

GEOLOGICAL WELL HISTORY

Edward Mike Davis
#12-27 UPRR Price
SW NW Sec. 27-T3S-R59W
Adams County, Colorado



SYNOPSIS OF WELL HISTORY

Spud Date 1-1-92

Completion Date 1-6-92

Results - Plugged and Abandoned

Surface Casing - 10 joints of 8 5/8" x 24# Casing set at 411 ft. KB Measurements with 350 sacks of regular cement and 3% Calcium Chloride with 1/4# flowseal per sack.

Total Depth 6226' Driller
6233' Log

Elevation 5018' Ground
5028 K.B.

Electric Logs Schlumberger
Dual Induction/SFL-GR
Compensated Formation Density-GR

Drilling Contractor - Allison Drilling Company, Inc.

FORMATION TOPS

Niobrara	5184
Ft. Hays	5587
Codell	5627
Carlile	5637
Greenhorn	5714
Brown Lime	5951
"D" Sand	6048
"J" Sand	6093
Skull Creek	6225

Total Depth 6226' Driller
6233' Logger

Elevation 5018' Ground
5028' Kelly Bushing

BIT RECORD

BIT #	1	2	3
SIZE	- 12 1/4"	7 7/8"	7 7/8"
MAKE	- SECURITY	REED	HTC
TYPE	- S-3	HP11	J-22
INTERVAL	- SURFACE 420 FT.	420 - 6032 FT.	6032-6235 FT.
FOOTAGE	- 420 FT.	5612 FT.	203 FT.
HOURS	- 3 3/4 HRS.	49 HRS.	15 HRS.

MUD DATA

Above 5,000 ft. , the basic drilling fluid was fresh water. No gel sweeps were needed and calcium was controlled with treatments of soda ash. About 5100 ft., before drilling the Niobrara, a drilling detergent was added to help reduce bit balling, mud rings, torque and drag. At 5200 ft., gel was added along with caustic soda and a dispersant. This mud-up lowered the water less to 10cc or less and with the addition of water the weight was controlled at 9.3 lb./gal. or less. When drilling the sands a filtrate control agent was used to lower the water loss to 8 cc or less. The viscosity was raised to 70 sec. or above for logging by adding gel.

DRILLING CONTRACTOR DATA

CONTRACTOR: Allison Drilling Company, Inc.

DRAW WORKS: Ideco Rambler 1000

POWER: 2-1271 GMC's (V-12's)

MUD PUMP: Ideco MM550 (5 1/2" x 15") with Cat 3412

MAST: 108 ft. Ideco 350,000.00 lb. Hook Load

DRILL COLLARS: 17(6" x 2 1/4") X-Hole

DRILL PIPE: 4 1/2 x 16 X-Hole
Annular Velocity 190 ft./min.

CHRONOLOGICAL WELL HISTORY

- 1-1-92 Moved-in Drilling rig and rigged-up.
Spudded well at 10:45 p.m.
- 1-2-92 Drilled 420 ft. of 12 1/4" Surface Hole in 3 3/4 hours - Ran 10 joints of 8 5/8" x 24# ST&C Surface Casing with Guide Shoe and 2 centralizers - Set at 411 ft. Kelly Bushing Measurements - Cemented with 350 sacks of standard cement with 3% Calcium Chloride and 1/4# flowseal per sack - Good returns - Plug down at 7:20 a.m. - Tested Surface Casing by pressuring up to 500 lbs. for 15 min. - Drilled out plug at 5:00 p.m. - Drilling a 7 7/8" Main Hole - Bit Weight 10,000#/30,000# - Rotary RPM 180 - Pump Pressure 800"/1100# @ 64 SPM - Bottom Hole Assembly Bit 7 7/8" Reed HP11 w/3 - 13/32 Jets - Drill Collars 17 - 6" x 2 1/4" Drilling Fluid - Water.
- 1-3-92 Drilling at 3325 ft. at 7:00 a.m.
Bit Weight 35,000# - Rotary RPM 160/180 - Pump Pressure 1100#/1300# @ 64 SPM.
Bottom Hole Assembly - Bit 7 7/8 - Reed HP11 w/3 13/32 Jets - Drill Collars 17-6" x 2 1/4"
Drilling Fluid - Water
- 1-4-92 Drilling at 5600 ft. at 7:00 a.m.
Bit Weight - 38,000#, Rotary RPM - 108/160,
Pump Pressure - 1300# @ 64 SPM
Bottom Hole Assembly - Bit 7 7/8 - Reed HP11 w/3 13/32 Jets - Drill Collars 17-6" x 2 1/4"
Drilling Fluid Gel - Chemical Weight 9.0 - Viscosity 42 - W. L. 14
- 1-5-92 Drilling at 6084 ft. at 7:00 a.m. Pipe Strap at 6024 ft. - 8 ft. long
Bit Weight - 35,000#, Rotary RPM - 60, Pump Pressure - 1250 psi @ 64 SPM
Bottom Hole Assembly Bit 7 7/8 HTC-J-22 w/3 14/32 Jets - Drill Collars 17-6" x 2 1/4"
Drilling Fluid - Gel- Chemical - weight 9.2 - Viscosity 42 - W.L. 7.4
Total Depth at 6226 @ 7:30 p.m.
Short Trip to 9:00 P.M.
Circulate Hole for logs to 10:30 p.m.
- 1-6-92 Trip Out for Logs to 2:00 a.m.
Start to Log at 2:30 a.m.
Finished Logging at 5:30 a.m.
Prepare to P & A

Mr. Jim Kenney approved the following plugging procedure.
The well was plugged and abandoned at 1:00 p.m.
1-6-92

PLUG NO.	INTERVAL	NUMBER SACKS CEMENT
1	6100 FT. TO 6000 FT.	40 SACKS
2	430 FT. TO 360 FT.	30 SACKS
3	30 FT. TO SURFACE	10 SACKS

LITHOLOGY

"D" Sandstone

6048-58 (10') Sandstone and shale interbedded, gray to dark gray-sandstone silty to very fine grain, some black mica, no porosity, no show, no fluorescence.

"J" Sandstone

6093-6101 (8') Sandstone very fine grain to fine grain, light gray, some dark gray, fair porosity & permeability with black mica and glauconite, no show, trace of fluorescence

6101-6127 (26') Shale dark gray with siltstone inclusions tight, no show, no fluorescence

6127-45 (18') Sandstone fine grain, light gray, very slight porosity in part, white clay matrix, trace to scattered fluorescence, no show.

6145-80 (35') Sandstone fine grain, gray to light gray, very slight porosity, with black mica and glauconite, no show, no fluorescence

6180-6215 (35') Sandstone gray very shaley, hard, quartzosc, to porosity, no show, no fluorescence.

6215-26 (11') Shale, dark gray silty in part no show.

SURVEYS

FEET	DEGREES
420 FT.	1/2
1421 FT.	1/4
2443 FT.	1/2
3445 FT.	1 1/4
4442 FT.	1 1/4
6024 FT.	1/4

WILLIAM J. MEAGHER, GEOLOGIST