



00300638

**Well:** #31-35 Gotfredson

**Location:** NW/4 NE/4 Section 35, T. 12 N., R. 53 W.  
Logan County, Utah

**Operator:** Holly Resources Corporation

**Contractor:** Exeter Drilling Company

**Elevations:** 4541 Gr.; 4549 K. B.

**Casing:** Set 4 jts. 8-5/8" (139.20') at 149.20' KB with 100 sacks regular cement plus 3% CaCl<sub>2</sub>. Plug down 2:00 p. m., April 9, 1969.

**Cores:** None.

**Drill Stem Tests:** None.

**Well History:**

- 4/ 9/69 Moved in, set surface.
- 4/10/69 Drilling @ 2470'.
- 4/11/69 Drilling @ 4440'.
- 4/12/69 Drilling @ 5227'.
- 4/13/69 Drilling @ 5358'. Total depth reached this date.
- 4/14/69 Plugged and abandoned.

**Logs:** Schlumberger Ind-Elec., FDC-Microlog Combined

**Log Formation Tops:**

Niobrara	4390	
Carlile	4770	
Greenhorn	4988	
Bentonite	5124	
"D" Sand	5224	-675
"J" Sand	5332	-783
Total Depth	5417	5415 Driller

**Mud:** On the morning of April 13, 1969, the mud had the following properties:

Weight	10.0 #/gal.
Viscosity	68 API Funnel
Water Loss	4.8 cc in 30"
Filter Cake	2/32"

- 5274 - 5310 Shale, black.
- 5310 - 5332 Siltstone and shale.
- 5332 - 5355 Sandstone, fine-grained, white, occasional glauconite inclusions, siliceous, hard, tight, streaks of clay-filled sandstone, low porosity, all wet, no show, no fluorescence.
- 5355 - 5368 Shale, black; siltstone, gray.
- 5368 - 5394 Sandstone, white, fine-grained, heavy minerals, clay matrix, clear subrounded quartz grains, variable porosity, friable, wet, no show, no fluorescence.
- 5394 - 5397 Shale, black.
- 5397 - 5406 Sandstone, very fine-grained, gray, silty, clay-filled, friable, low porosity, heavy minerals, wet, no show, no fluorescence.
- 5406 - 5415 Shale, pyrite, siltstone.

**Discussion:**

This well was drilled to evaluate prospective sands in the "J" section; however, the well ran lower than had been anticipated and no shows were encountered in the samples. The well was plugged and abandoned in the surface casing only on April 14, 1969.

*Jack D. Gray*  
Jack D. Gray  
Geologist

April 15, 1969

<b>Bit Record:</b>	<u>No.</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth Out</u>	<u>Feet</u>	<u>Hours</u>
	1	7-7/8	Sec.	S-3	3090	2941	16-1/2
	2	7-7/8	Reed	YT3A	4681	1591	19-1/4
	3	7-7/8	Smith	DT	5245	574	17-1/2
	4	7-7/8	HTC	OSC	5357	112	14
	5	7-7/8	Reed	YSI	5414	58	9-3/4

<b>Deviation Surveys:</b>	<u>Depth</u>	<u>Degrees from Vertical</u>
	514	1/4°
	1025	1/2°
	1472	1/4°
	1950	1/2°
	2459	1/2°
	3090	1-1/4°
	3519	1°
	4016	1°
	4681	1/2°
	5245	3/4°

**Sample Description:**

5200 - 5224	Shale, black.
5224 - 5227	Sandstone, fine-grained, white, clay-filled, low porosity, wet.
5227 - 5230	Shale, black.
5230 - 5240	Sandstone, gray to white, clay-filled and silty to slight clay matrix, poor to fair porosity, clear subrounded quartz grains, friable, wet, no show, no fluorescence.
5240 - 5246	Shale and siltstone, gray to black.
5246 - 5256	Sandstone, fine-grained, white, good porosity, friable, clear subrounded quartz grains, few shale partings, wet, no show, no fluorescence.
5256 - 5274	Siltstone with stringers of sandstone, hard, tight, siliceous; shale, tan to black.