



OILFIELD RESEARCH LABORATORIES

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

July 10, 1981

T. I. Energy, Inc.
Ottawa Professional Building
4th & Main
Ottawa, Kansas 66067

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Clark Lease, Well No. 1, located in Franklin County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on July 8, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Ottawa, Kansas

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GENERAL INFORMATION & SUMMARY

Company T. I. Energy, Inc. Lease Clark Well No. 1
 Location 2475' FNL & 165' FEL
 Section 5 Twp. 16S Rge. 20E County Franklin State Kansas

Elevation, Feet

Name of Sand.....	Squirrel
Top of Core	699.4
Bottom of Core	754.3
Top of Sand (Tested)	716.3
Bottom of Sand (Tested)	751.0
Total Feet of Permeable Sand	25.3

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 20	8.9	8.9
20 - 40	7.4	16.3
40 - 60	7.0	23.3
60 - 85	2.0	25.3

Average Permeability Millidarcys	31.1
Average Percent Porosity	21.4
Average Percent Oil Saturation	41.7
Average Percent Water Saturation.....	35.6
Average Oil Content, Bbls./A. Ft.	693.
Total Oil Content, Bbls./Acre.....	17,531.

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LOGName T. I. Energy, Inc. Lease Clark Well No. 1

<u>Depth Interval, Feet</u>	<u>Description</u>
699.4 - 702.1	Light gray slightly sandstone limestone.
702.1 - 705.8	Light grayish brown shaly sandstone with micaceous partings.
705.8 - 708.1	Grayish brown slightly shaly sandstone with micaceous partings.
708.1 - 716.3	Light brown slightly calcareous sandstone.
716.3 - 723.3	Brown slightly calcareous sandstone.
723.3 - 724.3	Grayish brown slightly calcareous sandstone with shale partings.
724.3 - 726.4	Dark brown sandstone.
726.4 - 729.3	Grayish brown slightly calcareous sandstone with shale partings.
729.3 - 735.3	Brown slightly calcareous sandstone.
735.3 - 738.3	Grayish brown slightly calcareous sandstone with shale partings.
738.3 - 748.0	Grayish dark brown slightly calcareous sandstone with micaceous partings.
748.0 - 752.7	Very dark brown slightly calcareous slightly carbonaceous sandstone.
752.7 - 754.3	Gray shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company T. I. Energy, Inc. Lease Clark Well No. 1

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	716.8	20.9	48	31	79	778	56.	1.0	1.0	778	56.00
2	719.7	23.6	41	44	85	751	54.	1.7	2.7	1277	91.80
3	721.6	23.1	55	28	83	986	83.	1.0	3.7	986	83.00
4	722.5	24.5	60	21	81	1140	67.	1.0	4.7	1140	67.00
5	723.7	22.1	43	40	83	737	56.	1.0	5.7	737	56.00
6	726.6	19.9	40	46	86	618	12.	0.9	6.6	556	10.80
7	727.4	16.4	43	41	84	547	5.5	1.0	7.6	547	5.50
8	728.5	20.4	54	27	81	855	11.	1.0	8.6	855	11.00
9	730.6	21.8	35	37	72	592	46.	1.0	9.6	592	46.00
10	732.4	22.2	44	37	81	758	24.	1.0	10.6	758	24.00
11	734.6	21.3	45	36	81	744	19.	1.0	11.6	744	19.00
12	735.5	20.2	31	51	82	486	12.	1.0	12.6	486	12.00
13	736.5	19.9	39	45	84	602	4.2	1.0	13.6	602	4.20
14	738.4	22.0	43	31	74	734	23.	1.0	14.6	734	23.00
15	740.5	24.0	29	45	74	540	42.	1.3	15.9	702	54.60
16	741.6	22.3	38	27	65	657	26.	1.4	17.3	920	36.40
17	742.7	21.7	41	24	65	690	35.	1.0	18.3	690	35.00
18	743.6	21.6	25	38	63	419	32.	1.0	19.3	419	32.00
19	744.6	20.8	35	30	65	565	21.	1.0	20.3	565	21.00
20	745.4	17.3	43	40	83	577	13.	1.0	21.3	577	13.00
21	746.4	21.3	37	30	67	611	25.	1.0	22.3	611	25.00
22	747.6	18.7	57	38	95	827	47.	1.0	23.3	827	47.00
23	748.5	22.4	29	47	76	504	2.4	1.0	24.3	504	2.40
24	750.6	22.9	52	16	68	924	10.	1.0	25.3	924	10.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		T. I. Energy, Inc.		Lease		Clark		Well No.	
Depth Interval, Feet		Feet of Core Analyzed		Average Permeability, Millidarcys		Permeability Capacity, Ft. x Md.			
716.3 - 724.3		5.7		62.1		353.80			
726.4 - 751.0		19.6		22.0		431.90			
716.3 - 751.0		25.3		31.1		785.70			

Depth Interval, Feet		Feet of Core Analyzed		Average Percent Oil Saturation		Average Percent Water Saturation		Average Oil Content Bbl./A. Ft.		Total Oil Content Bbls./Acre	
716.3 - 724.3		5.7		48.4		34.2		863		4,918	
726.4 - 751.0		19.6		39.8		36.0		644		12,613	
716.3 - 751.0		25.3		41.7		35.6		693		17,531	