



OILFIELD RESEARCH LABORATORIES

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

May 16, 1978

TEC Drilling Company, Inc.
P.O. Box 693
El Dorado, Kansas 67042

Gentlemen:

Enclosed herewith are the results of tests run on the rotary cores taken from the Tom Kee Lease, Well No. 13, Woodson County, Kansas, and submitted to our laboratory on May 11, 1978.

These cores were sampled by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:cb

4 c to El Dorado, Kansas

1 c to Yates Center, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company TEC Drilling Co., Inc. Lease Tom Kee Well No. 13

Location SE NW SE

Section 18 Twp. 25S Rge. 16E County Woodson State Kansas

Name of Sand - - - - - Upper Squirrel

Top of Core - - - - - (Received) 941.0

Bottom of Core - - - - - (Received) 949.6

Top of Sand - - - - - (Received) 941.0

Bottom of Sand - - - - - (Analyzed) 949.4

Total Feet of Permeable Sand - - - - - 6.0

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 10	2.1	2.1
10 - 30	2.7	4.8
30 & Above	1.2	6.0

Average Permeability Millidarcys - - - - - 26.7

Average Percent Porosity - - - - - 17.6

Average Percent Oil Saturation - - - - - 47.2

Average Percent Water Saturation - - - - - 31.9

Average Oil Content, Bbls./A. Ft. - - - - - 665.

Total Oil Content, Bbls./Acre - - - - - 3,990.

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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GENERAL INFORMATION & SUMMARY

Company TEC Drilling Co., Inc. Lease Tom Kee Well No. 13

Location SE NW SE

Section 18 Twp. 25S Rge. 16E County Woodson State Kansas

Name of Sand	- - - - -	Lower Squirrel
Top of Core	- - - - - (Received) - - - - -	987.0
Bottom of Core	- - - - - (Received) - - - - -	996.0
Top of Sand	- - - - - (Received) - - - - -	987.0
Bottom of Sand	- - - - - (Received) - - - - -	996.0
Total Feet of Permeable Sand	- - - - -	8.5

Total Feet of Floodable Sand - - - - -		
Distribution of Permeable Sand:		
Permeability Range	Feet	Cum. Ft.
Millidarcys		
1.3	1.3	1.3
2.3	2.3	3.6
4.9	4.9	8.5

Average Permeability Millidarcys	- - - - -	30.6
Average Percent Porosity	- - - - -	17.1
Average Percent Oil Saturation	- - - - -	52.6
Average Percent Water Saturation	- - - - -	24.1
Average Oil Content, Bbls./A. Ft.	- - - - -	704.
Total Oil Content, Bbls./Acre	- - - - -	5,982.
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	- - - - -	

OILFIELD RESEARCH LABORATORIES

- LOG -

Company TEC Drilling Co, Inc. Lease Tom Kee Well No. 13

<u>Depth Interval, Feet</u>	<u>Description</u>	<u>Upper Squirrel Sand</u>
941.0 - 942.4	Dark fine grained sandstone.	
942.4 - 944.8	Gray sandy shale.	
944.8 - 949.4	Dark fine grained sandstone.	
949.4 - 949.6	Dark shaly sandstone.	
949.6 - 987.0	Drilled.	
		<u>Lower Squirrel Sand</u>
987.0 - 987.3	Dark shaly sandstone.	
987.3 - 994.2	Dark slightly shaly sandstone.	
994.2 - 994.7	Gray sandy shale.	
994.7 - 996.0	Dark shaly sandstone.	

RESULTS OF SATURATION & PERMEABILITY TESTS

Company TEC Drilling Company, Inc. Lease Tom Kee

13

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.	Cur. Ft.		
						<u>UPPER SQUIRREL SAND</u>					
1	941.9	14.1	30	55	85	329	0.17	1.4	1.4	460	0.24
2	944.9	15.2	34	42	76	402	3.0	0.7	2.1	281	2.10
3	946.0	19.4	53	18	71	800	81.	1.2	3.3	960	97.20
4	947.5	19.1	55	20	75	817	20.	1.4	4.7	1144	28.00
5	948.8	19.2	59	27	86	881	25.	1.3	6.0	1145	32.50
						<u>LOWER SQUIRREL SAND</u>					
6	987.2	12.3	41	50	91	392	1.5	0.3	0.3	118	0.45
7	988.5	16.6	33	38	71	426	33.	1.6	1.9	682	52.80
8	989.4	18.7	48	22	70	698	44.	1.0	2.9	698	44.00
9	990.4	13.1	58	14	72	591	8.5	1.0	3.9	591	8.50
10	991.7	19.2	48	19	67	717	36.	1.2	5.1	860	43.20
11	992.7	17.9	56	13	69	779	62.	1.1	6.2	857	68.20
12	993.8	18.7	70	17	87	1018	21.	1.0	7.2	1018	21.00
13	995.0	17.1	67	30	97	891	17.	1.3	8.5	1158	22.10