

WESTBAY WELL SUMMARY

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Location ID: 200-I Field Representative(s): M. Russell, G. Giles, J. Pearson, P. Egan

Purpose of Well: (1) Monitor water table at 200 Area sewage lagoon (NMED DP-392 requirement).
(2) Delineation of groundwater contaminants near well 200-B-240 (EPA RFI request).
(3) Sampling zone within Charlene Shale to assist with Post Closure Care monitoring and reporting. Also allows subsurface mapping of the impermeable Charlene Shale unit.

Date Started: 05/20/97 Date Completed: 06/23/97

Northing: 227439.06 Easting: 416552.58

Brass Cap: 4837.79 Outer Casing: 4840.03 Inner Casing: 4839.91

Drilling Method: Mud/Air-Foam Rotary Drilling Contractor: Stewart Bros. Drilling

Driller: V. Amaro, R. Stewart

Diameter Borehole: 8 3/4" (0'-130'); 4 1/2" (130'-TD)

Total Depth Borehole: 845' (caved to 837') Total Depth Well Casing: 815'

Total Depth Surface Casing: 130'

Diameter Well Casing: 1 1/2" Diameter Surface Casing: 5" (nominal)

Sampling zones:	<u>165'</u>	to	<u>190'</u>
Sampling zones:	<u>290'</u>	to	<u>305'</u>
Sampling zones:	<u>370'</u>	to	<u>380'</u>
Sampling zones:	<u>485'</u>	to	<u>495'</u>
Sampling zones:	<u>670'</u>	to	<u>680'</u>
Sampling zones:	<u>790'</u>	to	<u>800'</u>

Water First Detected: Not identified Water Level Open Borehole: 178'

Water Level Cased Borehole: See pressure profile sheets

Estimated Water Use: Approx. 30400 gallons recorded

Well Casing:

1.5 in x 2 ft SCD 80 PVC:	<u>1</u>	=	<u>2</u>	ft
1.5 in x 5 ft SCD 80 PVC:	<u>19</u>	=	<u>95</u>	ft
1.5 in x 10 ft SCD 80 PVC:	<u>65</u>	=	<u>650</u>	ft
Total SCD 80 PVC pipe:			<u>747</u>	ft

5 ft MP packer:	<u>14</u>	=	<u>70</u>	ft
Regular coupling:	<u>75</u>			
Pumping port coupling:	<u>6</u>			
Measurement port coupling:	<u>16</u>			
End cap:	<u>2</u>			
Casing Clamp:	<u>0</u>			
Magnetic collar:	<u>9</u>			

Well Completion: Not used for completion

100# bags 16/40 sand:	bags
100# bags 10/20 sand:	bags
100# bags 8/14 sand:	bags
100# bags 8/20 sand:	bags
94# bags cement:	bags
5 gal. buckets bentonite:	buckets
50# bentonite powder:	bags
Benseal:	bags

Surface Casing:

bags cement: Not recorded

bags bentonite powder: Not recorded

Pertinent Field Notes: For details see Field Notebook #1, pgs. 29-53, 89-93.

05/20/97 Set up on 200-I pad. Mixed drilling mud. Drilled 8 3/4" borehole with mud rotary through alluvium, 0' - 130'. Encounter silty limestone bedrock at 130'. Attempted to install 5" (nominal) surface casing but failed due to obstructions in borehole. - G. Giles.

05/21/97 Reinstalled 130' of surface casing and grouted annulus. Prepared for drilling with air-foam. -M. Russell.

05/22/97 Drilled 4 1/2" borehole using air-foam rotary (hammer bit) 130' - 300' (170 feet). Dark gray silty limestone with shale interbeds. - J. Pearson.

05/23/97 Continued drilling 300' - 474' (194 feet). Dark gray silty limestone with shale interbeds. - M. Russell.

05/24/97 Equipment repairs. Continued drilling, 474' - 526' (52 feet). Dark gray shale. Drilling stopped because of full mud pits. - M. Russell.

05/25/97 Excavated additional mud pits. Continued drilling, 526' - 630' (104 feet). Dark gray shaly limestone. - J. Pearson.

05/26/97 Drilled 630' - 725' (95 feet) within interbedded dark grey shale and shaly limestone. - G. Giles.

05/27/97 Develop by air-lifting using rig. Removed approximately 11,865 gallons from open borehole. Final turbidity reading was 77.4 NTU's. - M. Russell.

05/28/97 Drillers trip out of hole. Begin mobilizing to BLM-32. Geophysical logs run by Southwest Surveys. - J. Pearson.

06/09/97 Re-enter bore to deepen in attempt to reach Charlene Shale. Drill 745' - 845' (100 feet). Develop open borehole by air-lifting fluids using rig. - J. Pearson.

06/10/97 Second set of geophysical logs run by Southwest Surveys. - M. Russell.

06/13/97 Camera log run by Southwest Surveys. Hole is bridged at or sloughed to 725'. - J. Pearson.

06/19/97 Move rig back over hole to drill through bridge. Hole clear to 837' (TD). - J. Pearson.

06/20/97 Install Westbay casing. - P. Egan.

06/21/97 Inflated 8 of 14 packers. - J. Pearson.

06/23/97 Inflate remaining 6 packers. Well installation is complete. - M. Russell.