



00264913

Well: Walsh-State No. 1

Location: C-NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16, T 9 N, R 56 W
Weld County, Colorado

Operator: Robert Schulein & E. G. Griffith

Contractor: Exeter Drilling & Exploration Co.
Rig No. 4

Elevations: 4509' K.B., 4500' G.L.

Casing: 3 joints 8-5/8" set at 99' K.B., cemented
with 120 sacks cement.

Well History: 9-30-74 Spudd 12:45 P.M., set surface casing
10-1-74 Drilling at 2243'
10-2-74 Drilling at 4869'
10-3-74 Drilling at 5447'
10-4-74 Drilling at 5760'
10-5-74 Drilling at 5861'
10-6-74 Running Drill Stem Test No. 1
P & A

Cores: None

Drill Stem Tests: DST No. 1, "D" Sand, run after reaching T.D. of
5918' and running logs. Straddle test, test inter-
val 5747' to 5820', log depths. Tool open 120",
shut in 45". Strong blow, decreasing slightly
toward the end of the test. Recovered 93' water
cut mud and 147' slightly oil and gas cut mud.

Initial Hydrostatic Pressure	3209#
Final Hydrostatic pressure	3118#
Flow Pressures	48# to 120#
Shut in pressure	889#

No initial shut in pressure or flow period were
taken because it was thought that the upper packer
seats were tenuous, being set in the shale above
the "D" as they were. The shut in pressure curve
was still climbing at the end of the test. Bottom
packer bled to 1600#.

Logs: Schlumberger Induction-Electrical Log; Compensated
Formation Density Log Gamma-Gamma

Log Formation Tops:	<u>Formation</u>	<u>Electric Log</u>	<u>Subsea</u>
	Niobrara	4920	
	Carlile	5275	
	Greenhorn	5446	
	Bentonite	5642	
	"D" Sand	5748	(-1239)
	"J" Sand	5832	(-1323)
	T.D.	5917 Log	
		5923 Driller	

Mud: On the morning of 10-5-74, the mud had the following properties:

Weight	10.0 #/gal
Viscosity	76 API funnel
Water Loss	4.8 cc/30"
Filter Cake	2/32"

Bit Record:	<u>No.</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth Out</u>	<u>Feet</u>	<u>Hours</u>
	1	7-7/8"	Reed	411J	3180	3080	16
	2	7-7/8"	Smith	DT	5132	1952	21
	3	7-7/8"	Smith	DT	5614	582	18-3/4
	4	7-7/8"	Reed	Y21R	5760	146	9-3/4
	5	7-7/8"	Reed	Y21G	5860	100	17-1/4
	6	7-7/8"	Reed	Y21G	5920	60	7-1/2

Deviation Surveys:	<u>Depth</u>	<u>Degrees from Vertical</u>
	95	1/4
	5132	2
	5180	3/4
	5760	1/2

Sample Description: Log depths used.

5700 - 5748' Shale, black.

5748 - 5754' Sandstone, fine grained, white, light tan oil stain, friable, clean, excellent porosity, good bright yellow fluorescence, good ether cut fluorescence, grading to sandstone, fine grained, gray to white, heavily clay filled, low porosity, light oil stain, good yellow fluorescence, milky yellow ether cut fluorescence, fluorescence somewhat spotty in the more clay filled sandstone.

- 5754 - 5772' Sandstone, gray, very fine grained, siliceous, silty, very hard, tight, no shows, no fluorescence; shale tan to gray.
- 5772 - 5812' Shale, black.
- 5812 - 5832' Siltstone, gray
- 5832 - 5836' Sandstone, gray to white, fine grained to very fine grained, siliceous, silty, no porosity, hard, tight, no shows, no fluorescence.
- 5836 - 5844' Shale, black.
- 5844 - 5850' Sandstone, very fine grained, gray, silty, friable, pale yellow fluorescence, very light ether cut fluorescence, no porosity.
- 5850 - 5854' Shale, black.
- 5854 - 5920' Sandstone, fine grained to very fine grained, white, siliceous, hard and tight to clay filled, friable - all low porosity, wet, no shows, no fluorescence. Few specks black heavy minerals at base of zone; some free white bentonite.

Discussion:

The anticipated "D" sand was not developed, however, the sample shows and log characteristics of the 6' thick D-1 sand which was present were encouraging, and it was on the strength of this data that the drillstem test was run. The lack of fluid recovery on the drill stem test was not anticipated, but the test appeared to be valid. Sample shows were noted in the second bench of the "J" sand in a very tight sand. The log of this sand also appeared to indicate tight sand, and no attempt was made to test this sand. The well was plugged and abandoned in the surface casing only in accordance with the instructions received from Mr. Rogers of the Colorado Oil and Gas Conservation Commission.

Jack D. Gray
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October 7, 1974