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GEOLOGIC REPORT

DONALD C. WINSLOW #1 STATE "A"
C SE SE Section 3-10N-53W
Logan County, Colorado

OIL & GAS
CONSERVATION COMMISSION

Chronological Record

The location was surveyed and staked by Powers Surveyors, Inc.
Elevation 4261 Ground

| | |
|---------------|--|
| June 14, 1965 | Rotary moved on location. Murfin Drilling Co. Contractor Set 98° of 8-5/8" @ 108° with 70 sacks |
| June 15 | Drilling at 625° |
| June 16 | Shut down |
| June 17 | Drilling @ 2776° |
| June 18 | Drilling at 3800° |
| June 19-20 | Shut down for rig repairs |
| June 21 | Drilling @ 4750° |
| June 22 | Reached TD @ 5134°, Ran Schlumberger I-ES log |
| June 23 | Ran DST in "J" Sand 5067-70 Well plugged and abandoned. |

Samples description

| | |
|-----------|--|
| 4100-4430 | Shale, gray, speckled 10%-30% with white-buff limestone. |
| 4430-4480 | Limestone, white-gray, chalky, shaley |
| 4480-4700 | Shale, dark gray, silty. |
| 4700-4720 | Limestone, brown, sugary, no effective porosity. |
| 4720-4945 | Shale, dary gray, bentonitic. |
| 4945-4950 | Sandstone and shale, mottled, no porosity |
| 4950-4965 | Sandstone, white, very fine grained, dense, very low permeability, good oil stain and fluorescence. |
| 4965-4985 | Sandstone, white, very fine grained, quartzitic, no effective porosity, no show. |
| 4985-5060 | Shale, dark gray, silty. |
| 5060-5065 | Sandstone and shale, laminated, pyritic. |
| 5065-5075 | Sandstone, white, fine-medium grained, clean, good porosity and permeability, even light oil stain and yellow fluorescence. |
| 5075-5080 | Sandstone, as above, shaley, low permeability, good show. |
| 5080-5085 | Sandstone, as above, clean, oil stain and fluorescence somewhat spotty, appears to be water bearing. |
| 5085-5115 | Sandstone and shale, laminated and reworked, no effective porosity. |
| 5115-5130 | Sandstone, salt and pepper, fine grained, poorly sorted, low porosity and permeability, no show, water bearing. |
| 5130-5134 | Shale, black, fissile. |

Drillstem Testing Data

Interval tested: 5066-70 (Schlumberger)

Tester - Central States

Type Test - straddle packer

Packer seats - 5059, 5066, 5070

Tool open - 2 hours

Tool shut in - 45 min.

Description: Tool opened with steady medium blow, decreased to weak at end of test.

Recovery: 900° gas
90° oil cut water
450° water (.65 @ 70° F)Pressures: Hydrostatic 2630#
Initial flow 52#
Final flow 152#
Shut in 918#Slope Tests

| | <u>Depth</u> | <u>Deviation</u> |
|---|--------------|------------------|
| 1 | 761° | 1/4° |
| 2 | 1326 | 1/4 |
| 3 | 2700 | 1-1/4 |
| 4 | 2922 | 1-1/2 |
| 5 | 3580 | 1-1/4 |
| 6 | 3797 | 1-1/4 |
| 7 | 4451 | 1 |
| 8 | 4974 | 3/4 |

Schlumberger Formation Tops

Elevation 4269 K.B.

| | |
|-------------|--------------|
| Niobrara | 4104° |
| Ft. Hays | 4430° |
| Carlile | 4484° |
| Greenhorn | 4710° |
| bentonite | 4852° |
| "D" Sand | 4947° (-678) |
| "J" Sand | 5058° (-789) |
| Skull Creek | 5128° |

Discussion

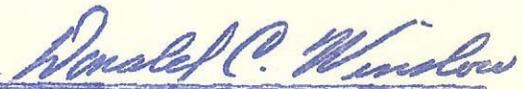
The #1 State "A" was drilled to a depth of 5134' or 6' below the base of the Dakota "J" sandstone and was abandoned on June 23, 1965. Shows of oil were evidenced in both Dakota "D" and "J" Sands.

Oil saturation was seen in the top zone of porosity in the "D" sand (4902-12). The sand was too tight to merit a DST, however, this zone could develop into a good reservoir body closeby possibly associated with a better structural position.

The top zone of porosity in the "J" sand (5066-85) also possessed excellent oil shows. This 19' zone, absent in the Winslow & Hayes #1 State, C SW NW Section 11, is positive proof of the extension of the Beall Creek - Bonanza offshore bar northward through Section 34-35, T 11 N, R 53 W.

Structurally the #1 State "A" proved to be a seismic disappointment running 52' low to detailed shooting. Even as low as it is (-789 on the "J") the well proved to be very close to an oil-water contact as seen from the samples, log and DST analyses.

In light of all the facts found from the drilling of this well, I believe that an oil accumulation similar to that at Bonanza exists in the NE/4 of Section 10. Locations at NE NE of SW NE appear to be most favorable from a subsurface structural viewpoint.



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