

**Westbay
Well Summary**

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Location ID: BLM-28 Field Representative(s): Dave Menzie

Date Started: 03/24/94 Date Completed: 05/10/94

Northing: 222924.78 Easting: 408218.92

Brass Cap: 4639.30 Outer Casing: 4639.43 Inner Casing: 4640.65

Drilling Method: Mud/Air Foam Rotary Drilling Contractor: Larjon Drilling Co.

Driller: J. Gower

Total Depth Borehole: 560' Total Depth Well Casing: 555'

Total Depth Surface Casing: 310'

Diameter Well Casing: 2" Diameter Surface Casing: 5"

Water Producing (packed-off) Intervals: 415' to 435'

Water Producing (packed-off) Intervals: 460' to 480'

Water Producing (packed-off) Intervals: 515' to 540'

Water Producing (packed-off) Intervals: N/A to N/A

Water Zone(s) Detected: ND Water Level Open Borehole: 380.30' GS

Water Level Cased Borehole: NA

Quik-Foam Use: 3 gallons

Estimated Water Use: 6,400 gallons

Well Casing:

2in x 2ft SCD 80 PVC:	<u>1</u>	=	<u>2</u>	ft
2in x 5ft SCD 80 PVC:	<u>3</u>	=	<u>15</u>	ft
2in x 10ft SCD 80 PVC:	<u>51</u>	=	<u>510</u>	ft
5ft MP packer:	<u>6</u>	=	<u>30</u>	ft
Total SCD 80 PVC pipe:			<u>557</u>	ft

Regular coupling:	<u>50</u>
Pumping port coupling:	<u>3</u>
Measurement port coupling:	<u>7</u>
End cap: Top and bottom =	<u>1</u>
Casing Clamp:	<u>Yes</u>

Surface Casing:

94# bags cement: 45 bags

50# bags bentonite powder: 5 bags

Pertinent Field Notes:

- 03/18/94 Steam clean Frank's rig and mud goose. Mobilize cleaned equipment to drill site; Menzie.
- 03/23/94 Steam clean drill pipe. Take to drill site, stand up rig, and line under rig with plastic; Menzie.
- 03/24/94 Steam clean subs and spud bit. Mobilize to site, line discharge pit with plastic, mix mud, spud hole, and drill 0' to 55' with 8 1/2-inch tricone milltooth bit; Menzie.
- 03/25/94 Drill 55' to 145'; Menzie.
- 03/28/94 Rig down to repair mud pump; Menzie.
- 03/29/94 Complete repair of mud pump; Menzie.
- 03/30/94 Drill 145' - 200'; Menzie.
- 03/31/94 Drill 200' - 235'; Menzie.
- 04/01/94 Drill 235' - 263'; Menzie.
- 04/04/94 Drill 263' - 312'. Bedrock at 300' is Orejon Andesite; Menzie.
- 04/05/94 Install 310.5' of 5" steel surface casing and pressure grout annulus to surface; Menzie.
- 04/06/94 Demobilize mud rotary equipment; Menzie.
- 04/07/94 Steam clean and mobilize air rotary equipment. Set up and drill 225' to 360' with 4 1/2-inch hammer bit. Drilled through 87' of grout in bottom of surface casing; Menzie.
- 04/08/94 Drill 360' - 560' with 4 1/2-inch hammer. TD borehole at 560'. Blow hole for one hour to cleanup cuttings; Menzie.
- 04/11/94 Blow hole for initial development; Menzie.

04/12/94 Blow hole for development; Menzie.

04/14/94 Blow hole; Menzie.

04/18/94 Blow hole; Menzie.

04/20/94 Blow hole; Menzie.

04/22/94 Blow hole, trip drill pipe out, demobilize air rotary equipment and install 1 1/2HP submersible pump at 528'; Menzie.

04/25/94 Pump well for final development, see development sheet for results; Menzie.

04/26/94 Pump well for development; Menzie.

04/28/94 Pump well for development; Summers.

04/29/94 Pump well for development; Contaldo.

05/05/94 Well developed and water level recovered to 381.40' TOSC. Run full suite of geophysical logs plus downhole camera demonstration; Menzie.

05/06/94 Begin setting up for Westbay MP casing installation; Menzie.

05/09/94 Install 557' of Westbay MP casing; Menzie.

05/10/94 Inflate all six straddle packers in Westbay MP casing. See completion diagram for details. Demobilize casing installation materials and equipment. Well completed; Menzie.