



JUN-7 1966

OIL & GAS  
CONSERVATION COMMISSION

**GEOLOGICAL REPORT**  
**STUARCO and DON WINSLOW**  
**#1-C STATE**  
**SE NE Section 2-10N-53W**  
**Logan County, Colo.**

Chronological Record

The location was surveyed and staked by Powers Surveyors, Inc.  
Elevation: 4338 Ground.  
May 23, 1966 Rotary moved on location, Stuarco Rig #6  
Set 105' of 8-5/8" @ 112', cemented with 90 sacks  
50/50 pozzol.  
May 24 Drilling at 1222'  
May 25 Drilling at 3640'  
May 26 Drilling at 4914'  
May 27 Reached T.D. at 5199'. Ran Schlumberger I-ES and  
Micro logs.  
Ran DST #1  
Plugged and abandoned.

Samples description

4100 - 4200 Shale, light gray, micaceous  
4200-4500 Shale, gray, speckled 10-30% with white-tan limestone.  
4500-4560 Limestone, gray, chalky, shaley, no effective porosity.  
4560-4780 Shale, dark gray, silty.  
4780-4800 Limestone, buff, sugary, no effective porosity.  
4800-5020 Shale, dark gray, bentonitic.  
5020-5030 Sandstone and shale, laminated, dirty, no permeability,  
no show.  
5030-5040 Sandstone, white, very fine grained, dense, low porosity  
and permeability, 50% spotty oil stain and fluorescence.  
5040-5050 Sandstone, gray, carbonaceous, low-very low porosity, no  
show.

- 5050-5070 Siltstone and shale, mottled and laminated, no porosity.
- 5070-5125 Shale, dark gray, silty, pyritic.
- 5125-5130 Sandstone and siltstone, reworked, no effective porosity, no show.
- 5130-5145 Sandstone, white, fine grained, clean, good porosity and permeability, good stain and fluorescence throughout.
- 5145-5160 Sandstone and shale, laminated, dirty, no porosity, no show.
- 5160-5165 Sandstone, gray, fine grained, fair-good porosity and permeability, no apparent staining, slight dull yellow fluorescence, appears water bearing.
- 5165-5180 Shale and siltstone, laminated.
- 5180-5195 Sandstone, white, very fine grained, dense, very low porosity, no show.
- 5195-5199 Shale, black, fissile.

Drillstem test Data

Interval tested - 5159-72

Tool open - 90 min.

Tool opened with good blow - remained steady throughout test.

Recovery: 90' mud cut water

1300' clear water

Pressures:	IH	2812#
	FH	2801#
	IF	55#
	FF	643#
	ISI	1252# (30")
	FSI	1144# (30")

The bottom packer held and bled to 2000#

Slope Tests

<u>Depth</u>	<u>Deviation</u>
1006'	3/4°
2001'	2°
3000'	1°
3640'	1°
4722'	1 1/2°
5133'	3/4°

Schlumberger Formation Tops

Elevation 4343 K.B.

Niobrara shale	4199'
Ft. Hays line	4507'
Carlile shale	4559'
Greenhorn line	4789'
bentonite marker	4928'
"D" Sandstone	5024'
"J" Sandstone	5126' (-783)
Skull Creek shale	5193'

Discussion

The #1-C State was drilled to a total depth of 5199' into the Skull Creek shale formation, and was abandoned on May 27, 1966. Structurally, the well ran 6' high to the well at SE SE Section 2 and 3' low to the recent well at NW SE Section 2.

The "Bonanza" bar sand was present in the well from 5133-48 and good shows were evidenced in the samples. The structural position and log analysis indicated water production. A gain in structure of approximately 10-15' would be needed for good commercial production. Although this is possible at any given forty acre location in the immediate area, the chances for a major oil accumulation appear to be condemned by this test.




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