

WELL HISTORY

Reichhold Energy Corporation
Well: C-Z No. 4

Section 36-5N-4W, W.B. & M.
Columbia County, Oregon

November, 1979

- 4, Brinkerhoff-Signal moved in Rig No. 61 and rigged up.
- 5, Rigging up.
- 6, Rigged up.
- 7, Spudded in at 5:30 A.M. with 12-1/4" bit and drilled ahead.
- 46' Sand and Clay
- Washed out around conductor.
- Hung drill pipe at 46' and pumped in 90 sacks of Class II Cement treated with 3% CaCl₂. Stopped for 10 minutes and pumped in 20 sacks of Class II treated with 3% CaCl₂. Cement in place at 12:30 P.M.
- Washed cement out of mousehole.
- Drilled out firm cement from 31' to 46' and lost return around conductor and to mouse hole.
- Hung drillpipe at 46' and pumped in and equalized 60 sacks of Class II Cement treated with 3% CaCl₂. Cement in place at 7:15 P.M.
- 8, Drilled out cement 30' - 32' and drilled ahead.
- 401' Sand and Clay
- Lost 85 bbls of mud at 342'. Regained circulation.
- Survey at 100' 0° 0'
- Survey at 300' 0° 0'
- 9, 623' Sand and Clay
- Survey at 500' 0° 0'
- Survey at 623' 0° 30'

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9, Measured out.

673' Sand and Clay

Ran 18 joints of 8-5/8" 24# casing equipped with B&W guide shoe and insert fill-up valve on top of shoe joint.

Cemented around shoe at 673' with 350 sacks of Class II Cement treated with 2% CaCl₂. Used top rubber plug but did not bump plug. Had approximately 85 Cu.Ft. of returns at surface. Bled off and check held. Cement in place at 9:50 P.M.

Casing Details:

Guide Shoe	1.06'
1 Joint 8-5/8" 24# K	39.40'
Insert Fill-up Valve	-0-'
16 Joints 8-5/8" 24# K	620.25'
1 Landing Joint	<u>19.00'</u>
	679.71'
Up	<u>7.00'</u>
Shoe @	<u><u>672.71'</u></u>

10, Backed out landing joint.

Installed 8" Series 900 Screw on Head.

Installed BOP equipment.

11, Tested blind rams with 1,150 psi.

12, Tested BOP equipment with 1,100 psi. Witnessed and approved by DOGAMI.

Drilled out plug, insert, cement below and shoe with 7-7/8" bit and drilled ahead.

1,126' Shale and Siltstone

Survey at 928' 0° 15'

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13,	1,682'	Sand and Siltstone		
		Survey at 1,211'	0°	15'
		Survey at 1,526'	1°	0'
14,	2,304'	Sand and Siltstone		
		Survey at 1,838'	0°	45'
15,	2,523'	Sand and Basalt		
		Survey at 2,367'	0°	30'
16,	3,076'	Basalt, Sand, Siltstone		
		Survey at 2,850'	1°	0'
17,	3,637'	Sand and Siltstone		
		Survey at 3,554'	0°	45'
18,	4,022'	Siltstone and Shale		
		Survey at 4,022'	1°	30'
19,	4,460'	Siltstone and Shale		
		Survey at 4,460'	1°	45'
20,	4,863'	Sand and Siltstone		
		Survey at 4,863'	2°	15'
21,	5,108'	Sand and Siltstone		
		Survey at 5,079'	2°	15'
22,	5,377'	Sand and Siltstone		
		Survey at 5,377'	NG	
23,	5,609'	Sand and Siltstone		

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- 24, 5,752' Sand and Siltstone
Survey at 5,609' 3° 15'
- 25, 5,950' Sand and Siltstone
Survey 5,782' 3° 45'
- 26, 6,063' Sand and Siltstone
Ran Welex Dual Induction Guard Log from 673' - 6,062'
Ran Welex Dipmeter.
- 27, Ran Welex Compensated Acoustic Velocity Log from 673' - 6,058'.
Welex attempted 15 Sidewall Samples and recovered 5. Descriptions attached.
- 28, Laid down excess drill pipe.
Plug No. 1: Hung drill pipe at 745' and pumped in and equalized 90 sacks of Class II Cement treated with 3% CaCl₂. Cement in place at 12:35 P.M.
Located top of plug No. 1 at 531'.
Witnessed and approved by DOGAMI.
Plug No. 2: Hung drill pipe at 61' and filled 8-5/8" casing to surface with cement. Cement in place at 5:30 P.M.
Removed casing head.
Cut off surface casing 4' below ground level and welded on steel plate.
Hole abandoned in this condition.