

OILFIELD RESEARCH LABORATORIES

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

February 5, 1980

Apache Resources Corp.
1717 Kentucky Ave.
Joplin, Missouri 64801

Gentlemen:

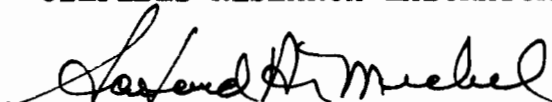
Enclosed herewith are the results of tests run on the rotary core taken from the J. Goley Lease, Well No. 4, Crawford County, Kansas, and submitted to our laboratory on January 25, 1980.

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



Sanford A. Michel

SAM/kas
4 c to Joplin, Missouri
1 c to Chanute, Kansas

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GENERAL INFORMATION & SUMMARY

Company Apache Resources Corp. Lease J. Goley Well No. 4

Location -

Section 17 Twp 28S Rge. 22E County Crawford State Kansas

Elevation, Feet

Name of Sand Tucker

Top of Core 499.0

Bottom of Core 517.0

Top of Sand 499.0

Bottom of Sand (Tested) 510.7

Total Feet of Permeable Sand 10.7

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 5

5.9

5.9

5 - 12

2.8

8.7

25 & Above

2.0

10.7

Average Permeability Millidarcys 10.1

Average Percent Porosity 16.0

Average Percent Oil Saturation 36.0

Average Percent Water Saturation 45.4

Average Oil Content, Bbls./A. Ft. 447.

Total Oil Content, Bbls./Acre 5,235.

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LOGName Apache Resources Corp. Lease J. Goley Well No. 4

<u>Depth Interval, Feet</u>	<u>Description</u>
499.0 - 507.8	Brown and gray laminated sandstone and shale.
507.8 - 509.0	Gray and brown laminated shale and sandstone.
509.0 - 510.7	Gray and light brown laminated shale and sandstone.
510.7 - 517.0	Gray laminated shale and sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Apache Resources Corporation Lease J. Goley Well No. 4

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	499.4	16.4	30	44	74	382	1.0	1.0	1.0	382	1.00
2	500.5	14.2	30	51	81	331	26.	1.0	2.0	331	26.00
3	501.5	12.4	43	50	93	414	1.6	1.0	3.0	414	1.60
4	502.5	17.1	35	46	81	464	2.6	1.0	4.0	464	2.60
5	503.5	17.6	41	34	75	560	8.3	1.0	5.0	560	8.30
6	504.5	16.3	38	47	85	481	10.	1.0	6.0	481	10.00
7	505.5	17.2	39	40	79	520	1.9	1.0	7.0	520	1.90
8	506.5	17.6	41	30	71	560	50.	1.0	8.0	560	50.00
9	507.5	16.2	37	50	87	465	7.2	0.8	8.8	372	5.76
10	508.5	15.6	33	56	89	399	1.0	1.2	10.0	479	1.20
11	509.5	14.6	36	57	93	408	Imp.	1.0	11.0	408	0.00
12	510.5	18.0	27	35	62	377	0.24	0.7	11.7	264	0.17

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Apache Resources Corporation		Lease		J. Goley		Well No.					
Depth Interval, Feet		Feet of Core Analyzed		Average Permeability, Millidarcys		Permeability Capacity Ft. x Md.							
499.0 - 510.7		10.7		10.1		108.53							
Depth Interval, Feet		Feet of Core Analyzed		Average Percent Porosity		Average Percent Oil Saturation		Average Oil Content Bbl./A. Ft.		Total Oil Content Bbls./Acre			
499.0 - 510.7		11.7		16.0		36.0		45.4		447		5,235	