WELL HISTORY

Reichhold Energy Corporation
Well Columbia County No. 6

API NO.
Section 10-6N-5W, W.B.& M.
Mist Field, Columbia County, Oregon

July, 1979

16, Taylor Drilling Company moved in Rig No. 4, and rigged up.

17, Spudded in at 12 Noon with 9-7/8" bit and drilled ahead.

368' Clay

18, 420' Clay

Ran 10 joints or 403' of 7" 20# Casing equipped with a guide shoe and cemented around shoe at 401', with 150 sacks of Class II cement. No cement returns at surface. Cement in place at 7:45 A.M.

Ran 1" pipe to top of cement in annulus at 41'. Pumped in 25 sacks of Class II Cement. Cement did not stay at surface. Cement in place at 12:45 P.M.

Ran 1" pipe to top of cement in annulus at 16'. Pumped in 15 sacks of Class II Cement which filled annulus to surface. Cement in place at 3:00 P.M.

Landed casing and installed casing head.

19, Installed and tested BOP equipment. Test of BOPE witnessed and approved by Mr. Vern Newton of DOGMI.

Drilled out plug, cement below and shoe with 6-1/4" bit and drilled ahead.

946' Clay

20, 1,872' Clay and Sand

21, 2,258' Clay and Sand

22, 2,794' Clay and Sand

23, Commenced coring with Reese Conventional Core Barrel and 6-1/4" Drag Head.

Core No. 1 2,794' - 2,804' Rec. 4'

WELL HISTORY

Reichhold Energy Corporation
Well Columbia County No. 6

API NO.
Section 10-6N-5W, W.B.& M.
Mist Field, Columbia County, Oregon

July, 1979

23, 4' Sand, fine to medium grained. Well cemented. Well sorted. Subangular to subrouned, clear to gray quartz grains with minor subrounded Mafic grains. Some Calcite veins. Abundant pyrite and mica. Trace of lignite.

Drilled ahead with 6-1/4" bit.

2,917' Sand

24, 3,102' Sand and Tuff

25, 3,465' Tuff and Sand

26, Ran Welex Induction-electric Log from 401' to 3,456'.

Ran Welex Compensated Acoustic Velocity Log.

REDRILL NO. 1

Plug No. 1. Hung drill pipe at 2,180' and pumped in and equalized 40 sacks of Class II Cement. Cement in place at 1:15 P.M.

Plug No. 2. Hung drill pipe at 460' and pumped in and equalized 56 sacks of Class II Cement in place at 2:10 P.M.

Located top of Plug No. 2, at 286'.

27, Drilled out cement from 285' - 460' and cleaned out to 615'. Circulated and conditioned mud.

Plug No. 3. Hung drill pipe at 618' and pumped in and equalized 82 sacks of Class II Cement. Cement in place at 7:10 A.M.

Located top of plug at 396'. Cleaned out soft cement to 401'.

Plug No. 4. Hung drill pipe at 401' and pumped in and equalized 30 sacks of Class II Cement. Cement in place at 3:00 P.M.

Located top of plug at 291'.

28, Cleaned out cement to 400'.

WELL HISTORY

Reichhold Energy Corporation
Well Columbia County No. 6

API NO.
Section 10-6N-5W, W.B.& M.
Mist Field, Columbia County, Oregon

July, 1979

28, Waiting for cement to set.

29, Cleaned out cement to 492'. Kop

30, Ran Dyna Drill with 6-1/4" bit and drilled ahead.

929' Clay

31, Laid down Dyna Drill and drilled ahead.

1,515' Clay

Pick up Dyna Drill and drilled ahead.

1,660' Clay

August, 1979

1, 1,876' Clay

Laid down Dyna Drill and drilled ahead.

2,228' Clay

2, 2,954' Clay and Sand

3, 2,956' Sand, Tuff, Sand and Basalt

Ran Welex Induction-electric Log from 401' to 2,949'.

Ran Welex Compensated Acoustic Velocity Log from 492' to 2,952'.

Ran Welex Dipmeter.

REDRILL NO. 2

Plug No. 1. Hung drill pipe at 2,365' and pumped in and equalized 40 sacks of Class II Cement. Cement in place at 10:20 P.M.

Plug No. 2. Hung drill pipe at 865' and pumped in and equalized 58 sacks of Class II Cement treated with 2% $CaCl_2$. Cement in place at 11:15 P.M.

WELL HISTORY

Reichhold Energy Corporation
Well Columbia County No. 6

API NO.
Section 10-6N-5W, W.B.& M.
Mist Field, Columbia County, Oregon

August, 1979

4, Located top of plug at 621'. Cleaned out cement to 645'.

Waiting on Cement.

5, Cleaned out cement to 684'. Kop

Ran Dyna Drill with 6-1/4" bit and drilled ahead.

833' Clay

6, 1,261' Clay

Laid down Dyna Drill and drilled ahead.

1,646' Clay

7, 2,243' Clay and Sand

Pulled 9 strands of drill pipe and well started to flow.

Closed rams and installed Kelly.

8, Killed well with 78 lb./cu.ft. mud.

Ran bit to bottom at 2,243' and conditioned mud.

9, Pulled out of hole and changed stabilizers. Ran bit and drilled ahead.

2,614'

10. Ran Welex Induction-electric Log which stopped at 1,985'. Pulled logging tool.

Ran 6-1/4" bit to bottom and conditioned hole and mud.

Ran Welex Induction-electric Log from 684' - 2,614'.

Ran Welex Compensated Acoustic Velocity Log from 684' - 2,614'.

Ran Welex Dipmeter.

Laid down drill pipe.

WELL HISTORY

Reichhold Energy Corporation
Well Columbia County No. 6

API NO.
Section 10-6N-5W, W.B.& M.
Mist Field, Columbia County, Oregon

August, 1979

11, Ran 68 Joints or 2,587.44' (incl. equip.) of 4-1/2" 10.5# K casing equipped with a guide shoe and an insert fill-up valve on top of second joint above shoe. Casing equipped with centralizers on collars of bottom 11 joints. (38' ± spacing.)

Cemented around shoe at 2,584' with 150 sacks of Class II Cement. Used bottom rubber plug and displaced top rubber plug with 225 cu.ft. of water and bumped plug with 1,200 psi. Pressure held for 5 minutes. Bled off and check held. Closed in at surface. Cement in place at 4:00 A.M.

Casing details

Shoe	.60
2 joints 10.5#	74.72
Insert	-
66 joints 10.5#	2,512.12
On Hook	2,587.44
Above KB	3.44
Shoe @	2,584.00

Landed casing and installed tubing spool with Secondary Seal. Tested seal with 3,000 psi.

Re-installed and tested BOP equipment.

Picked up 2-3/8" tubing and ran to top of plug at 2,508'.

Wait on cement.

12, Ran Welex Micro-Seisonogram Log - Cased hole from 2,497' - 1,200'. Neutron tool failed to work.

Ran 2-3/8" tubing to 2,508' and conditioned water in hole with 3% KCL.

Landed 2-3/8" tubing as follows:

WELL HISTORY

Reichhold Energy Corporation
Well Columbia County No. 6

API NO.
Section 10-6N-5W, W.B.& M.
Mist Field, Columbia County, Oregon

August, 1979

12,

Below KB	10.00'
Tubing hanger	1.00'
67 joints	2,134.38'
	2,145.38

13, Removed BOP equipment and installed Christmas Tree.

Welex ran through tubing and ran Neutron Correlation Log from 2,150' - 2,506'.

14, Welex ran through tubing with a 1-9/16" Sidewinder jet gun and shot 4 holes per foot, 0° phasing in the following intervals.

PERFS

2,240'- 2,252'	2,303'- 2,324'
2,257'- 2,267'	2,329'- 2,336'
2,277'- 2,287'	2,358'- 2,373'
2,293'- 2,297'	

Bridge Plug to isolate these perfs to keep out water.

Well flowing water to sump after perforating. Flowed well at various rates to remove water.

Flowed well for 15 minutes at a stabilized rate as follows:

Choke	Tubing Press	Casing Press	Rate Mcf/D	Remarks
9/16	800	900	6,500	Dry
S I	930	920		3 Min.

Well shut in waiting for pipeline connection.