

## HISTORY



COMPANY: Sun Oil Company  
AREA: Cuba Mesa  
WELL NO.: C. B. McElvain-Government No. 1  
LOCATION: Section 23, T 21 N, R 2 W  
850' North of and 225' East of the West 1/4 Corner  
Sandoval County, New Mexico

ELEVATIONS: Ground . . . . . 7057.7'  
Derrick Floor . . . 7068'  
Kelly Bushing . . . 7069'

Drilling Contractor: Loffland Bros. Drilling Company  
Spudded: December 24, 1956  
Completed: February 5, 1957

Casing Record: Cemented 9 5/8" surface pipe with 220 sacks at 529'

Plugs: 6400' to 6300', 5040' to 4990', 6150' to 6050',  
4000' to 3900' (38 sacks), 1620' to 1470' (50 sacks),  
550' to 500' (20 sacks), 10 sack plug in surface.

Total Depth: 7180' in Jurassic Entrada

Schlumberger Logs: Electric Log (40' to 7186'), Microlog (4796' to  
5628')

Sample Log: 20' to 7180'  
Core Lab. Log: 529' to 7180' - Drilling time, porosity, lithology,  
oil shows, cuttings analysis, mud  
analysis (gas), mud data, bit data,  
core data, and drillstem test data.

Drillstem Tests: No. 1 - 3726'-3772'  
No. 2 - 4925'-5009'

Geologists: Mark Williams, B. D. Sheffer, J. R. Boshard  
Production: Plugged and Abandoned

### SUMMARY:

The well was located on a prospect referred to as the Cuba Mesa Area. Cuba Mesa is situated in the southeast end of the San Juan Basin. Regionally, it is considered to be a prospective area for possible gas and/or oil production from the Cretaceous rocks. Locally, the indicated seismic closure which amounted to about 50 feet warranted a test to the Jurassic Entrada sandstone which produces oil on a small anomaly several miles to the south.

The test was drilled to total depth without any unusual delays nor difficulties. One core was cut, and two drillstem tests were run at

intervals indicating fair or good shows. DST No. 1 was run in the Point Lookout sandstone and recovered 2,780 feet of heavily gas cut fresh water. DST No. 2 was run in the Gallup, recovering 184 feet of drilling mud with no shows.

It is felt the well was adequately evaluated and tested before abandonment.

#### DETAILED HISTORY

Dec. 24, 1956 Spudded at 9:30 p. m.  
Dec. 25, 1956 Drilling at 225'.  
Dec. 26, 1956 TD 529'. Ran ES to 522'. Running 9 5/8" to bottom.  
Off 1/2". No DST of possible zones - hole caving.  
Schlumberger - probable water in sandstone down to 200'.  
Dec. 27, 1956 Set 9 5/8" surface pipe at 529' with 220 sacks. Plugged  
down at 5:30 p. m. on Dec. 26, 1956. WOC.  
Dec. 28, 1956 Drilled out from under surface at 8:30 p. m. Core Lab.  
on at 10:00 p. m.  
Dec. 29, 1956 Drilling at 1020' - shale, varicolored, clayey, trace of  
sandstone, medium to coarse, arkosic,  
no shows.  
Drilling at 1 1/2 minute per foot.  
Dec. 30, 1956 Drilling at 1390' - shale, varicolored, clayey, trace of  
sandstone, gray to white, fine, no  
shows.  
Dec. 31, 1956 Drilling at 2114'. Circulated out drilling break at 2104'  
to 2114' - sandstone, fine to very fine, angular, slight  
porosity, no shows.  
Sample Tops:  
K-Ojo Alamo 1300 - plus 5768  
K-Kirtland-Fruitland 1410 - plus 5658  
K-Pictured Cliffs 1485 - plus 5583 - no shows, no  
K-Lewis Shale 1615 - plus 5443 good ss.  
Jan. 1, 1957 Drilling at 2615' - shale, gray to green, waxy, slightly  
arenaceous.  
Jan. 2, 1957 Drilling at 2993' - shale, gray to green, bentonitic, very  
slightly arenaceous. No gas reading  
differences of more than two units.  
Jan. 3, 1957 Drilling at 3370' - shale, gray, traces of coal.  
Sample Tops:  
K-Cliff House 3105? - plus 3963  
K-Menefee 3165 - plus 3903  
first coal at 3120'  
second coal at 3165'  
expect K-Point Lookout at 3715'

Jan. 4, 1957 Drilling at 3622' - shale, gray, with interbedded coal and sandstone, gray, very fine, angular, silty.

Jan. 5, 1957 Drilling at 1 1/2 minutes to 2 1/2 minutes per foot. Good drilling break at 3725 to 3732'. Circulated out samples. No shows. Drilling to 3770'. Circulated out samples at 3740' - sandstone, fair fluorescence, very slight cut, medium grain, glauconitic, angular, porous.

Jan. 6, 1957 K-Point Lookout -- 3725'.  
DST No. 1 - 3726-3772' - (K-Point Lookout)  
Open 1 hour. Shut in 20 minutes. 3/4-inch bottom choke, 5/8-inch top choke. Good blow air immediately, continued throughout. Recovered 2,780 feet heavily gas cut fresh water. FP 195-1260#; SIP 1180#; H - initial 1930#, final 1905#.

Jan. 7, 1957 Drilling at 4010' - shale, gray to dark gray, splintery, micaceous, slightly arenaceous. Top of K-Mancos (Upper) at 3970'.

Jan. 8, 1957 TD 4280'. Shale, gray-brown, silty.  
Making trip.

Jan. 9, 1957 TD 4490'. Shale, gray, siltstone.  
Making trip.

Jan. 10, 1957 TD 4717'. Shale, gray, siltstone.  
Making trip.

Jan. 11, 1957 TD 4895'. Sandstone, gray, fine to very fine, micaceous, tight, slight to very shaley.

Jan. 12, 1957 TD 4947'.  
Core No. 1 - 4941-4955' - Recovered 14' - (Barrel jammed)  
14' - sandstone, very fine, tight, interbedded with shale, black, fossiliferous, entire core highly fractured, no shows.

Jan. 13, 1957 Drilling at 5074' in sandstone and shale interbedded. Top of K-Gallup - 4810'?

Jan. 14, 1957 Drilling at 5237' - shale, black, sandy, micaceous.

Jan. 15, 1957 TD 5460'. Shale, black, slightly sandy, no shows.  
Making trip.

Jan. 16, 1957 Drilling at 5725'. Dark shale with trace of limestone and sandstone.  
Drilling at 3 1/2 minutes per foot.  
Tripping. Started in at 7:45 a. m.

Jan. 17, 1957 TD 5972'. Shale, gray, limy, interbedded with siltstone and sandstone.  
Top of Greenhorn at 5860' (plus 1188').

Jan. 18, 1957      Drilling at 6055' - shale, dark gray, slightly fossiliferous, micaceous.

Jan. 19, 1957      TD 6115'. Sandstone, white, fine to medium, angular, calcite, slight to fair porosity, no shows.  
Top of K-Dakota at 6105' (plus 963').

Jan. 20, 1957      TD 6175'. Sandstone, white, fine to medium, angular, slightly glauconitic, porous, no shows.  
Making trip.

Jan. 21, 1957      TD 6225'. Sandstone, white to tan, fine to very fine, angular, slightly porous, no shows.  
Making trip. Drilling at 9 minutes per foot.

Jan. 22, 1957      TD 6336'. Sandstone, shale, slightly arkose, medium to coarse, subangular to round, unconsolidated, porous, no shows, no gas in cuttings or mud.  
Making trip.

Jan. 23, 1957      Drilling at 6386' - shale, varicolored, with thin interbeds of sandstone, green, fine, angular, quartzitic.  
Top of J-Morrison at 6335'.

Jan. 24, 1957      TD 6414'. Shale, varicolored, with thin interbeds of sandstone, green, fine, angular, quartzitic.  
Tripping for new bit.

Jan. 25, 1957      Drilling at 6455' - sandstone, varicolored, fine, angular, quartzitic, very cherty, tight, with interbedded shale, varicolored, cherty.  
Drilling at rate of 12 to 18 minutes per foot.

Jan. 26, 1957      TD 6517'. Drilling in sandstone, varicolored, fine, angular, quartzitic, very cherty, tight, with interbedded shale, varicolored.

Jan. 27, 1957      Drilling at 6578' as above.

Jan. 28, 1957      Drilling at 6678' in sandstone, white, fine to coarse, slight to fair porosity, no shows.

Jan. 29, 1957      TD 6808'. Sandstone, white to pink, medium to coarse, angular, micaceous, porous, no shows.

Jan. 30, 1957      Drilling at 6902' in shale, red to varicolored, with sandstone, very fine, white to pink, tight, calcite, siltstone.

Jan. 31, 1957      TD 7003'. Sandstone, white to pink, fine and varicolored shale, silty, no shows.  
Stuck drill pipe at 6429' coming out on trip.  
Drilling at rate of 4 feet per hour.

Feb. 1, 1957      TD 7051'. Shale, varicolored, silty with streaks of sandstone, white, fine, no shows.  
Drilling at rate of 18 minutes per foot.

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Feb. 2, 1957 TD 7131'. Sand and shale.  
Feb. 3, 1957 Ran Schlumberger logs to TD 7186'. (Depth bottom driller 7180')  
Tops: J-Todilto 7051'  
J-Entrada 7145'  
Feb. 4, 1957 Set cement plugs at 4990' to 5040'; 6050' to 6150'; 6300' to 6400'.  
To test plugs this p. m. and DST at daylight Feb. 5, 1957.  
Ran Schlumberger electrical log from 529' to 7186'; micro-log from 4800' to 5623'. Completed at 9:00 a. m. Feb. 3, 1957. Released Core Lab. at 11:00 a. m. Feb. 3, 1957.  
Feb. 5, 1957 DST No. 2 - 4925-5009'  
Open 1 hour. Shut in 20 minutes. 5/8-inch x 1-inch choke. Fair to weak blow, died at end of test.  
Recovered 184 feet of drilling mud. IFP 110#;  
FFP 135#; SIP 1540#; HP in 2650#; HP out 2625#.  
Set cement plugs from 1470' to 1620'; 1180' to 1310'.  
Plugged and Abandoned Feb. 5, 1957.

<u>SCHLUMBERGER TOPS:</u>	<u>DEPTH</u>	<u>DATUM</u>
TERTIARY	Surface	
CRETACEOUS		
Ojo Alamo	1204	5865
Kirtland-Fruitland	1347	5722
Pictured Cliffs	1502	5567
Lewis Shale	1584	5485
Nesa Verde		
Cliffhouse	3122	3947
Menefee	3160	3909
Point Lookout	3722	3347
Mancos (Upper)	3962	3107
Gallup	4888	2181
Mancos (Middle)	5448	1621
Sanastee	5540	1529
Mancos (Lower)	5669	1400
Greenhorn	5864	1205
Graneros	5885	1184
Dakota	6115	954
JUPASSIC		
Morrison	6338	731
Todilto	7051	18
Entrada	7145	-76