CORE ANALYSIS

W. C. CAPRON & N. R. WILLIAMSON

J. Ferris Lease

Well Exploration "A"

McKinley County, New Mexico

RYDER SCOTT COMPANY
PETROLEUM ENGINEERS
WICHITA FALLS, TEXAS

JOB NO. WD-444

FEATHERSTON BUILDING
922 EIGHTH STREET

RYDER SCOTT COMPANY
PETROLEUM ENGINEERS
WICHITA FALLS, TEXAS

TELEPHONE
723-7119

COMPANY W. C. Capron & N. R. Williamson

LEASE J. Ferris WELL NO. Expl. A FORMATION Mesa Verde Sand

COUNTY McKinley STATE New Mexico DATE 2/6/61

CORE CHART

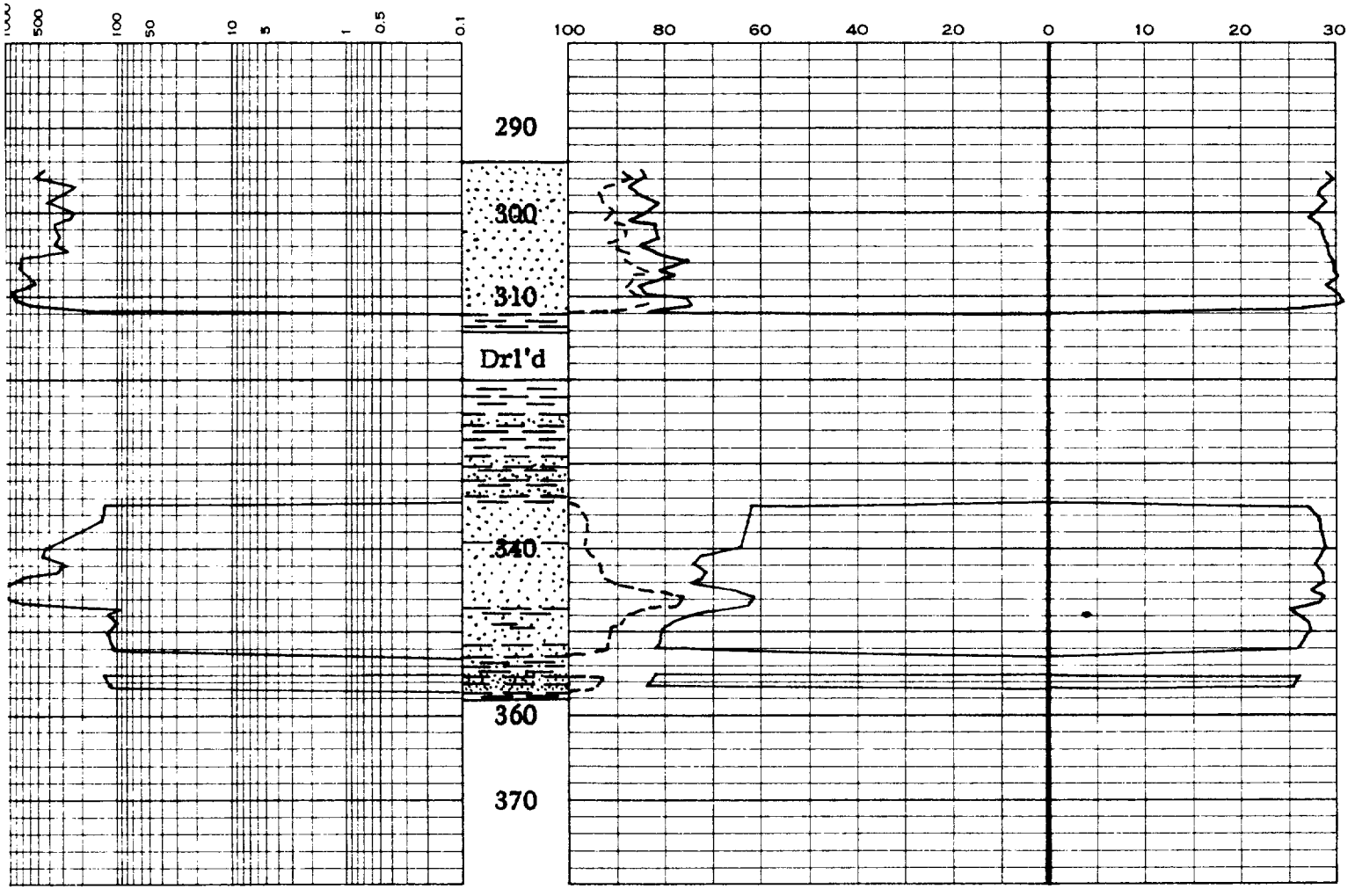
VERTICAL SCALE 5" = 100'

RESIDUAL OIL SATURATION - - -
% PORE SPACE
0 20 40 60 80 100

PERMEABILITY
MILLIDARCIES

TOTAL WATER SATURATION ——
% PORE SPACE

EFFECTIVE
POROSITY
PERCENT



AVERAGES:

POROSITY 28.1 %

PERMEABILITY 463. MD

RESIDUAL OIL SATURATION 10.4 %

TOTAL WATER SATURATION 77.8 %

RYDER SCOTT COMPANY
PETROLEUM ENGINEERS

WICHITA FALLS, TEXAS

COMPANY W. C. Capron & N. R. Williamson INTERVAL CORED 294' - 314' and 320' - 358'

LEASE J. Ferris WELL NO. Expl. A CORE LOSS INTERVAL None Reported

LOCATION 660' FSL & 1315' FEL, Sect. 18, FORMATION Mesa Verde Sand

T 18 N, R 10 W TYPE OF CORE Rotary (Air & Water)

COUNTY McKinley STATE N. Mex. DATE CORED 1/28/61 ELEVATION 6508

REMARKS

Jack A. Dodd

CORE ANALYSIS DATA

SAMPLE NUMBER	DEPTH	EFFECTIVE POROSITY	PERMEABILITY	SATURATION		PROBABLE PRODUCTION	REMARKS
				OIL	WATER		
	FEET	%	MILLIDARCIES	%	%		
1	295.4	29.0	455.	10.3	86.2		Upper zone (Samples Nos. 1 - 19)
2	296.1	29.5	563.	12.3	85.5		
3	297.0	28.2	229.	7.4	88.4		
4	297.8	27.9	304.	6.2	85.3		
5	299.0	28.9	428.	7.3	81.7		
6	299.9	27.9	246.	9.1	84.0		
7	300.7	26.8	278.	7.8	87.9		
8	301.6	27.9	366.	11.0	82.0		
9	302.9	28.3	323.	11.0	81.7		
10	303.9	28.4	364.	7.3	86.6		
11	304.9	28.5	287.	12.1	81.3		
12	305.7	29.6	715.	11.6	75.3		
13	306.6	29.8	724.	16.9	81.1		
14	307.6	30.3	622.	13.4	78.2		
15	308.5	28.9	547.	11.4	87.4		
16	309.3	30.4	897.	12.7	85.0		
17	310.1	31.0	833.	15.0	75.5		
18	310.9	30.6	732.	16.3	74.9		
19	311.8	26.1	188.	10.3	84.0		
20	335.6	27.2	139.	2.4	63.5		Lower zone (Samples Nos. 20 - 37) Samples 20, 21 and 22 selected in Ryder Scott laboratory on 2/1/61.
21	337.0	27.9	145.	4.4	64.1		
22	339.9	28.4	428.	4.1	64.8		

COMPANY W. C. Capron & N. R. Williamson LEASE AND WELL NO. J. Ferris Expl. A PAGE NO. 2

CORE ANALYSIS DATA

SAMPLE NUMBER	DEPTH	EFFECTIVE POROSITY	PERMEABILITY	SATURATION		PROBABLE PRODUCTION	REMARKS
				OIL	WATER		
	FEET	%	MILLIDARCIES	%	%		
23	341.2	28.1	445.	4.6	72.9		
24	341.9	27.7	279.	5.7	74.6		
25	342.7	28.3	342.	5.8	71.8		
26	343.3	28.4	675.	6.2	72.5		
27	344.2	28.4	841.	8.1	74.1		
28	344.9	27.3	1510.	17.3	66.6		
29	345.5	28.0	1667.	23.8	62.4		
30	346.2	27.5	679.	22.4	63.8		
31	347.1	25.0	90.	16.1	70.4		
32	348.0	25.7	130.	11.7	75.7		
33	349.1	27.0	106.	10.6	79.2		
34	350.4	27.2	148.	8.8	80.6		
35	352.0	26.1	127.	8.8	82.1		
36	355.5	26.2	146.	7.1	82.6		
37	356.7	25.7	118.	6.3	84.3		

Cored formation from 398' - 407' and from 447.7' - 453.7' was also received, however, ultra violet light revealed no oil shows, therefore, it was not analyzed.

EXPLANATION OF CORE CHART

The results of the core analysis are shown on the graph sheet which has a vertical scale of 5 inches = 100 feet. This is the conventional scale of electrical logs.

At the base of the core chart the arithmetical average values of effective porosity, permeability, oil saturation and water saturation are listed. These average values include only those which are predicted as productive of oil.

REPORTING OF CORE ANALYSIS

The report is a brief form to furnish measured values of the effective porosity, the permeability, the oil saturation and the water saturation.

Recovery values are reported in our complete core analysis report which is furnished when a detailed study of the core for valuation purposes is requested by the client.

OIL AND WATER SATURATIONS

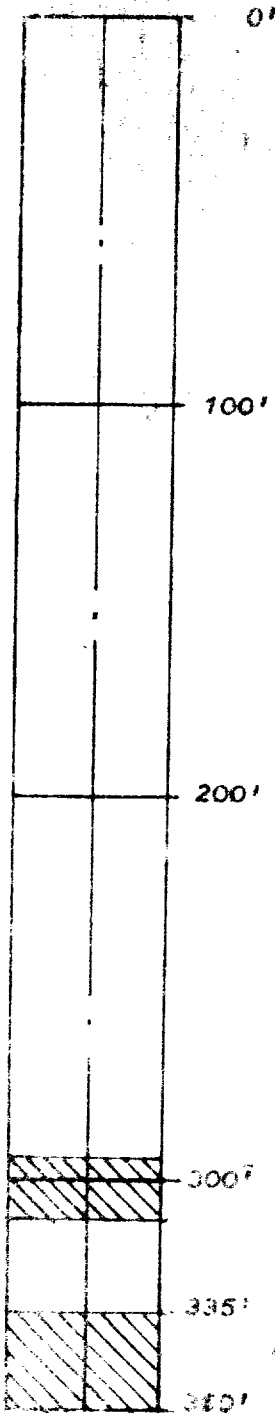
The oil and water saturation values are measured and calculated as percent of the effective pore space or void space of the rock. Coring operations usually alter the saturations from their natural reservoir values, therefore these measured values should be used only with proper interpretation.

PRICE SCHEDULE

Per Sample Analyzed

1 thru 10	$7.50
11 thru 20	7.25
21 thru 30	7.00
31 thru 40	6.50
41 thru 50	6.00
51 or more	5.00

Estimates of primary and secondary oil recovery are available with this report at an additional charge of $0.50 per test.



This a proposed completion of injection wells, to be installed for a water flood project in the Seven Lakes Pool

To drill a 7 7/8" hole and set 5 1/2" casing to approximate depth of 337 ft., which will be 2 feet in the Mesa Verde, which is the known pay sand in this area.

After running casing and cementing to surface, will drill plug and core sand and complete these wells as an open hole completion, which will be in the "B" ZONE

After completion is made on injection wells, I would at this time start injecting fresh water at the rate of approx. 500 bls. per day, providing this reservoir will take this amount of fluid, with a maximum of 275 lbs. pressure.

The water supply will come from a well drilled to a depth of 2850 ft. in the NW¼ of the NW¼ of sec. 20, T.18 N. R.10 W. This well, at the time of plugging, the operator at that time ran 4 1/2" casing to a depth of 918 feet, which is the top of the lower water sand. This well flowed fresh water from approx. 950 feet to 1050 feet from the surface. I am sure this well will produce adequate water for this proposed flood. This water was tested at the time the well was drilled and flowing fresh water, analysis made at this time proved the water was adequate and compatible with oil from this reservior. and would be sufficient for flooding purposes.

At a later date and adequately testing the "B" ZONE, either proving or disproving an effective or uneffective project on this zone.

If this project is effective, I would also attempt a water flood on the "A" ZONE

EXHIBIT "B"

Case 2277