Sand .....	Upper Squirrel
Top of Core .....	642.0
Bottom of Core .....	662.0
Top of Sand .....	642.0
Bottom of Sand .....	662.0
Total Feet of Permeable Sand .....	10.8

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 15	3.1	3.1
15 - 25	4.7	7.8
25 - 31	3.0	10.8

Average Permeability Millidarcys .....	19.6
Average Percent Porosity .....	18.0
Average Percent Oil Saturation .....	31.2
Average Percent Water Saturation .....	48.5
Average Oil Content, Bbls./A. Ft. ....	455.
Total Oil Content, Bbls./Acre .....	9,100.

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LOG

Name Diamond B Industries Lease Henning Well No. DH-12

<u>Depth Interval, Feet</u>	<u>Description</u>
642.0 - 644.3	Light brown sandstone.
644.3 - 648.7	Grayish light brown shaly sandstone.
648.7 - 649.4	Light brown sandstone.
649.4 - 650.5	Grayish light brown shaly sandstone.
650.5 - 656.2	Light brown sandstone.
656.2 - 658.3	Grayish light brown shaly sandstone.
658.3 - 658.9	Light brown sandstone.
658.9 - 662.0	Grayish light brown shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Diamond B Industries Lease Henning Well No. DH-12

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	Total			Ft.	Cum. Ft.		
1	642.5	22.0	41	38	79	700	25.	1.0		700	25.00
2	643.9	21.1	43	31	74	704	20.	1.3		915	26.00
3	644.6	14.3	39	48	87	433	*	1.5		650	*
4	646.4	17.8	33	52	85	456	9.4	1.5		684	14.10
5	647.5	8.6	17	67	84	113	Imp.	1.4		158	0.00
6	648.8	21.1	27	35	62	442	14.	0.7		309	9.80
7	649.7	13.6	26	64	90	274	Imp.	1.1		301	0.00
8	650.8	22.5	36	33	69	628	21.	1.0		628	21.00
9	651.9	23.6	40	26	66	732	18.	1.0		732	18.00
10	652.9	22.5	42	32	74	733	14.	0.9		660	12.60
11	653.5	22.9	36	32	68	640	19.	1.4		896	26.60
12	654.9	24.5	35	26	61	665	31.	1.4		931	43.40
13	656.4	13.2	31	60	91	318	Imp.	1.0		318	0.00
14	657.7	11.6	26	63	89	234	Imp.	1.1		257	0.00
15	658.8	20.6	17	50	67	272	26.	0.6		163	15.60
16	659.2	15.6	30	58	88	363	Imp.	1.0		363	0.00
17	660.3	16.5	23	76	99	294	Imp.	1.0		294	0.00
18	661.4	15.0	11	83	94	128	Imp.	1.1		141	0.00

NOTE: \* Permeability sample unobtainable.

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

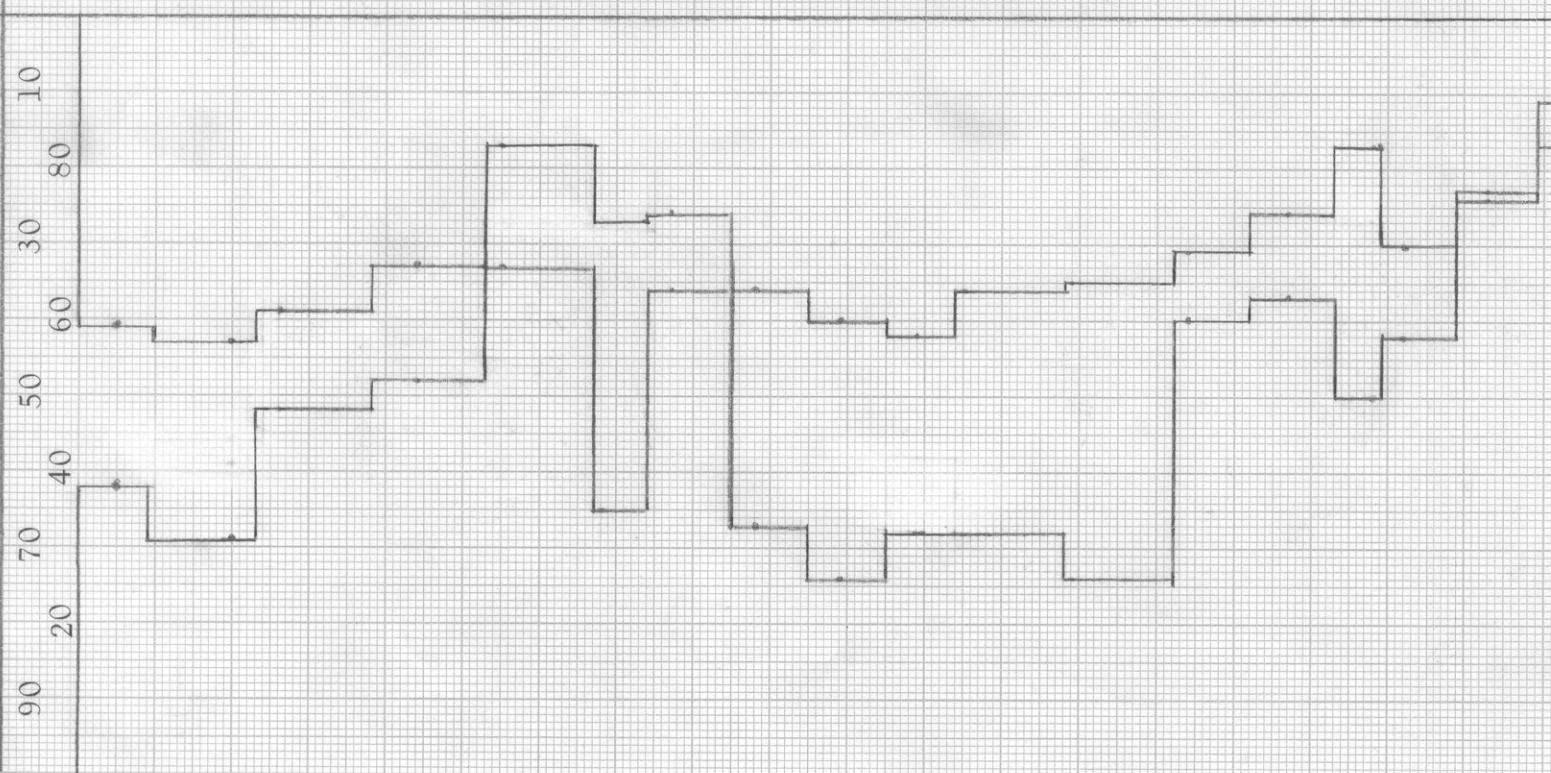
Company	Diamond B Industries	Lease	Henning	Well No.	DH-12
Depth Interval, Feet	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Total Oil Content Ebbls./Acre
Depth Interval, Feet	Feet of Core Analyzed	Average Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.
642.0 - 650.5	4.5	16.6	32.5	49.1	437
650.5 - 656.2	5.7	21.3	37.4	29.7	675
656.2 - 662.0	0.6	26.0	23.3	66.3	265
642.0 - 662.0	10.8	19.6	31.2	48.5	455
642.0 - 650.5	8.5	16.4	16.4	8.5	3,717
650.5 - 656.2	5.7	23.3	23.3	5.7	3,847
656.2 - 662.0	5.8	15.0	15.0	5.8	1,536
642.0 - 662.0	20.0	18.0	18.0	20.0	9,100

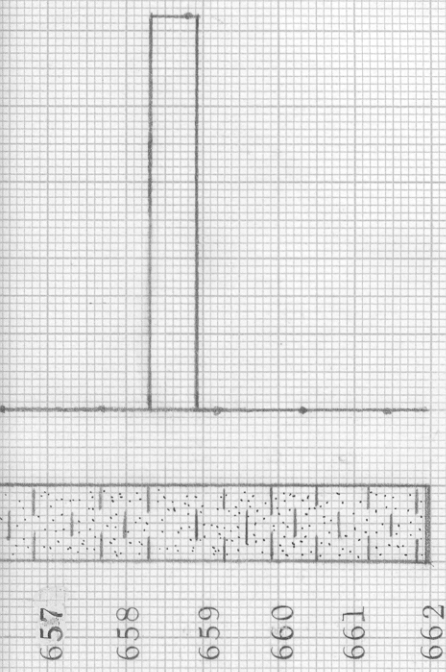
PERMEABILITY, IN MILLIDARCYS



642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661

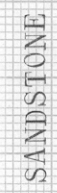
WATER SAT., PERCENT  
OIL SAT., PERCENT





KEY:

 SANDSTONE

 SHALY SANDSTONE

# DIAMOND B INDUSTRIES

HENNING LEASE  
 MIAMI COUNTY, KANSAS  
 WELL NO. DH-12

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS
642.0 - 650.5	8.5	16.4	32.5	49.1	16.6
650.5 - 656.2	5.7	23.3	37.4	29.7	21.3
656.2 - 662.0	5.8	15.0	23.3	66.3	26.0
642.0 - 662.0	20.0	18.0	31.2	48.5	19.6

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 CHANUTE, KANSAS  
 MARCH, 1981