FORM F-9

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Company Skelly Oil Company | Formation Gallup | Page 1 of 1

Well Jicarilla B - 3 | Cores Diamond Conv. | File RP-3-569

Field Unnamed | Drilling Fluid Water Base Mud | Date Report 8/25/57

County Rio Arriba State New Mexico | Elevation 6659 DF | Analysts

Location Sec. 5- 24N.- 5W. 660 N&W L | Remarks Service # 4 (Preliminary Report)

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
				OIL % VOLUME	% PORE / TOTAL WATER % PORE		
1	5858-59	0.01	4.4	38.6	59.2		
2	5860-61	0.01	7.6	38.2	60.6		
3	5862-63	0.01	7.6	40.8	57.9		
4	5864-65	0.01	8.3	35.0	63.9		
5	5866-67	0.01	2.8	21.4	67.8		
6	67-68	0.02	4.2	28.6	64.3		
7	68-69	0.02	7.7	41.5	55.9		
8	69-70	0.02	5.4	35.2	61.1		
9	70-71	0.01	7.4	30.4	63.5		
10	71-72	<0.01	8.8	35.2	61.4		
11	72-73	0.01	7.5	40.0	57.3		
12	73-74	0.01	6.9	37.8	58.0		
13	74-75	0.02	5.7	38.6	52.6		
14	75-76	0.01	3.2	53.1	28.1		
15	76-77	0.01	5.4	40.8	51.8		
16	77-78	0.01	4.9	30.6	57.2		
17	78-79	0.01	2.7	48.2	48.2		
18	5879-80	0.02	3.3	55.5	63.0		

5858-5880-

This interval has the following average properties: porosity 5.8%, permeability 0.01 md/ft, residual oil saturations 38.2% and total water saturations 57.3%. The matrix is interpreted to be essentially non-productive due to low permeability and porosity. However, there is a good continuous fracture system present which should be further tested in order to evaluate the amount and type of fluid present in the fractures.

NOTE:

(*) REFER TO ATTACHED LETTER.

(1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS

FORM F-B

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Company Skelly Oil Company	Formation Gallup	Page 1 of 1	
Well Jicarilla B - 3	Cores Diamond Conv.	File RP-3-569	
Field Unnamed	Drilling Fluid Water Base Mud	Date Report 8/27/57	
County Rio Arriba State New Mexico	Elevation 6659 DF	Analysts FK:GD	
Location Sec. 5- 24N.- 5W.	Remarks Service # 4 (Preliminary Report)		

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
				OIL % VOLUME % PORE	TOTAL WATER % PORE		
19	5880-81	0.01	5.0	38.0	56.1		
20	81-82	0.01	4.0	32.5	65.0		
21	82-83	0.04	8.7	20.7	78.2		
22	83-84	1.4	4.7	34.1	59.6		
23	84-85	0.8	5.6	33.9	58.9		
24	85-86	0.01	5.1	31.4	54.9		
25	5909-10	0.28	8.7	36.8	58.8		
26	10-11	0.03	4.0	20.0	70.1		
27	11-12	0.01	5.4	24.9	59.2		
28	12-13	0.01	6.5	29.2	50.8		
29	13-14	0.02	6.9	33.3	50.7		
30	14-15	0.03	8.5	41.2	43.6		
31	15-16	0.01	5.1	19.7	53.1		
32	16-17	0.06	7.7	40.2	40.3		
33	17-18	0.01	3.5	37.1	37.1		
34	18-19	0.02	7.0	34.2	51.3		
35	19-20	0.02	7.3	43.9	43.9		
36	20-21	0.02	7.2	19.4	69.5		
37	5921-22	0.04	6.2	12.8	72.3		
38	5928-29	0.01	5.5	14.5	76.4		

5880-5912-

This interval has the following average properties: porosity 5.7%, permeability 0.28 md/ft, residual oil saturation 30.2% and total water saturation 62.3%. The interval is interpreted to be essentially non productive. Further testing should be done to evaluate the fracture system.

5912-5920-

Low porosity (6.5% average) low permeability (0.02 md/ft average) high oil saturation (36.1% average) and high water saturation (46.3% average) make this zone look interesting. Although the matrix rock is essentially non productive, further testing should be done to evaluate the fractures.

5920-5929-

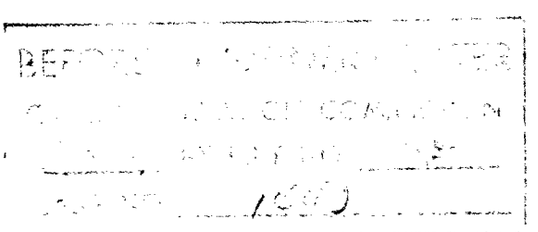
This interval has the following average properties: porosity 6.3%, permeability 0.02 md/ft, residual oil saturation 15.5% and total water saturation 72.7%. This interval is interpreted to be essentially non productive and should be excluded from any completion attempts.

NOTE:

(*) REFER TO ATTACHED LETTER.

(1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS



FORM P 9

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

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Well Jicarilla B - 3 | Cores Diamond Conv. | File RP-3-569
Field Unnamed | Drilling Fluid Water Base Mud | Date Report 8/29/57
County Rio Arriba State New Mexico | Elevation 6659 DF | Analysts FK:GD
Location Sec.5- 24N.- 5W. | Remarks Service # 4 (Preliminary Report)

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PERCENT	RESIDUAL SATURATION OIL % VOLUME	RESIDUAL SATURATION OIL % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	PROBABLE PRODUCTION	REMARKS

5930-5940- Continued -
productive. A vertical fracture system present throughout the zone may warrant further testing to determine the amount and type of fluids present within the system. Other properties of this zone are: permeability (.25 md/ft average), residual oil saturation (27.5% average), total water saturation (67.3% average).

5940-5946-

This zone exhibits fairly low porosity (8.7% average) but the residual oil saturation (35.8% average) and total water saturation (34.4% average) indicate the zone to be oil productive. The permeability is low (.07 md/ft average) and production will depend on success of formation fracturing treatment to in crease permeability. The vertical fracture system extends into this zone and further testing would evaluate whether the system would increase the productive capacity of the zone.

5946-5954-

Low porosity (6.0% average) and high total water saturations (57.2% average) show this zone to be of no commercial value. Other properties of this zone are: permeability (.06 md/ft average), and residual oil saturations (27.8% average).

5960-5961-

Low porosity (4.8%) and high total water saturation (83.8%) show the foot to be of no commercial value. Other properties of this foot are: permeability (<0.01 md.) residual oil saturation (14.6%). A vertical fracture system also extends through this foot.

NOTE:
(*) REFER TO ATTACHED LETTER.
(1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.
(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULT


BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO.

FORM F-9

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
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Company Skelly Oil Company | Formation Gallup | Page 1 of 2
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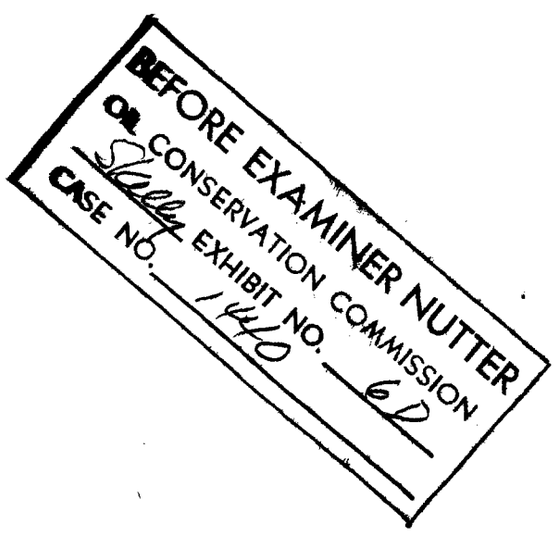
CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
				OIL % VOLUME % PORE	TOTAL WATER % PORE		
39	5930-31	<0.01	5.2	25.0	73.2		
40	31-32	0.01	5.9	22.1	76.3		
41	32-33	0.03	9.2	13.0	86.0		
42	33-34	0.03	3.7	18.9	78.5		
43	34-35	*	5.1	23.5	72.5		
44	35-36	0.08	4.6	26.1	71.8		
45	36-37	0.03	5.0	30.0	66.2		
46	37-38	0.10	5.1	35.3	60.8		
47	38-39	1.9	5.3	49.2	47.3		
48	39-40	0.04	5.0	32.0	40.0		
49	40-41	0.07	8.2	35.4	45.1		
50	41-42	0.04	8.8	36.4	27.3		
51	42-43	0.07	9.2	35.9	33.8		
52	43-44	0.08	9.8	36.7	32.7		
53	44-45	0.07	8.1	34.6	34.6		
54	45-46	0.07	8.3	36.2	33.8		
55	46-47	0.13	3.5	34.3	11.1		
56	47-48	0.01	3.5	28.7	54.4		
57	48-49	0.07	5.9	25.1	62.7		
58	49-50	0.01	8.4	34.6	53.5		
59	50-51	0.02	6.1	36.1	54.2		
60	51-52	0.08	6.5	26.2	64.7		
61	52-53	0.01	5.1	23.5	74.6		
62	53-54	0.16	8.6	13.8	82.6		
63	5960-61	<0.01	4.8	14.6	83.8		



*Fractured Plug.

5930-5940-

Low porosity (5.4% average) and failure of the matrix to yield any appreciable fluids during the change from bottom hole pressure to normal atmospheric pressure show the matrix of this zone to be non-

NOTE:
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(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.


BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO. 1445