

**EARLOUGHER ENGINEERING**  
CORE SUMMARY

Company M. W. Skriver Lease McCaslin Well No. C-1  
 Location 2585 feet south, 210 feet east of northwest corner  
 Section 5 Twp. 23-S Rge. 21-E County Anderson State Kansas  
 Formation Cored Bartlesville Sand Type Core No. 6 Baker Barrel  
 Date Cored 6-24-45 Date Shot \_\_\_\_\_ Date Completed \_\_\_\_\_

Depths:

Elevation	1049.0 ft.
Started coring, shale	723.2 "
Top of sand	734.9 "
Bottom of sand	750.5 "
Net feet of sand	15.4 "
Black sand (750.5 - 751.0 feet)	0.5 "
Coal	751.0 - 752.0 "
Bottom of core, shale	753.8 "
Total cored	30.6 "
Feet analyzed	16.8 "

Shot Record:

			Set Packer <u>733.0</u> Feet		
			Bottom of hole - <u>750.5 ft.</u>		
<u>Depth, Feet</u>		<u>Feet</u>	<u>Shell Diameter</u>	<u>Quarts Per Foot</u>	<u>Total Quarts</u>
<u>From</u>	<u>To</u>				
736.	741.	5.	4 "	2.5	12.5
741.	750.	9.	4 1/2 "	3.2	28.8
					<u>41.3</u>

Completion Data:

Hrs. well stood after coring 40; Feet Fluid in Hole 415 (Oil 406 Water 9)  
 Clean-out time, hrs. 24; Initial production, bbls. day 15 (Oil 15 Water No)

Remarks: This core shows 15.4 net feet of floodable oil sand in an unbroken section between 734.9 and 750.5 feet.

PERMEABILITY Average permeability is 75 millidarcys. Values range from 15 to 260 millidarcys but lie, for the most part, between 20 and 140 millidarcys. Permeability capacity is 1,156 foot millidarcys.

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POROSITY Porosity is uniformly good and averages 21.5 percent. Individual values range from 20.4 to 23.2 percent.

PERCENT SATURATION Average oil saturation is 36.9 percent and values range from 27 to 51 percent. Average water saturation is 38 percent.

OIL CONTENT The average oil content is 615 barrels per acre foot and values range from 530 to 810 barrels per acre foot.

LABORATORY FLOODING TESTS Oil recovery obtained in laboratory flooding tests averaged 128 barrels per acre foot. Average residual oil saturation after flooding was 27.5 percent and values varied from 25 to 30 percent.

CONCLUSIONS

1. Net feet of oil pay is 15.4 feet.
2. Total average saturation is 75 percent which indicates the possibility of oil having been lost from the core by gas expansion although this well is located only 150 feet from two old oil wells.
3. Estimated recovery by water flooding is approximately 5,700 barrels per acre from the area of which this core is representative.

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# GEOLOGIC STANDARDS COMPANY

## RESULTS OF SATURATION TESTS

COMPANY M. W. Shriver

WELL McCaslin No. C-1

Sat. No.	Depth Feet	Porosity Per Cent	PER CENT SAT.			Avg. Oil Content Bbls./A. Ft.	FT. OF SAND		Total Oil Content Bbls./Acre
			Oil	Water	Total		Ft.	Cum.	
1	731.7	17.6	28.	32.	60.	390.	0.9	0.9	350.
2	735.3	20.4	51.	48.	99.	810.	1.4	2.3	1130.
3	736.7	23.2	39.	27.	66.	700.	1.1	3.4	770.
F- 4	737.7	22.3	38.	--	--	650.	1.0	4.4	650.
4	738.7	17.6	39.	40.	79.	530.	0.9	5.3	480.
5	740.9	20.7	43.	34.	77.	690.	2.0	7.3	1380.
6	742.1	21.3	36.	36.	72.	600.	1.8	9.1	1080.
F- 7	743.7	22.8	33.	--	--	580.	0.9	10.0	520.
7	744.4	22.8	27.	31.	58.	480.	1.3	11.3	620.
8	746.0	22.5	33.	36.	69.	580.	2.0	13.3	1160.
9	748.1	22.2	31.	38.	69.	540.	1.2	14.5	650.
10	748.9	21.1	39.	39.	78.	630.	1.0	15.5	630.
11	749.9	21.2	32.	35.	67.	530.	0.8	16.3	420.
12	750.8	19.1	57.	31.	88.	850.	0.5	16.8	430.

### SUMMARY

DEPTH FEET		FEET OF SAND	AVG. POROSITY	AVG. OIL SAT.	AVG. WATER SAT.	AVG. OIL CONTENT BBL./A. FT.	TOTAL OIL CONTENT BBL./ACRE
FROM	TO						
731.5	732.4	0.9	17.6	28.	32.	390.	350.
734.9	750.5	15.4	21.5	36.9	38.	615.	9490.
750.5	751.0	0.5	19.1	57.	31.	850.	430.

# GEOLOGIC STANDARDS COMPANY

## RESULTS OF PERMEABILITY TESTS

COMPANY M. W. Shriver WELL McCaslin No. C-1

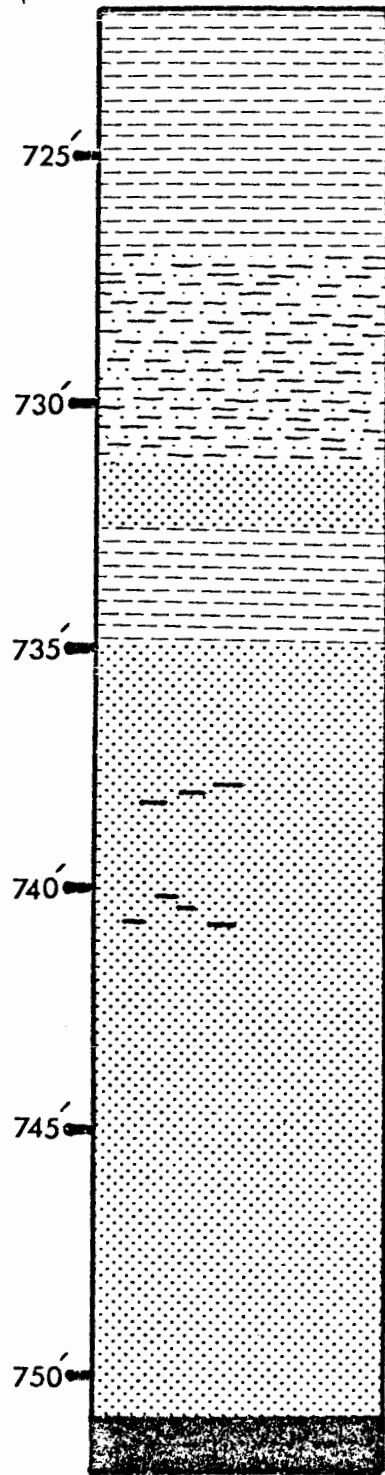
Sample No.	Depth Feet	Permeability Millidarcys	FEET OF SAND		Capacity Ft. X Md.	Sample No.	Depth Feet	Permeability Millidarcys	FEET OF SAND		Capacity Ft. X Md.
			Ft.	Cum. Ft.					Ft.	Cum. Ft.	
1	731.9	56.	0.9	0.9	50.	16	742.4	54.	0.6	8.4	32.
2	735.0	37.	0.5	1.4	18.	17	743.0	131.	0.7	9.1	92.
3	735.6	46.	0.5	1.9	23.	18	743.5	42.	0.4	9.5	17.
4	736.1	34.	0.4	2.3	14.	19	744.0	71.	0.5	10.0	36.
5	736.9	131.	0.7	3.0	92.	20	744.6	121.	0.7	10.7	85.
6	737.5	144.	0.4	3.4	58.	21	745.1	27.	0.6	11.3	16.
7	738.0	23.	0.6	4.0	14.	22	745.7	58.	1.1	12.4	64.
8	738.4	15.	0.4	4.4	6.	23	746.4				
9	739.0					24	747.4	37.	0.9	13.3	33.
10	739.4	129.	0.9	5.3	116.	25	748.0	61.	0.8	14.1	49.
11	739.9	260.	0.5	5.8	130.	26	748.6	81.	0.4	14.5	32.
12	740.3	114.	0.5	6.3	57.	27	749.2	64.	0.7	15.2	45.
13	740.7	34.	1.0	7.3	34.	28	749.6	65.	0.3	15.5	20.
14	741.4					29	750.1	49.	0.8	16.3	39.
15	741.9	67.	0.5	7.8	34.	30	750.6	20.	0.5	16.8	10.

### SUMMARY

DEPTH FEET		FEET OF SAND	AVERAGE PERMEABILITY	CAPACITY FT. X MD.
FROM	TO			
731.5	732.4	0.9	56.	50.
734.9	750.5	15.4	75.	1156.
750.5	751.0	0.5	20.	10.

Richard Eng. C-1-McCaslin  
SE SE NE 5-23-21 E  
elev. 1049'

Depths:



Mas. dk.-gr. slty. sh.

725'

Gy. to brn. par.-lam. sltst. & sh.

730'

Mas. v. fn.-gr. brn. oily ss.

Mas. dk.-gy. sh.

735'

Mas. brn. oily ss. w/few sid. layers & carb. ptgs.

740'

745'

Ss. becomes v. oily & blk. (tar sds.)

750'

Coal; v. fri.

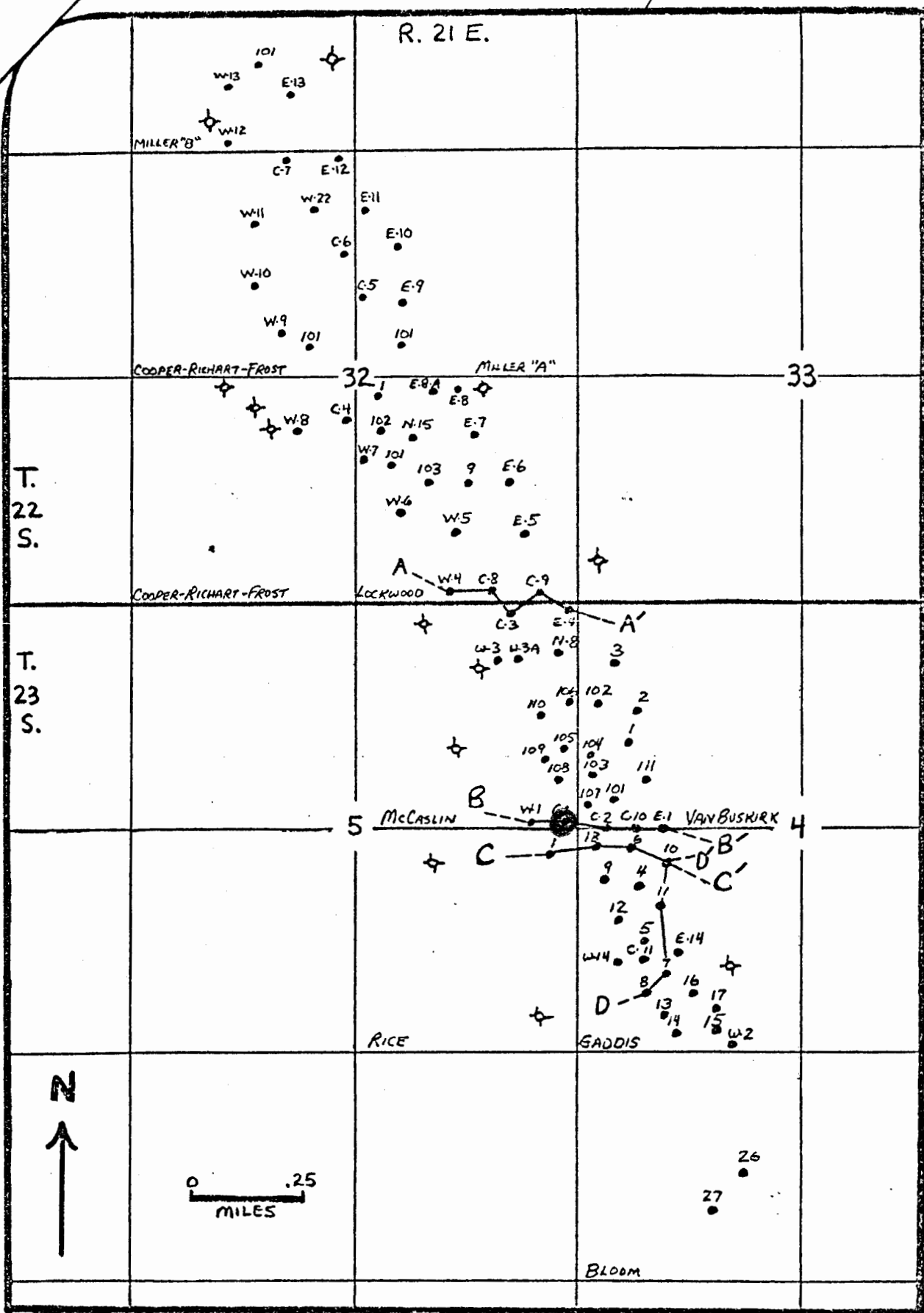
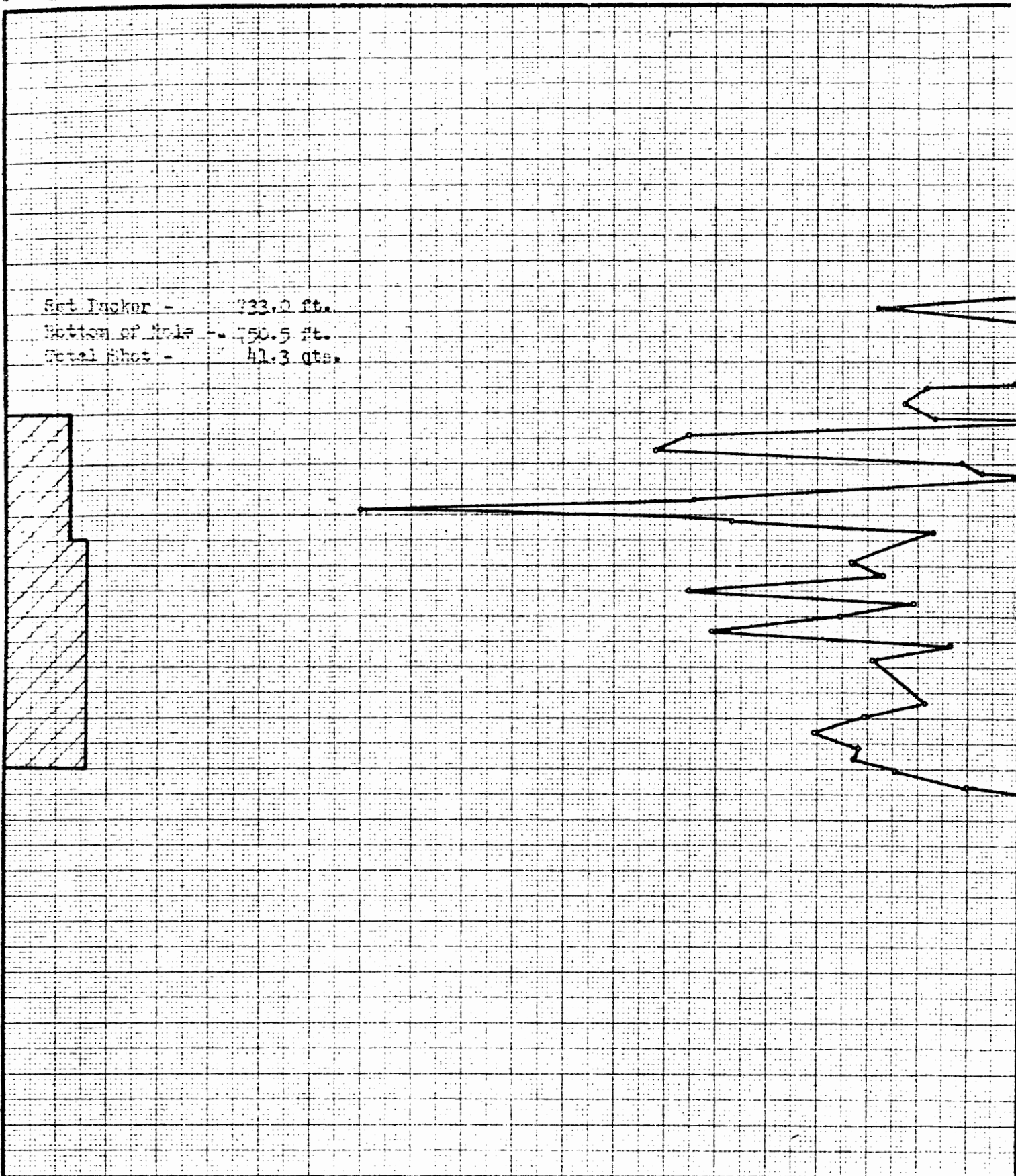
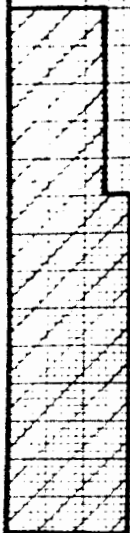


Figure 6. - Map of the Kincaid Oil Field showing leases, locations of wells, and lines of cross sections.

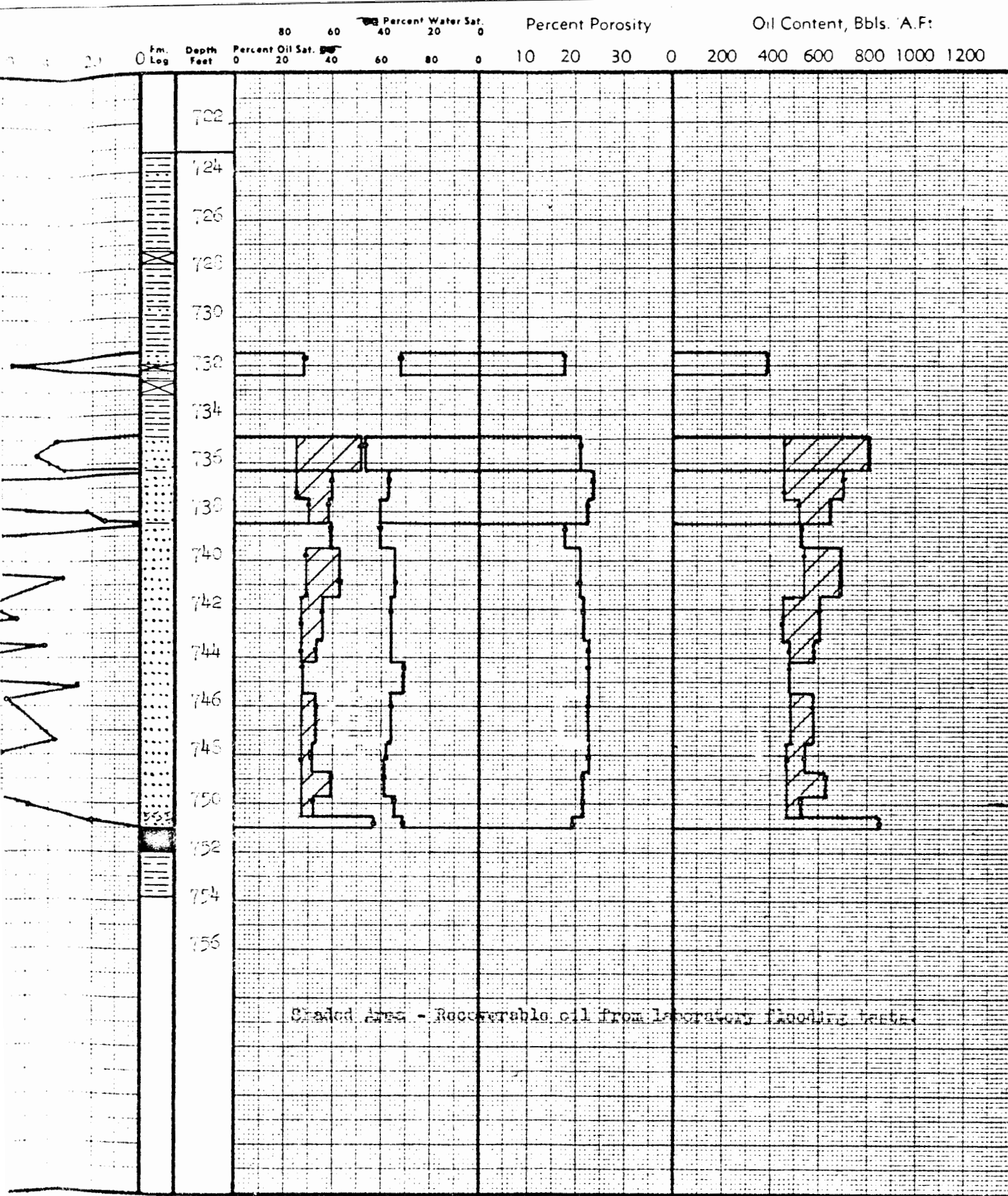
Permeability, Millidarcys

0 2 4 340 320' 300 280 260 240 220 200 180 160 140 120 100 80 60 40 20

Set Backer - 733.2 ft.  
 Bottom of Hole - 751.5 ft.  
 Total Pinos - 41.3 qts.



Sec	Sand	Depth, Feet		Net Ft of Sand	Avg. Per	Average Core Sat		Core Oil Content		Permeability	
		From	To			Oil	Water	Avg. B./A.Ft	Total Bbl/Ac	Avg Mds.	Capacity Ft x Mds
1	Bartlesville	732.5	732.4	0.9	17.6	20.	32.	390.	350.	50.	50.
2	Bartlesville	734.9	750.5	15.4	21.5	36.9	30.	615.	9400.	15.	1150.
3	Bartlesville	750.5	751.0	0.5	19.1	57.	31.	850.	430.	20.	10.



Capacity Ft. x Md.	Saturation		Oil Content	
	Oil	Water	B / A Ft	Bbl. / Ac
9. 11. 10.	27.5	52.	487.	

COMPANY M. W. SILVER  
 LEASE MC CASIN WELL NO. C-2  
 LOCATION 225' S., 210' E. of NW Corner  
SEC. 5 T. 33 N. R. 21E COUNTY Anderson  
 STATE Kansas DATE 7-2-46  
 EARLOUGHER ENGINEERING TULSA, OKLAHOMA