



00817848

OPERATOR: A. T. Skaer  
3250 Monaco St. Parkway  
Denver 7, Colorado

LEASE: #2 Kirk

LOCATION: SE SE SE, Sec. 18, T9N, R53W,  
Logan County, Colorado

ELEVATION: 4219 Ground Level  
4226 Kelly Bushing

SPUD: 10-22-58

COMPLETED: 10-28-58

TOTAL DEPTH: 5040 Driller  
5049 Electric Log

SURFACE CASING: 142' of 9-7/8 at 148' with 200 sacks  
cement

CORE DATA: Core #1 4884 - 4891 ("D")  
Core #2 4894 - 5040 ("J")

DST DATA: DST #1 4890 - 4904 ("D")

ELECTRIC LOGS: 1. Induction electric log from 5043 to 147  
2. Microlog from 5046 to 4750

RIG TYPE: Ideco H-30

CONTRACTOR: Huron Drilling Co.  
506 Patterson Building  
Denver 2, Colorado

PUSHER: Mr. Gene Phillips  
Box 633  
Ft. Morgan, Colorado

## BIT RECORD:

run	Size	Make	Type	From	To	Feet	Hours
1	7-7/8	Varel	V3d	152	2973	2821	20½
2	7-7/8	Varel	V3d	2973	3935	963	12
3	7-7/8	Varel	V3d	3935	4642	707	11
4	7-7/8	Varel	V3d	4642	4884	242	3½
5	7-7/8	Varel	V2d	4891	4994	103	8½
Core							
#1	7-3/4	D&S	Truco	4884	4891	7	6
#2	7-3/4	D&S	Truco	4994	5040	46	12

MUD:

Jell and chemical with oil mix

STATUS:

Plugged and abandoned.

ELECTRIC LOG FORMATION TOPS

Formation	Depth	Datum
Niobrara	4226	-114
Fort Hays	4382	*156
Codell	4426	-200
Carlile	4434	-208
Greenhorn	4646	-420
Bentonite	4796	-570
"D"	4889	-663
"J"	4996	-770
T.D.	5049	

CORE AND TEST DATA

"D" SAND:

Core #1 4884 - 4891 Cut 7' Recovered 3'

3' Sandstone, very fine grained, good stain and odor, good permeability and porosity, with thin shale laminations, good fluorescence, vertical fractures.

CORE ANALYSIS

Depth Feet	Permeability		Porosity	Oil	Water
	Horz	Vert			
4884-85	56	45	17.0	14.7	49.5
85-86	349	278	17.2	14.6	62.2
86-87	445	404	17.3	16.8	42.8

"J" SAND:

Core #2 4994 - 5040 Cut 46' Recovered 46'

1 1/2' Reworked sand and shale.  
1 1/2' Alternating sand and shale, slightly reworked.  
7' Sandstone, hard and tight, stain and odor, with shale laminations in bottom 5'. Fluorescence decreasing to bottom of interval.  
3' Alternating sand and shale, no show.  
6 1/2' Reworked sand and shale.  
4 1/2' Silty shale.  
10' Reworked sand and shale.  
5' Alternating sand and shale.



2½' Shale, sandy.  
3½' Sandstone, very fine grained, with shale  
laminations, no show.  
1' Shale, black, hard.

BEST IMAGE  
AVAILABLE

### DRILL STEM TEST DATA

D.S.T. #1 ("D") 4890 - 4904

Tool open 2 hours and shut-in 30 minutes. Good blow in 3 minutes. Gas to surface in 39 minutes. Initial Flow Pressure 0 psi. Final Flow Pressure 75 psi. Shut-in Pressure 250 psi. Hydrostatic Pressure 2575. Temperature 150°. Recovered 95' slightly oil cut mud. 120' slight oil and gas cut muddy water.

### CONCLUSION

#### "D" SAND

The "D" ran structurally 12' low to the well located in the C W/2 SW/4 SW/4 Sec. 17, T9N, R53W and contained approximately 14' of saturated sand. As shown on the core analysis of the 3' feet recovered in coring the permeability is high. Water saturation on core analysis is high, but this is true for the area, in general, and is not too high for oil production. The well is high enough structurally to produce oil. The drill stem test shows a shut-in pressure of 250 psi. This is the real reason for plugging the well. Bottom hole pressures for the area should run around 600 - 650 psi. A pressure as low as 250 psi is not enough to push the oil into the well bore in a sufficient amount to make a commercial well. The reason for this low bottom hole pressure is very apparent. The offset wells have been good commercial wells and have drained the immediate reservoir sufficiently to lower the bottom hole pressure to this point. If this well had been drilled 1½ - 2 years ago I believe it would have made an excellent commercial well. Under the circumstances I feel compelled to emphasize the fact that there are other offset locations on this tract that should be drilled immediately. If there is as much delay as there was in drilling this offset location the same results might be expected.

#### "J" SAND

The "J" was cored and contained approximately 7' of stained sand. This sand was too hard and tight to produce and calculations from the electric log indicates that it will make water. The well also ran approximately 17' low on the "J". In view of this no drill stem tests were taken and it was my recommendation that the well be abandoned.

Yours very truly,

*William H. Young*  
William H. Young  
Geologist