



DATA SHEET AND DISCUSSION

LOCATION: SE NE (1983 feet South of Northline and 665 feet West of East line), Section 17, Township 2 North, Range 54 West, Washington County, Colorado

COMMENCED: June 30, 1959

COMPLETED: July 4, 1959

CONTRACTOR: Exeter Drilling Company, Denver, Colorado

CASING: Set 3 joints, 101 feet of 8x5/8 inch, 24 pound, 8 round thread new casing at 112 feet with 85 sacks of cement, 25 Calcium Chloride, 45 Gal.

MEASUREMENTS: All measurements are taken from the Kelly bushing which was approximately 9 feet above the ground. A 3 foot downward correction is necessary to make the Drill Stem Test, Core, and Core Analysis match the log.

ELEVATION: 4474 Ground (Powers) - 4483 Kelly Bushing

<u>Formation</u>	<u>Sample Tops</u>	<u>Log Tops</u>	<u>Depths</u>
Niobrara	3990	3975	+ 506
Timpas	4319	4320	+ 194
Carlile	4373	4383	+ 100
Greenhorn	4472	4475	+ 10
Mowry	4703	4704	- 221
Brown Lime	4710	4706	- 224
"D" Sand	4791	4790	- 307
"J" Siltstone	4847	4847	- 364
"J" Sand	4859	4862	- 374
Total Depth	5035	5036	- 555

DISCUSSION: The "D" Sand, 4790 (-307), was about 10 feet lower than expected from subsurface work but within the normal range to indicate the presence of the structural nose. The sand drilled very fast and only a small percent was recovered in the samples, however, there were no shows noted in the samples or indicated on the electric log.

The "J" sand, 4862 (-374), was cored to 4903, there were shows noted in the top 19 feet of the sand the best shows were from 4873 to 80 and were drill stem tested and proved to be too tight to give up fluid. The remainder of the sand was water bearing, as there were no shows in the core samples or indicated on the log.

The well was plugged July 4, 1950 by filling it with heavy mud from the total depth to the bottom of the surface pipe (5038 to 110). A 10 sack cement plug was set in the bottom 30 feet of the surface pipe 110 to 80, then the casing was filled with heavy mud to within 20 feet of the top. A 7 sack cement plug was set in the top 20 feet of the surface pipe (32 to 12).

All measurements are taken from the Kelly bushing which was approximately 9 feet above the ground.

Submitted by,

George D. Volk

GEORGE D. VOLK
Petroleum Geologist

GDV:sh

SAMPLE LOG

3800-10	Shale dark gray
20	Ditto
30	Ditto
40	Ditto
50	Ditto
60	Ditto
70	Ditto
80	Ditto
90	Ditto
3900	Ditto
3900-10	Ditto
20	Ditto
30	Ditto
40	Ditto
50	Ditto
60	Ditto
70	Ditto
80	Ditto
90	Ditto
3990	<u>Niobrara</u>
4000	Ditto
4000-10	Ditto
20	Ditto
30	Ditto
40	Ditto
50	Ditto; little shale dark gray mottled buff to brown calcareous
60	Ditto; little ditto
70	Ditto; little ditto
80	Ditto; little ditto
90	Ditto and ditto
4100	Ditto and ditto
4100-10	Shale gray to dark gray mottled white to brown calcareous and shale dark gray
20	Same
30	Same
40	Same
50	Same
60	Same
70	Same
80	Same
90	Same
4200	Same
4200-10	Same
20	Same
30	Same
40	Same
50	Same
60	Same
70	Same
80	Same
90	Same
4300	Same; more shale

4300-10	Shale gray to dark gray mottled white to brown calcareous and shale dark gray; more shale
4319	<u>Timpan</u>
20	Same; more shale
30	Same; more shale
40	Same; more shale; trace limestone white to buff dense
50	Same; more shale; little ditto
60	Same; more shale; little ditto
70	Shale dark gray; little ditto
4372	<u>Carlile</u>
80	Ditto; trace ditto
90	Ditto; little ditto
4400	Ditto; little ditto
4400-10	Ditto; trace limestone white dense
20	Ditto; trace ditto
30	Ditto
40	Ditto
50	Ditto
60	Ditto
70	Ditto
4472	<u>Greenhorn</u>
80	Ditto
90	Ditto; trace siltstone gray
4500	Ditto; trace ditto
4500-10	Ditto
20	Ditto; trace limestone gray to buff crystalline, partly sandy
30	Ditto; trace ditto
40	Ditto; trace ditto
50	Ditto; trace ditto; trace siltstone gray
60	Ditto; trace siltstone gray
70	Ditto; trace ditto
80	Ditto; trace ditto
90	Ditto; trace ditto; trace limestone gray crystalline
4600	Ditto; trace ditto; trace ditto
4600-10	Ditto; trace ditto; trace ditto
20	Ditto
30	Ditto
40	Ditto
50	Ditto; trace limestone buff crystalline
60	Ditto
70	Ditto
80	Ditto
90	Ditto
4800	Ditto/
4700-10	Ditto
20	Ditto
30	Ditto
40	Ditto; trace limestone gray to brown crystalline
50	Ditto; trace ditto
55	Ditto
60	Ditto
65	Ditto
70	Ditto
75	Ditto
80	Ditto

Sample Log (Continued)

3

4780-85	Shale dark gray
90	Ditto
4791 (~305)	<u>7" Sand</u>
95	Ditto
4800	Ditto; trace siltstone gray
4800-05	Ditto; trace ditto
10	Ditto; trace ditto
15	Ditto; trace ditto; trace sand gray fine silty tight, no show
20	Ditto; little ditto some porous, no show
25	Ditto; little ditto
30	Ditto; little ditto
35	Ditto; little ditto, more porous, no show
40	Ditto; little ditto
45	Ditto; little ditto silty tight
50	Ditto; trace ditto
4850 Circ. 30	
Min.	Ditto; trace ditto
4850-4900	See Core Description
4850	<u>7" Sand</u>
4900-05	Shale dark gray to black; little sand gray fine silty tight, no show
10	Ditto; trace ditto
15	Ditto; trace ditto
20	Ditto; trace ditto, partly porous
25	Ditto; trace ditto
30	Ditto; trace ditto
35	Ditto; trace ditto
40	Ditto; trace ditto
45	Ditto; little sand gray fine to medium silty tight, no show
50	Ditto; little ditto
55	Ditto; trace ditto
60	Ditto; little ditto
65	Ditto; trace ditto
70	Ditto; trace ditto
75	Ditto
80	Ditto; trace ditto
85	Ditto
90	Ditto
95	Ditto; trace ditto
5000	Ditto; trace ditto
5000-05	Ditto; trace ditto
10	Ditto; trace ditto
15	Ditto; trace ditto
20	Ditto; trace ditto
25	Ditto; trace ditto
30	Ditto; trace ditto
35	Ditto; trace ditto
5035 Circ. 30	
Min.	Ditto; little sand dark gray fine very silty tight, no show
5035 Circ. 60	
Min.	Ditto; trace ditto

CORE DESCRIPTION AND CORE ANALYSIS RECORD

Core #1	4850 to 4900 4853 to 4903 Log Measurements
9' - 0"	Shale dark gray to black laminated with siltstone gray to dark gray, few thin beds of bentonite gray.
11' - 0"	Sand gray fine silty tight, slightly reworked with shale dark gray, spotted fluorescence, weak odor top 2 feet.
3' - 0"	Shale dark gray reworked with sand gray fine silty tight, no show, with 4 thin beds of sand, gray, fine, hard, tight, saturated, good odor fluorescence bleeding oil in bottom 18".
5' - 0"	Sand gray fine silty tight slightly reworked with shale dark gray more porous streaks, good to spotty fluorescence, good to no odor and staining.
5' - 0"	Sand gray fine partly silty tight, streaks reworked or thinly laminated with shale dark gray, no show.
1' - 0"	Shale dark gray reworked with sand gray fine silty tight.
2' - 0"	Sand gray fine silty tight, no show, slightly reworked and laminated with shale dark gray.
9' - 0"	Reworked sand gray fine silty tight, no show, and shale dark gray
2' - 0"	Sand gray fine silty tight, slightly reworked with shale dark gray, no show.
1' - 0"	Shale black catonaceous.
1' - 0"	Sand gray silty tight, no show, few streaks thin laminations.



BIT RECORD

No	Collar	Size	Type	From - To	Footage Drilled	Hours Run	Condition
1	Hughes	7 7/8	OSC 5J	125 - 3039	2914	17	Dull
2	"	"	OSC 3	3039 - 4372	1333	13	Dull
3	CP	"	ES 1 C	4372 - 4850	478	9	Locked
4	Diamond	6 5/8	Cone	4850 - 4900	50	7	Slightly grooved
4	Hughes	7 7/8	OWV	4850 - 5035	185	4	NO

MUD RECORD

Date	Depth	Wt	Vis	St Vis	Gel. Strength Initial Final	pH	Water Loss in cc	Wall Cake in 3 mins	Tester
7/2/59	5129								Plains Mud Co.
7/2/59	4200	10	35	18	0 12	9	6.5	2	" " "
7/3/59	4389	10	67	--	2 18	9	3.8	2	" " "

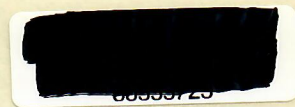
DRILL STEM TEST RECORD

Drill Stem Test #1 1570 $\frac{1}{2}$ to 77 $\frac{1}{2}$
 1573 $\frac{1}{2}$ to 80 $\frac{1}{2}$ (Log Measurements)

The tool was open 5 minutes, shut in for 30 minutes, open one hour, then shut in for 30 minutes. It had only a weak bubble blow during the initial 5 minute open period and no blow during the regular open period. The core indicated tight sand the test was continued to give the formation every chance to give up fluid. The test recovered 5 feet of drilling mud with no show of oil or gas.

Initial Flow pressure was	20	pounds per square inch
Final Flow pressure was	20	" " " "
Initial Shut In pressure was	925	" " " "
Final Shut In pressure was	255	" " " "
Initial Hydrostatic pressure was	2510	" " " "
Final Hydrostatic Pressure was	2208	" " " "

DRILLING TIME RECORD



00000720

From & To	Minutes per 5-foot intervals	Remarks
3800-50	2-0-2-2-2-2-2-2-2-2	
3850-3900	2-2-2-2-2-2-2-2-2-2	
3900-50	2-0-2-2-2-2-2-2-2-3	
3950-4000	3-2-3-3-3-3-3-3-3-3	
4000-50	3-2-3-3-3-3-3-3-3-3	
4050-4100	3-2-3-3-3-3-3-3-3-3	
4100-50	4-2-4-4-4-4-4-4-4-4	
4150-4200	4-2-4-4-4-4-4-4-4-4	
4200-50	4-2-4-4-4-4-4-4-4-5	
4250-4300	3-2-3-3-3-3-3-3-3-3	
4300-50	6-5-6-6-6-7-10-10-10-7-6	
4350-4400	7-6-7-7-7-7-7-7-7-5	
4400-50	6-4-6-6-6-6-7-7-7-3	
4450-4500	3-2-3-3-3-3-3-3-3-3	
4500-50	5-2-5-5-5-6-7-7-7-3	
4550-4600	3-2-3-3-3-3-3-3-3-3	
4600-50	4-2-4-4-4-4-4-4-4-4	
4650-4700	4-2-4-4-4-4-4-4-4-3	
4700-50	3-6-3-6-3-6-6-6-6-4	

minutes per 1-foot intervals

4750-60	3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1	
70	3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1	
80	3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1	
90	3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1-3/1	
1000	1-1-1-1-1-1-1-1-1-1-1-1	
1000-10	1-1-1-1-1-1-1-1-1-1-1-1	
20	1-1-1-1-1-1-1-1-1-1-1-1	
30	2-2-2-2-2-2-2-2-2-2-2-2	
40	2-2-2-2-2-2-2-2-2-2-2-2	
50	2-2-2-2-2-2-2-2-2-2-2-2	
60	10-11-10-17-15-16-16-10-13-15	Core #1
70	10-11-10-17-15-16-16-10-13-15	Core #1
80	3-10-3-7-7-7-7-7-7-7-7-7	Core #1
90	3-3-3-3-3-3-3-3-3-3-3-3	Core #1
1000	6-6-6-6-6-6-6-6-6-6-6-6	Core #1
1000-10	1-1-1-1-1-1-1-1-1-1-1-1	
20	1-1-1-1-1-1-1-1-1-1-1-1	
30	1-1-1-1-1-1-1-1-1-1-1-1	
40	1-1-1-1-1-1-1-1-1-1-1-1	
50	1-1-1-1-1-1-1-1-1-1-1-1	
60	1-1-1-1-1-1-1-1-1-1-1-1	
70	1-1-1-1-1-1-1-1-1-1-1-1	
80	1-1-1-1-1-1-1-1-1-1-1-1	
90	1-1-1-1-1-1-1-1-1-1-1-1	
5000	1-1-1-1-1-1-1-1-1-1-1-1	
5000-10	1-1-1-1-2-2-1-2-1-2-1	
20	1-1-1-1-1-1-1-1-1-1-1-1	
30	1-1-1-1-1-1-1-1-1-1-1-1	
35	3-3-6-7-7	