



OILFIELD RESEARCH LABORATORIES

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

March 15, 1979

CHN Oil Company
2502 E. Douglas
Wichita, Kansas 67214

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the R.V. Hale Lease, Well No. H-10, Allen County, Kansas, and submitted to our laboratory on March 13, 1979.

This core was sampled and sealed in plastic bags by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

SAM:km
5 c to Wichita, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company CHN Oil Company Lease R.V. Hale Well No. H-10

Location 825' EWL & 825' SNL E $\frac{1}{2}$ SE $\frac{1}{4}$

Section 25 Twp. 26S Rge. 21E County Allen State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 668.0

Bottom of Core - - - - - 693.0

Top of Sand - - - - - 668.4

Bottom of Sand - - - - - 683.7

Total Feet of Permeable Sand - - - - - 11.7

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 5
5 - 10
10 - 60

6.5
0.8
4.4

6.5
7.3
11.7

Average Permeability Millidarcys - - - - - 15.2

Average Percent Porosity - - - - - 17.3

Average Percent Oil Saturation - - - - - 35.2

Average Percent Water Saturation - - - - - 46.5

Average Oil Content, Bbls./A. Ft. - - - - - 470.

Total Oil Content, Bbls./Acre - - - - - 5,496.

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 - - - - -

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LOG

Company CHN Oil Company Lease R.V. Hale Well No. H-10

The detailed log of the formation cored is as follows:

<u>Depth Interval, Feet</u>	<u>Description</u>
668.0 - 668.4	Dark gray shale.
668.4 - 668.8	Light brown slightly shaly sandstone.
668.8 - 670.0	Dark gray shale.
670.0 - 670.4	Light brown slightly shaly sandstone.
670.4 - 672.0	Dark gray shale.
672.0 - 672.4	Light brown sandstone.
672.4 - 673.2	Dark gray shale.
673.2 - 678.2	Brown micaceous sandstone.
678.2 - 683.7	Brown slightly shaly micaceous slightly carbonaceous sandstone.
683.7 - 684.2	Gray slightly calcareous slightly carbonaceous conglomerate.
684.2 - 685.7	Black sandy shale.
685.7 - 686.1	Coal.
686.1 - 691.0	Gray sandy shale.
691.0 - 692.5	Gray slightly calcareous sandy shale.
692.5 - 693.0	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company CHN Oil Company Lease R.V. Hale Well No. H-10

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 in.
			Oil	Water			Ft.	Cum. Ft.		
1	668.5	18.1	29	43	407	6.5	0.4	0.4	163	2.60
2	670.2	15.6	25	60	303	6.3	0.4	0.8	121	2.52
3	672.2	18.7	33	45	479	22.	0.4	1.2	192	8.80
4	673.5	20.6	32	40	511	33.	0.8	2.0	409	26.40
5	674.5	15.6	27	61	327	4.3	1.0	3.0	327	4.30
6	675.5	18.7	29	49	421	36.	1.0	4.0	421	36.00
7	676.5	18.5	25	57	359	54.	1.0	5.0	359	54.00
8	677.5	17.0	33	54	435	31.	1.2	6.2	522	37.20
9	678.5	18.9	42	36	616	1.4	0.8	7.0	493	1.12
10	679.5	17.1	42	38	557	1.2	1.0	8.0	557	1.20
11	680.5	16.6	48	37	618	0.87	1.0	9.0	618	0.87
12	681.5	15.9	44	40	543	0.99	1.0	10.0	543	0.99
13	682.5	15.8	30	51	368	1.8	1.0	11.0	368	1.80
14	683.5	15.8	47	37	576	0.78	0.7	11.7	403	0.55

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.	
CHN Oil Company		R.V. Hale		H-10	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
668.4 - 673.2	1.2	11.6	13.92		
673.2 - 683.7	10.5	15.7	164.43		
668.4 - 683.7	11.7	15.2	178.35		

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
668.4 - 673.2	1.2	17.4	29.0	49.3	397	476
673.2 - 683.7	10.5	17.3	35.9	46.1	478	5,020
668.4 - 683.7	11.7	17.3	35.2	46.5	470	5,496