

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

700 NORTH MISSION
OKMULGEE, OKLAHOMA
PHONE: 4444

Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: HE 1-2650

December 4, 1961

Continental Oil Company
2013 Lohoma Road
Enid, Oklahoma

Gentlemen:

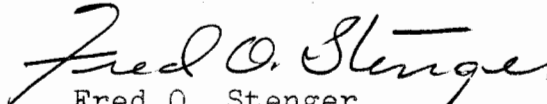
Enclosed herewith are the results of tests run on the Rotary core taken from the John Ord Lease, Well No. 47, Labette County, Kansas, and submitted to our laboratory on November 21, 1961.

This core was sampled and the samples sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Fred O. Stenger

FOS:rf

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GENERAL INFORMATION & SUMMARY

Company Continental Oil Co. Lease John Ord Well No. 47
 Location 1095' South of North line & 1545' East of West line NW $\frac{1}{4}$
 Section 35 Twp. 32S Rge. 17E County Labette State Kansas
 Name of Sand - - - - - Bartlesville
 Top of Core - - - - - (Received) - - - - - 701.0
 Bottom of Core - - - - - (Received) - - - - - 738.5
 Top of Sand - - - - - (Received) - - - - - 701.0
 Bottom of ^{Good} Sand - - - - - 732.0
 Total Feet of Permeable Sand - - - - - 33.0
 Total Feet of Floodable Sand - - - - - -
 Distribution of Permeable Sand:

Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 1	6.0	6.0
1 - 5	20.0	26.0
5 - 10	4.0	30.0
10 & above	3.0	33.0

 Average Permeability Millidarcys - - - - - 4.1
 Average Percent Porosity - - - - - 16.1
 Average Percent Oil Saturation - - - - - 20.4
 Average Percent Water Saturation - - - - - 59.4
 Average Oil Content, Bbls./A. Ft. - - - - - 254.
 Total Oil Content, Bbls./Acre - - - - - 9,420.
 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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LOGCompany Continental Oil Co. Lease John Ord Well No. 47

Depth Interval, Feet	Description
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701.0 - 707.0	- Grayish light brown laminated shaley sandstone.
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707.0 - 708.0	- Laminated sandstone and shale.
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708.0 - 732.0	- Grayish light brown laminated shaley sandstone.
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732.0 - 733.0	- Grayish light brown calcareous sandstone.
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733.0 - 738.0	- Gray laminated shaley carbonaceous sandstone.
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738.0 - 738.5	- Black shale.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Continental Oil Co.

Lease

John Ord

Well No.

47

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	701.5	17.2	12	64	76	160	0.75	1.0	1.0	160	0.75
2	702.5	16.6	12	68	80	155	2.1	1.0	2.0	155	2.10
3	703.5	16.4	20	67	87	254	12.	1.0	3.0	254	12.00
4	704.5	17.3	8	62	70	107	13.	1.0	4.0	107	13.00
5	705.5	16.0	15	68	83	186	3.3	1.0	5.0	186	3.30
6	706.5	15.5	17	59	76	204	0.39	1.0	6.0	204	0.39
7	707.5	8.6	25	70	95	167	3.0	1.0	7.0	167	3.00
8	708.5	17.2	14	54	68	187	3.9	1.0	8.0	187	3.90
9	709.5	15.7	14	61	75	170	3.5	1.0	9.0	170	3.50
10	710.5	18.0	20	56	76	279	6.1	1.0	10.0	279	6.10
11	711.5	18.0	15	53	68	210	8.6	1.0	11.0	210	8.60
12	712.5	17.3	24	54	78	322	16.	1.0	12.0	322	16.00
13	713.5	14.8	11	72	83	126	0.33	1.0	13.0	126	0.33
14	714.5	15.6	18	39	57	218	9.9	1.0	14.0	218	9.90
15	715.5	11.7	40	57	97	363	4.7	1.0	15.0	363	4.70
16	716.5	17.4	27	50	77	364	2.3	1.0	16.0	364	2.30
17	717.5	17.0	19	61	80	250	3.1	1.0	17.0	250	3.10
18	718.5	14.7	17	71	88	194	3.6	1.0	18.0	194	3.60
19	719.5	18.3	23	49	72	327	4.8	1.0	19.0	327	4.80
20	720.5	15.2	14	76	90	165	1.4	1.0	20.0	165	1.40
21	721.5	17.4	27	51	78	364	0.52	1.0	21.0	364	0.52
22	722.5	17.4	33	49	82	445	1.2	1.0	22.0	445	1.20
23	723.5	16.6	12	64	76	155	0.45	1.0	23.0	155	0.45
24	724.5	16.4	14	77	91	178	1.8	1.0	24.0	178	1.80
25	725.5	17.2	22	46	68	293	4.8	1.0	25.0	293	4.80
26	726.5	17.4	28	52	80	378	3.8	1.0	26.0	378	3.80
27	727.5	18.1	29	51	80	407	1.8	1.0	27.0	407	1.80
28	728.5	17.5	22	58	80	298	3.1	1.0	28.0	298	3.10
29	729.5	17.5	16	55	71	217	5.8	1.0	29.0	217	5.80

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Continental Oil Co. Lease John Ord Well No. 47

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.		
30	730.5	18.9	31	50	81	455	2.1	1.0	30.0	455	2.10
31	731.5	18.2	30	51	81	424	3.7	1.0	31.0	424	3.70
32	732.5	12.5	30	44	74	291	1.1	1.0	32.0	291	1.10
33	733.5	14.9	23	74	97	266	0.47	1.0	33.0	266	0.47
34	734.5	14.3	20	63	83	222	Imp.	1.0	34.0	222	0.00
35	735.5	13.7	17	70	87	180	Imp.	1.0	35.0	180	0.00
36	736.5	13.5	25	69	94	262	Imp.	1.0	36.0	262	0.00
37	737.5	17.5	13	62	75	177	Imp.	1.0	37.0	177	0.00
								Total	-----	9,420	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.	
Continental Oil Co.		John Ord		47	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
701.0 - 713.0	12.0	6.1	72.64		
713.0 - 723.0	10.0	3.2	31.85		
723.0 - 734.0	11.0	2.6	28.92		
701.0 - 734.0	33.0	4.1	133.41		

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbl./Acre
701.0 - 713.0	12.0	16.2	16.3	61.2	200	2,401
713.0 - 723.0	10.0	16.0	22.9	57.5	282	2,816
723.0 - 738.0	15.0	16.3	22.2	59.0	280	4,203
701.0 - 738.0	37.0	16.1	20.4	59.4	254	9,420