

**WESTBAY
WELL SUMMARY**

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Location ID: WB-14 Field Representative(s): D. Menzie, M. Canavan,
P. Egan

Date Started: 02/28/92 Date Completed: 03/23/92

Northing: 217704.21 Easting: 410835.15

Brass Cap: 4731.68' Outer Casing: N/A Inner Casing: 4732.83'

Drilling Method: Mud & Air-Foam Rotary Drilling Contractor: Larjon Drilling Co.

Driller: J. Gower

Total Depth Borehole: 550' Total Depth Well Casing: 545'

Total Depth Surface Casing: 490'

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

Water Producing (packed-off) Intervals: 510' to 530'

Water Producing (packed-off) Intervals: - to -

Water Producing (packed-off) Intervals: - to -

Water Zone(s) Detected: not detected Water Level Open Borehole: 301.66'(T.O.S.C.)
while drilling 03/18/92

Water Level Cased Borehole: 301.66'(T.O.S.C.) (03/18/92)

Quik-Foam Use: 1 gallon

Estimated Water Use: 2,600 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>52</u>	=	<u>520</u>	ft
Total SCD 80 PVC pipe:			<u>537</u>	ft

5ft MP packer:	<u>2</u>	=	<u>10</u>	ft
Regular coupling:	<u>53</u>			
Pumping port coupling:	<u>1</u>			
Measurement port coupling:	<u>3</u>			
End cap:	<u>2</u>			
Casing Clamp:	<u>1</u>			
Magnetic collar:	<u>1</u>			
Total footage:			<u>547</u>	ft

Surface Casing:

94# bags cement: 65 bags

50# bags bentonite powder: 7 bags

Pertinent Field Notes:

- 02/26/92 Steam clean and mobilize mud rotary equipment. - Menzie
- 02/28/92 Drill mud rotary (7 7/8" tricone button bit) from 0'-80'. - Menzie
- 03/02/92 Drill mud rotary (7 7/8" tricone button bit) from 80'-170'. - Canavan
- 03/03/92 Drill mud rotary 170'-275'. - Canavan
- 03/04/92 Drill mud rotary 275'-365'. Highly altered tuff bedrock encountered at 280'. Bedrock is 80%-90% gummy reddish clay. - Canavan
- 03/05/92 Drill mud rotary 365'-415'. Bedrock continues to be 80%-90% clay.
- 03/06/92 Drill mud rotary 415'-490'. Competent zone was encountered at 483'. Drilled to 490' to ensure that formation remained competent. This depth was also the cutoff to enable one Westbay completion zone. - Canavan
- 03/09/92 Installed 489.71' of steel surface casing and grouted in to place. - Egan
- 03/10/92 Drilled through grout in surface casing from 215'-400'. Apparently, amount of grout needed was over calculated. - Canavan
- 03/11/92 Drilled 400'-490' in grout. Drilled air-foam rotary with 4" air hammer 490'-550' (TD). Bedrock is competent brick-red tuff. - Canavan
- 03/12/92 Sound borehole at 553.0'. Water level measured at 411.15'. - Canavan
- 03/13/92 Southwest Surveys ran full suite of geophysical logs. - Canavan
- 03/16/92 Steamclean pulling unit, Westbay inflation hoses and water level probe in preparation for Westbay MP system installation. Sound borehole at 550.08'. Water level has risen to 305.75'. - Canavan
- 03/18/92 Install and pressure-tested 485' of Westbay casing. Hung casing inside surface casing. - Canavan
- 03/19/92 Installed and pressure tested remaining 62' of Westbay casing for a total of 547' (2' stick up and casing depth of 545'). Attempted to inflate packers but were unsuccessful. - Canavan

- 03/19/92 Attempted to inflate packers #2 & #6. Once again we were unsuccessful. Apparently we can't get pump pressure high enough. Consult with Westbay and try again tomorrow. - Canavan

- 03/20/92 Unable to get pump pressure to hold with line open (on Pressure Control Unit). Took apart pump bypass valve. Cleaned valve and replaced O rings. - Canavan

- 03/23/92 Inflated packers #2 & #6 (finally). Secured well head and welded locking cap and plate. Turned well over to Lockheed. - Canavan