



00054537

DATA SHEET AND DISCUSSION

LOCATION: NW SE (1083 feet North of South line and 1029 feet West of East line), Section 28, Township 25, Range 54N, Washington County, Colorado.

COMPLETION: October 5, 1959

COMPLETED: October 10, 1959 (Set 4 1/2 inch casing)

CONTRACTOR: Exeter Drilling Company, Denver, Colorado

CASING: Set 4 joints, 113 feet of 2 5/8 inch, 24 pound, 3 round thread new casing at 123 feet with 85 sacks of cement, 2% Calcium Chloride, 1% Cel. Set 155 joints, 4076.40 feet of 4 1/2 inch 9.5 pound, 3 round thread, J-55 new casing at 4940 with 125 sacks of 50-50 Posmix, 2% Cel. Centralizer 4928, 4984, 4992 and 4920. Halliburton Roto Wall scratchers 9 sections 4930 to 4984 and 10 sections 4950 to 4980. Plug 4911.

MEASUREMENTS: All depths taken from Kelly bushing approximately 7 feet above the ground elevation. A 2 foot downward correction is necessary to match drilled depths with log depths. The casinghead is 9.3 feet below the Kelly bushing.

ELEVATION: 4543 Ground (Powers) - 4550 Kelly bushing

Formation	Sample Tops	Log Tops	Datums
Niobrara	3960	3948	+ 602
Timpas	4340	4341	+ 209
Carlile	4392	4395	+ 165
Greenhorn	4470	4480	+ 75
Mowry	4714	4716	- 166
Brown Lime	4720	4722	- 172
"D" Sand	4799	4801	- 251
"J" Siltstone	-----	4864	- 314
"J" Sand	4936	4878	- 328
Total Depth	4940	4941	- 391

DISCUSSION:

The "D" Sand, 4801 (-251) was cored from 4807 to 4852. The top 12 feet of the core was chaled out, with good gas sand from 4820 to 4836 and oil from 4836 to 4845, the base of the sand. Drill Stem Test #1, 4836.5 to 4852, proved this section will produce gas and oil with no water. Only the very bottom of the sand should be perforated at this time to hold back the gas and avoid a high gas oil ratio well.

The "J" Sand, 4878 (-328), was drilled, a weak show was noted in the 4905 and 4910 samples consisting of pinpoint fluorescence in wet looking sand. The log shows this sand came from 4887 to 4896 and it would be water productive, and not worth testing.

Discussion (Continued)

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The above measurements are from the log which is 2 feet
deeper than drilled depths.

Submitted by,

George D. Volk

GEORGE D. VOLK
Petroleum Geologist

EV:sh

CASING SUPPLEMENT

	4940	Centralizer 4928
1	20.24	Float 4 Sections Scratchers Halliburton Roto Wall
	<u>4913.04</u>	Plug 4911
2	29.20	5 Sections Halliburton Roto Wall Scratchers
	<u>4883.84</u>	Centralizer
3	31.65	
	<u>4852.19</u>	Centralizer
4	32.10	6 Sections Halliburton Roto Wall Scratchers
	<u>4820.09</u>	Centralizer
5	35.15	4 Sections Halliburton Roto Wall Scratchers
	<u>4784.94</u>	
6	32.50	
	<u>4752.44</u>	
7	31.10	
	<u>4721.34</u>	
8	32.15	
	<u>4689.19</u>	
9	32.00	
	<u>4657.19</u>	
10	31.80	
	<u>4625.39</u>	
11	32.30	
	<u>4593.09</u>	
12	31.93	
	<u>4561.16</u>	
13	31.60	
	<u>4529.56</u>	
14	32.37	
	<u>4497.19</u>	
15	32.30	
	<u>4464.89</u>	

DRILL STEM TEST RECORD

Drill Stem Test #1 4834.5 to 4850
 4836.5 to 4852 (Log measurements)

The tool was open 1 minute, with gas to the surface, then shut in for 30 minutes, open for 25 minutes and shut in for 30 minutes. Gas flowed at the rate of 1,000 MCF with an occasional puff of distillate for 12 minutes, when mud reached the surface, clearing to oil in 17 minutes, continuing in a heavy cloud for the remaining test interval. The test recovered 375 feet of 36° gravity oil at 74°, with 2 to 3 feet of muddy water.

Initial shut in pressure was	1180	pounds per square inch
Final shut in pressure was	1180	pounds per square inch
Initial flow pressure was	535	pounds per square inch
Final flow pressure was	575	pounds per square inch
Initial hydrostatic pressure was	2746	pounds per square inch
Final hydrostatic pressure was	2728	pounds per square inch
Temperature was	148°	

DRILLING TIME RECORD

<u>From - To:</u>	<u>Minutes per 5-foot intervals</u>	<u>Remarks</u>
3900-50	2-2-2-2-2-2-2-2-2	
3950-4000	2-2-2-2-2-2-2-3-3-3	
4000-50	3-3-3-3-3-3-3-3-3	
4050-4100	2-2-2-2-2-2-2-2-2	
4100-50	2-2-2-2-2-3-3-3-3-3	
4150-4200	2-2-2-3-3-3-3-3-3-3	
4200-50	3-3-3-3-3-3-3-3-3	
4250-4300	3-3-3-3-3-3-3-3-3	
4300-50	3-3-3-3-3-3-3-6-6	
4350-4400	7-6-6-6-5-5-5-5-4-4	
4400-50	4-5-4-4-5-6-5-3-4-4	
4450-4500	3-3-3-4-5-5-5-5-5-5	
4500-50	5-5-5-5-5-6-6-7-6-6	
4550-4600	9-5-6-6-6-5-6-5-6-5	
4600-50	5-5-5-5-5-6-6-6-6-6	
4650-4700	7-9-5-5-5-6-6-6-6-6	
4700-50	9-9-8-10-9-9-9-8-7-6	

Minutes per 1-foot intervals

4750-60	1-1-2-1-1-1-2-1-2-1	
4760-70	1-1-1-1-1-1-1-1-1-1	
4770-80	1-1-1-1-1-1-1-1-1-1	
4780-90	1-1-1-1-1-1-1-1-1-1	
4790-4800	1-1-1-1-1-1-1-1-1-2	
4800-05	1-2-2-2-2*	Core #1
4805-10	11-18-13-14-14	Core #1
4810-20	11-16-1-30-10-10-11-6-2-5	Core #1
4820-30	5-5-6-7-6-7-6-5-6-7	Core #1
4830-40	5-7-9-7-10-10-11-9-10-11	Core #1
4840-50	11-11-16-20-20-22-27-20-18-25*	Core #1
4850-60	2-3-7-4-4-13-7-7-9-15	
4860-70	12-15-12-2-3-4-5-4-4-3	
4870-80	3-3-4-3-2-2-2-2-2-1	
4880-90	1-1-1-1-1-1-1-1-1-2	
4890-4900	3-3-3-2-3-3-3-3-2-3	
4900-10	3-3-3-2-3-4-6-6-7-6	
4910-20	10-10-5-7-7-4-3-6-5-6	
4920-30	7-6-7-6-6-7-4-8-5-6	
4930-40	6-6-6-6-7-6-7-6-5-5*	

(* - Trip)

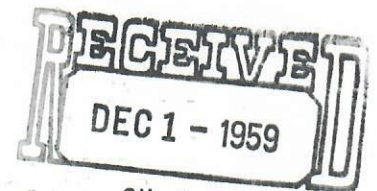
BIT RECORD

No	Make	Size	Type	From - To	Footage Drilled	Hours Run	Condition
1	CP	7 7/8	ES1C	133 - 3336	3203	17	Dull
2	Hughes	"	OSC-3	3336 - 4360	1024	10	Dull
3	CP	"	ES1C	4360 - 4805	445	7	Dull
*	Diamond	6 5/8	Core	4805 - 4850	45	10	Washed Some
4	Hughes	7 7/8	CWV	4805 - 4840	135	8	WO

MUD RECORD

Date	Depth	Wt	Vis	St. Vis	Gel. Strength		pH	Water Loss in cc	Wall Cake in 32nds	Tester
10/6/59										Magnobar
10/7/59	4402	9.9	38	12	0	0	9.0	5.2	2	"
10/8/59	4820	10.2	60	35	1	3	9.5	4.2	1	"
10/9/59	4918	10.2	61	23	0	12	9.0	5.2	2	"

SAMPLE LOG



OIL & GAS
CONSERVATION COMMISSION

3900-10	Shale dark gray
20	Ditto
30	Ditto
40	Ditto
50	Ditto
3960	<u>Niobrara</u>
60	Ditto
70	Ditto
80	Ditto
90	Ditto
4000	Ditto
4000-10	Ditto; little shale gray to dark gray mottled white to brown calcareous
20	Ditto; little ditto
30	Ditto; little ditto
40	Shale gray to dark gray mottled white to brown calcareous; little shale dark gray
50	Same
60	Same
70	Same
80	Same
90	Same
4100	Same
4100-10	Same
20	Same
30	Same
40	Same
50	Same
60	Same
70	Same
80	Same
90	Same
4200	Same
4200-10	Same
20	Same; trace limestone buff crystalline
30	Same; trace ditto
40	Same;
50	Same
60	Same
70	Same
80	Same
90	Same; trace limestone gray shaley dense
4300	Same; trace ditto
4300-10	Same
20	Same
30	Same
40	Same
4340	<u>Timpas</u>
50	Same
60	Same; little limestone white to buff dense
70	Shale dark gray and ditto; little calcareous shale as above
80	Ditto and ditto; little ditto
90	Ditto and ditto; little ditto

Sample Log (Continued)

2-

4392	<u>Carlile</u>
4390-4400	Shale dark gray and little limestone white to buff dense; trace calcareous shale as above
4400-10	Ditto and ditto
20	Ditto; little ditto
30	Ditto; trace ditto
40	Ditto
50	Ditto
60	Ditto
70	Ditto
4470	<u>Greenhorn</u>
80	Ditto
90	Ditto
4500	No Sample
4500-10	Ditto; little siltstone gray
20	Ditto; trace ditto
30	Ditto; little ditto
40	Ditto; little ditto
50	Ditto; little ditto
60	Ditto; little ditto
70	Ditto; little ditto; trace limestone buff crystalline
80	Ditto; little ditto
90	Ditto; little ditto
4600	Ditto; trace ditto
4600-10	Ditto; trace ditto
20	Ditto; trace ditto
30	Ditto; trace ditto
40	Ditto; trace ditto
50	Ditto; trace ditto
60	Ditto; trace ditto
70	No Sample
80	No Sample
90	Ditto
4700	Ditto
4700-10	Ditto
4714	<u>Mowry</u>
4720	<u>Brown Lime</u>
20	Ditto
30	Ditto
40	Ditto; trace limestone brown crystalline
50	Ditto; trace limestone brown crystalline
55	Ditto
60	Ditto
65	Ditto
70	Ditto
75	Ditto
80	Ditto
85	Ditto
90	Ditto
95	Ditto
4800	Ditto
4799 (-249)	<u>"D" Sand,</u>
4800-05	Ditto
4805 Circ. 30	
Min.	Ditto; little siltstone gray

Sample Log (Continued)

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4805 Circ. 60		
Min.	Shale dark gray; little siltstone gray; trace sand gray fine porous fair fluorescence	
4805 to 50	See Core Description	
4850-55	Shale dark gray to black; and sand gray fine porous dull to good fluorescence	
60	Ditto and ditto	
65	Ditto; trace ditto and unconsolidated sand partly surface	
70	Ditto; trace ditto and ditto	
75	Ditto little ditto	
80	Ditto; trace siltstone gray; trace ditto; 1 cluster fluorescence as above	
85	Ditto; little ditto	
90	Ditto; little ditto	
4889	<u>"J" Sand</u>	
95	Ditto; little ditto	
4900	Ditto; trace ditto; little sand gray fine partly silty tight, dull to fair fluorescence; some reworked	
4900-05	Ditto; little ditto; trace of spotted fluorescence	
10	Ditto; little ditto; trace ditto	
15	Ditto (3 clusters ditto)	
20	Ditto (1 cluster ditto)	
25	Ditto (2 cluster ditto)	
30	Ditto; trace siltstone gray; trace argillite white	
35	Ditto; trace sand white silty tight, no show; trace ditto	
40	Ditto; trace ditto trace ditto	
4940 Circ. 60		
Min.	Ditto; trace ditto trace ditto	

CORE DESCRIPTION AND CORE ANALYSIS RECORD

Core #14805 to 4850 - Recovered 34' - 8"
4807 to 4852 (Log Measurements)

- 6' - 0" Shale dark gray, hard, silty.
- 6' - 0" Thinly laminated and slightly reworked sand, gray, fine silty, hard, tight, no snow, shale dark gray, and siltstone gray.
- 3' - 0" Sand, gray, fine, silty, tight, some spotty fluorescence streaks thinly laminated or slightly reworked with shale dark gray. (Poor gas sand.)
- 13' - 6" Sand, gray, fine, porous, permeable, some spotty fluorescence, few thin beds of shale dark gray and thinly laminated sand and shale.
- 0' - 6" Shale dark gray, hard, silty.
- 5' - 8" Sand, gray, fine, porous, permeable, good odor, staining, and fluorescence. Few streaks tight thinly laminated with shale dark gray at 4835.1 to 4835.4; 4836.7 to 4837.0; and 4839 to 4839.3.

-ALL- TEXAS

SERVICE NO. 8

(Figures in parentheses refer to footnote remarks)

1	4818-19	70	34	17.5	2.9	48.0	(2)	Sandstone, Fine-Grain, Shaly.
2	4820-21	948	280	17.5	1.1	49.1	(2)	Sandstone, Fine-Grain.
3	4823-24	1220	410	20.9	0.0	41.2	(2)	Sandstone, Fine-Grain.
4	4827-28	352	284	25.2	0.0	49.6	(2)	Sandstone, Fine-Grain.
5	4830-31	356	296	24.5	0.0	42.8	(2)	Sandstone, Fine-Grain.
6	4832-33	1661	1476	26.2	0.0	42.3	(2)	Sandstone, Fine-Grain.
7	4834-35	338	296	21.4	2.8	38.3	(2)	Sandstone, Fine-Grain, Slightly Shaly.
8	4835-36	160	79	20.6	8.7	43.2	(2)	Sandstone, Fine-Grain, Vertical Fracture.
9	4836-37	320	240	20.6	7.8	46.2	(2)	Sandstone, Fine-Grain.
10	4837-38	336	272	20.1	11.0	48.2	(2)	Sandstone, Fine-Grain.
11	4838-39	2614	2330	19.7	12.2	56.8	(2)	Sandstone, Fine-Grain.

Correct above 2 feet down to match log.

4 OF LOCATION ANALYSIS NO INTERPRETATION OF RESULTS.

14. THE PROPOSAL ATTACHES TO LETTER

3. INCOMPLETE FORM RECORDS - INTERPRETATION RECORDS