

<p><b>A. Document No.: PNNL-13022</b></p> <p><b>Revision No.: 1</b></p> <p><b>Document Title: Groundwater Quality Assessment Plan for Single-Shell Tank Waste Management Area B-BX-BY at the Hanford Site</b></p> <p><b>Document's Original Author: S. M. Narbutovskih</b></p>	<p><b>Effective Date of ICN:</b> May 7, 2002</p> <p><b>Change Requested By:</b> S. M. Narbutovskih</p>
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**B. Action:**  
Make changes in the monitoring plan as described below in Section D. Attach this ICN in front of the document title page.

**C. Effect of Change:**  
This ICN updates the assessment plan to reflect the addition of wells newly installed in FY2001. Project scientist will provide a schedule change request identifying the wells as new and providing a list of constituents and sample frequencies to the sample scheduler.

**D. Reason for Change/Description of Change:**

**Reason for Change:** New wells have been constructed at WMA B-BX-BY and added to the groundwater monitoring network. Groundwater procedure documentation is also updated.

**Description of Change:** This ICN updates the monitoring network for single-shell tank Waste Management area B-BX-BY with the addition of three newly installed wells and a minor change to the site's constituent list.

Changes to the groundwater monitoring network since the assessment plan was released are the addition of monitoring wells 299-E33-337, 299-E33-338 and 299-E33-339, which are added to the network as downgradient wells.

- Draw a line through page 1.3 of the original document and put the attached page 1.3 behind the old page.
- Draw a line through Table 4.1 in the original document and place the page with the new Table R4.1 behind the old page. The wells in Table R4.1, along with the sampling frequency and constituents, are subject to change as need is indicated by recent changes in groundwater chemistry.
- Draw a line through Table 4.2 in the original document and place the page with the new Table R4.2 behind the old page. The change to the constituent list consists of removing total dissolved solids and total organic halides (TOX), which are considered unnecessary since conductivity and alkalinity are measured routinely and the farms are not a source of TOX. Strontium-90 was also removed due to budget constraints but may be added periodically as needed.
- Draw a line through Table B.1a and B.2a in the original document and insert the new Tables RB.1a and RB.1b after.
- Change the first sentence under Section B.2.6 (page B.20) to read "Procedures for groundwater sampling, sample documentation and preservation, shipment, and chain-of-custody requirements are described in subcontractor manuals and in the latest quality assurance project plan (PNNL 2000)."
- Remove the following reference in Section B.2.7 (page B.21) "Bechtel Hanford Company. 1997. *Environmental Investigations Procedures*, manual BHI-EE-01."
- Add the following reference to Section B.2.7 (page B.21) "PNNL. 2000. *The Hanford Ground-Water Monitoring Project Quality Assurance Project Plan*, QA Plan ETD-012, Pacific Northwest National Laboratory, Richland, Washington."
- Remove page B.22.
- Insert the as-built diagrams for the new wells (page 6 through 11 of this ICN) after the last page of Appendix C of the original document.

**E. Document Management Decisions:**  
See Attached Distribution List.

<p><b>F. Approval Signatures</b> (Please Sign and Date)</p>	<p><b>Type of Change: (Check one):</b> <input checked="" type="checkbox"/> Minor <input type="checkbox"/> Major</p>
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Process Quality Department: T.G. Walker *Thomas G Walker* Date: 5/15/02

Approval Authority: S. P. Luttrell *S. P. Luttrell* Date: 5/9/02

Other Approval: S. M. Narbutovskih *S. M. Narbutovskih* Date: 5/9/02



## 4.1 Extent of Contamination

The objective of this study is to map the level and extent of contamination observed at the WMA. Groundwater chemistry data will be acquired from the assessment wells listed in Table 4.1. Although the decision to provide continuing information on contaminant levels and extent is required by 40 CFR 265.93, other uses will be made of these data. For example the resulting contaminant plume maps will be used to assess the need for additional monitoring wells. Also the acquired data will help locate the source of contamination found west, north and northeast of the WMA. As the plumes are mapped over time, information may be provided on groundwater flow velocity. In addition, these data will help determine an appropriate sampling frequency for continued monitoring and for closure network design.

### 4.1.1 Spatial/Temporal Mapping

Based on groundwater chemistry data, contaminant plumes maps will be prepared for the contaminants of interests and for associated constituents. Detailed, contaminant maps will be constructed for selected time intervals in the past and during the assessment to evaluate temporal relationships related to plume movement. Spatial relationships between contaminants will be compared to determine differences in plume chemistry. The plume maps will also be compared to results from Section 4.3 on source chemistry signature and vadose zone source locations to provide further evidence to define sources.

The groundwater plume maps and the local flow direction will be used to determine contaminant sources. When combined with a comparison of tank and crib chemistry, the source or sources of contamination observed to the west and north-northwest can be determined. This information may also provide insight relative to the points of entry to the groundwater as well as flow migration pathways within the unconfined aquifer.

**Table R4.1.** Groundwater Monitoring Assessment Wells at WMA B-BX-BY

Original RCRA Network Wells	Assessment Network Wells	
All wells have RCRA compliant construction	Non-RCRA compliant wells	RCRA compliant wells
299-E33-31	299-E33-7	299-E33-31
299-E33-32	299-E33-9	299-E33-32
299-E33-33	299-E33-15	299-E33-334
299-E33-36	299-E33-16	299-E33-335
299-E33-41	299-E33-17	299-E33-337
299-E33-42	299-E33-18	299-E33-338
299-E33-43	299-E33-20	299-E33-339
	299-E33-21	299-E33-38
	299-E33-26	299-E33-39
	299-E28-8	299-E33-41
		299-E33-42
		299-E33-43
		299-E33-44

**Table R4.2.** Assessment Network Constituent List

Field-Analyzed Constituents	Laboratory-Analyzed Constituents	
	Quarterly	Annually
pH	Alkalinity	TOC
Conductivity	Anions	
Temperature	Cyanide	
Turbidity	Gross Alpha	
	Gross Beta	
	Gamma	
	Metals	
	Technetium-99	
	Tritium	
	Uranium	

**Table RB.1a.** List of Available Assessment Wells Used at WMA B-BX-BY Along with the Annual and Quarterly Constituents of Interest

299-E33-1A	299-E33-2	299-E33-3	299-E33-4	299-E33-5
299-E33-6	299-E33-7	299-E33-8	299-E33-9	299-E33-10
299-E33-334	299-E33-335	299-E33-13	299-E33-14	299-E33-15
299-E33-16	299-E33-17	299-E33-18	299-E33-19	299-E33-20
299-E33-21	299-E33-337	299-E33-338	299-E33-339	299-E33-25
299-E33-26	299-E33-27	299-E33-28	299-E33-29	299-E33-31
299-E33-32	299-E33-33	299-E33-36	299-E33-38	299-E33-39
299-E33-40	299-E33-41	299-E33-42	299-E33-43	299-E33-44
699-50-53A	699-49-55A	699-49-57A	299-E28-8	

**Table RB.1b**  
**Sampling Schedule**

Annual	Semi-Annual	Quarterly	
299-E33-9	299-E33-15	299-E33-18	299-E33-334
299-E33-31	299-E33-16	299-E33-26	299-E33-335
299-E33-32	299-E33-17	299-E33-31	299-E33-337
299-E33-334	299-E33-20	299-E33-32	299-E33-338
299-E33-335	299-E33-21	299-E33-38	299-E33-339
299-E33-337	299-E28-8	299-E33-39	299-E33-43
299-E33-338		299-E33-41	
299-E33-339		299-E33-42	
299-E33-38		299-E33-44	
299-E33-39		299-E33-7	
299-E33-41		299-E33-9	
299-E33-42			
299-E33-43			
299-E33-44			
Planned Analysis			
Annual	Semi-Annual <sup>(a)</sup>	Quarterly-A <sup>(b)</sup>	
TOC	Alkalinity	Alkalinity	
	Anions	Anions	
	Cyanide	Cyanide	
	Gross Beta	Gross Alpha	
	Gamma	Gross Beta	
	ICP Metals	Gamma	
	Tritium	ICP Metals	
	Technetium-99	Tritium	
	Uranium	Technetium-99	
		Uranium	
(a) Not all wells sampled for gross beta or gamma.			
(b) Not all wells are sampled for gamma, gross alpha, or gross beta.			

<b>WELL CONSTRUCTION AND COMPLETION SUMMARY</b>																														
<b>Drilling Method:</b> Air Rotary Drl & Drive <b>Drilling Fluid Used:</b> Air <b>Driller's Name:</b> Mike Gomez <b>Drilling Company:</b> RSI <b>Date Started:</b> 10Jul01	<b>Sample Method:</b> Grab/Split Spoon <b>Additives Used:</b> None <b>WA State Lic Nr:</b> Not Available <b>Company Location:</b> Woodland, Ca. <b>Date Completed:</b> 03Aug01	<b>WELL NUMBER:</b> 299-E33-337 <b>TEMPORARY C3390 WELL NO:</b> Not Allowed  <b>Coordinates: N</b> Not documented <b>Coordinates: E</b> Not documented <b>Start Card #:</b> Not Available <b>Elevation Ground Surface:</b>																												
<b>Depth to Water:</b> 259.92 ft <b>03Aug01</b> (Ground surface)  <b>GENERALIZED STRATIGRAPHY</b> <b>Geologist's Log</b>		<b>Elevation of Reference Point:</b> m  <b>Height of Reference Point Above Ground Surface:</b> <b>Depth of Surface Seal:</b> 10.1 ft <b>Type of Surface Seal:</b> 4x4 Concrete Pad																												
<div style="border-bottom: 1px solid black; padding-bottom: 5px;">           0 - 18 ft : sandy gravel (sg)            18 - 35 ft : Sand (S)             35 - 37 ft : gravelly sand (gs)            37 - 45 ft : Sand (S)            45 - 60 ft : sandy gravel (sg)             60 - 125 ft : Sand (S)                     125 - 138 ft : silty sand (ms)            138 - 178 ft : Sand (S)                     178 - 185 ft : Slightly Silty Sand            185 - 189 ft : silty sand (ms)            189 - 195 ft : Gravelly sand (Gs)            195 - 205 ft : Sand (S)            205 - 212 ft : silty sand (ms)            212 - 215 ft : Sand (S)            215 - 226 ft : Gravelly Sand (gs)            226 - 228 ft : Sandy gravel (Sg)            228 - 230 ft : Gravel (G)            230 - 259.5 ft : Sandy gravel (Sg)             259.5 - 265 ft : Gravel (G) trace of sand            265 - 281 ft : Sandy Gravel (Sg)             281 - 286 ft : Basalt         </div>		<div style="text-align: center;"> </div>																												
<div style="border-bottom: 1px solid black; padding-bottom: 5px;">           259.5 - 265 ft : Gravel (G) trace of sand            265 - 281 ft : Sandy Gravel (Sg)             281 - 286 ft : Basalt         </div>		<table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left; width: 33%;">Fill</th> <th style="text-align: left; width: 33%;">Casing</th> <th style="text-align: left; width: 33%;">Screen</th> </tr> </thead> <tbody> <tr> <td>0 - 10.1 ft : 11-inch hole Cement Surface Seal</td> <td>0 - 255.36 ft : 4 inch 304L SS sch 5 csg</td> <td></td> </tr> <tr> <td>10.1 - 239.6 ft : 11-inch hole Bentonite crumbles</td> <td></td> <td></td> </tr> <tr> <td>239.6 - 245.1 ft : 11-inch hole 1/4" &amp; 3/8" Bentonite Pellets</td> <td></td> <td></td> </tr> <tr> <td>245.1 - 282.4 ft : 11-inch hole 10/20 Silica Sand</td> <td></td> <td></td> </tr> <tr> <td>282.4 - 283.6 ft : 11-inch hole 10/20 Silica Sand</td> <td></td> <td></td> </tr> <tr> <td>283.6 - 286 ft : 11-inch hole 1/4" COATED Bentonite Pellets</td> <td></td> <td></td> </tr> <tr> <td></td> <td>280.39 - 282.4 ft : 4 inch 304L SS Sump</td> <td></td> </tr> <tr> <td></td> <td></td> <td>255.36 - 280.39 ft : 4 inch 304L SS Wire Wrap .020 slot scrm</td> </tr> </tbody> </table>		Fill	Casing	Screen	0 - 10.1 ft : 11-inch hole Cement Surface Seal	0 - 255.36 ft : 4 inch 304L SS sch 5 csg		10.1 - 239.6 ft : 11-inch hole Bentonite crumbles			239.6 - 245.1 ft : 11-inch hole 1/4" & 3/8" Bentonite Pellets			245.1 - 282.4 ft : 11-inch hole 10/20 Silica Sand			282.4 - 283.6 ft : 11-inch hole 10/20 Silica Sand			283.6 - 286 ft : 11-inch hole 1/4" COATED Bentonite Pellets				280.39 - 282.4 ft : 4 inch 304L SS Sump				255.36 - 280.39 ft : 4 inch 304L SS Wire Wrap .020 slot scrm
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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 299-E33-337	
WELL DESIGNATION	: 299-E33-337
CERCLA UNIT	:
RCRA FACILITY	:
DEPTH DRILLED (GS)	: 286.0 ft
MEASURED DEPTH (GS)	: 282.4 03Aug01
AVAILABLE LOGS	: Geologist & Geophysical
DATE EVALUATED	: Data not available
EVAL RECOMMENDATION	: Data not available
LISTED USE	: RCRA Monitoring
CURRENT USER	: RCRA & Operations
PUMP TYPE	: Not Documented
MAINTENANCE	: Data not available
COMMENTS	: Air Rotary Drl & Drive 10-3/4" CS Temp csg to 286 ft
TV SCAN COMMENTS	:
<div>Report Form: WELLS Project File: WELLS.GPJ</div> <div>Drawing By: JEA Reference: Hanford Wells Revision: 0 Revision Date: 17Oct01 Print Date: 17Oct01</div>	

## WELL CONSTRUCTION AND COMPLETION SUMMARY

<b>Drilling Method:</b> Cable Tool <b>Drilling Fluid Used:</b> none <b>Driller's Name:</b> Gary Howell <b>Drilling Company:</b> RSI <b>Date Started:</b> 23Jul01	<b>Sample Method:</b> Grab/Split Spoon <b>Additives Used:</b> None Documented <b>WA State Lic Nr:</b> 1930 <b>Company Location:</b> Woodland, Ca. <b>Date Completed:</b> 31Aug01	<b>WELL NUMBER:</b> 299-E33-338 <b>TEMPORARY C3391 WELL NO:</b> Not Allowed <b>Coordinates: N</b> Not documented <b>Coordinates: E</b> Not documented <b>Start Card #:</b> R037814 <b>Elevation Ground Surface:</b>
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<b>Depth to Water:</b> 254.24 ft <b>04Sep01</b> (Ground surface) <b>GENERALIZED STRATIGRAPHY</b> <b>Geologist's Log</b>		<b>Elevation of Reference Point:</b> m <b>Height of Reference Point Above Ground Surface:</b> <b>Depth of Surface Seal:</b> 10.6 ft <b>Type of Surface Seal:</b> 4x4 Concrete Pad
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	Fill	Casing	Screen
0 - 12.5 ft : Silty Sandy Gravel (msG)	0 - 10.6 ft : 12-inch hole	0 - 250.9 ft : 4 inch	
12.5 - 14.5 ft : Silty Gravelly Sand (mgS)	Cement Surface Seal	304L SS sch 5 csg	
14.5 - 15 ft : Silt lens			
15 - 16.5 ft : Silty Gravelly Sand (mgS)			
16.5 - 20 ft : Silty Sand (mS)			
20 - 31 ft : Silty Sandy Gravel (msG)			
31 - 35.5 ft : Silty Sand (mS)			
35.5 - 51.5 ft : Silty Sandy Gravel (msG)			
51.5 - 52 ft : Silt lens			
52 - 57.7 ft : Silty Sand (mS)			
57.7 - 66.3 ft : Sand (S)			
66.3 - 71.3 ft : Silty Sand (mS)			
71.3 - 72.3 ft : Sand (S) lens			
72.3 - 94 ft : Silty Sand (mS)			
94 - 104.5 ft : Slightly Silty Gravelly Sand (mgS)			
104.5 - 114 ft : Silty Sand (mS)			
114 - 127.6 ft : Sand (S)			
127.6 - 136 ft : Silty Sand (mS)			
136 - 143.2 ft : Sand (S)			
143.2 - 167 ft : Silty Sand (mS)			
167 - 169.5 ft : Sand (S)			
169.5 - 175 ft : Silty Sand (mS)			
175 - 203.5 ft : Sand (S) w/ silt lenses			
203.5 - 212.5 ft : Slightly Gravelly Sand (gS)			
212.5 - 216 ft : Sand (S)			
216 - 218 ft : Silty Sand (mS)			
218 - 222.4 ft : Silt to Sandy Silt (m)			
222.4 - 258 ft : Silty Sandy Gravel (msG)			
258 - 271 ft : Sandy Gravel (sG)			
271 - 275.75 ft : Basalt			
	10.6 - 236 ft : 12-inch hole Granular Bentonite		
	236 - 241 ft : 12-inch hole Bentonite Pellets		
	241 - 271.32 ft : 12-inch hole 10/20 Silica Sand		
	271.32 - 271.5 ft : 12-inch hole 10/20 Silica Sand		
	271.5 - 275.6 ft : 12-inch hole 1/4" Bentonite Hole Plug		
	275.6 - 275.75 ft : 12-inch hole Slough		
	270.9 - 271.32 ft : 4 inch 304L SS Sump		
	250.9 - 270.9 ft : 4 inch 304L SS Wire Wrap .020 slot scrm		

  

<b>275.75 ft : Borehole drilled depth</b> <b>0 - 275.75 ft : 12-in. Cable Tool 11-3/4" CS Temp csg</b>	
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<b>Drawing By:</b> JEA <b>Reference:</b> Hanford Wells <b>Revision:</b> 0 <b>Revision Date:</b> 19Oct01 <b>Print Date:</b> 19Oct01	
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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 299-E33-338	
WELL DESIGNATION	: 299-E33-338
CERCLA UNIT	:
RCRA FACILITY	:
DEPTH DRILLED (GS)	: 275.8 ft
MEASURED DEPTH (GS)	: 271.32 04Sep01
AVAILABLE LOGS	: Geologist & Geophysical
DATE EVALUATED	: Data not available
EVAL RECOMMENDATION	: Data not available
LISTED USE	: RCRA Monitoring
CURRENT USER	: RCRA & Operations
PUMP TYPE	: Not Documented
MAINTENANCE	: Data not available
COMMENTS	: Cable Tool - 11-3/4" CS Temp csg to 275.75 ft
TV SCAN COMMENTS	:
<div>Report Form: WELLS Project File: WELLS.GPJ</div> <div>Drawing By: JEA Reference: Hanford Wells Revision: 0 Revision Date: 19Oct01 Print Date: 19Oct01</div>	

<b>WELL CONSTRUCTION AND COMPLETION SUMMARY</b>																								
<b>Drilling Method:</b> Air Rotary Drl & Drive <b>Drilling Fluid Used:</b> Air <b>Driller's Name:</b> Mike Gomez <b>Drilling Company:</b> RSI <b>Date Started:</b> 17Jul01	<b>Sample Method:</b> Grab/Split Spoon <b>Additives Used:</b> None <b>WA State Lic Nr:</b> Data not available <b>Company Location:</b> Woodland, Ca. <b>Date Completed:</b> 17Aug01	<b>WELL NUMBER:</b> 299-E33-339 <b>TEMPORARY C3392 WELL NO:</b> Not Allowed <b>Coordinates: N</b> Not documented <b>Coordinates: E</b> Not documented <b>Start Card #:</b> R037814 <b>Elevation Ground Surface:</b>																						
<b>Depth to Water:</b> 261.27 ft    21Aug01 (Ground surface)  <b>GENERALIZED STRATIGRAPHY</b> <b>Geologist's Log</b>		<b>Elevation of Reference Point:</b> m  <b>Height of Reference Point Above Ground Surface:</b> <b>Depth of Surface Seal:</b> 10.4 ft <b>Type of Surface Seal:</b> 4x4 Concrete Pad																						
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>0 - 6 ft : Backfill material</p> <p>6 - 15 ft : Silty Sandy Gravel (msG)</p> <p>15 - 18.5 ft : Slightly Silty Sandy Gravel</p> <p>18.5 - 20 ft : Silt Lens</p> <p>20 - 23 ft : Sand (S)</p> <p>23 - 25 ft : Silty Sand (mS)</p> <p>25 - 30 ft : Slightly Silty Gravelly Sand with silt lens at 28 ft</p> <p>30 - 34 ft : Silty Sandy Gravel (msG)</p> <p>34 - 37 ft : Silty Sand (mS)</p> <p>37 - 37.5 ft : Silt Lens</p> <p>37.5 - 55 ft : Silty Sandy Gravel (msG)</p> <p>55 - 56 ft : Sandy Gravel (sG)</p> <p>56 - 223 ft : Sand (S)</p> </div> <div style="flex: 1; text-align: center;"> </div> </div>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Fill</th> <th style="text-align: center;">Casing</th> <th style="text-align: center;">Screen</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">           0 - 10.4 ft :            11-inch hole            Cement Surface Seal         </td> <td style="padding: 5px;">           0 - 259.4 ft :            4 inch            304L SS sch 5 csg         </td> <td></td> </tr> <tr> <td colspan="3" style="height: 150px;"></td> </tr> <tr> <td style="padding: 5px;">           10.4 - 244.35 ft :            11-inch hole            Bentonite Crumbles         </td> <td></td> <td></td> </tr> <tr> <td colspan="3" style="height: 150px;"></td> </tr> <tr> <td style="padding: 5px;">           244.35 - 249.7 ft :            11-inch hole            1/4" &amp; 3/8"            Bentonite Pellets         </td> <td style="padding: 5px;">           279.3 - 281.4 ft :            4 inch            304L SS Sump         </td> <td style="padding: 5px;">           259.4 - 279.3 ft :            4 inch            304L SS Wire Wrap .020 slot scrn         </td> </tr> <tr> <td style="padding: 5px;">           249.7 - 281.4 ft :            11-inch hole            10/20 Silica Sand            281.4 - 283.1 ft :            11-inch hole            10/20 Silica Sand            283.1 - 285.44 ft :            11-inch hole            3/8" COATED            Bentonite Pellets         </td> <td></td> <td></td> </tr> </tbody> </table>		Fill	Casing	Screen	0 - 10.4 ft : 11-inch hole Cement Surface Seal	0 - 259.4 ft : 4 inch 304L SS sch 5 csg					10.4 - 244.35 ft : 11-inch hole Bentonite Crumbles						244.35 - 249.7 ft : 11-inch hole 1/4" & 3/8" Bentonite Pellets	279.3 - 281.4 ft : 4 inch 304L SS Sump	259.4 - 279.3 ft : 4 inch 304L SS Wire Wrap .020 slot scrn	249.7 - 281.4 ft : 11-inch hole 10/20 Silica Sand 281.4 - 283.1 ft : 11-inch hole 10/20 Silica Sand 283.1 - 285.44 ft : 11-inch hole 3/8" COATED Bentonite Pellets		
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<p>223 - 225 ft : gravelly Sand (gS)</p> <p>225 - 235 ft : Sandy Gravel (sG)</p> <p>235 - 250 ft : Silty Sandy Gravel (msG)</p> <p>250 - 252 ft : Gravel (G)</p> <p>252 - 253.5 ft : Silt (m)</p> <p>253.5 - 254 ft : slightly silty sandy Gravel (msG)</p> <p>254 - 260 ft : Gravel (G)</p> <p>260 - 275 ft : sandy Gravel (sG)</p> <p>275 - 279 ft : silty Grael (mG)</p> <p>279 - 285.44 ft : Basalt</p>		<p>285.44 ft : Borehole drilled depth</p> <p>0 - 285.44 ft : 11-in. Air Rotary drl &amp; Drive 10-3/4" CS Temp csg</p>																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <b>Drawing By:</b> JEA  <b>Reference:</b> Hanford Wells  <b>Revision:</b> 0  <b>Revision Date:</b> 17Oct01  <b>Print Date:</b> 19Oct01         </td> <td style="width: 50%;"></td> </tr> </table>				<b>Drawing By:</b> JEA <b>Reference:</b> Hanford Wells <b>Revision:</b> 0 <b>Revision Date:</b> 17Oct01 <b>Print Date:</b> 19Oct01																				
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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 299-E33-339	
WELL DESIGNATION	: 299-E33-339
CERCLA UNIT	:
RCRA FACILITY	:
DEPTH DRILLED (GS)	: 285.4 ft
MEASURED DEPTH (GS)	: 283.1 21Aug01
AVAILABLE LOGS	: Geologist & Geophysical
DATE EVALUATED	: Data not available
EVAL RECOMMENDATION	: Data not available
LISTED USE	: RCRA Monitoring
CURRENT USER	: RCRA & Operations
PUMP TYPE	: Not Documented
MAINTENANCE	: Data not available
COMMENTS	: Air Rotary Dri & Drive 10-3/4" CS Temp csg to 285.44 ft
TV SCAN COMMENTS	:
<div>Report Form: WELLS Project File: WELLS.GPJ</div> <div>Drawing By: JEA Reference: Hanford Wells Revision: 0 Revision Date: 17Oct01 Print Date: 19Oct01</div>	

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