GEOLOGICAL WELL REPORT

MIKE DAVIS

#1 JOLLY

NE/4 NW/4 SECTION 15 TOWNSHIP 3S - RANGE 56W

WASHINGTON COUNTY, COLORADO

ODC 12

SYNOPSIS OF WELL HISTORY

SPUD DATE	12-18-93
COMPLETION DATE	12-22-93
RESULTS	PLUGGED & ABANDONED
SURFACE CASING	4 JOINTS OF 8-5/8" × 24# CASING SET AT 135 FT. - KB MEASUREMENTS - WITH 120 SACKS OF REGULAR CEMENT WITH 3% CALCIUM CHLORIDE
TOTAL DEPTH	5,255 DRILLER 5,256 LOGGER
ELEVATION	4,780 GROUND 4,793 KELLY BUSHING
ELECTRIC LOG	SCHLUMBERGER - DUAL INDUCTION - SFL
CONTRACTOR	ALLISON DRILLING COMPANY, INC.
DRILLING MUD ENGINEER	QUALITY DRILLING FLUIDS

CHRONOLOGICAL WELL HISTORY

12-18-93 Spudded well at 6:00 AM and drilled 140 ft. of 12-1/4" Surface Hole in 3-1/2 hours - Ran 4 Joints of 8-5/8" × 24# Surface Casing - Set at 135 ft. with 120 Sacks of Regular Cement and 3% Calcium Chloride. Plug Down @ 9:30 AM - Drilled out plug at 9:30 PM. Drilling a 7-7/8" Main Hole, Bit Weight 25,000#, Rotary rpm 180, Pump Pressure 600 psi. Drilling Fluid - Water.

12-19-93 Drilling at 2,219 ft. at 7:00 AM. Bit Weight, Rotary rpm, Pump Pressure, same. Drilling Fluid - Water.

12-20-93 Drilling at 4,525 ft. at 7:00 AM after laying down bad joint of drill pipe. Bit Weight 30,000#, Rotary rpm 180, Pump Pressure 1,150 psi. Drilling Fluid - Water and Gel.

12-21-93 Circulate top of "J" Sand to Surface from 5:00 AM to 6:00 AM. Drilling at 5,120 ft. at 7:00 AM. Total Depth @ 5,255 ft. reached at 4:00 PM. Made Short Trip and Circulated Hole 1 hour for Log - Started Logging at 8:30 PM - Finished Logging 10:00 PM - Colorado Oil & Gas Commission gave instructions to Plug & Abandon Well.

12-22-93 Plugged & Abandoned @ 5:00 AM

FORMATION TOPS

Niobrara	4,163	
Ft. Hays	4,590	
Codell	4,635	
Carlile	4,645	
Greenhorn	4,730	
Brown Lime	4,970	
"D" Sandstone	5,061	
"J" Sandstone	5,114	
Total Depth	5,255	Driller
	5,256	Log
Elevation	4,780	Ground
	4,793	KB

LITHOLOGY

"D" Sandstone

5,061-77 (16´) Sandstone & Shale inter-bedded, sandstone very fine grain, gray, dense clay matrix, no porosity and permeability, No Stain or Fluorescence.

5,077-84 (7´) Sandstone fine grain, light gray, quartzose, trace glauconite, fair porosity and permeability, No Stain or Fluorescence.

"J" Sandstone

5,114-46 (32´) Sandstone fine grain, quartzose, poor oil stain, very dull fluorescence at top, fair to good porosity and permeability throughout.

5,146-54 (8´) Shale, black.

5,154-72 (18´) Sandstone very fine grain, quartzitic in part, hard, tight, interbedded with shale, No Show.

5,172-5,200 (28´) Sandstone fine grain, quartzose, white clay matrix in part, poor to fair porosity and permeability, No Show, some shale inclusions.

5,200-08 (8´) Shale, black.

5,208-55 (47´) Sandstone fine grain, dense, white clay matrix, poor porosity and permeability, No Show. No Fluorescence.

CONCLUSION

The #1 Jolly was prepared on the geology of a stream channel. The channel was evident in a test drilled 3/4 of a mile west and down-dip. This test had the coarsening-upward log signature indicative of a distributary mouth bar as well as a mathematically calculated show from log resistivity and porosity. Our test, the #1 Jolly, did not encounter the channel, at least not in an isolated form, which would be primary for the necessary geometry to have closure for oil production.

STRAIGHT HOLE SURVEYS

Depth	Deviation
1,158 ft.	1/4°
2,219 ft.	3/4°
3,219 ft.	1/4°
4,244 ft.	1-1/2°
5,255 ft.	1°

MUD DATA

In the upper hole, above 4,100 ft., the basic drilling fluid was fresh water. No gel sweeps were needed, and calcium was controlled with a daily tour treatment of soda ash. At 4,100 ft., gel was added along with caustic soda and a dispersant. This mud-up lowered the water loss to 10 cc or less, and, with the addition of water, the weight was controlled at less than 9.6 lb/gal. The viscosity was raised to 70 sec. or above for logging with the addition of gel.

PLUGGING DATA

The #1 Jolly was plugged and abandoned in accordance with instructions of the Colorado Oil & Gas Commission from Ed De Matteo.

Sacks Cement	Interval
40 Sacks	175 ft. to 75 ft - In & Out Base of Surface Casing
10 Sacks	25 ft. to Surface - At Surface
5 Sacks	In Mouse Hole
5 Sacks	In Rat Hole

Cut Surface Casing Off 4 ft. Below Ground Level and Welded Plate on Casing.

DRILLING CONTRACTOR DATA

Contractor	Allison Drilling Company, Inc.	
Drawworks	Cooper 650	
Power	Cat 3412	650 hp
Mast	75 ft. Cooper	250,000 lb. Capacity
Mud Pump	Emsco 550	(6" × 16")
Power	Cat 379	
Drill Collars	14 (6-1/4" × 2-1/4")	X-Hole
Drill Pipe	4-1/2" × 16.6#	X-Hole