

OIL FIELD RESEARCH LABORATORIES  
CHANUTE, KANSAS

April 7, 1951

Deep Rock Oil Corporation  
Atlas Life Building  
Tulsa, Oklahoma

Attention: Mr. T. F. Lawry

Gentlemen:

Enclosed herewith is the report of the partial analysis made on the 8 $\frac{1}{2}$ " Rotary core taken from the Badders Lease, Well No. W-24, Anderson County, Kansas, and submitted to our laboratory on March 31, 1951.

No recovery is given for this well, as the tests showed that the sand would not take water even at a pressure of 50 pounds per square inch. Chances are, it would be advisable to shoot the sand heavily hoping to cause fracture to penetrate into more permeable sand.

Very truly yours,

OIL FIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:bb

c.c. to Mr. Neil Henderson  
Mr. Jack McQueeney

8-21-21E  
Badder W-24

DEEP ROCK OIL CORPORATION

CORE ANALYSIS REPORT

BADDERS LEASE

WELL NO. W-24

ANDERSON COUNTY, KANSAS

OIL FIELD RESEARCH LABORATORIES

CHANUTE, KANSAS

APRIL 7, 1951

# Oil Field Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Deep Rock Oil Corporation Lease Badders Well No. W-24

Location \_\_\_\_\_

Section 8 Twp. 21S Rge. 21E County Anderson State Kansas

Name of Sand	Squirrel
Top of Core	584.94
Bottom of Core	614.04
Top of Sand	585.15
Bottom of Sand	594.85
Total Feet of Permeable Sand <b>(To water)</b>	None

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
--	------	----------

Average <b>Effective</b> Permeability Millidarcys	0.00
Average Percent Porosity	14.73
Average Percent Oil Saturation	32.77
Average Percent Water Saturation	-
Average Oil Content, Bbls./A. Ft.	377.
Total Oil Content, Bbls./Acre	1,838.
Average Percent Oil Recovery by Laboratory Flooding Tests	None
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	None
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	None
Total Calculated Oil Recovery, Bbls./Acre	
Packer Setting, Feet	
Viscosity, Centipoises @	
A. P. I. Gravity, degrees @ 60 °F	

OIL FIELD RESEARCH LABORATORIES  
CHANUTE, KANSAS

LOG

Company Deep Rock Oil Corporation Lease Badders Well No. W-24

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
584.94 - 585.15	- Finely laminated sandy shale.
585.15 - 585.30	- Brown fine grained micaceous sandstone.
585.30 - 585.45	- Brown fine grained finely laminated shaley sandstone.
585.45 - 585.70	- Brown fine grained slightly shaley sandstone.
585.70 - 586.00	- Brown fine grained finely laminated shaley sandstone.
586.00 - 586.25	- Finely laminated sandy shale.
586.25 - 586.50	- Brown fine grained slightly shaley sandstone.
586.50 - 587.25	- Finely laminated sandy shale.
587.25 - 587.50	- Brown fine grained laminated shaley sandstone.
587.50 - 587.80	- Brown fine grained finely laminated shaley sandstone.
587.80 - 588.10	- Brown fine grained sandstone.
588.10 - 588.30	- Finely laminated sandy shale.
588.30 - 588.55	- Brown fine grained sandstone.
588.55 - 588.80	- Brown fine grained laminated shaley sandstone.
588.80 - 588.95	- Gray sandy shale.
588.95 - 589.10	- Brown fine grained laminated shaley sandstone.
589.10 - 589.70	- Brown fine grained finely laminated shaley sandstone.
589.70 - 589.95	- Brown fine grained slightly laminated shaley sandstone.
589.95 - 590.60	- Finely laminated sandy shale.
590.60 - 591.05	- Finely laminated shaley sandstone.
591.05 - 591.75	- Brown fine grained sandstone.
591.75 - 592.58	- Brown fine grained laminated shaley sandstone.

OIL FIELD RESEARCH LABORATORIES  
CHANUTE, KANSAS

-2-

592.58 - 593.57 - Gray shale.

593.57 - 593.70 - Laminated sandy shale.

593.70 - 594.85 - Brown fine grained micaceous shaley sandstone.

594.85 - 596.20 - Gray shale.

596.20 - 614.04 - Shale (discarded at well).

**Oil Field Research Laboratories**

**RESULTS OF SATURATION TESTS**

**TABLE III**

Company Deep Rock Oil Corporation Lease Beckers Well No. 1-2

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content, Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water	Total		Ft.	Cum. Ft.	
F-1	585.85	14.8	29.9	-	-	369	0.30	0.30	193
F-2	586.63	14.1	30.2	-	-	370	0.75	1.05	248
F-3	587.65	12.4	27.8	-	-	268	0.30	1.35	80
F-4	588.68	14.6	32.2	-	-	364	0.25	1.60	92
F-5	589.58	13.8	24.3	-	-	260	0.60	2.20	156
F-6	591.18	14.7	37.5	-	-	427	0.70	2.90	299
F-7	592.08	14.9	33.2	-	-	384	0.83	3.73	318
F-8	594.18	16.1	37.8	-	-	472	1.15	4.88	549
							<b>Total -</b>	<b>- - - -</b>	<b>1,838</b>

Oil Field Research Laboratories

SUMMARY OF SATURATION TESTS

TABLE IV

Company Deep Rock Oil Corporation Lease Badger Well No. W-24

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbls./A. Ft.	Total Oil Content Bbls./Acre
585.70-594.85	4.88	14.73	32.77	-	377	1,838

Oil Field Research Laboratories

RESULTS OF LABORATORY FLOODING TESTS

TABLE V

Company Deep Rock Oil Corporation Lease Baddara Well No. X-24

Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation			Volume of Water Recovered cc*	Effective Permeability, Millidarcys **	Initial Fluid Production Pressure Lbs./Sq. In.
			Percent	Bbls./A. Ft.	Percent	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.			
1	585.65	14.8	29.9	343	0.0	0	29.9	67.1	343	0	Imp.	50%
2	586.63	14.1	30.2	330	0.0	0	30.2	61.0	330	0	Imp.	50%
3	587.65	12.4	27.8	268	0.0	0	27.8	70.4	268	0	Imp.	50%
4	588.68	14.6	32.2	364	0.0	0	32.2	63.0	364	0	Imp.	50%
5	589.58	13.8	24.3	260	0.0	0	24.3	64.2	260	0	Imp.	50%
6	591.18	14.7	37.5	427	0.0	0	37.5	55.0	427	0	Imp.	50%
7	592.08	14.9	33.2	364	0.0	0	33.2	62.5	364	0	Imp.	50%
8	594.18	16.1	37.8	472	0.0	0	37.8	58.2	472	0	Imp.	50%

Notes: cc - cubic centimeter  
 \* - Volume of water recovered at the time of maximum oil recovery.  
 \*\* - Determined by passing water through sample which still contains residual oil.