



# OILFIELD RESEARCH LABORATORIES

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

August 25, 1980

Renflow Oil Company  
P. O. Box 707  
Chanute, Kansas 66720

Gentlemen:

Enclosed herewith are the results of tests run on the rotary cores taken from the Larson Lease, Well No. I-38, Allen County, Kansas and submitted to our laboratory on July 10, 1980.

The cores were sampled and sealed in plastic bags by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

  
Sanford A. Michel

SAM/ks

5 c to Chanute, Kansas

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

Company Renflow Oil Company Lease Larson Well No. I-38  
 Location —  
 Section — Twp. — Rge. — County Allen State Kansas

Elevation, Feet . . . . .		
Name of Sand . . . . .	Tucker Upper Sand	Tucker Lower Sand
Top of Core . . . . .	784.0	826.0
Bottom of Core . . . . .	803.6	834.5
Top of Sand . . . . .	784.4	826.0
Bottom of Sand . . . . .	*(Tested) *803.3	834.5
Total Feet of Permeable Sand . . . . .	14.6	8.5

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.		
	<u>Upper Sand</u>			
0 - 10	8.3	8.3		
10 - 20	1.0	9.3		
20 - 40	0.7	10.0		
130 - 285	3.3	13.3		
370 & Above	1.3	14.6		
	<u>Lower Sand</u>			
10 - 20	0.5	0.5		
20 - 40	3.0	3.5		
40 - 50	4.0	7.5		
130 & Above	1.0	8.5		
Average Permeability Millidarcys . . . . .		98.2		45.7
Average Percent Porosity . . . . .		18.6		18.0
Average Percent Oil Saturation . . . . .		50.1		38.6
Average Percent Water Saturation . . . . .		20.5		32.6
Average Oil Content, Bbls./A. Ft. . . . .		740.		536.
Total Oil Content, Bbls./Acre . . . . .		11,402.		4,557.

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LOGName Renflow Oil Company Lease Larson Well No. I-38

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
	<u>UPPER SAND</u>
784.0 - 784.4	Gray sandy shale.
784.4 - 788.8	Dark brown slightly calcareous sandstone.
788.8 - 789.4	Gray sandy shale.
789.4 - 789.8	Brown shaly sandstone.
789.8 - 791.1	Dark brown sandstone.
791.1 - 792.0	Brown shaly sandstone.
792.0 - 792.5	Gray sandy shale.
792.5 - 793.7	Brown sandstone.
793.7 - 795.2	Gray sandy shale.
795.2 - 797.5	Gray carbonaceous shaly sandstone.
797.5 - 798.4	Gray sandy shale.
798.4 - 801.3	Gray carbonaceous shaly sandstone.
801.3 - 803.6	Gray carbonaceous very shaly sandstone.
	<u>LOWER SAND</u>
826.0 - 834.5	Brown sandstone.

**Oilfield Research Laboratories**  
**RESULTS OF SATURATION & PERMEABILITY TESTS**

**TABLE I-B**

Company RenFlow Oil Company Lease Larson Well No. I-38

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			Ft.	Cum. Ft.		
1	784.5	13.0	17	44	172	14.	0.6	0.6	103	8.40
2	785.5	16.7	53	26	687	13.	1.0	1.6	687	13.00
3	786.7	22.4	51	13	886	241.	1.0	2.6	886	241.00
4	787.5	24.0	43	21	801	266.	1.0	3.6	801	266.00
5	788.4	17.7	36	19	494	384.	0.8	4.4	395	307.20
6	789.6	11.9	20	75	185	5.3	0.4	4.8	74	2.12
7	790.3	22.6	51	14	894	280.	1.3	6.1	1162	364.00
8	791.3	14.0	26	50	282	3.1	0.9	7.0	254	2.79
9	792.6	22.9	55	10	977	371.	0.5	7.5	489	185.50
10	793.5	18.1	54	15	758	29.	0.7	8.2	531	20.30
11	795.4	15.6	37	53	448	Imp.	0.8	9.0	358	0.00
12	796.7	23.2	64	9	1152	5.0	1.0	10.0	1152	5.00
13	797.4	16.7	47	14	609	5.0	0.5	10.5	305	2.50
14	798.7	17.8	67	6	925	4.5	0.6	11.1	555	2.70
15	799.5	19.5	71	10	1074	5.5	1.0	12.1	1074	5.50
16	800.6	20.0	60	10	931	4.1	1.3	13.4	1210	5.33
17	801.7	15.6	58	14	702	1.0	1.0	14.4	702	1.00
18	802.4	14.5	59	6	664	1.1	1.0	15.4	664	1.10
19	826.6	18.8	36	36	525	131.	1.0	16.4	525	131.00
20	827.5	17.6	42	33	574	47.	1.0	17.4	574	47.00
21	828.7	19.6	34	32	517	42.	1.0	18.4	517	42.00
22	829.4	19.8	38	26	584	43.	1.0	19.4	584	43.00
23	830.8	17.5	35	38	475	40.	1.0	20.4	475	40.00
24	831.5	16.9	48	27	629	34.	1.0	21.4	629	34.00
25	832.7	17.7	36	32	494	22.	1.0	22.4	494	22.00
26	833.5	16.7	39	36	505	24.	1.0	23.4	505	24.00
27	834.3	16.4	40	35	509	11.	0.5	23.9	254	5.50

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Well No.													
RenFlow Oil Company	Larson	I-38	Depth Interval, Feet		Ft. of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity, Ft. x Md.	Depth Interval, Feet		Ft. of Core Analyzed	Average Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content, Bbl./A. Ft.	Total Oil Content, Bbls./Acre
			<u>Upper Sand</u>												
			784.4 - 793.7	8.2	172.0	1410.31									
			795.2 - 803.3	6.4	3.6	23.13									
			784.4 - 803.3	14.6	98.2	1433.44									
			<u>Lower Sand</u>												
			826.0 - 834.5	8.5	45.7	388.50									
			<u>Upper Sand</u>												
			784.4 - 793.7	8.2	19.0	42.6	25.6	5,382							
			795.2 - 803.3	7.2	18.1	58.8	14.6	6,020							
			784.4 - 803.3	15.4	18.6	50.1	20.5	11,402							
			<u>Lower Sand</u>												
			826.0 - 834.5	8.5	18.0	38.6	32.6	4,557							