

APPENDIX DATA

ATTACHMENT G: WIPP BOREHOLE UPDATE

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WIPP BOREHOLES

The Department of Energy (DOE) prepared DOE/WIPP 95-2092, Rev. 1, Waste Isolation Pilot Plant Borehole Data Report (CCA Appendix BH) to serve as a central document providing data on boreholes used in characterizing the site. The report contained a comprehensive database on wells drilled in support of the WIPP and boreholes that were located within the 16-section Land Withdrawal Area.

This report was categorized into seven groups of boreholes: commercially drilled boreholes, DOE wells, geologic exploration boreholes, hydrologic test boreholes, potash boreholes, subsurface exploration boreholes, and Water Quality Sampling Program boreholes. There were 179 boreholes in the report. At the time of the CCA, 80 of those boreholes were being used as monitoring wells. The rest of the boreholes were plugged and abandoned after being drilled for their specific purpose, i.e., potash information, hydrocarbon information, or WIPP site characterization information.

This report updates all of the monitoring wells identified in CCA Appendix BH and adds the new monitoring wells drilled since the initial certification. This report also adds the wells that were in use but inadvertently omitted from CCA Appendix BH.

Table DATA-G-1. Monitoring Well Status

<i>Well Name</i>	<i>CCA Monitoring Status</i>	<i>CRA Monitoring Status</i>	<i>Depth</i>	<i>Year Drilled</i>	<i>Year Plugged</i>
<i>AEC-7</i>	<i>Culebra</i>	<i>Culebra</i>	<i>4734 ft</i>	<i>1974</i>	<i>N/A</i>
<i>AEC-8</i>	<i>Bell Canyon</i>	<i>Bell Canyon</i>	<i>4922 ft</i>	<i>1974</i>	<i>N/A</i>
<i>B-1</i>	<i>Observation</i>	<i>Observation</i>	<i>58 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-1A</i>	<i>Observation</i>	<i>Observation</i>	<i>13 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-4</i>	<i>Observation</i>	<i>Observation</i>	<i>39 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-4A</i>	<i>Observation</i>	<i>Observation</i>	<i>14 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-13</i>	<i>Observation</i>	<i>Observation</i>	<i>28 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-16</i>	<i>Observation</i>	<i>Observation</i>	<i>31 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-18</i>	<i>Observation</i>	<i>Observation</i>	<i>33 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-20</i>	<i>Observation</i>	<i>Observation</i>	<i>14 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-20A</i>	<i>Observation</i>	<i>Observation</i>	<i>34 ft</i>	<i>1978</i>	<i>N/A</i>
<i>B-38</i>	<i>Observation</i>	<i>Observation</i>	<i>50 ft</i>	<i>1979</i>	<i>N/A</i>
<i>B-54</i>	<i>Observation</i>	<i>Observation</i>	<i>210 ft</i>	<i>1979</i>	<i>N/A</i>
<i>D-268</i>	<i>Culebra</i>	<i>Rancher's Water Well</i>	<i>1411 ft</i>	<i>1984</i>	<i>1999</i>
<i>DOE-1</i>	<i>Culebra</i>	<i>Culebra</i>	<i>4057 ft</i>	<i>1982</i>	<i>N/A</i>
<i>DOE-2</i>	<i>Culebra</i>	<i>Magenta</i>	<i>4325 ft</i>	<i>1984</i>	<i>N/A</i>
<i>ERDA-9</i>	<i>Culebra</i>	<i>Culebra</i>	<i>2886 ft</i>	<i>1976</i>	<i>N/A</i>
<i>H-1</i>	<i>Culebra/Magenta</i>	<i>Plugged</i>	<i>856 ft</i>	<i>1976</i>	<i>2001</i>
<i>H-2A</i>	<i>Culebra</i>	<i>Culebra</i>	<i>672 ft</i>	<i>1977</i>	<i>N/A</i>
<i>H-2B1</i>	<i>Magenta</i>	<i>Magenta</i>	<i>661 ft</i>	<i>1977</i>	<i>N/A</i>

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Table DATA-G-1. Monitoring Well Status — Continued

<i>Well Name</i>	<i>CCA Monitoring Status</i>	<i>CRA Monitoring Status</i>	<i>Depth</i>	<i>Year Drilled</i>	<i>Year Plugged</i>
<i>H-2B2</i>	<i>Culebra</i>	<i>Culebra</i>	<i>660 ft</i>	<i>1984</i>	<i>N/A</i>
<i>H-2C</i>	<i>Magenta</i>	<i>Culebra</i>	<i>795 ft</i>	<i>1977</i>	<i>N/A</i>
<i>H-3B1</i>	<i>Magenta</i>	<i>Magenta</i>	<i>902 ft</i>	<i>1976</i>	<i>N/A</i>
<i>H-3B2</i>	<i>Culebra</i>	<i>Culebra</i>	<i>725 ft</i>	<i>1983</i>	<i>N/A</i>
<i>H-3B3</i>	<i>Magenta</i>	<i>Culebra</i>	<i>730 ft</i>	<i>1983</i>	<i>N/A</i>
<i>H-3D</i>	<i>Dewey Lake</i>	<i>Dewey Lake</i>	<i>554 ft</i>	<i>1987</i>	<i>N/A</i>
<i>H-4A</i>	<i>not in use</i>	<i>Plugged</i>	<i>532 ft</i>	<i>1978</i>	<i>2000</i>
<i>H-4B</i>	<i>Culebra</i>	<i>Culebra</i>	<i>529 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-4C</i>	<i>Magenta</i>	<i>Magenta</i>	<i>661 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-5A</i>	<i>Culebra</i>	<i>Culebra</i>	<i>930 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-5B</i>	<i>Culebra</i>	<i>Culebra</i>	<i>925 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-5C</i>	<i>Magenta</i>	<i>Magenta</i>	<i>1076 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-6A</i>	<i>Culebra</i>	<i>Culebra</i>	<i>637 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-6B</i>	<i>Culebra</i>	<i>Culebra</i>	<i>640 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-6C</i>	<i>Culebra</i>	<i>Culebra</i>	<i>741 ft</i>	<i>1978</i>	<i>N/A</i>
<i>H-7A</i>	<i>not in use</i>	<i>Plugged</i>	<i>154 ft</i>	<i>1979</i>	<i>2000</i>
<i>H-7B1</i>	<i>Culebra</i>	<i>Culebra</i>	<i>286 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-7B2</i>	<i>Culebra</i>	<i>Culebra</i>	<i>295 ft</i>	<i>1983</i>	<i>N/A</i>
<i>H-7C</i>	<i>not in use</i>	<i>not in use</i>	<i>420 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-8A</i>	<i>Magenta</i>	<i>Magenta</i>	<i>505 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-8B</i>	<i>not in use</i>	<i>Rancher's Water Well</i>	<i>624 ft</i>	<i>1979</i>	<i>1987</i>
<i>H-8C</i>	<i>Rustler</i>	<i>Rustler</i>	<i>808 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-9A</i>	<i>Culebra</i>	<i>Plugged</i>	<i>692 ft</i>	<i>1979</i>	<i>2002</i>
<i>H-9B</i>	<i>Culebra</i>	<i>Culebra</i>	<i>708 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-9C</i>	<i>Culebra</i>	<i>Magenta</i>	<i>816 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-10A</i>	<i>Magenta</i>	<i>Magenta</i>	<i>1318 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-10B</i>	<i>Magenta</i>	<i>Plugged</i>	<i>1398 ft</i>	<i>1979</i>	<i>2002</i>
<i>H-10C</i>	<i>not in use</i>	<i>Culebra</i>	<i>1550 ft</i>	<i>1979</i>	<i>N/A</i>
<i>H-11B1</i>	<i>Culebra</i>	<i>Culebra</i>	<i>785 ft</i>	<i>1983</i>	<i>N/A</i>
<i>H-11B2</i>	<i>Culebra</i>	<i>Magenta</i>	<i>776 ft</i>	<i>1983</i>	<i>N/A</i>
<i>H-11B3</i>	<i>Culebra</i>	<i>Plugged</i>	<i>789 ft</i>	<i>1983</i>	<i>2002</i>
<i>H-11B4</i>	<i>not in use</i>	<i>Culebra</i>	<i>765 ft</i>	<i>1988</i>	<i>N/A</i>
<i>H-12</i>	<i>Culebra</i>	<i>Culebra</i>	<i>1001 ft</i>	<i>1983</i>	<i>N/A</i>
<i>H-14</i>	<i>Culebra</i>	<i>Magenta</i>	<i>589 ft</i>	<i>1986</i>	<i>N/A</i>
<i>H-15</i>	<i>Culebra</i>	<i>Magenta</i>	<i>900 ft</i>	<i>1986</i>	<i>N/A</i>
<i>H-16</i>	<i>Dewey Lake</i>	<i>not in use</i>	<i>851 ft</i>	<i>1987</i>	<i>N/A</i>

Table DATA-G-1. Monitoring Well Status — Continued

<i>Well Name</i>	<i>CCA Monitoring Status</i>	<i>CRA Monitoring Status</i>	<i>Depth</i>	<i>Year Drilled</i>	<i>Year Plugged</i>
<i>H-17</i>	<i>Culebra</i>	<i>Culebra</i>	<i>880 ft</i>	<i>1987</i>	<i>N/A</i>
<i>H-18</i>	<i>Culebra</i>	<i>Magenta</i>	<i>840 ft</i>	<i>1987</i>	<i>N/A</i>
<i>H-19B0</i>	<i>not in use</i>	<i>Culebra</i>	<i>779 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B2</i>	<i>not in use</i>	<i>Culebra</i>	<i>785 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B3</i>	<i>not in use</i>	<i>Culebra</i>	<i>785 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B4</i>	<i>not in use</i>	<i>Culebra</i>	<i>782 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B5</i>	<i>not in use</i>	<i>Culebra</i>	<i>786 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B6</i>	<i>not in use</i>	<i>Culebra</i>	<i>788 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B7</i>	<i>not in use</i>	<i>Culebra</i>	<i>785 ft</i>	<i>1995</i>	<i>N/A</i>
<i>P-14</i>	<i>Culebra</i>	<i>Plugged</i>	<i>1545 ft</i>	<i>1976</i>	<i>1999</i>
<i>P-15</i>	<i>Culebra</i>	<i>Plugged</i>	<i>1465 ft</i>	<i>1976</i>	<i>2002</i>
<i>P-17</i>	<i>Culebra</i>	<i>Culebra</i>	<i>1660 ft</i>	<i>1976</i>	<i>N/A</i>
<i>P-18</i>	<i>Culebra</i>	<i>Plugged</i>	<i>1998 ft</i>	<i>1976</i>	<i>2002</i>
<i>WIPP-12</i>	<i>Culebra</i>	<i>Culebra</i>	<i>3928 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-13</i>	<i>Culebra</i>	<i>Culebra</i>	<i>3856 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP -18</i>	<i>Culebra</i>	<i>Magenta</i>	<i>1060 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-19</i>	<i>Culebra</i>	<i>Culebra</i>	<i>1038 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-21</i>	<i>Culebra</i>	<i>Culebra</i>	<i>1045 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-22</i>	<i>Culebra</i>	<i>Culebra</i>	<i>1450 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-25</i>	<i>Culebra/Magenta</i>	<i>Culebra/Magenta</i>	<i>650 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-26</i>	<i>Culebra</i>	<i>Culebra</i>	<i>503 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-27</i>	<i>Culebra/Magenta</i>	<i>Culebra</i>	<i>592 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-28</i>	<i>Rustler</i>	<i>Plugged</i>	<i>801 ft</i>	<i>1978</i>	<i>1999</i>
<i>WIPP-29</i>	<i>Culebra</i>	<i>Culebra</i>	<i>377 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WIPP-30</i>	<i>Culebra/Magenta</i>	<i>Culebra/Magenta</i>	<i>913 ft</i>	<i>1978</i>	<i>N/A</i>
<i>WQSP-1</i>	<i>Culebra</i>	<i>Culebra</i>	<i>737 ft</i>	<i>1994</i>	<i>N/A</i>
<i>WQSP-2</i>	<i>Culebra</i>	<i>Culebra</i>	<i>846 ft</i>	<i>1994</i>	<i>N/A</i>
<i>WQSP-3</i>	<i>Culebra</i>	<i>Culebra</i>	<i>879 ft</i>	<i>1994</i>	<i>N/A</i>
<i>WQSP-4</i>	<i>Culebra</i>	<i>Culebra</i>	<i>800 ft</i>	<i>1994</i>	<i>N/A</i>
<i>WQSP-5</i>	<i>Culebra</i>	<i>Culebra</i>	<i>681 ft</i>	<i>1994</i>	<i>N/A</i>
<i>WQSP-6</i>	<i>Culebra</i>	<i>Culebra</i>	<i>617 ft</i>	<i>1994</i>	<i>N/A</i>
<i>WQSP-6A</i>	<i>Dewey Lake</i>	<i>Dewey Lake</i>	<i>225 ft</i>	<i>1994</i>	<i>N/A</i>
<i>Wells Inadvertently Omitted From Appendix BH of the CCA</i>					
<i>CB-1</i>	<i>Culebra</i>	<i>Culebra/Bell Canyon</i>	<i>4291 ft</i>	<i>1974</i>	<i>N/A</i>
<i>D-207</i>	<i>Potash/plugged</i>	<i>Plugged</i>	<i>1613 ft</i>	<i>1958</i>	<i>1958</i>
<i>H-19B</i>	<i>Not in Use/Capped</i>	<i>not in use/capped</i>	<i>40 ft</i>	<i>1995</i>	<i>N/A</i>
<i>H-19B1</i>	<i>plugged</i>	<i>Plugged</i>	<i>733 ft</i>	<i>1995</i>	<i>1995</i>

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Table DATA-G-1. Monitoring Well Status — Continued

<i>Well Name</i>	<i>CCA Monitoring Status</i>	<i>CRA Monitoring Status</i>	<i>Depth</i>	<i>Year Drilled</i>	<i>Year Plugged</i>
<i>I-457</i>	<i>Potash/plugged</i>	<i>Plugged</i>	<i>1885 ft</i>	<i>1976</i>	<i>1976</i>
<i>New Monitoring Wells Drilled During the First CRA Time Period</i>					
<i>C-2505</i>	<i>N/A</i>	<i>Santa Rosa/Dewey Lake</i>	<i>97 ft</i>	<i>1996</i>	<i>N/A</i>
<i>C-2506</i>	<i>N/A</i>	<i>Santa Rosa/Dewey Lake</i>	<i>69 ft</i>	<i>1996</i>	<i>N/A</i>
<i>C-2507</i>	<i>N/A</i>	<i>Santa Rosa/Dewey Lake</i>	<i>73 ft</i>	<i>1996</i>	<i>N/A</i>
<i>C-2737</i>	<i>N/A</i>	<i>Culebra/Magenta</i>	<i>710 ft</i>	<i>2001</i>	<i>N/A</i>
<i>C-2811</i>	<i>N/A</i>	<i>Santa Rosa/Dewey Lake</i>	<i>80 ft</i>	<i>2001</i>	<i>N/A</i>
<i>ES-001</i>	<i>N/A</i>	<i>Plugged</i>	<i>54 ft</i>	<i>1996</i>	<i>1996</i>
<i>ES-002</i>	<i>N/A</i>	<i>Plugged</i>	<i>19 ft</i>	<i>1996</i>	<i>1996</i>
<i>PZ-1</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>68 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-2</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>65 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-3</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>71 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-4</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>65 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-5</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>72 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-6</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>66 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-7</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>72 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-8</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>68 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-9</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>82 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-10</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>57 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-11</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>82 ft</i>	<i>1997</i>	<i>N/A</i>
<i>PZ-12</i>	<i>N/A</i>	<i>Santa Rosa</i>	<i>72 ft</i>	<i>1997</i>	<i>N/A</i>

1 **Individual Well Reports**

2 **This section provides data on the plugged wells and the new wells drilled during the CRA**
 3 **monitoring period (July 1995 through September 2002).**

4 **C-2505**

5 Location: T22S-R31E-20	Spud Date: 09/23/1996	Total Depth: 97 ft
6 Status: Monitoring Well	Completed: 09/24/1996	Elevation: 3413 ft
7 Hole Size: 0-97 ft = 7 7/8"	Stratigraphy: 0-9 = Holocene Deposits	
8 Casing Size: 0-65 ft = 4 1/2" PVC	9-12 = Mescalero Caliche Formation	
9	12-49 = Gatuña Formation	
10	49-54 = Santa Rosa Formation Sandstone	
11	54-65 = Dewey Lake Formation Redbeds	
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1 C-2506
 2 *Location: T22S-R31E-20 Spud Date: 09/25/1996 Total Depth: 69 ft*
 3 *Status: Monitoring Well Completed: 09/25/1996 Elevation: 3413 ft*
 4 *Hole Size: 0-69 ft = 7 7/8" Stratigraphy: 0-10 = Holocene Deposits*
 5 *Casing Size: 0-65 ft = 4 1/2" PVC 10-48 = Gatuña Formation*
 6 *48-54 = Santa Rosa Formation Sandstone*
 7 *54-65 = Dewey Lake Formation Redbeds*

8 C-2507
 9 *Location: T22S-R31E-20 Spud Date: 10/01/1996 Total Depth: 73 ft*
 10 *Status: Monitoring Well Completed: 10/02/1996 Elevation: 3410 ft*
 11 *Hole Size: 0-73 ft = 7 7/8" Stratigraphy: 0-10 = Holocene Deposits*
 12 *Casing Size: 0-69 ft = 4 1/2" PVC 10-40 = Gatuña Formation*
 13 *40-54 = Santa Rosa Formation Sandstone*
 14 *54-69 = Dewey Lake Formation Redbeds*

15 C-2737
 16 *Location: T22S-R31E-29 Spud Date: 02/14/2001 Total Depth: 710 ft*
 17 *Status: Monitoring Well Completed: 03/09/2001 Elevation: 3397 ft*
 18 *Hole Size: 0-710 ft = 12 1/4" Stratigraphy: 35-40 = Santa Rosa Formation Sandstone*
 19 *Casing Size: 0-700 ft = 7" Fiberglass 40-505 = Dewey Lake Formation Redbeds*
 20 *505-561 = Forty-niner Member*
 21 *561-584 = Magenta Dolomite Member*
 22 *584-675 = Tamarisk Member*
 23 *675-698 = Culebra Dolomite Member*
 24 *698-710 = Los Medaños Member*

25 C-2811
 26 *Location: T22S-R31E-29 Spud Date: 03/12/2001 Total Depth: 80 ft*
 27 *Status: Monitoring Well Completed: 03/12/2001 Elevation: 3399 ft*
 28 *Hole Size: No Report Stratigraphy: 0-10 = Holocene Deposits*
 29 *Casing Size: 0-80 ft = 2" PVC 10-48 = Gatuña Formation*
 30 *48-54 = Santa Rosa Formation Sandstone*
 31 *54-65 = Dewey Lake Formation Redbeds*

32 CB-1
 33 *Location: T23S-R31E-05 Spud Date: 05/31/1974 Total Depth: 4299 ft*
 34 *Status: Monitoring Well Completed: 02/08/1975 Elevation: 3320 ft*
 35 *Casing Size: 0-650 ft = 13 3/8"*
 36 *Notes: Originally drilled as a hydrocarbon exploration well. Before the operator plugged and*
 37 *abandoned the well, it was turned over to DOE to be utilized as a monitoring well. Currently*
 38 *used to monitor the Culebra Dolomite Member and Bell Canyon Formation.*

39

1 **D-207**
2 **Location: T22S-R31E-19** **Spud Date: 06/15/1958** **Total Depth: 1613 ft**
3 **Status: Plugged** **Completed: 07/03/1958** **Elevation: No Report**
4 **Plug Date: 07/03/1958**
5 **Notes: Potash core hole located on the Land Withdrawal Area. Hole was filled with cement**
6 **and brine water from total depth to 560 ft. From that depth to the surface, it was filled with**
7 **cuttings and soil.**

8 **D-268**
9 **Location: T22S-R30E-35** **Spud Date: 07/10/1984** **Total Depth: 1411 ft**
10 **Status: Rancher's Water Well** **Completed: 07/26/1984** **Elevation: No Report**
11 **Hole Size: No Report** **Stratigraphy: No Report**
12 **Casing Size: 0-528 ft = 8 5/8"**
13 **Notes: Originally drilled as a potash core test, it was converted to a monitoring well in 1988.**
14 **Plugged back to 493 ft and converted to a water well for livestock use in 1999. Ownership**
15 **transferred.**

16 **ES-001**
17 **Location: T22S-R31E-20** **Spud Date: 10/02/1996** **Total Depth: 54 ft**
18 **Status: Plugged** **Completed: 10/02/1996** **Elevation: 3413 ft**
19 **Plug Date: 10/02/1996**
20 **Notes: Backfilled to land surface. Drill cuttings and bentonite gel used to plug well.**

21 **ES-002**
22 **Location: T22S-R31E-20** **Spud Date: 10/03/1996** **Total Depth: 19 ft**
23 **Status: Plugged** **Completed: 10/03/1996** **Elevation: 3413 ft**
24 **Plug Date: 10/03/1996**
25 **Notes: Backfilled to land surface with drill cuttings and bentonite gel used to plug well.**

26 **H-1**
27 **Location: T22S-R31E-29** **Spud Date: 05/20/1976** **Total Depth: 856 ft**
28 **Status: Plugged** **Completed: 06/10/1976** **Elevation: 3400 ft**
29 **Plug Date: 02/19/2001**
30 **Casing Size: 0-848 ft = 7"**
31 **Notes: Plugged to surface with cement.**

32 **H-4A**
33 **Location: T22S-R31E-05** **Spud Date: 04/30/1978** **Total Depth: 532 ft**
34 **Status: Plugged** **Completed: 05/23/1978** **Elevation: 3333 ft**
35 **Plug Date: 10/25/2000**
36 **Casing Size: 0-364 ft = 5 1/2"**
37 **Notes: Plugged to surface with cement.**
38

1 H-7A
2 *Location: T23S-R30E-14 Spud Date: 09/18/1979 Total Depth: 154 ft*
3 *Status: Plugged Completed: 10/18/1979 Elevation: 3164 ft*
4 *Plug Date: 06/23/2000*
5 *Casing Size: 0-109 ft = 7"*
6 *Notes: Plugged to surface with cement.*

7 H-8B
8 *Location: T24S-R30E-23 Spud Date: 08/06/1979 Total Depth: 624 ft*
9 *Status: Rancher's Water Well Completed: 08/12/1979 Elevation: 3434 ft*
10 *Casing Size: 0-574 ft = 7"*
11 *Notes: Turned over to rancher for livestock use in 1987.*

12 H-9A
13 *Location: T24S-R31E-04 Spud Date: 07/09/1979 Total Depth: 692 ft*
14 *Status: Plugged Completed: 09/05/1979 Elevation: 3407 ft*
15 *Plug Date: 02/11/2002*
16 *Casing Size: 0-570 ft = 7"*
17 *Notes: Plugged to surface with cement.*

18 H-10B
19 *Location: T23S-R32E-20 Spud Date: 10/07/1979 Total Depth: 1398 ft*
20 *Status: Plugged Completed: 10/13/1979 Elevation: 3689 ft*
21 *Plug Date: 01/31/2002*
22 *Casing Size: 0-1346 ft = 7"*
23 *Notes: Well bore was plugged with cement from the bottom to the surface.*

24 H-11B3
25 *Location: T22S-R31E-33 Spud Date: 12/01/1983 Total Depth: 789 ft*
26 *Status: Plugged Completed: 01/04/1984 Elevation: 3412 ft*
27 *Plug Date: 08/28/2002*
28 *Casing Size: 0-733 ft = 5 1/2"*
29 *Notes: Well was plugged with cement from the bottom to the surface.*

30 H-19B
31 *Location: T22S-R31E-28 Spud Date: xx/xx/1995 Total Depth: 40 ft*
32 *Status: Capped Completed: xx/xx/1995 Elevation: 3417 ft*
33 *Casing Size: 0-38 ft = 20"*
34 *Notes: Cap welded on surface casing.*
35

1 **H-19B1**
2 *Location: T22S-R31E-28 Spud Date: 02/14/1995 Total Depth: 733 ft*
3 *Status: Plugged Completed: 03/19/1995 Elevation: 3417 ft*
4 *Plug Date: 03/19/1995*
5 *Notes: Well was plugged and abandoned because drilling tools stuck in the hole were not*
6 *retrievable.*

7 **I-457**
8 *Location: T22S-R31E-27 Spud Date: 07/08/1976 Total Depth: 1885 ft*
9 *Status: Plugged Completed: 07/22/1976 Elevation: 3460 ft*
10 *Plug Date: 07/22/1976*
11 *Notes: Potash core hole, plugged with cement and all casings recovered.*

12 **P-14**
13 *Location: T22S-R30E-24 Spud Date: 09/24/1976 Total Depth: 1545 ft*
14 *Status: Plugged Completed: 10/04/1976 Elevation: 3358 ft*
15 *Plug Date: 08/26/1999*
16 *Casing Size: 0-775 ft = 4 1/2"*
17 *Notes: Hole was plugged back from 1545 ft to 775 ft with cement and converted to monitoring*
18 *well in 1979. Plugged in 1999 with 200 ft³ of cement from 775 ft to the surface.*

19 **P-15**
20 *Location: T22S-R31E-31 Spud Date: 10/04/1976 Total Depth: 1465 ft*
21 *Status: Plugged Completed: 10/15/1976 Elevation: 3310 ft*
22 *Plug Date: 02/11/2002*
23 *Casing Size: 0-635 ft = 4 1/2"*
24 *Notes: In 1977, well was plugged back to 620 ft. and converted to monitoring well. Plugged*
25 *in 2002 with cement from the bottom to the surface, leaving 210 ft of casing in hole.*

26 **P-18**
27 *Location: T22S-R31E-26 Spud Date: 10/19/1976 Total Depth: 1998 ft*
28 *Status: Plugged Completed: 11/06/1976 Elevation: 3479 ft*
29 *Plug Date: 02/28/2002*
30 *Casing Size: 0-1138 ft = 4 1/2"*
31 *Notes: Converted to monitoring well in 1977 by plugging back well to 1125 ft. Abandoned*
32 *and plugged in 2002 with cement from the well bottom to the surface.*

33 **PZ-1**
34 *Location: T22S-R31E-20 Spud Date: 06/23/1997 Total Depth: 68 ft*
35 *Status: Monitoring Well Completed: 07/10/1997 Elevation: 3413 ft*
36 *Hole Size: 0-68 ft = 6 5/8" Stratigraphy: 40-56 = Santa Rosa Sandstone*
37 *Casing Size: 0-62 ft = 2" PVC 56-68 = Dewey Lake Redbeds*
38

1	<u>PZ-2</u>		
2	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 65 ft</i>
3	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3413 ft</i>
4	<i>Hole Size: 0-65 ft = 6 5/8"</i>	<i>Stratigraphy: 0-9 = Holocene Deposits</i>	
5	<i>Casing Size: 0-62 ft = 2" PVC</i>	<i>9-12 = Mescalero Caliche Formation</i>	
6		<i>12-39 = Gatuña Formation</i>	
7		<i>39-57 = Santa Rosa Formation Sandstone</i>	
8		<i>57-65 = Dewey Lake Formation Redbeds</i>	
9	<u>PZ-3</u>		
10	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 71 ft</i>
11	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3416 ft</i>
12	<i>Hole Size: 0-71 ft = 6 5/8"</i>	<i>Stratigraphy: 0-8 = Holocene Deposits</i>	
13	<i>Casing Size: 0-65 ft = 2" PVC</i>	<i>8-10 = Mescalero Caliche Formation</i>	
14		<i>10-38 = Gatuña Formation</i>	
15		<i>38-63 = Santa Rosa Formation Sandstone</i>	
16		<i>63-71 = Dewey Lake Formation Redbeds</i>	
17	<u>PZ-4</u>		
18	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 65 ft</i>
19	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3412 ft</i>
20	<i>Hole Size: 0-65 ft = 6 5/8"</i>	<i>Stratigraphy: 0-9 = Holocene Deposits</i>	
21	<i>Casing Size: 0-60 ft = 2" PVC</i>	<i>9-12 = Mescalero Caliche Formation</i>	
22		<i>12-31 = Gatuña Formation</i>	
23		<i>31-57 = Santa Rosa Formation Sandstone</i>	
24		<i>57-65 = Dewey Lake Formation Redbeds</i>	
25	<u>PZ-5</u>		
26	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 72 ft</i>
27	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3415 ft</i>
28	<i>Hole Size: 0-72 ft = 6 5/8"</i>	<i>Stratigraphy: 0-7 = Holocene Deposits</i>	
29	<i>Casing Size: 0-65 ft = 2" PVC</i>	<i>7-9 = Mescalero Caliche Formation</i>	
30		<i>9-36 = Gatuña Formation</i>	
31		<i>36-63 = Santa Rosa Formation Sandstone</i>	
32		<i>63-72 = Dewey Lake Formation Redbeds</i>	
33	<u>PZ-6</u>		
34	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 66 ft</i>
35	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3413 ft</i>
36	<i>Hole Size: 0-66 ft = 6 5/8"</i>	<i>Stratigraphy: 0-7 = Holocene Deposits</i>	
37	<i>Casing Size: 0-62 ft = 2" PVC</i>	<i>7-9 = Mescalero Caliche Formation</i>	
38		<i>9-32 = Gatuña Formation</i>	
39		<i>32-55 = Santa Rosa Formation Sandstone</i>	
40		<i>55-66 = Dewey Lake Formation Redbeds</i>	
41			

1	<u>PZ-7</u>		
2	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 72 ft</i>
3	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3414 ft</i>
4	<i>Hole Size: 0-72 ft = 6 5/8"</i>	<i>Stratigraphy: 0-8 = Holocene Deposits</i>	
5	<i>Casing Size: 0-71 ft = 2" PVC</i>	<i>8-10 = Mescalero Caliche Formation</i>	
6		<i>10-30 = Gatuña Formation</i>	
7		<i>30-69 = Santa Rosa Formation Sandstone</i>	
8		<i>69-72 = Dewey Lake Formation Redbeds</i>	
9	<u>PZ-8</u>		
10	<i>Location: T22S-R31E-21</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 68 ft</i>
11	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3418 ft</i>
12	<i>Hole Size: 0-68 ft = 6 5/8"</i>	<i>Stratigraphy: 0-7 = Holocene Deposits</i>	
13	<i>Casing Size: 0-68 ft = 2" PVC</i>	<i>7-9 = Mescalero Caliche Formation</i>	
14		<i>9-31 = Gatuña Formation</i>	
15		<i>31-60 = Santa Rosa Formation Sandstone</i>	
16		<i>60-68 = Dewey Lake Formation Redbeds</i>	
17	<u>PZ-9</u>		
18	<i>Location: T22S-R31E-21</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 82 ft</i>
19	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3421 ft</i>
20	<i>Hole Size: 0-82 ft = 6 5/8"</i>	<i>Stratigraphy: 0-8 = Holocene Deposits</i>	
21	<i>Casing Size: 0-75 ft = 2" PVC</i>	<i>8-11 = Mescalero Caliche Formation</i>	
22		<i>11-36 = Gatuña Formation</i>	
23		<i>36-75 = Santa Rosa Formation Sandstone</i>	
24		<i>75-82 = Dewey Lake Formation Redbeds</i>	
25	<u>PZ-10</u>		
26	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 57 ft</i>
27	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3406 ft</i>
28	<i>Hole Size: 0-57 ft = 6 5/8"</i>	<i>Stratigraphy: 0-6 = Holocene Deposits</i>	
29	<i>Casing Size: 0-54 ft = 2" PVC</i>	<i>6-9 = Mescalero Caliche Formation</i>	
30		<i>9-28 = Gatuña Formation</i>	
31		<i>28-46 = Santa Rosa Formation Sandstone</i>	
32		<i>46-57 = Dewey Lake Formation Redbeds</i>	
33	<u>PZ-11</u>		
34	<i>Location: T22S-R31E-20</i>	<i>Spud Date: 06/23/1997</i>	<i>Total Depth: 82 ft</i>
35	<i>Status: Monitoring Well</i>	<i>Completed: 07/10/1997</i>	<i>Elevation: 3419 ft</i>
36	<i>Hole Size: 0-82 ft = 6 5/8"</i>	<i>Stratigraphy: 0-10 = Holocene Deposits</i>	
37	<i>Casing Size: 0-71 ft = 2" PVC</i>	<i>10-13 = Mescalero Caliche Formation</i>	
38		<i>13-34 = Gatuña Formation</i>	
39		<i>34-71 = Santa Rosa Formation Sandstone</i>	
40		<i>71-82 = Dewey Lake Formation Redbeds</i>	
41			

1 **PZ-12**

2 ***Location: T22S-R31E-20***

3 ***Status: Monitoring Well***

4 ***Hole Size: 0-72 ft = 6 5/8"***

5 ***Casing Size: 0-64 ft = 2" PVC***

6

7

8

Spud Date: 06/23/1997

Completed: 07/10/1997

Stratigraphy: 0-6 = Holocene Deposits

6-8 = Mescalero Caliche Formation

8-39 = Gatuña Formation

39-62 = Santa Rosa Formation Sandstone

62-72 = Dewey Lake Formation Redbeds

9 **WIPP-28**

10 ***Location: T21S-R31E-18***

11 ***Status: Plugged***

12 ***Plug Date: 11/29/1999***

13 ***Notes: All casing was removed and hole was plugged with cement.***

Spud Date: 08/07/1978

Completed: 08/28/1978

Total Depth: 801 ft

Elevation: 3349 ft