



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650
November 2, 1967

Mr. Floyd Dotson
Security State Bank
Ft. Scott, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the Rotary core taken from the Kenneth Snyder Lease, Well No. 1, Bourbon County, Kansas, and submitted to our laboratory on October 24, 1967.

This core was sampled and the samples sealed in plastic bags by a representative of Oilfield Research Laboratories. The core from 144.0 feet - 164.0 feet was out approximately 2 hours prior to sampling.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:bjo

3 c. - Ft. Scott, Kansas
1 c. - Chanute, Kansas

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company	Floyd Dotson		Lease	Kenneth Snyder		Well No.	1
Location	SE, SW, SW						
Section	30	Twp.	23S	Rge.	24E	County	Bourbon
						State	Kansas
Name of Sand	-	-	-	-	-	-	Squirrel
Top of Core	-	-	-	-	-	-	134.0
Bottom of Core	-	-	-	-	-	-	177.0
Top of Sand	-	-	-	-	-	-	135.4
Bottom of Sand	-	-	-	-	-	-	174.5
Total Feet of Permeable Sand	-	-	-	-	-	-	20.2
Total Feet of Floodable Sand	-	-	-	-	-	-	-
Distribution of Permeable Sand:							
Permeability Range			Feet		Cum. Ft.		
Millidarcys							
0 - 5			6.1		6.1		
5 - 10			3.2		9.3		
10 - 30			6.9		16.2		
30 & above			4.0		20.2		
Average Permeability Millidarcys	-	-	-	-	-	-	16.5
Average Percent Porosity	-	-	-	-	-	-	19.3
Average Percent Oil Saturation	-	-	-	-	-	-	31.4
Average Percent Water Saturation	-	-	-	-	-	-	49.6
Average Oil Content, Bbls./A. Ft.	-	-	-	-	-	-	469.
Total Oil Content, Bbls./Acre	-	-	-	-	-	-	10,866.
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

GENERAL INFORMATION & SUMMARY

Company	Floyd Dotson	Lease	Kenneth Snyder	Well No.	1
Location	SE, SW, SW				
Section	30	Twp	23S	Rge.	24E
County	Bourbon			State	Kansas
Name of Sand					Tucker
Top of Core					363.0
Bottom of Core					383.0
Top of Sand	(Cored)				363.0
Bottom of Sand	(Cored)				383.0
Total Feet of Permeable Sand					20.0
Total Feet of Floodable Sand					-
Distribution of Permeable Sand:					
Permeability Range Millidarcys	Feet		Cum. Ft.		
0 - 10	2.0		2.0		
10 - 25	6.0		8.0		
25 - 50	7.0		15.0		
50 & above	5.0		20.0		
Average Permeability Millidarcys					47.1
Average Percent Porosity					20.9
Average Percent Oil Saturation					26.8
Average Percent Water Saturation					45.3
Average Oil Content, Bbls./A. Ft.					433.
Total Oil Content, Bbls./Acre					8,657.
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					

Company Floyd Dotson Lease Kenneth Snyder Well No. 1

Depth Interval, Description
Feet

SQUIRREL SAND

134.0 - 135.4 - Gray and brown laminated sandstone and shale.
135.4 - 138.5 - Light brown shaly sandstone.
138.5 - 141.0 - Grayish light brown laminated sandy shale.
141.0 - 144.0 - Loss.
144.0 - 144.9 - Light brown shaly sandstone.
144.9 - 146.8 - Brown sandstone.
146.8 - 149.0 - Gray and brown laminated shaly sandstone.
149.0 - 150.2 - Gray laminated sandy shale.
150.2 - 151.3 - Brown shaly sandstone.
151.3 - 156.8 - Gray and brown laminated sandstone and shale.
156.8 - 159.0 - Light brown laminated shaly sandstone.
159.0 - 160.2 - Light brown sandstone.
160.2 - 164.3 - Gray and light brown laminated sandstone and shale.
164.3 - 166.7 - Light brown sandstone.
166.7 - 168.9 - Light brown laminated slightly shaly sandstone.
168.9 - 171.3 - Light brown laminated shaly sandstone.
171.3 - 174.5 - Grayish light brown slightly calcareous sandstone.
174.5 - 177.0 - Gray and light brown laminated sandstone & shale.

TUCKER SAND

363.0 - 364.0 - Gray sandstone.
364.0 - 368.0 - Dark brown sandstone.
368.0 - 372.0 - Brown laminated shaly sandstone.
372.0 - 373.0 - Grayish light brown sandstone.

- LOG -

Company Floyd Dotson Lease Kenneth Snyder Well No. 1

Depth Interval, Description
Feet

TUCKER SAND

373.0 - 374.0 - Gray and brown laminated shaly sandstone.

374.0 - 379.0 - Grayish light brown sandstone.

379.0 - 383.0 - Grayish light brown laminated shaly sandstone.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company		Floyd Dotson		Lease		Kenneth Snyder		Well No.		1	
SQUIRREL SAND											
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	134.4	18.6	37	57	94	534	Imp.	0.8	0.8	427	0.00
2	135.2	18.7	39	56	95	566	0.18	0.6	1.4	340	0.11
3	136.1	18.4	32	58	90	457	30.	1.1	2.5	503	33.00
4	137.1	19.0	32	54	86	472	8.1	1.0	3.5	472	8.10
5	138.2	21.1	30	54	84	491	19.	1.0	4.5	491	19.00
6	139.2	17.2	26	69	95	347	Imp.	1.0	5.5	347	0.00
7	140.9	16.3	26	65	91	329	1.1	0.5	6.0	165	0.55
8	145.0	18.8	42	29	71	612	61.	0.6	6.6	367	36.60
9	145.9	17.7	36	24	60	494	44.	0.5	7.1	247	22.00
10	146.6	19.1	38	33	71	563	33.	0.8	7.9	450	26.40
11	147.8	18.3	35	47	82	497	0.93	1.2	9.1	596	1.11
12	148.9	17.2	28	53	81	374	1.8	1.0	10.1	374	1.80
13	150.8	21.3	30	35	65	496	10.	1.1	11.2	546	11.00
14	156.9	19.8	36	39	77	553	1.1	0.5	11.7	277	0.55
15	160.0	21.4	26	30	56	432	26.	1.2	12.9	518	31.20
16	164.5	21.4	29	51	80	482	18.	0.7	13.6	338	12.60
17	165.5	21.8	31	48	79	524	44.	1.0	14.6	524	44.00
18	166.5	22.0	33	45	78	563	27.	0.7	15.3	394	18.90
19	167.5	20.7	44	34	78	707	5.1	1.3	16.6	920	6.63
20	168.5	21.2	39	39	78	642	5.2	0.9	17.5	578	4.68
21	169.5	16.5	23	72	95	295	Imp.	1.1	18.6	324	0.00
22	170.5	17.2	19	70	89	254	0.53	1.3	19.9	330	0.69
23	171.5	19.2	21	56	77	313	1.5	1.0	20.9	313	1.50
24	173.0	18.3	36	51	87	511	21.	1.0	21.9	511	21.00

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Floyd Dotson Lease Kenneth Snyder 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.		
25	173.5	17.8	31	50	81	428	27.	1.2	23.1	514	32.40
						TUCKER SAND					
26	363.5	22.2	8	81	89	138	296.	1.0	24.1	138	296.00
27	364.5	21.8	57	20	77	964	66.	1.0	25.1	964	66.00
28	365.5	21.8	52	24	76	880	34.	1.0	26.1	880	34.00
29	366.5	21.6	40	25	65	670	42.	1.0	27.1	670	42.00
30	367.5	20.6	45	32	77	720	23.	1.0	28.1	720	23.00
31	368.5	22.0	53	20	73	904	25.	1.0	29.1	904	25.00
32	369.5	22.5	23	37	60	402	52.	1.0	30.1	402	52.00
33	370.5	20.2	33	33	66	517	18.	1.0	31.1	517	18.00
34	371.5	19.4	31	33	64	467	11.	1.0	32.1	467	11.00
35	372.5	22.4	12	63	75	208	72.	1.0	33.1	208	72.00
36	373.5	15.7	30	48	78	366	14.	1.0	34.1	366	14.00
37	374.5	22.7	7	65	72	123	41.	1.0	35.1	123	41.00
38	375.5	24.2	9	68	77	169	99.	1.0	36.1	169	99.00
39	376.5	24.2	15	45	60	282	35.	1.0	37.1	282	35.00
40	377.5	21.4	21	46	67	349	21.	1.0	38.1	349	21.00
41	378.5	20.1	24	48	72	374	28.	1.0	39.1	374	28.00
42	379.5	18.8	22	48	70	321	11.	1.0	40.1	321	11.00
43	380.5	19.1	13	55	68	193	8.3	1.0	41.1	193	8.30
44	381.5	20.5	20	53	73	318	38.	1.0	42.1	318	38.00
45	382.5	17.9	21	62	83	292	7.9	1.0	43.1	292	7.90

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Floyd Dotson	Lease	Kenneth Snyder	Well No.	1
Depth Interval, Feet	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	
		SQUIRREL SAND			
	134.8 - 160.2	11.1	17.2	191.42	
	164.3 - 174.5	9.1	15.7	142.40	
	134.8 - 174.5	20.2	16.5	333.82	
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
		SQUIRREL SAND			
134.0 - 160.2	12.9	19.2	32.2	474	6,120.
164.3 - 174.5	10.2	19.4	30.5	465	4,746.
134.0 - 174.5	23.1	19.3	31.4	469	10,866.

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Floyd Dotson	Lease	Kenneth Snyder	Well No.	1
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	
		</			