

**Attachment 1**  
**Radiological Profiles of Surface Soil**

# Attachment 1

Distribution of Cobalt-60 with Depth, (pCi/kg wet)

Depth	TS-155 (Beside WHT Moat)	TS-158 (Storage Area)	TS-171 (Under VC)
Asphalt	---	183	414
0-2"	18,600	9880	264
2-4"	5290	8880	< 99
4-6"	1270	866	< 93
6-8"	201	17.5	137
8-10"	95	201	< 104
10-12"	215	124	< 98
12-14"	---	< 96	781
14-16"	---	< 45	---

Distribution of Silver-108M with Depth, (pCi/kg wet)

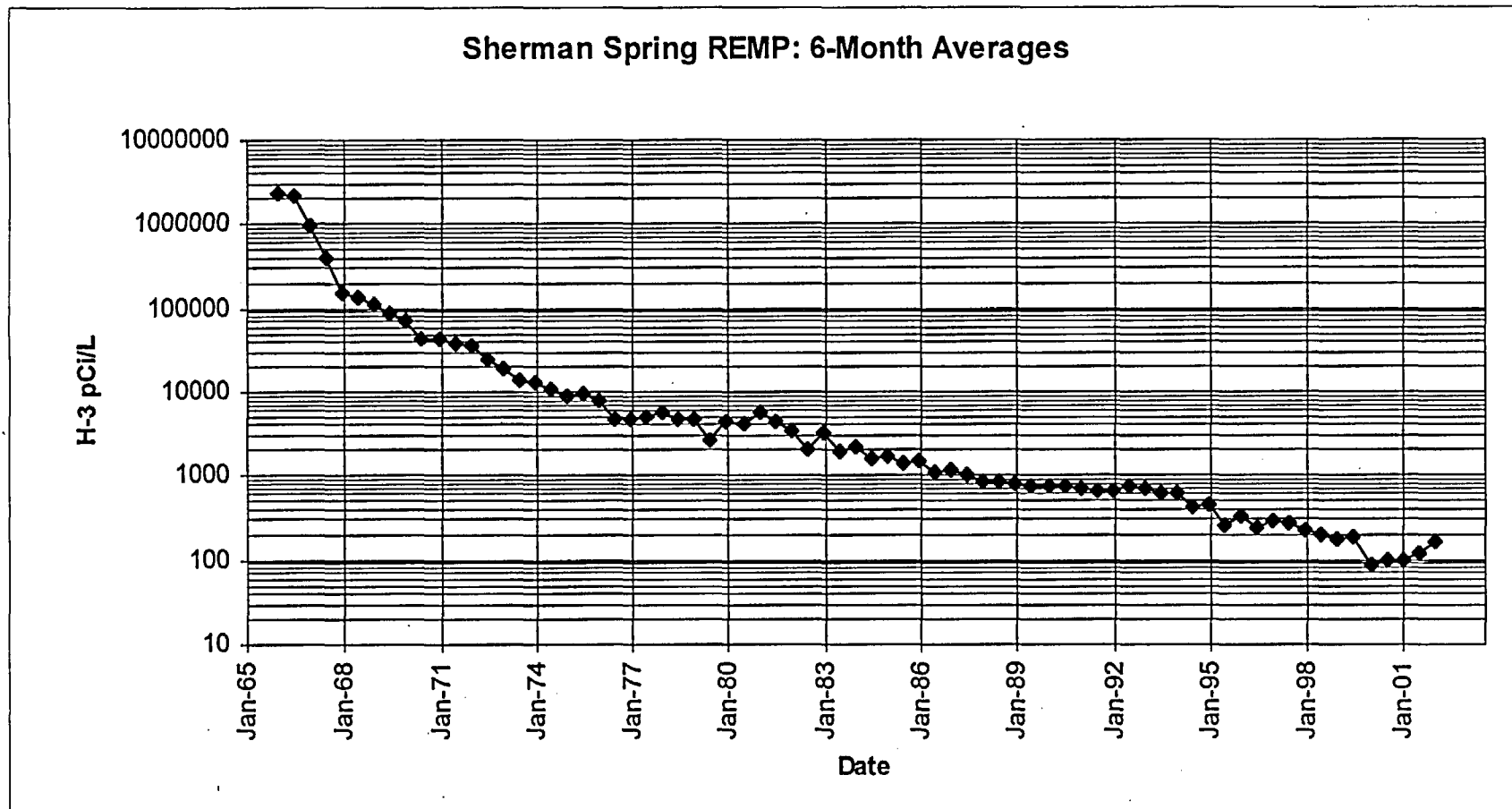
Depth	TS-155 (Beside WHT Moat)	TS-158 (Storage Area)	TS-171 (Under VC)
Asphalt	---	< 56	< 55
0-2"	37,400	20,600	< 66
2-4"	5030	3940	< 44
4-6"	1100	149	< 51
6-8"	425	< 61	< 52
8-10"	187	< 59	< 51
10-12"	157	226	< 42
12-14"	---	< 61	< 53
14-16"	---	< 60	---

# Attachment 1

Distribution of Cesium-137 with Depth, (pCi/kg wet)

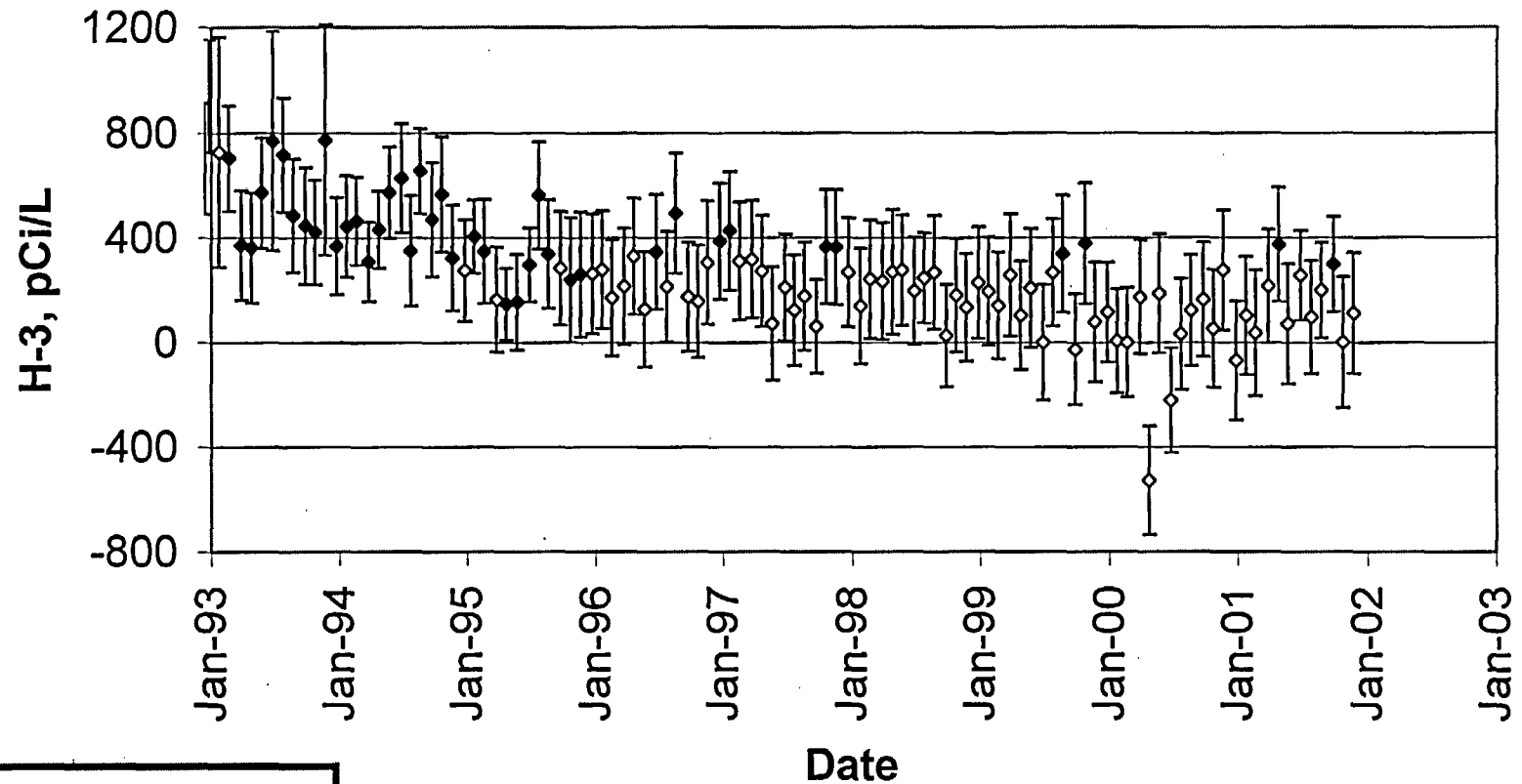
Depth	TS-155 (Beside WHT Moat)	TS-158 (Storage Area)	TS-171 (Under VC)
Asphalt	---	428	582
0-2"	18,400	7780	1490
2-4"	6070	9970	173
4-6"	1200	1660	84
6-8"	263	515	87
8-10"	115	336	< 87
10-12"	< 105	167	< 81
12-14"	---	145	251
14-16"	---	< 79	---

Attachment 2. H-3 Well Graphs



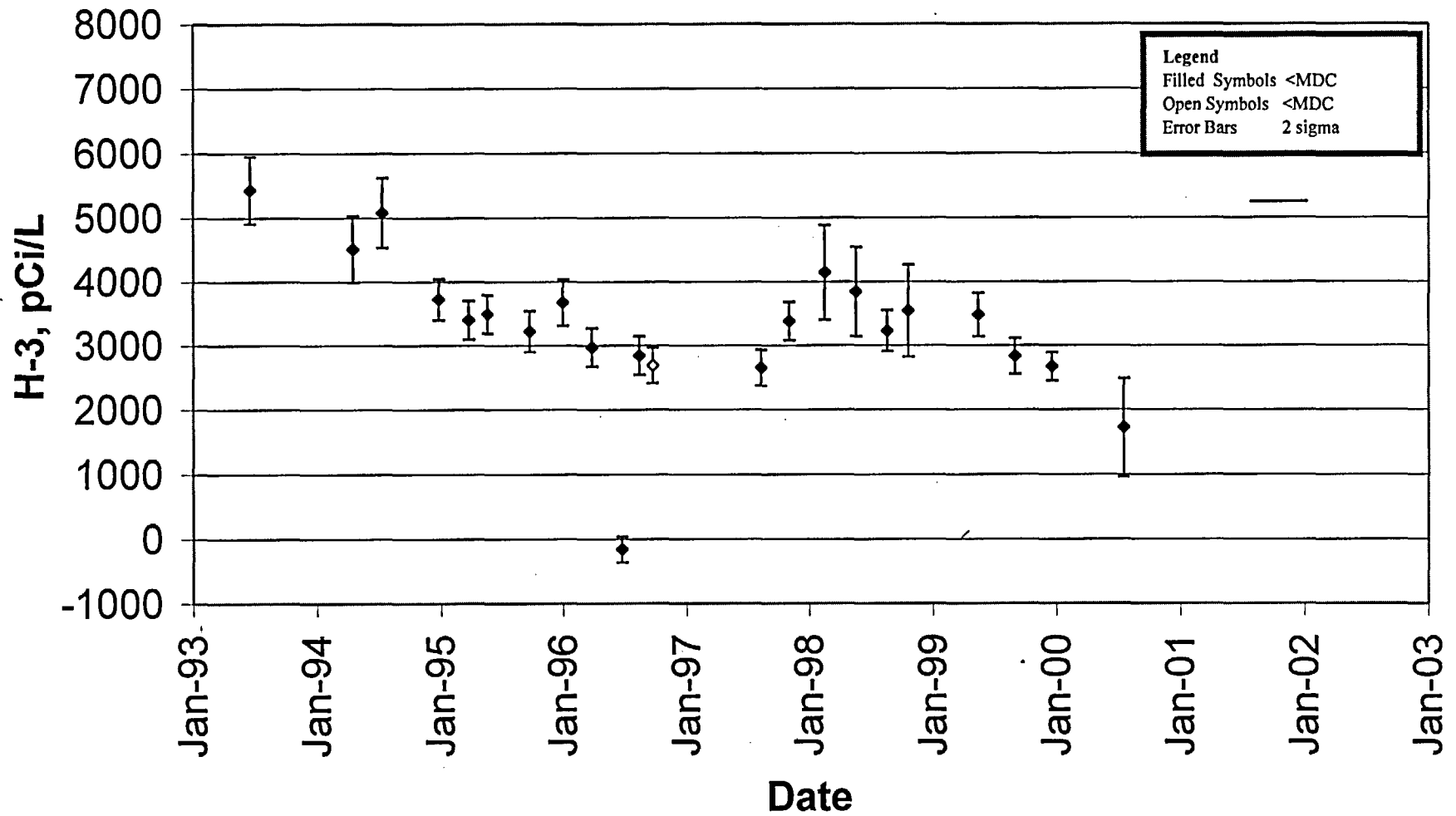
Site Ground Water Data Collection for YNPS Decommissioning

## Sherman Spring REMP Data: H-3

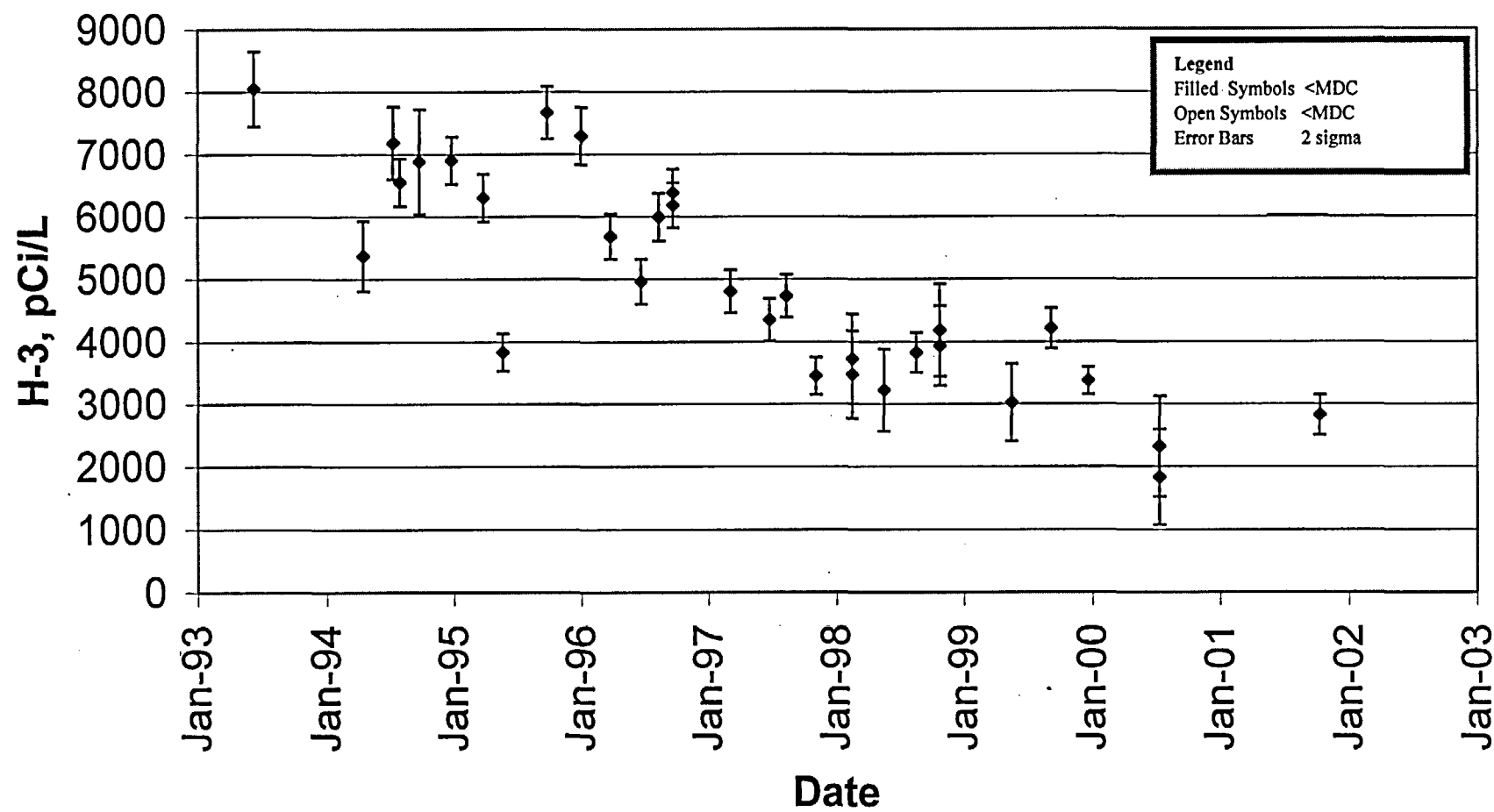


Legend  
Filled Symbols <MDC  
Open Symbols <MDC  
Error Bars 2 sigma

## B-1: H-3

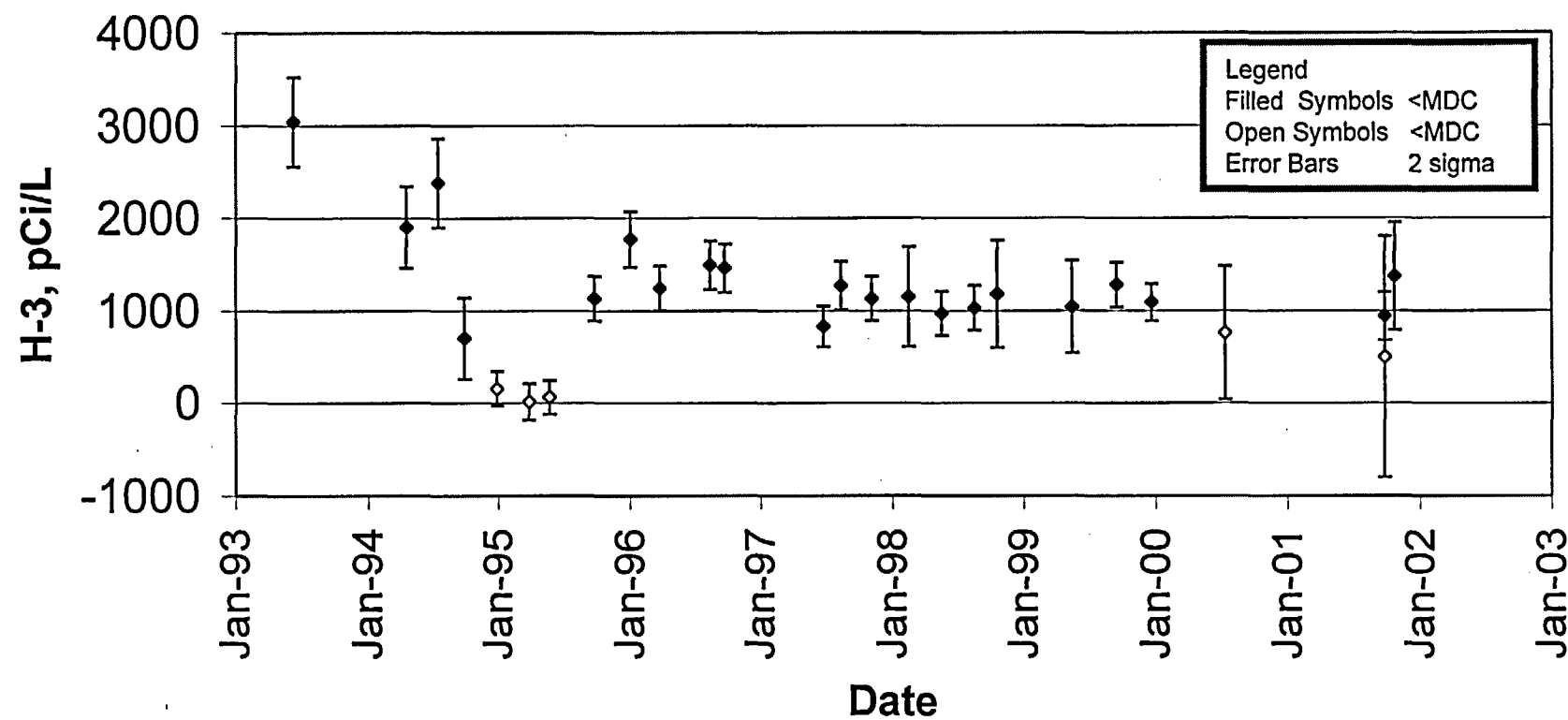


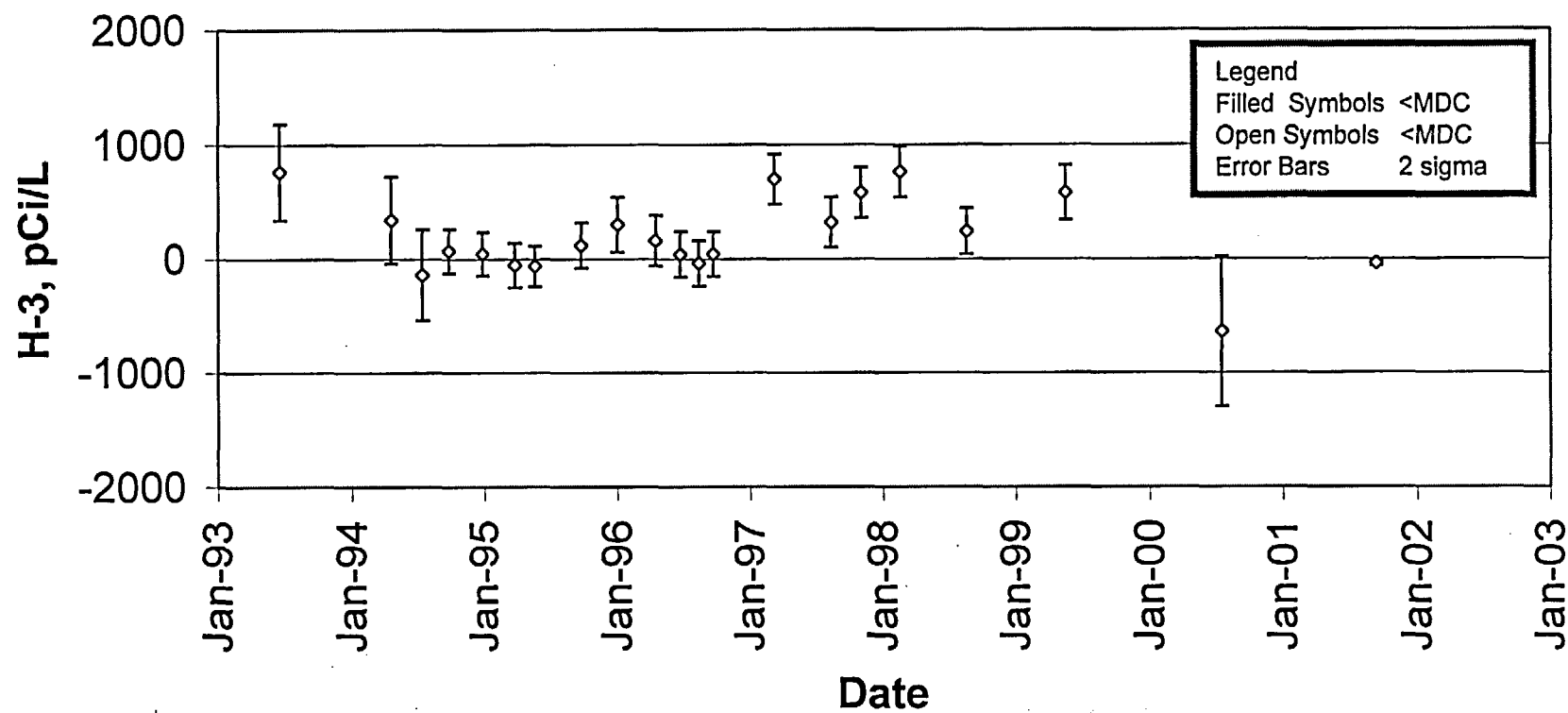
## CB-1: H-3



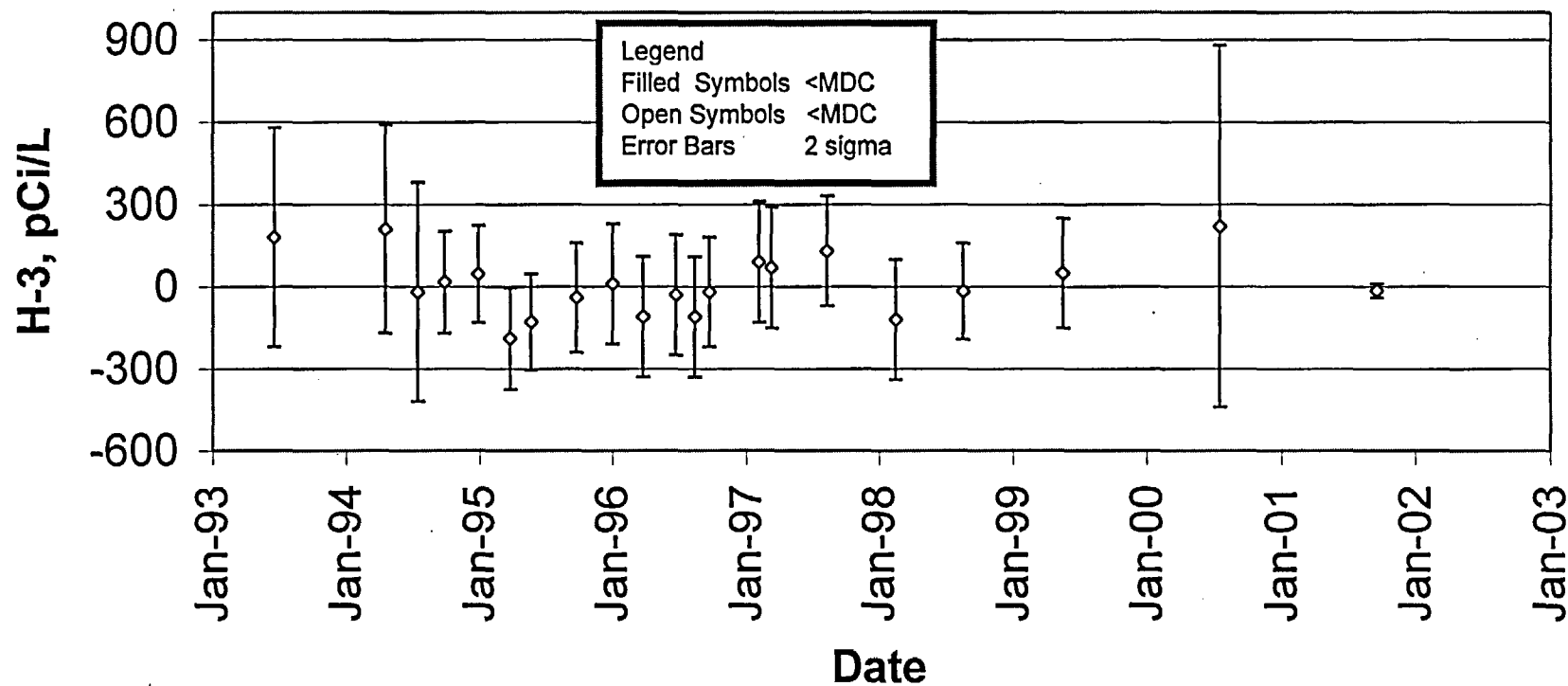


## CB-2: H-3

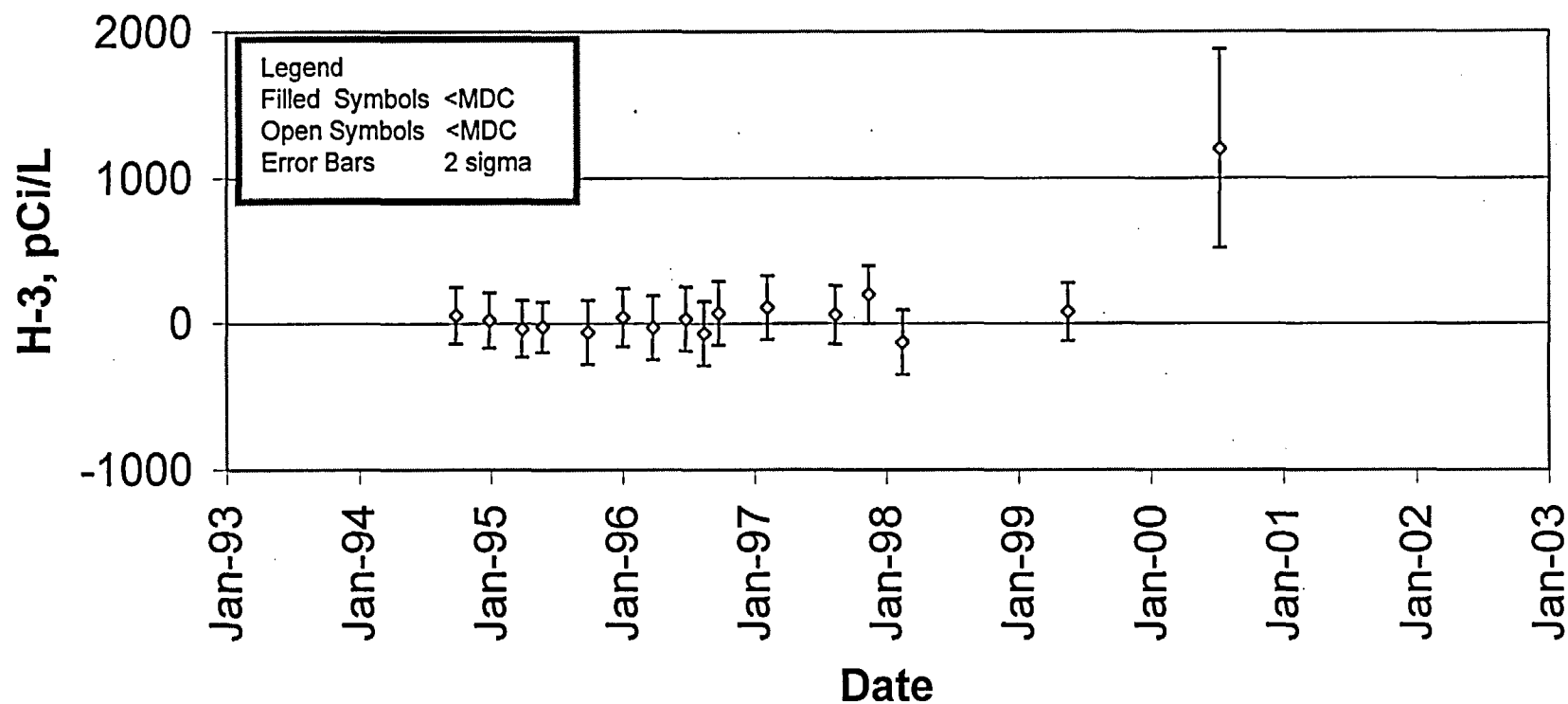


**CB-3: H-3**

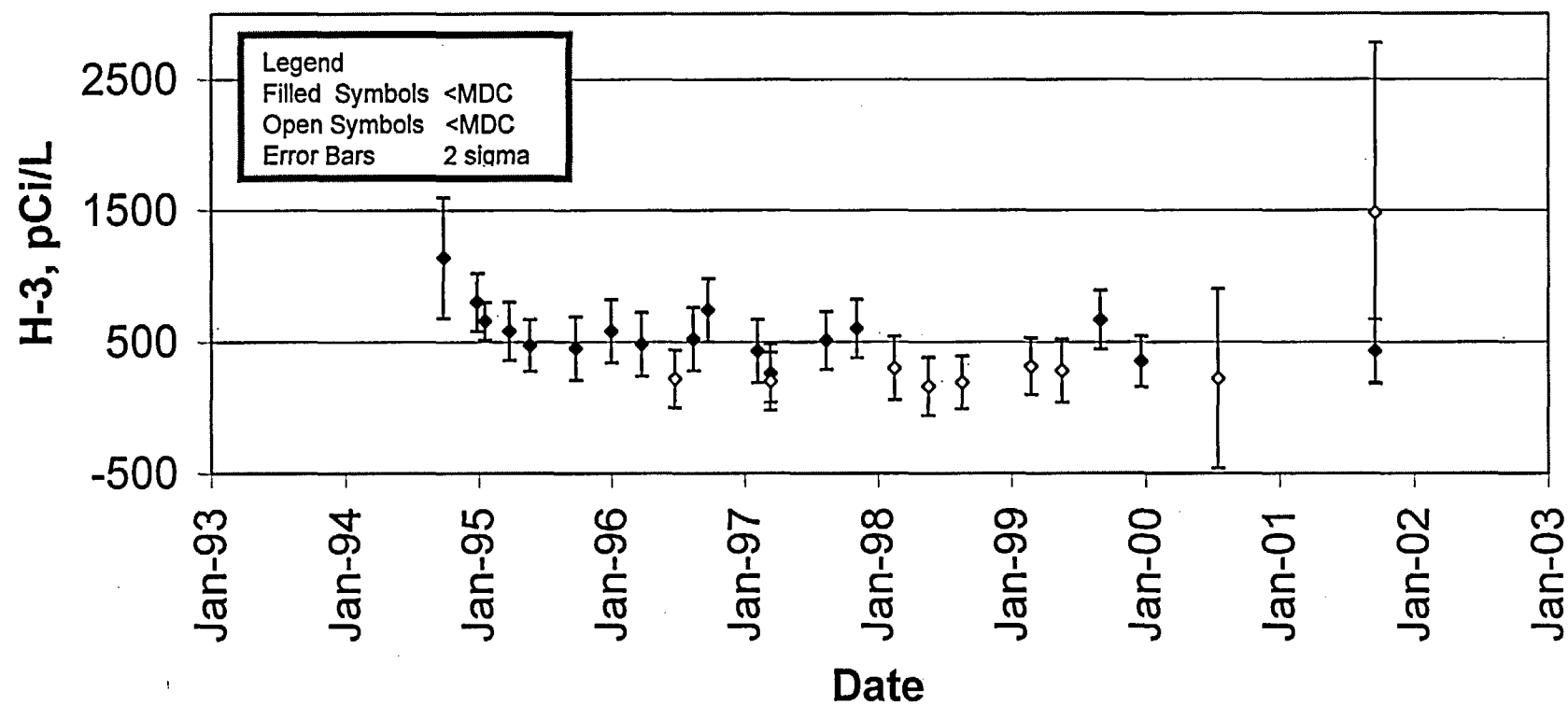
## CB-4: H-3



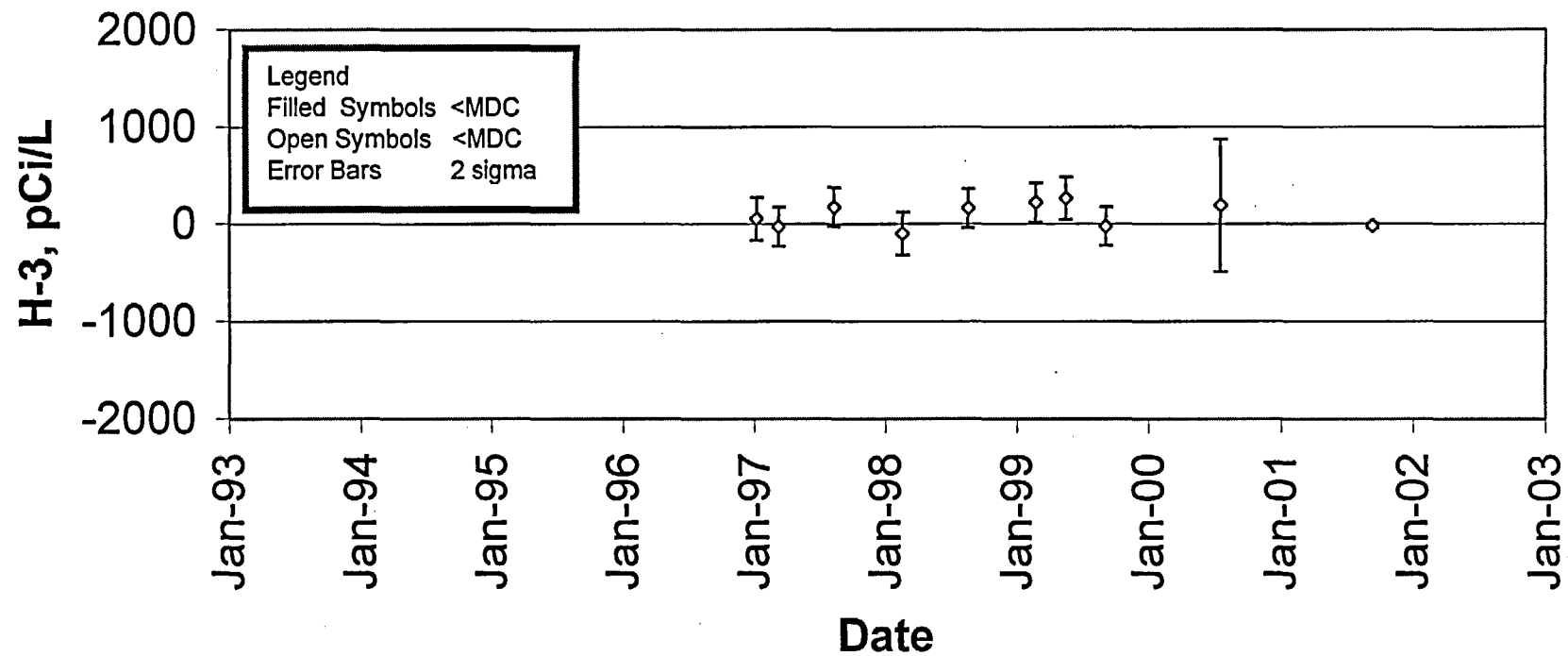
# CB-5: H-3



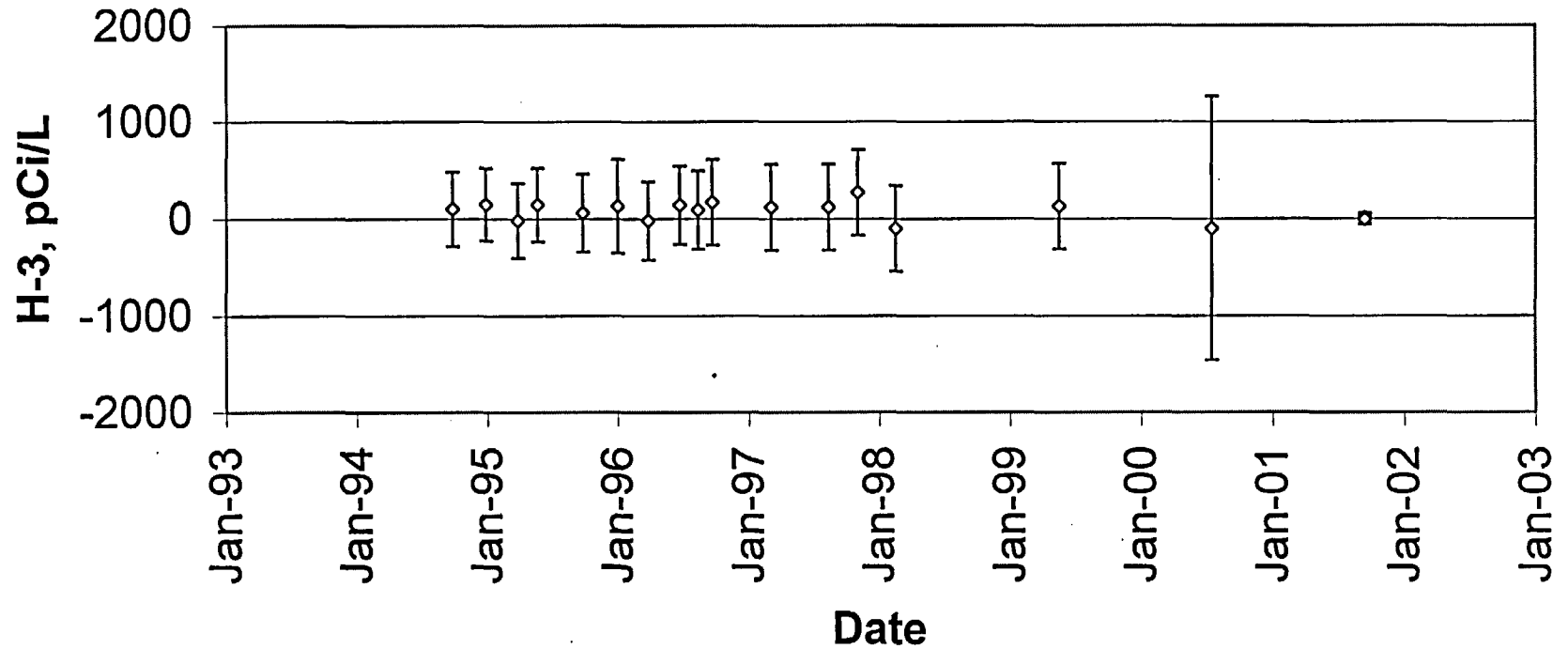
## CB-6: H-3



# CB-7: H-3

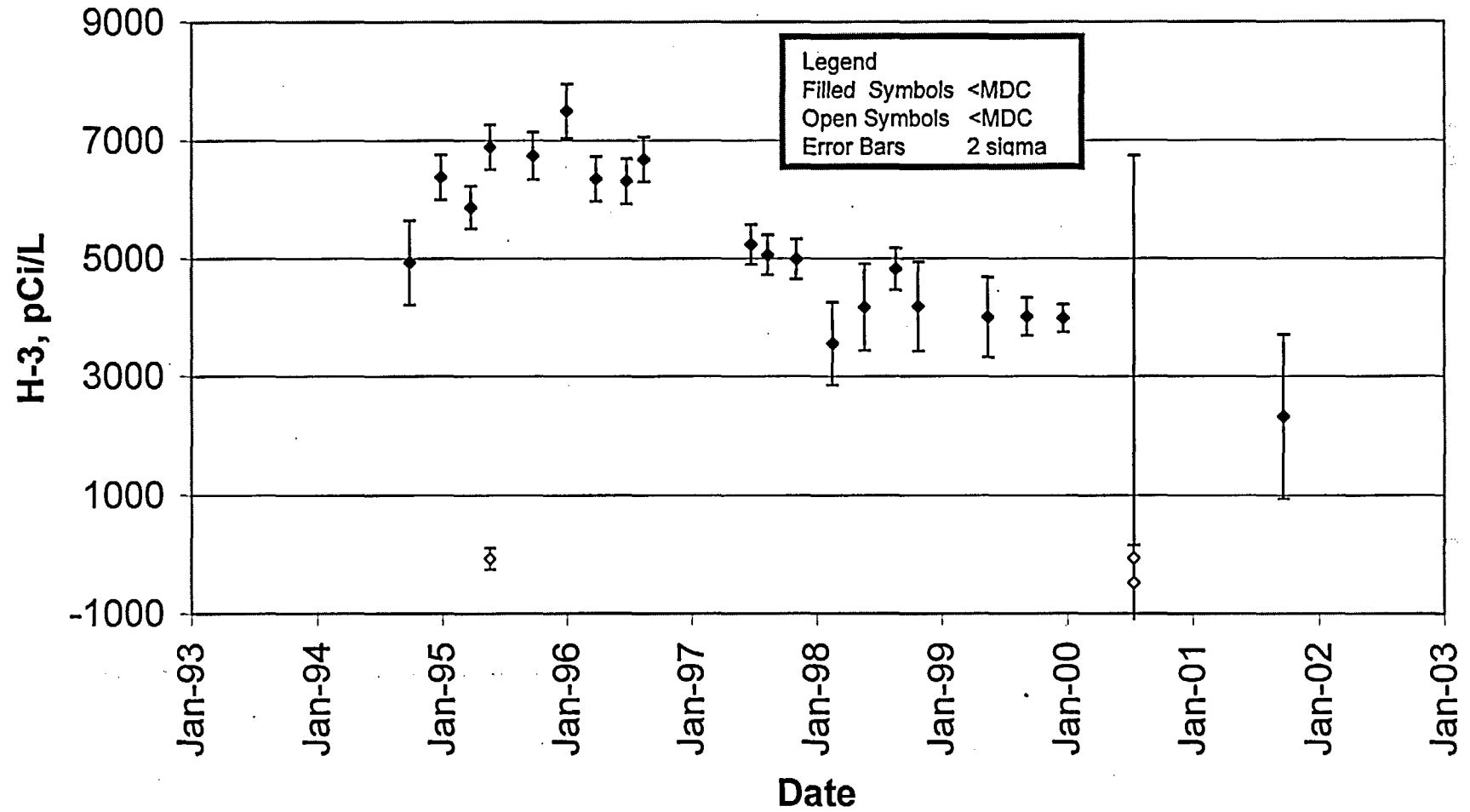


Site Ground Water Data Collection for YNPS Decommissioning

**CB-8: H-3**

Legend  
Filled Symbols <MDC  
Open Symbols <MDC  
Error Bars 2 sigma

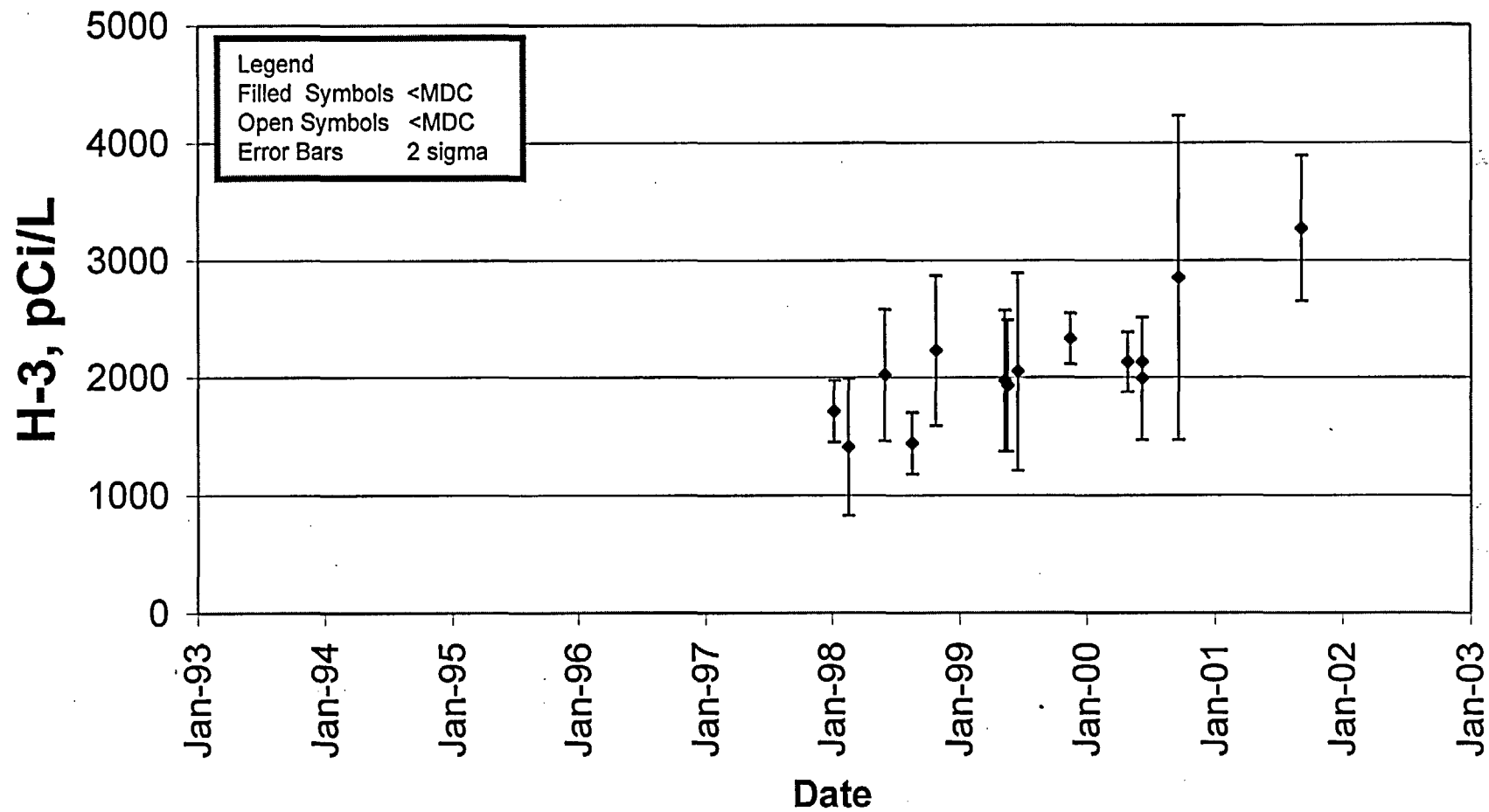
## CB-9: H-3



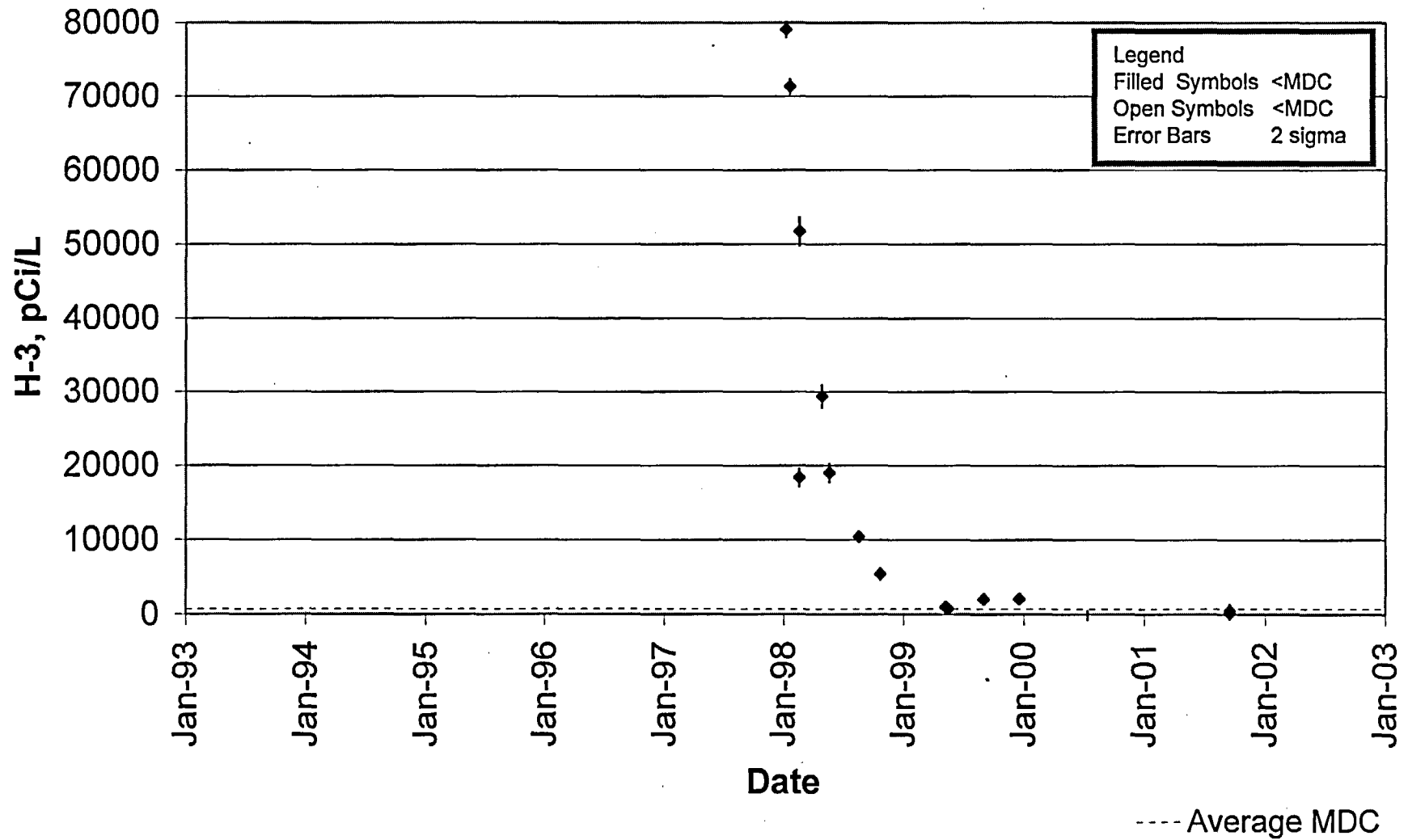


Site Ground Water Data Collection for YNPS Decommissioning

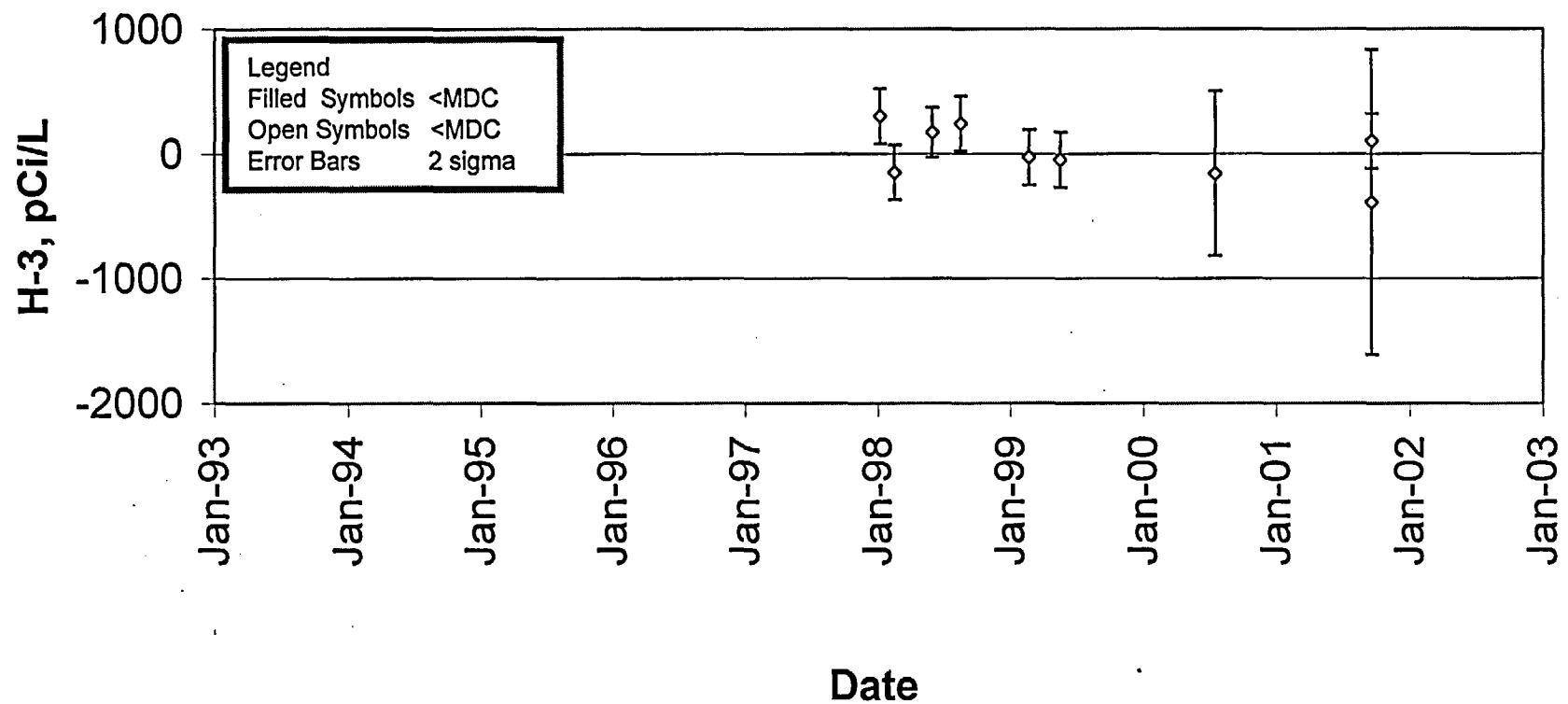
## CB-10: H-3



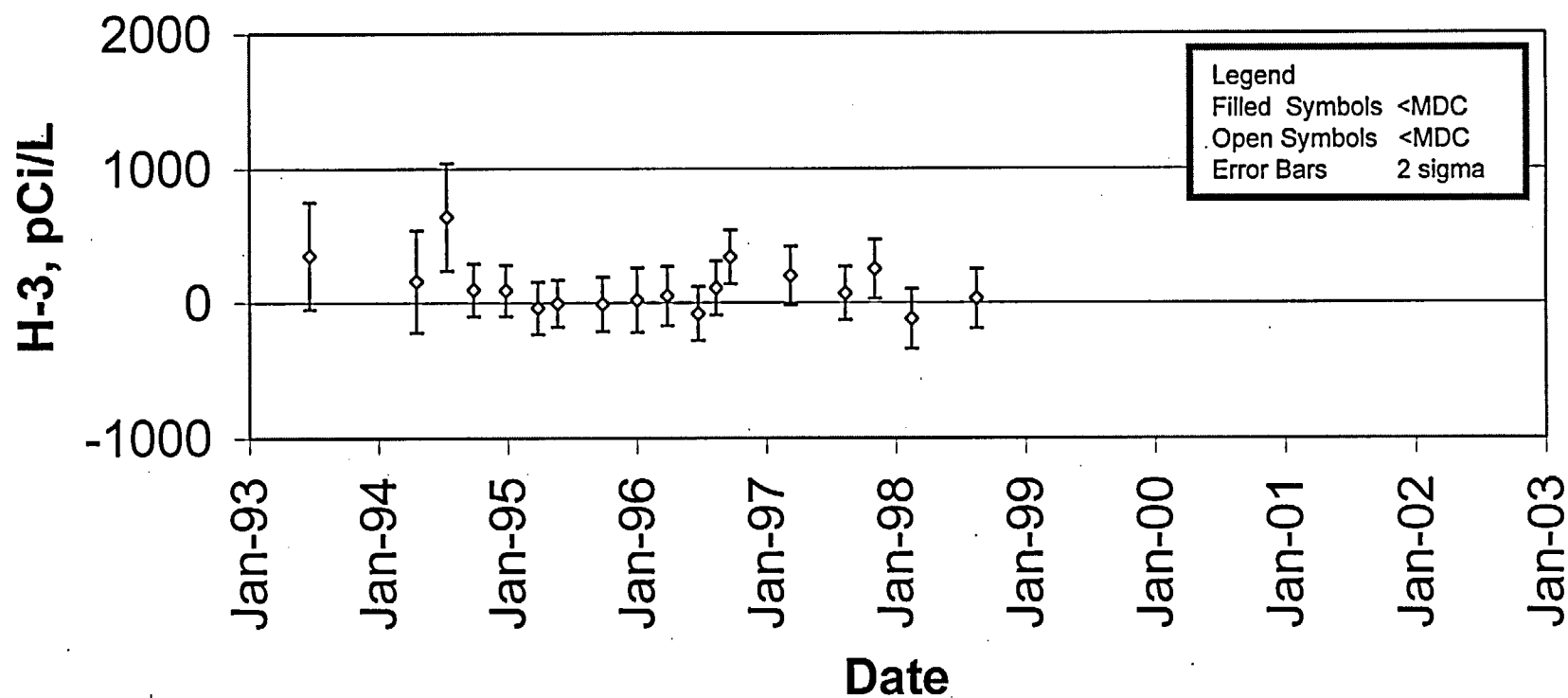
Site Ground Water Data Collection for YNPS Decommissioning

**CB-11A: H-3**

## CB-12: H-3



## CW-1: H-3



## CW-2: H-3

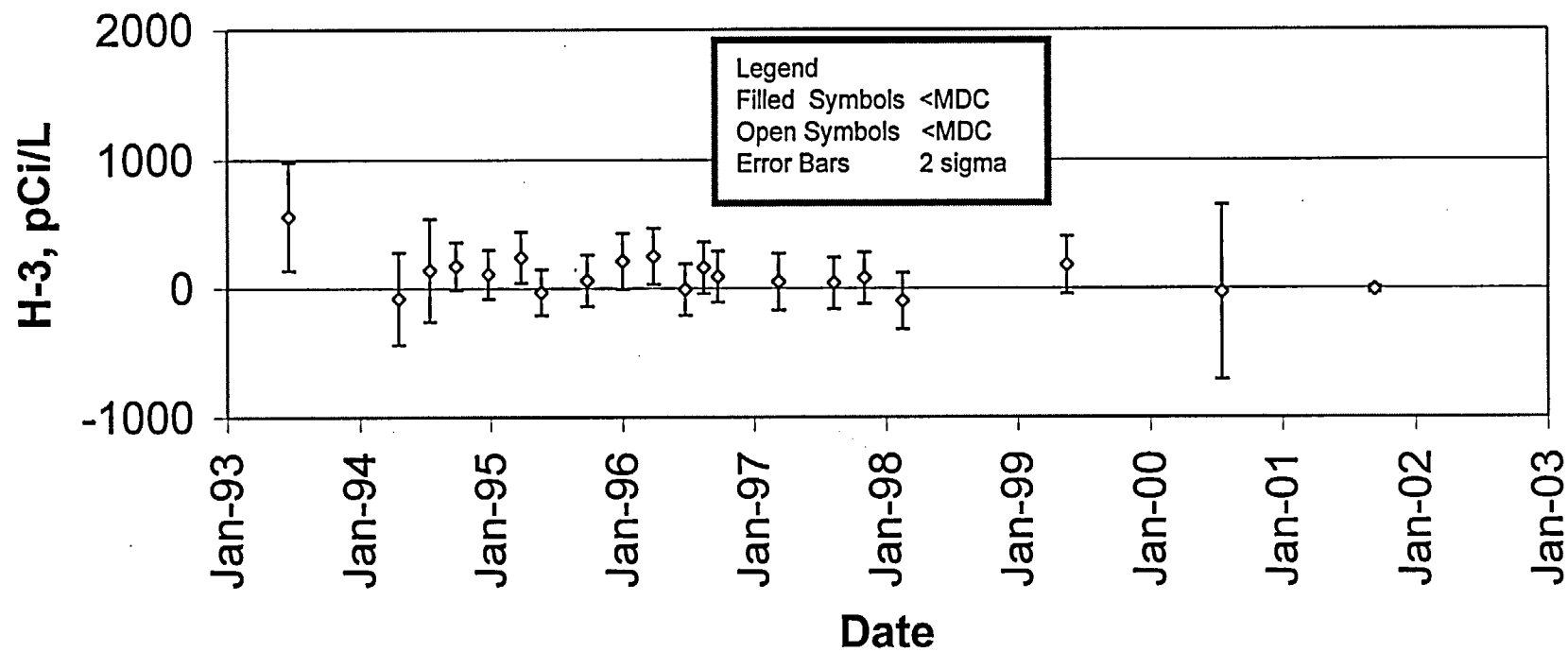
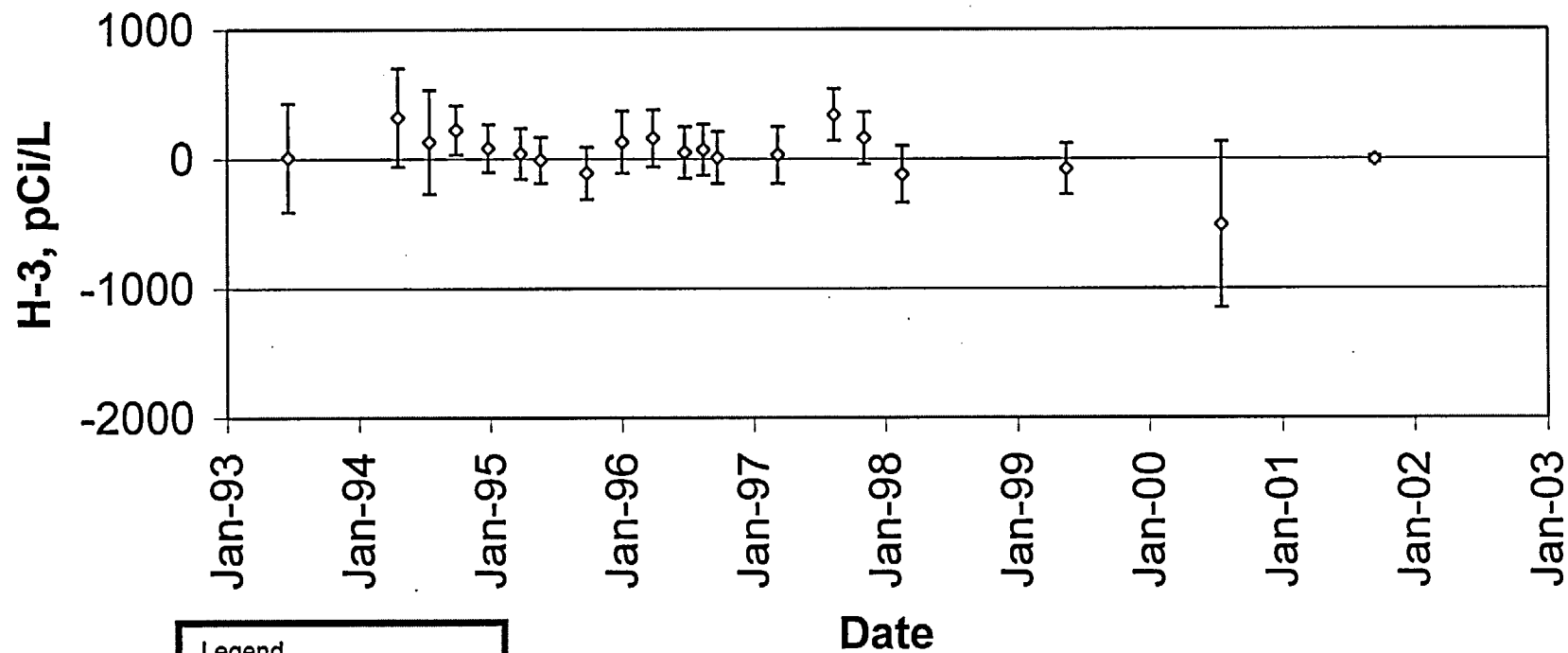
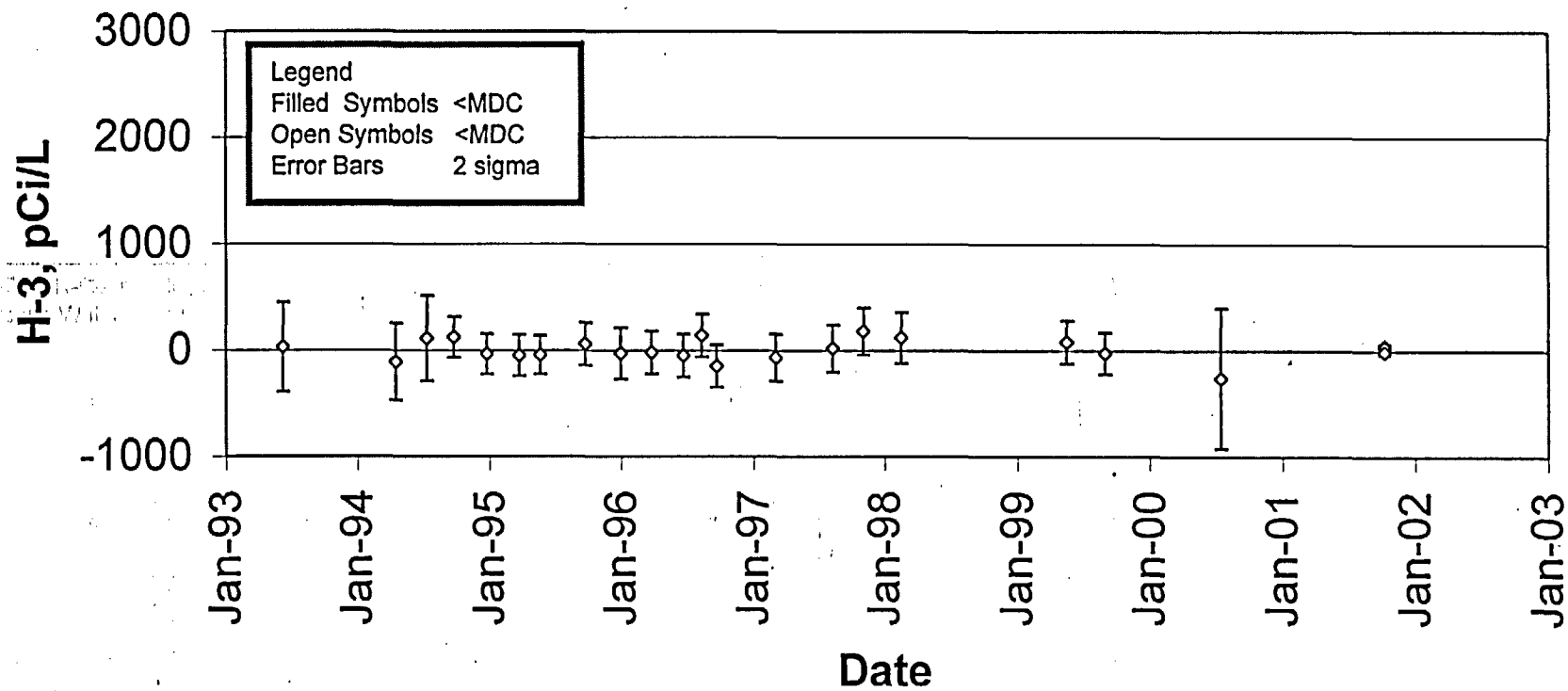


Figure 1 is a scatter plot showing the concentration of H-3 (pCi/L) over time (Date) from January 1993 to January 2003. The y-axis ranges from -1000 to 2000 pCi/L. The x-axis shows dates from Jan-93 to Jan-03. The data points are represented by open diamonds with vertical error bars indicating 2 sigma uncertainty. A legend in the top left corner specifies: Filled Symbols <MDC, Open Symbols <MDC, and Error Bars 2 sigma. The plot shows a general trend of low H-3 concentrations, with a notable spike around Jan-99 reaching approximately 1500 pCi/L.

## CW-4: H-3

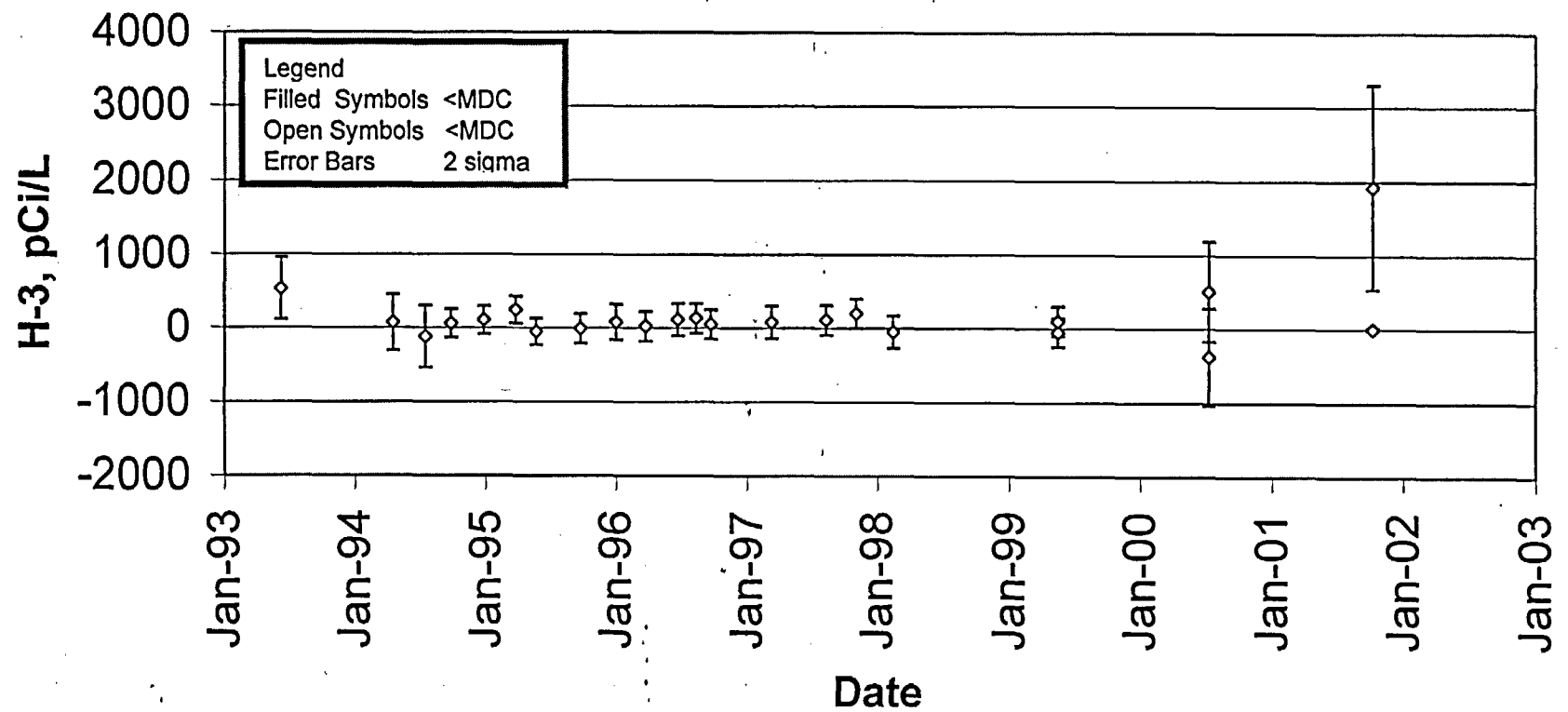


# CW-5: H-3

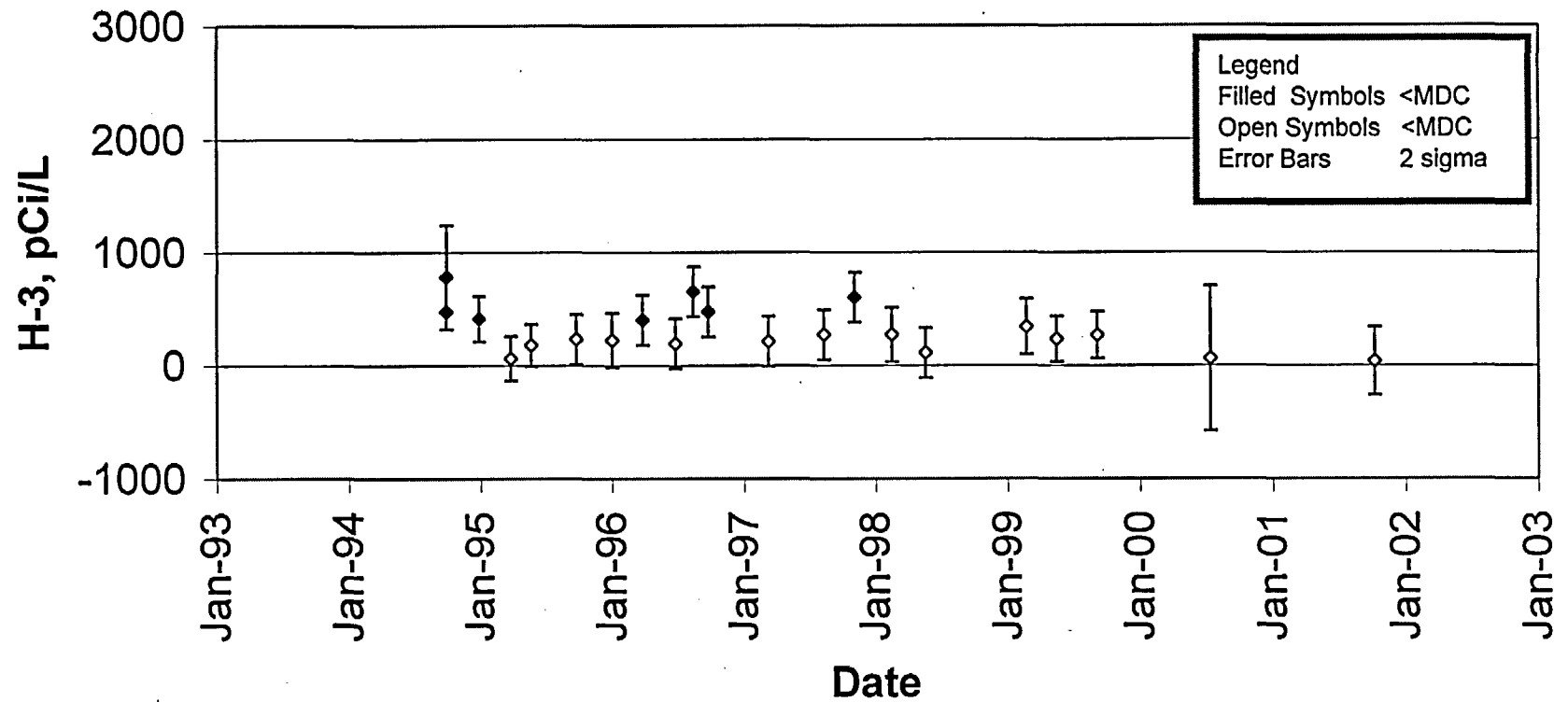




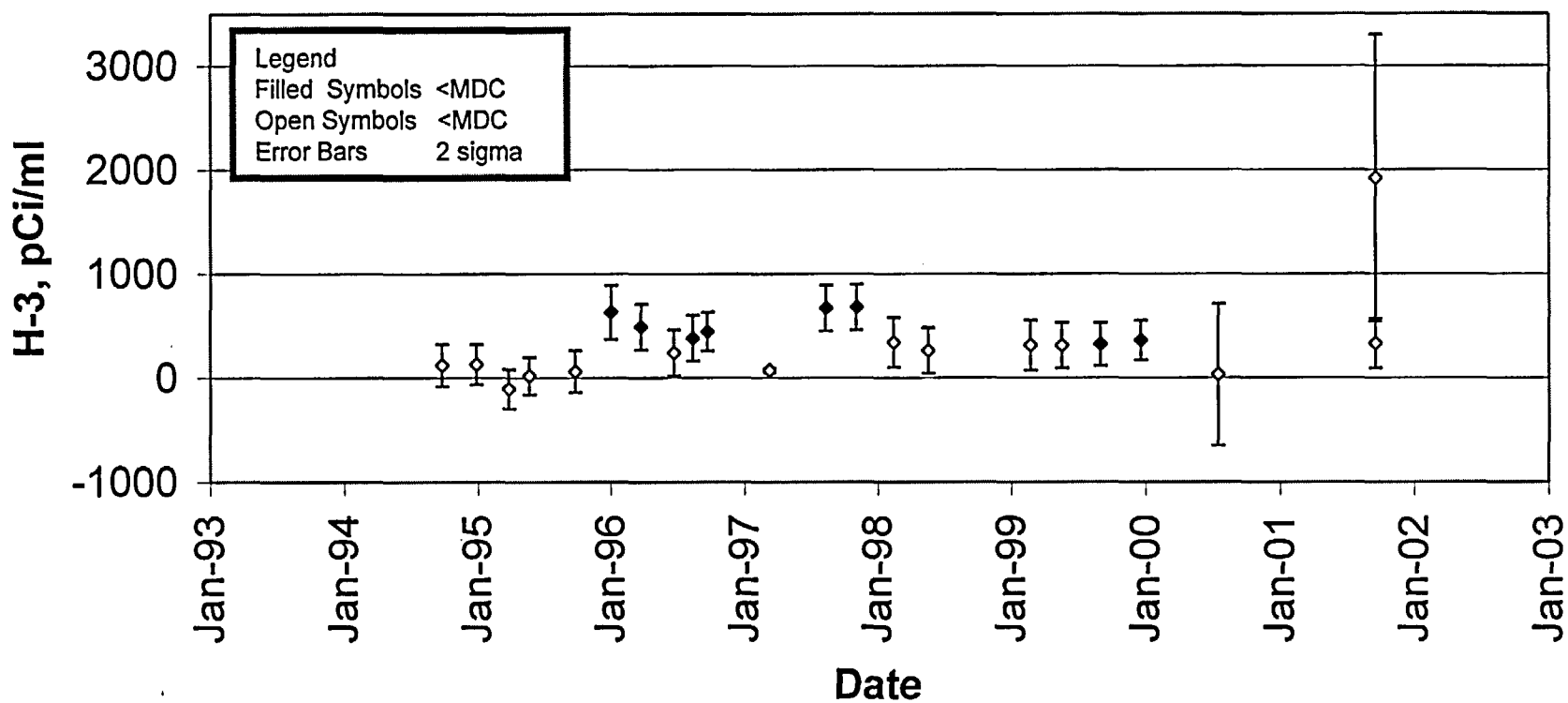
**CW-6: H-3**



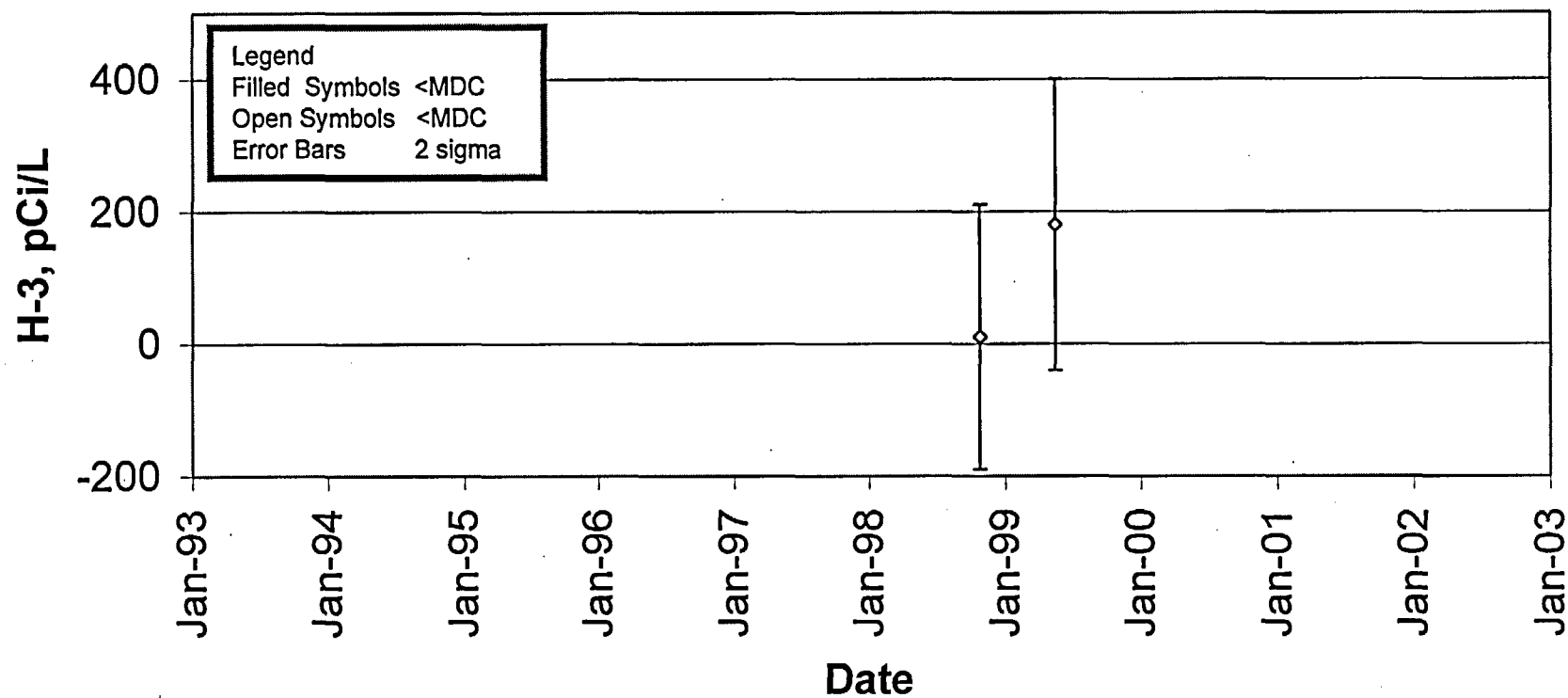
# CW-7: H-3



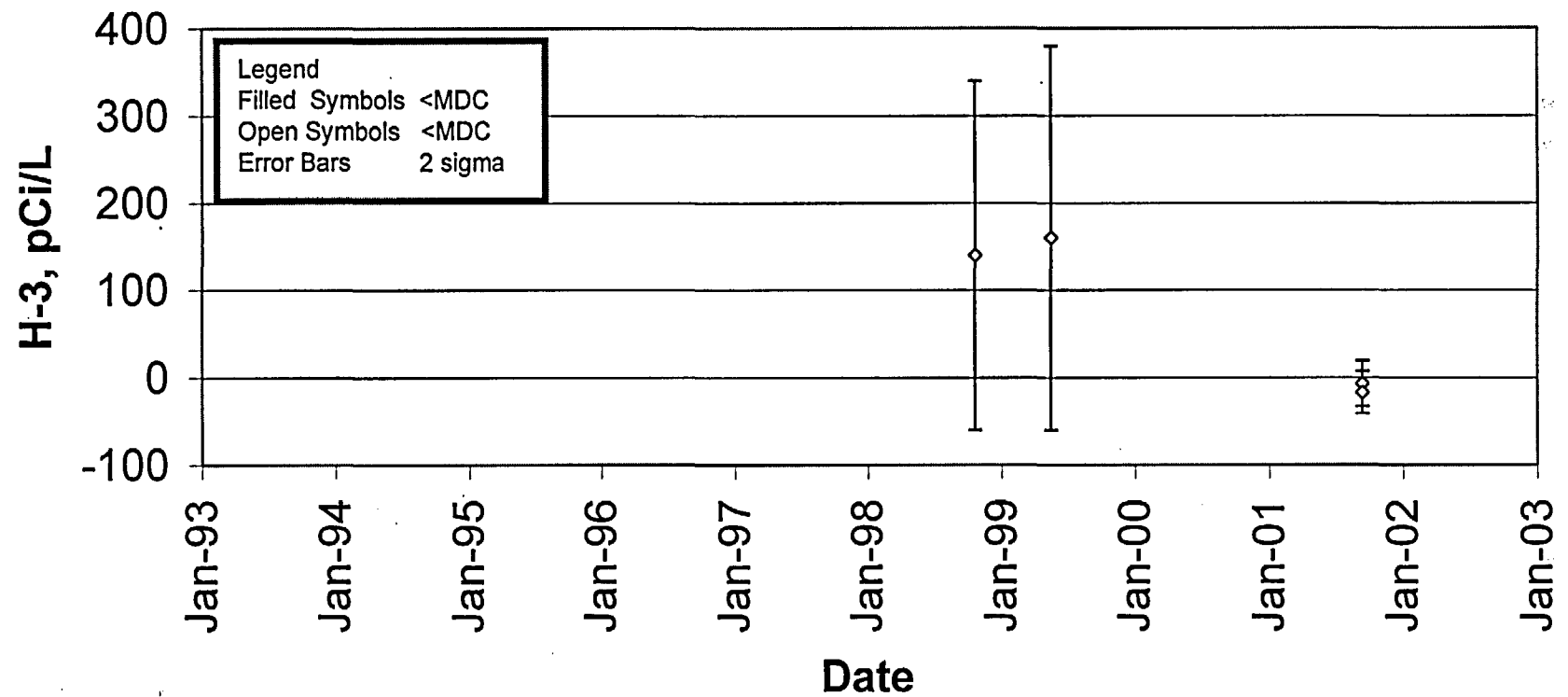
## CW-8: H-3



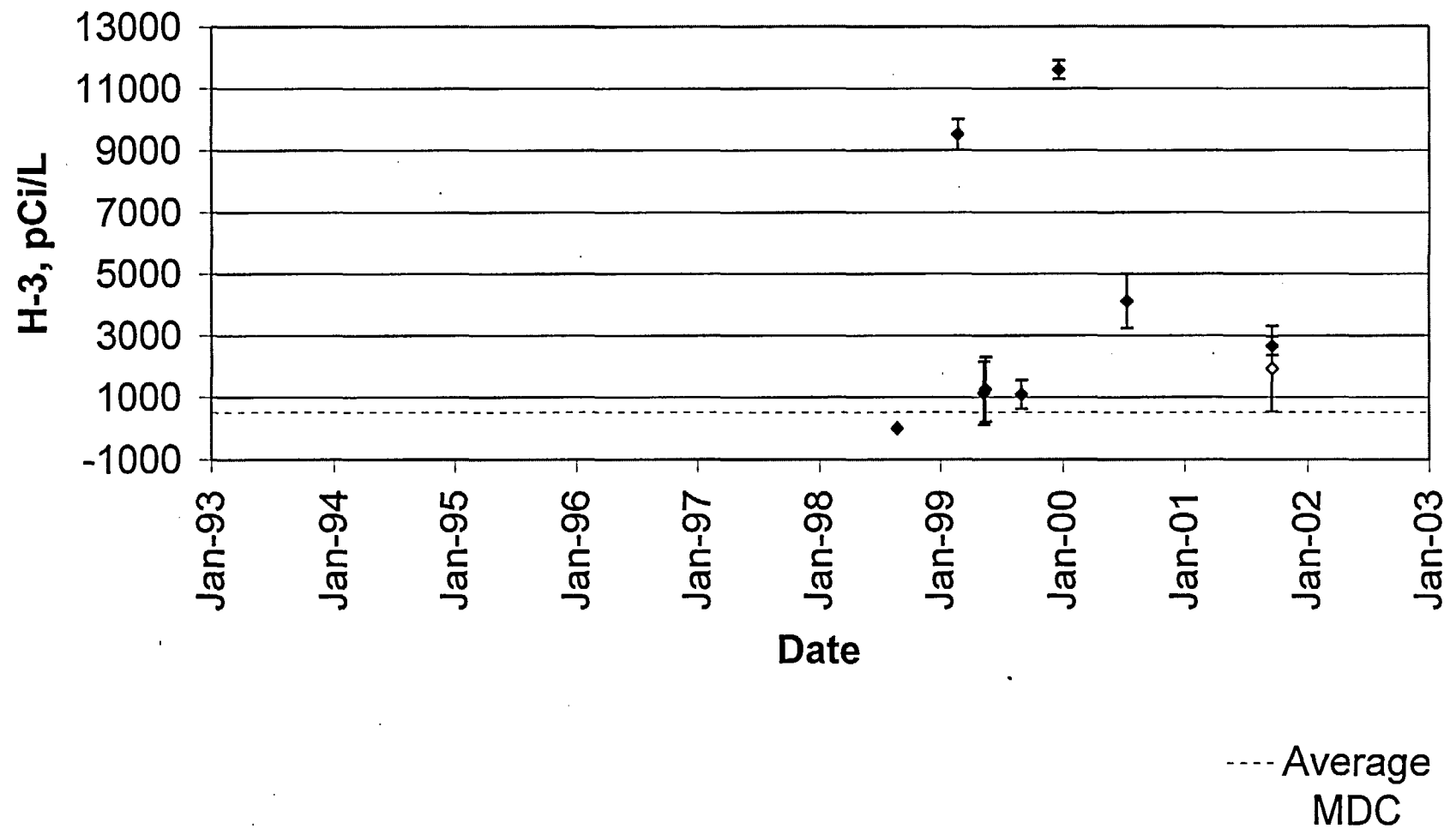
## CW-9: H-3



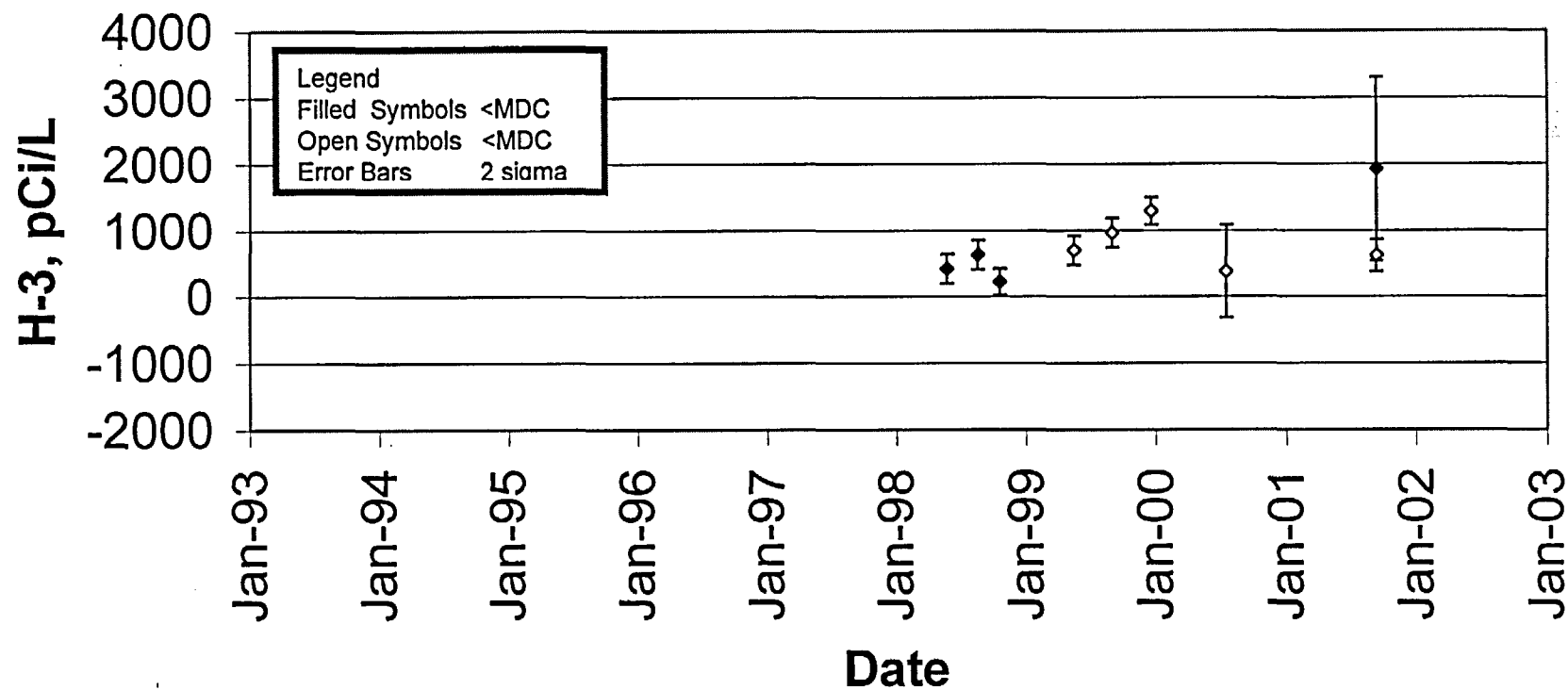
## CW-10: H-3



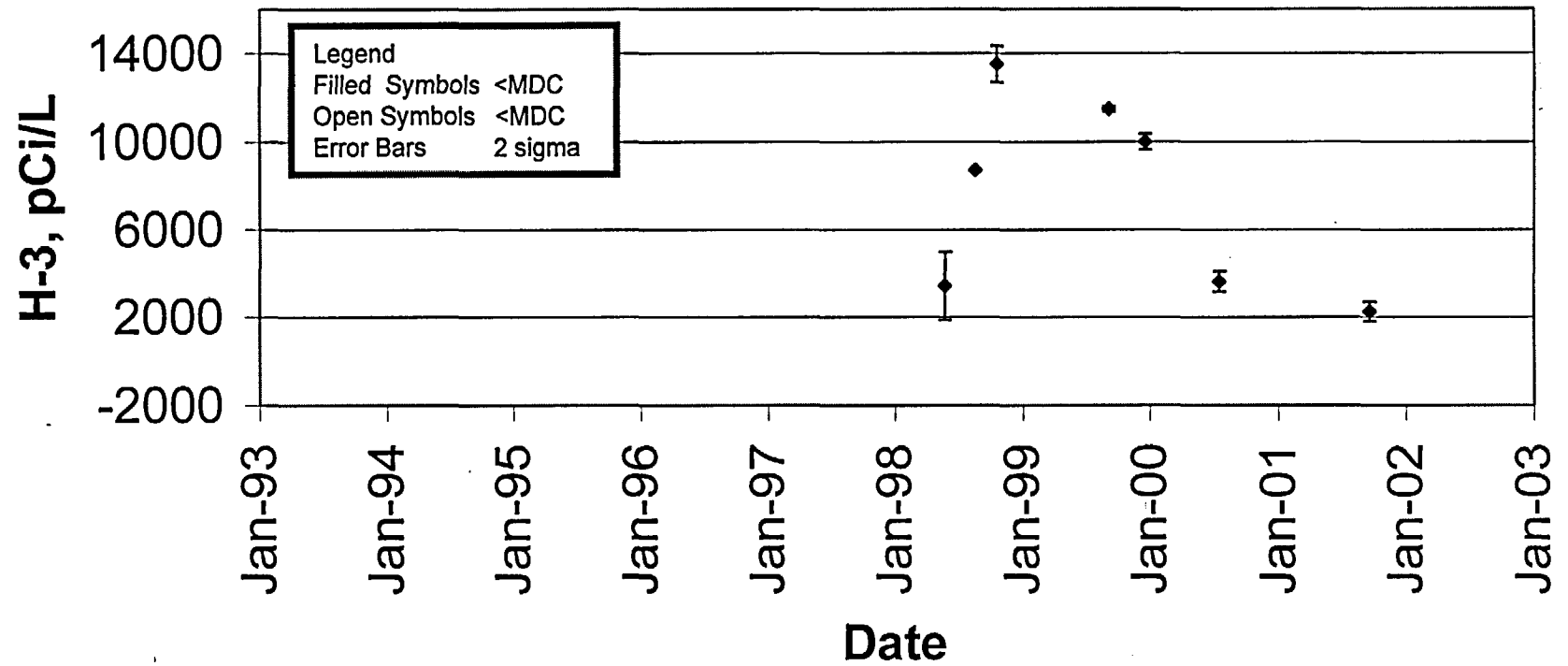
## CW-11: H-3



## MW-1: H-3

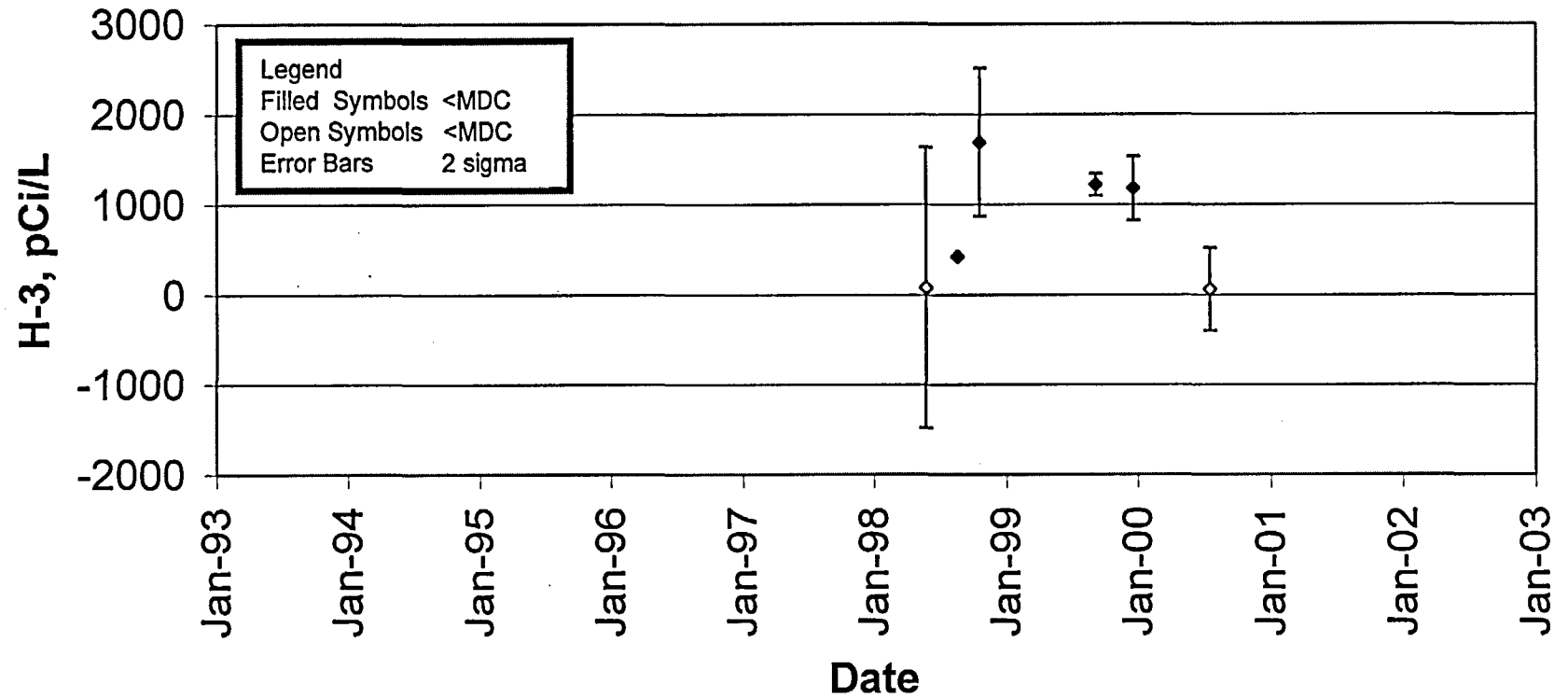


## MW-2: H-3

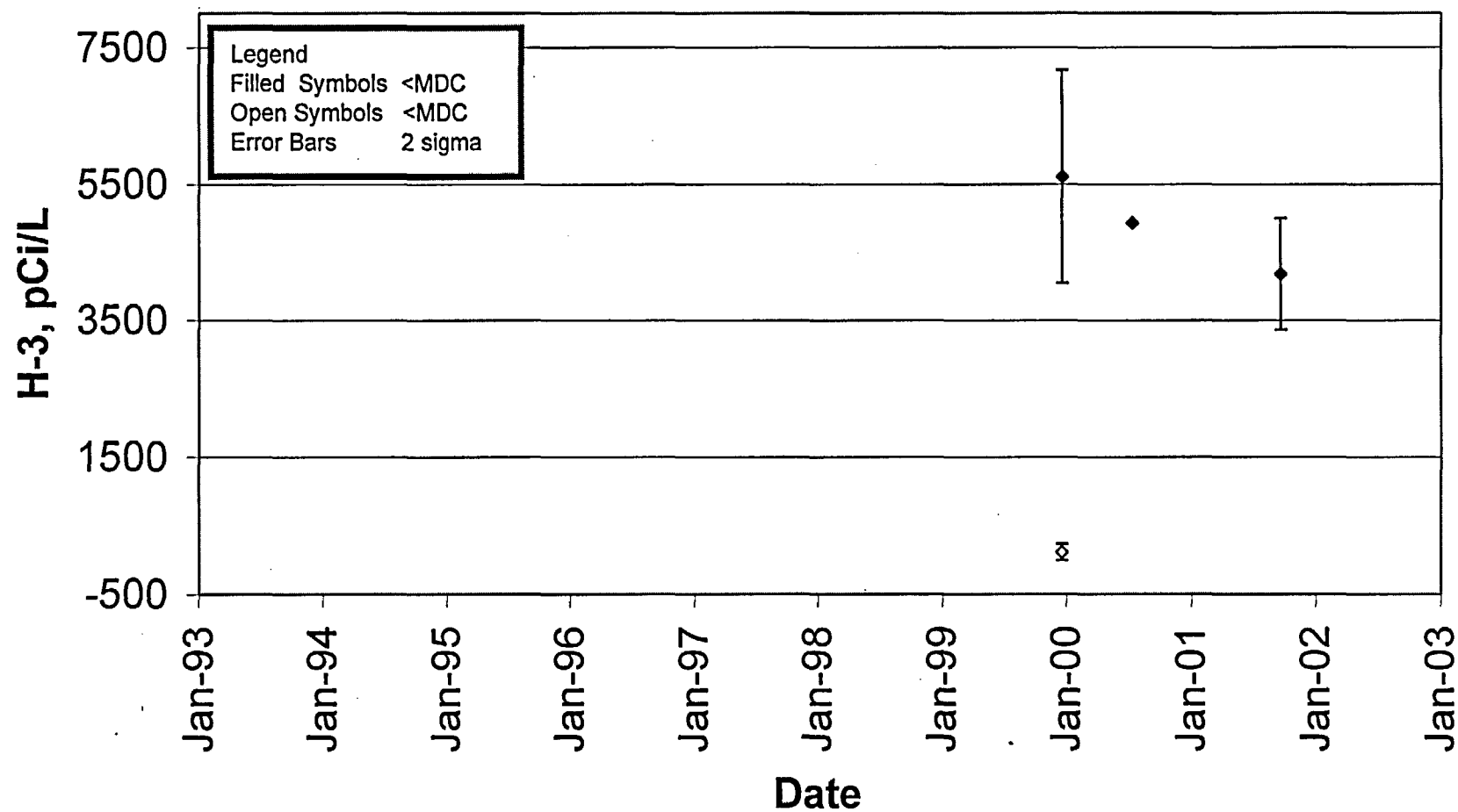




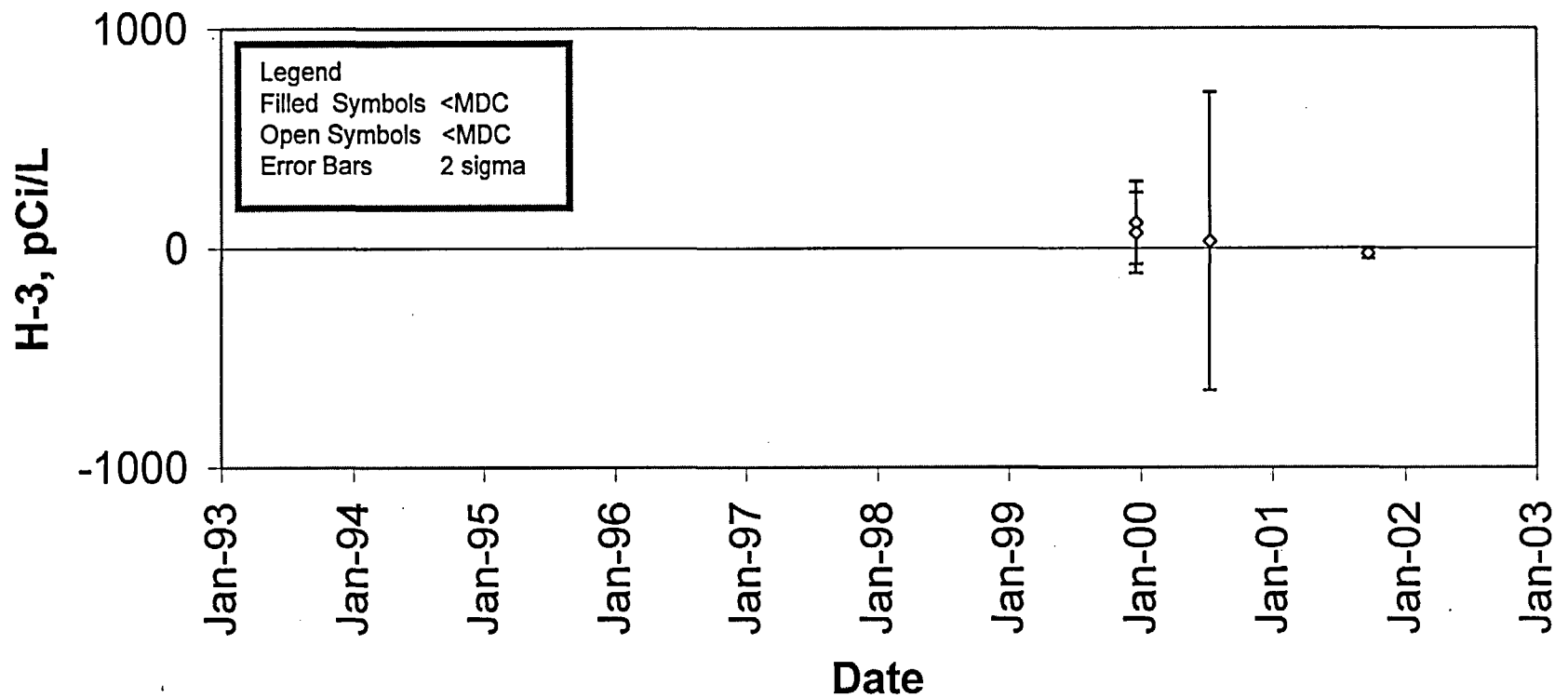
## MW-3: H-3



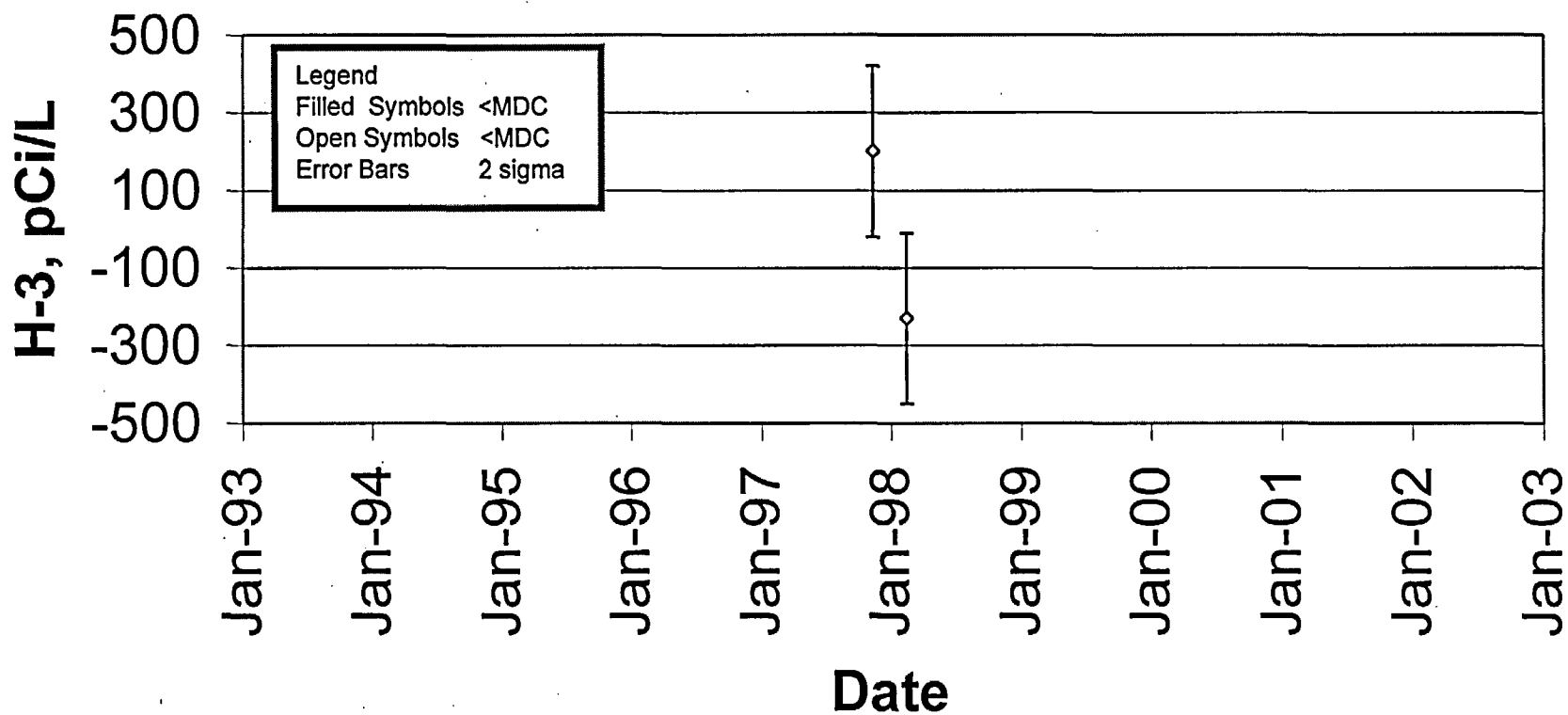
## MW-5: H-3



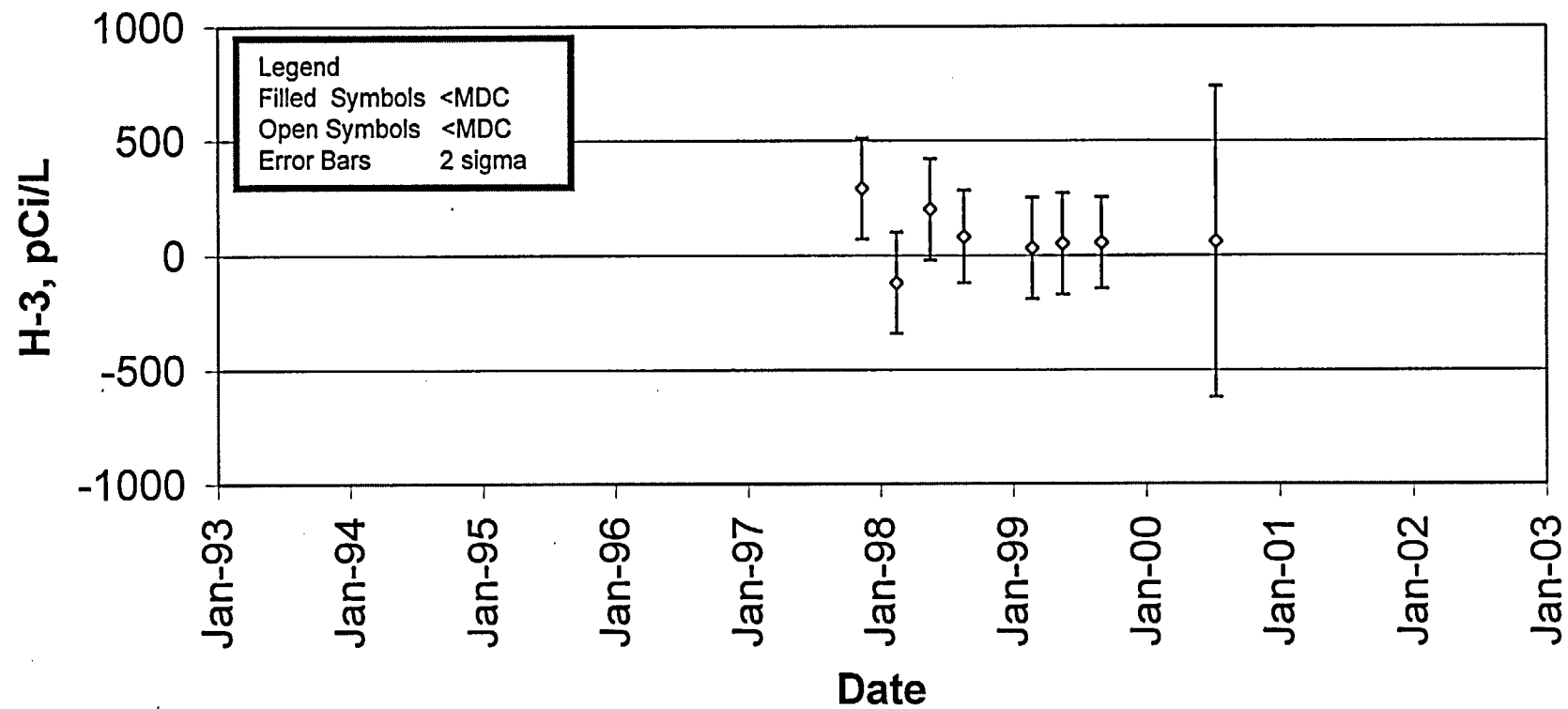
## MW-6: H-3



## NSR-1: H-3

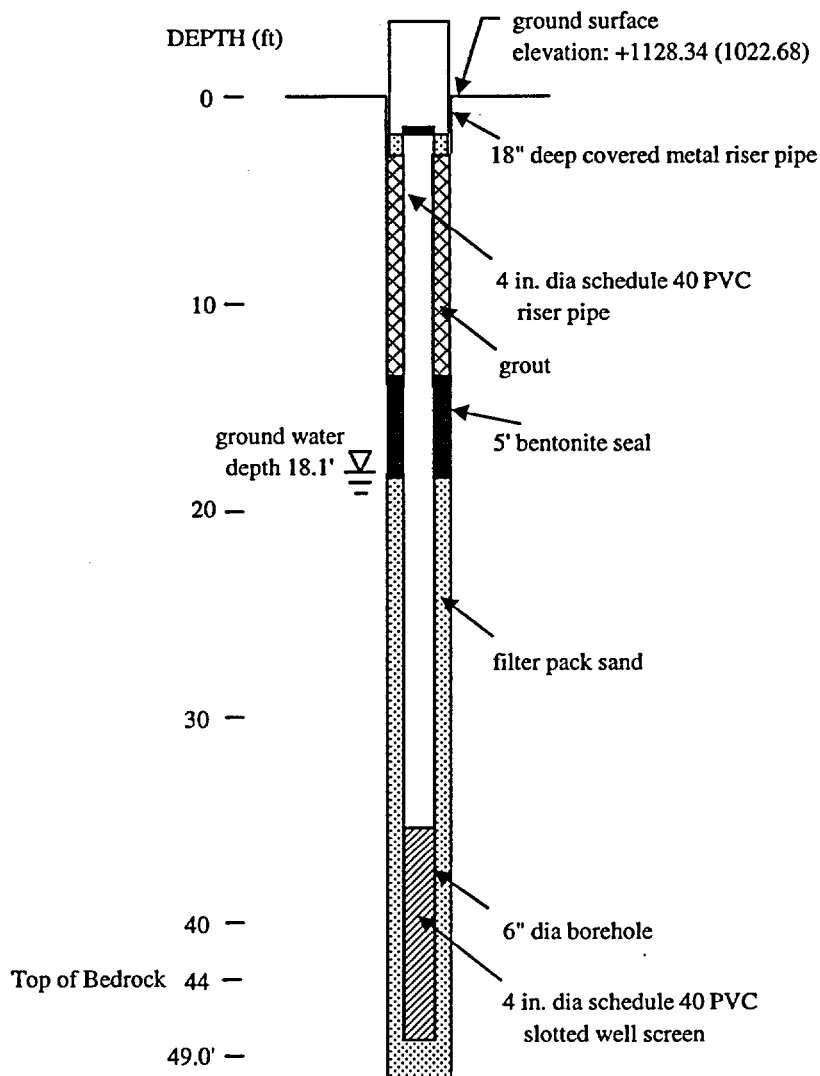


## OSR-1: H-3



Attachment 3  
Monitoring Well Configuration Sketches

SCHEMATIC FOR WELL INSTALLATION B-1  
 New Fuel Vault

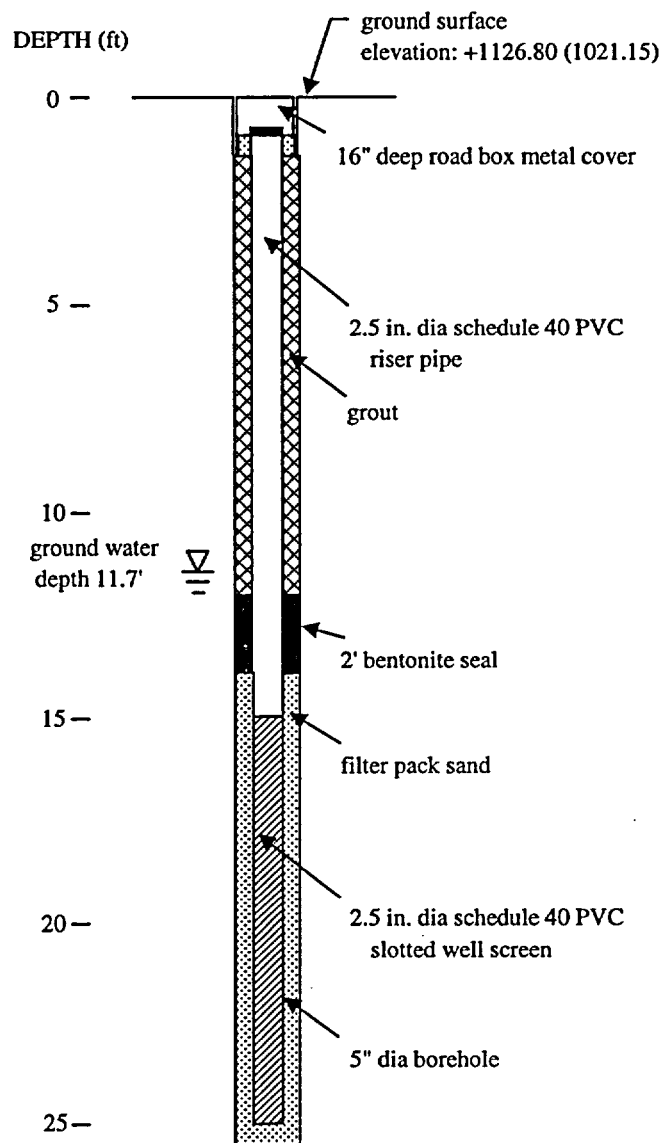


Borehole depth: 78.5'  
 Bottom of well screen: 49.0'  
 Top of well screen: 39.0'  
 Top of filter sand: 23'  
 Top of bentonite seal: 18'  
 Installation date: 12/30/77

Sampled Subsurface Materials:  
 0-8' Fill  
 8-44' Till  
 44'-78.5' Bedrock

Contractor: Guild Drilling  
 Engineer: Dames & Moore

SCHEMATIC FOR WELL INSTALLATION CB-1  
 N. of Fuel Building



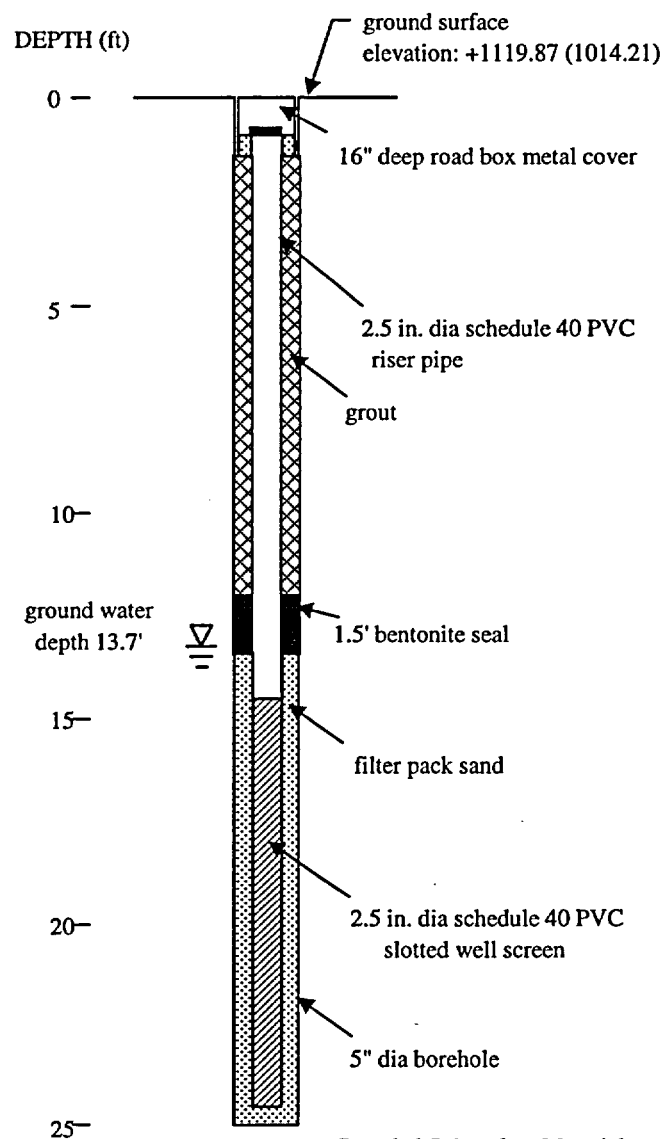
Borehole depth: 25.5'  
 Bottom of well screen: 25'  
 Top of well screen: 15'  
 Top of filter sand: 14'  
 Top of bentonite seal: 12'  
 Installation date: 4/26-27/93

Sampled Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-3.5' Fill  
 3.5'-13.5' Bouldery Till  
 13.5'-25.5' Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic



SCHEMATIC FOR WELL INSTALLATION CB-2  
 N. of Office Building



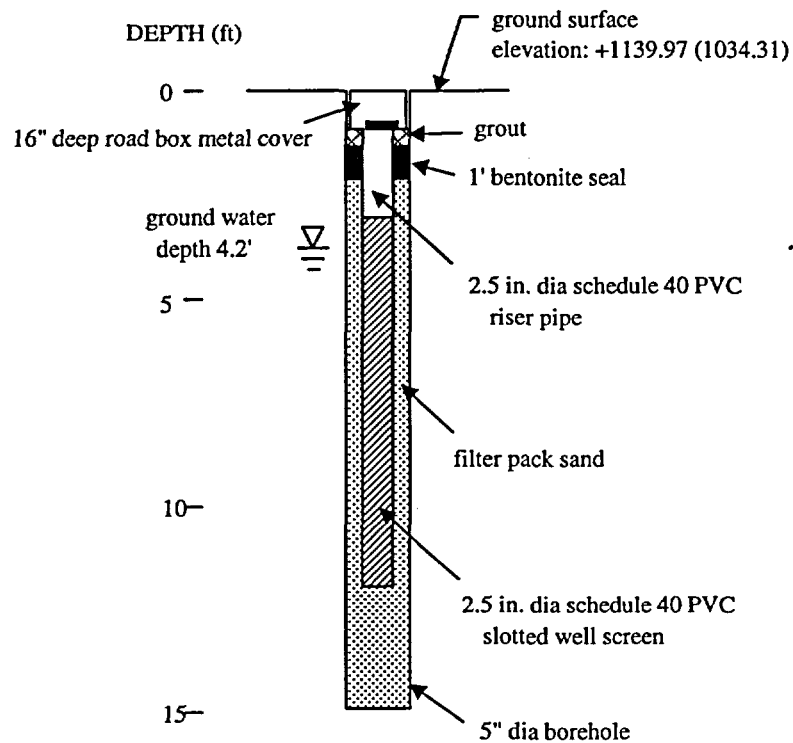
Borehole depth: 25'  
 Bottom of well screen: 24.5'  
 Top of well screen: 14.5'  
 Top of filter sand: 13.5'  
 Top of bentonite seal: 12'  
 Installation date: 4/20-21/93

Sampled Subsurface Materials:

0-0.5' Asphalt  
 0.5-15.5' Fill/Outwash  
 15.5'-25' Bouldery Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic

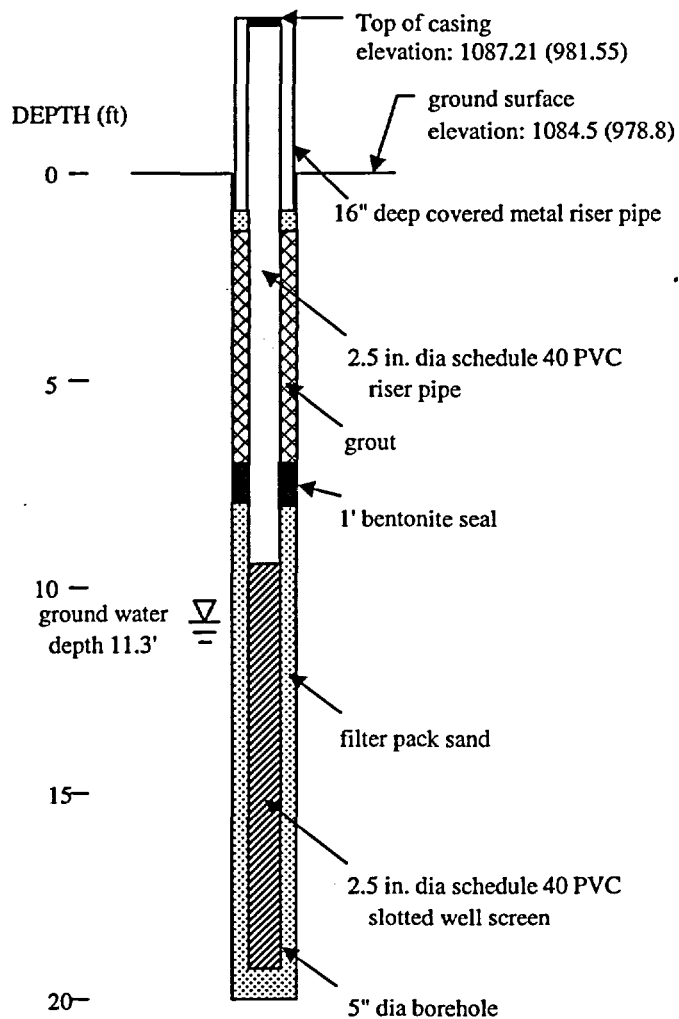
SCHEMATIC FOR WELL INSTALLATION CB-3  
E. of Fire Water Tank



Borehole depth: 15.0'  
Bottom of well screen: 13.0'  
Top of well screen: 3.0'  
Top of filter sand: 5.0'  
Top of bentonite seal: 2'  
Installation date: 4/29/93

Sampled Subsurface Materials:  
0-0.5' Asphalt  
0.5-10' Silty Outwash  
10-15' Till  
Contractor: Guild Drilling  
Engineer: Yankee Atomic

SCHEMATIC FOR WELL INSTALLATION CB-4  
 Old Septic Leaching Field

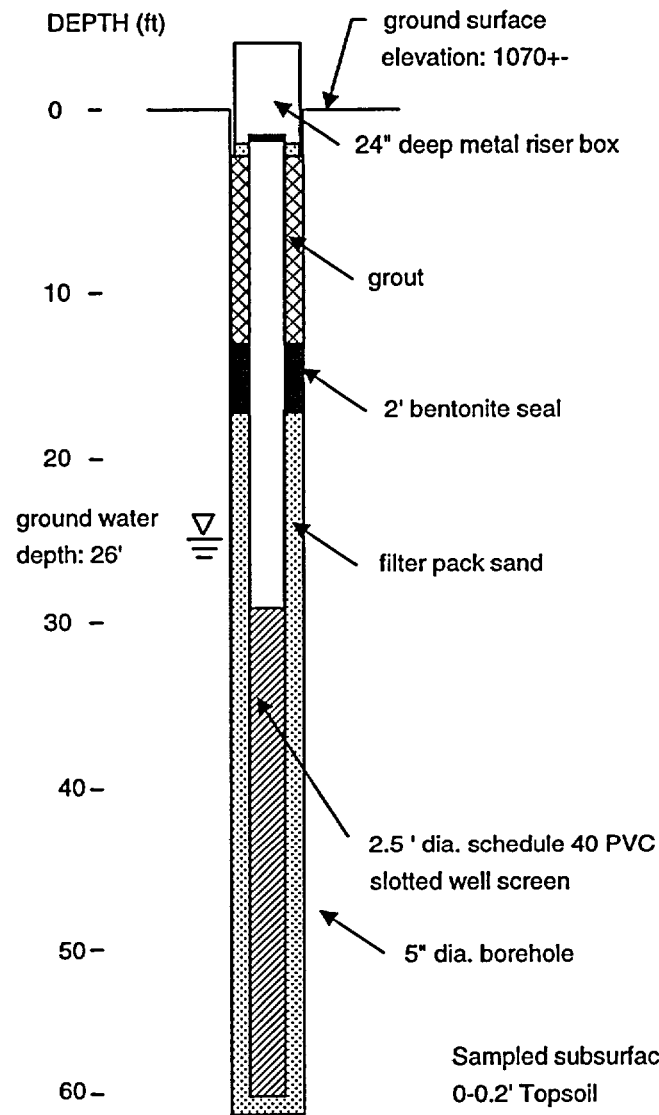


Borehole depth: 20.0'  
 Bottom of well screen: 19.0'  
 Top of well screen: 9.0'  
 Top of filter sand: 8.0'  
 Top of bentonite seal: 7.0'  
 Installation date: 5/4-5/93

Sampled Subsurface Materials:  
 0-0.5' Asphalt  
 0-2' Fill  
 2'-7' Sand  
 7'-9' Gravel  
 9-13' Sand  
 13-15' Gravel  
 15-20' Alluvium

Contractor: Guild Drilling  
 Engineer: Yankee Atomic

SCHEMATIC FOR WELL INSTALLATION CB-5  
 Southeast Construction Fill Area

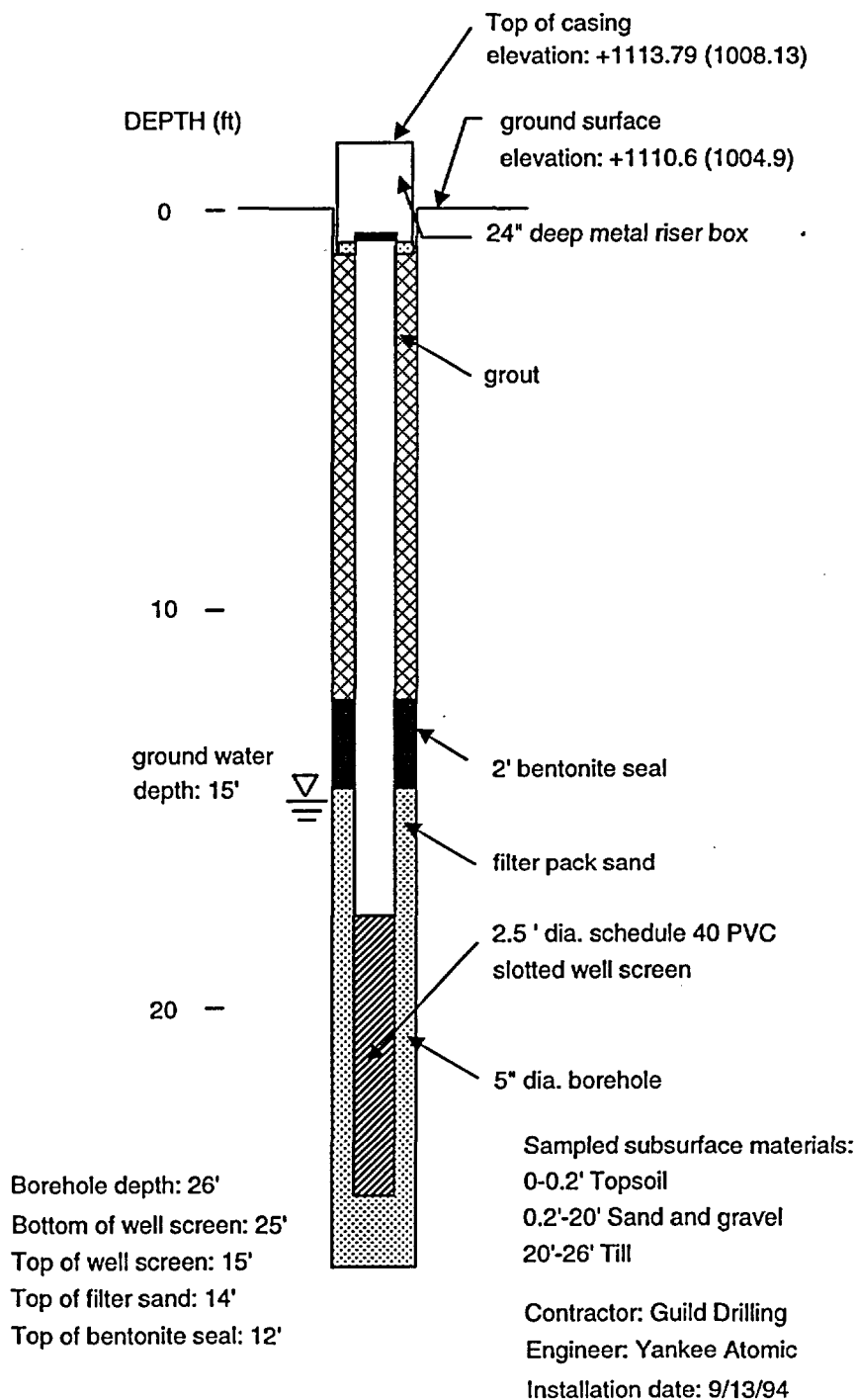


Borehole depth: 60'6"  
 Bottoms of well screen: 59'  
 Top of well screens: 29'  
 Top of filter sand: 18'  
 Top of bentonite seal: 16'

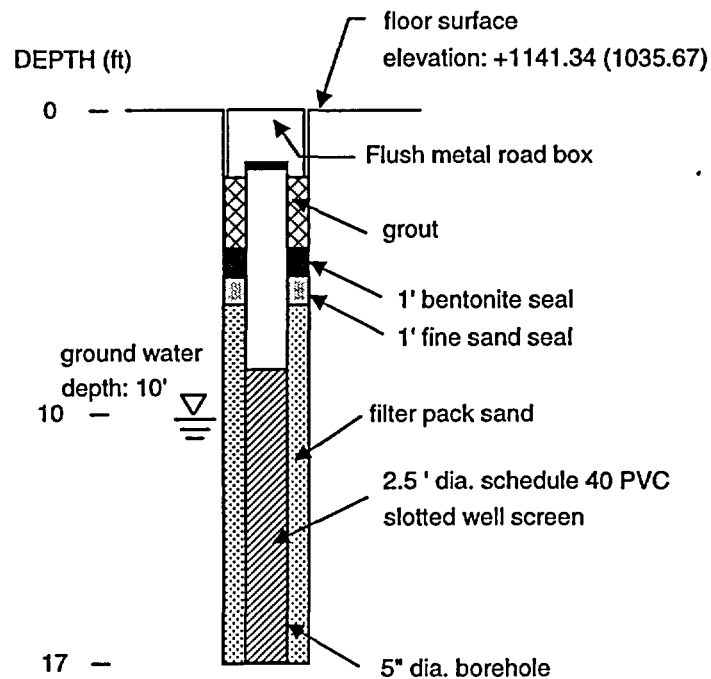
Sampled subsurface materials:  
 0-0.2' Topsoil  
 0.2'-25' Fill  
 25'-60'6" Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic  
 Installation date: 9/9/94

SCHEMATIC FOR WELL INSTALLATION CB-6  
 Southeast of Sherman Dam



SCHEMATIC FOR WELL INSTALLATION CB-7  
PCA Warehouse near Waste Building



Well depth: 17'  
Bottom of well screen: 17'  
Top of well screen: 7'  
Top of filter sand: 5.5'  
Top of fine sand seal: 4.5'  
Top of bentonite seal: 3.5'

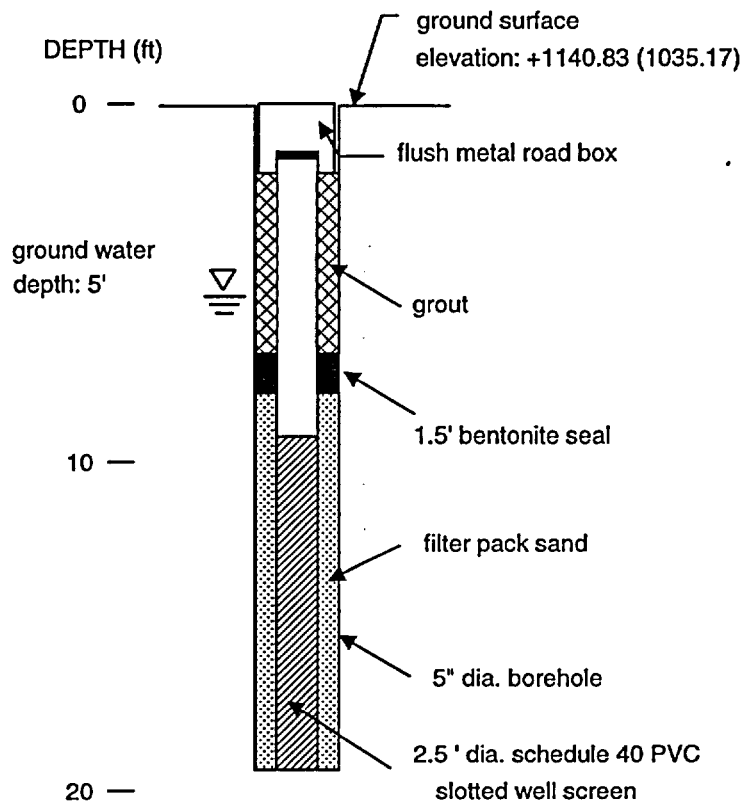
Sampled subsurface materials:

0-1' Concrete  
1'-6' Sand and Gravel Fill  
6'-11' Boulder, Cobbles  
11'-17' Boulders (Till?)

Contractor: Guild Drilling  
Engineer: Yankee Atomic  
Installation date: 1/7/97

# SCHEMATIC FOR WELL INSTALLATION CB-8

Rad Storage Area East of Old PCA



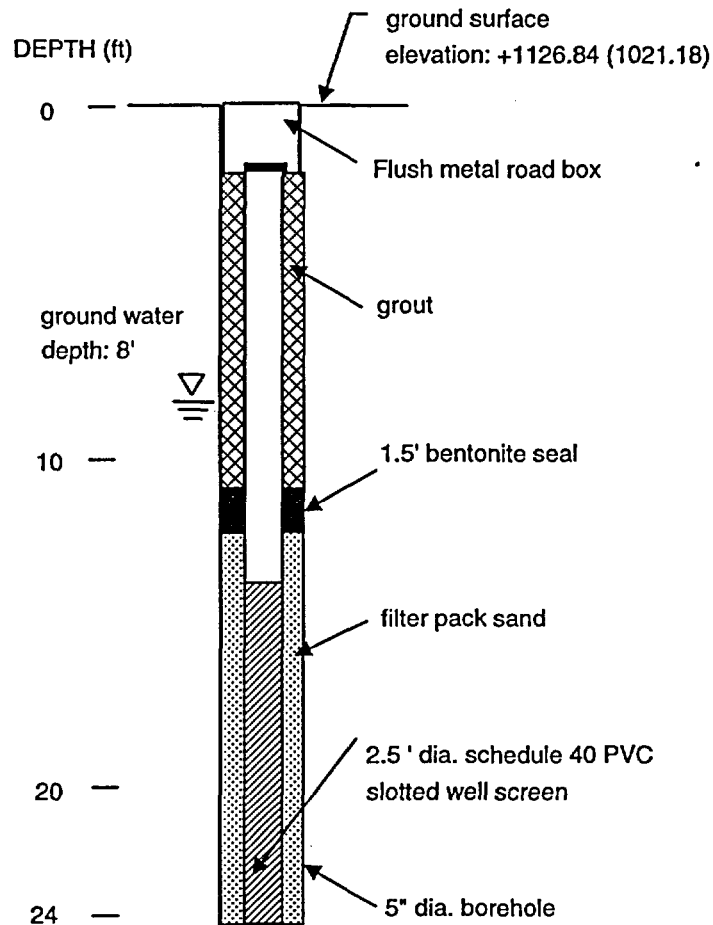
Well depth: 19'  
 Bottom of well screen: 19'  
 Top of well screen: 14'  
 Top of filter sand: 13'  
 Top of bentonite seal: 11.5'

## Sampled subsurface materials:

0-.5' Asphalt  
 0.5'-3' Sand fill (till?)  
 3'-19' Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic  
 Installation date: 9/20/94

SCHEMATIC FOR WELL INSTALLATION CB-9  
 Beneath VC Equipment Hatch



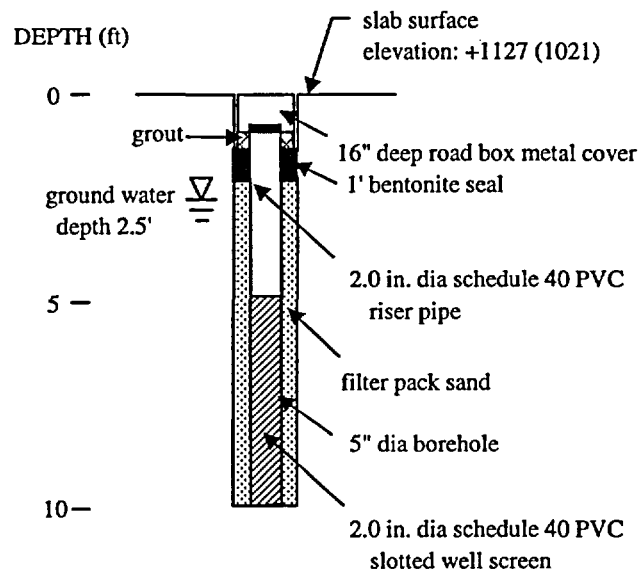
Well depth: 24'  
 Bottom of well screen: 24'  
 Top of well screen: 14'  
 Top of filter sand: 13'  
 Top of bentonite seal: 11.5'

Sampled subsurface materials:  
 0-2" Asphalt  
 2"-9.5' Sand fill  
 9.5'-24' Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic  
 Installation date: 9/19/94



SCHEMATIC FOR WELL INSTALLATION CB-10  
NW. Corner of Ion Exchange Pit

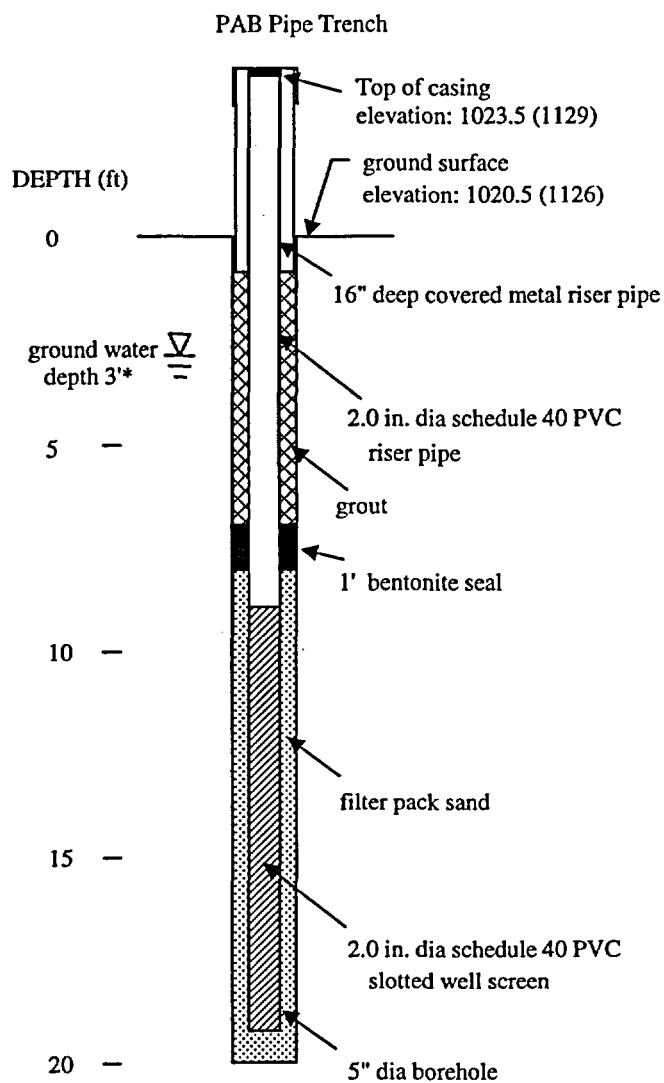


Borehole depth: 11.5'  
Bottom of well screen: 11.5'  
Top of well screen: 6.5'  
Top of filter sand: 5.5'  
Top of bentonite seal: 4.5'  
Installation date: 12/19/97

Sampled Subsurface Materials:  
0-1.5' Concrete  
1.5-10' Brown silty gravelly  
widely-graded sand

Contractor: Geosearch  
Engineer: Duke Engineering & Services

SCHEMATIC FOR WELL INSTALLATION CB-11A



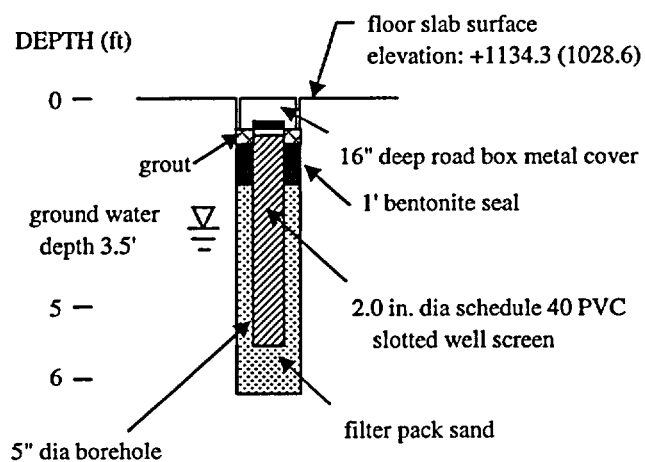
\* Initial ground water depth +0.2 ft above floor

Borehole depth: 20'  
 Bottom of well screen: 19'  
 Top of well screen: 9'  
 Top of filter sand: 8'  
 Top of bentonite seal: 7'  
 Installation date: 12/18/97

Sampled Subsurface Materials:  
 0-1.5' Concrete  
 1.5-19.5' Brown silty gravelly  
 widely-graded sand: loose  
 19.5-20.0' Clayey silt

Contractor: Geosearch  
 Engineer: Duke Engineering & Services

SCHEMATIC FOR WELL INSTALLATION CB-12  
NW Corner of Waste Disposal Building Ash Dewatering Pit

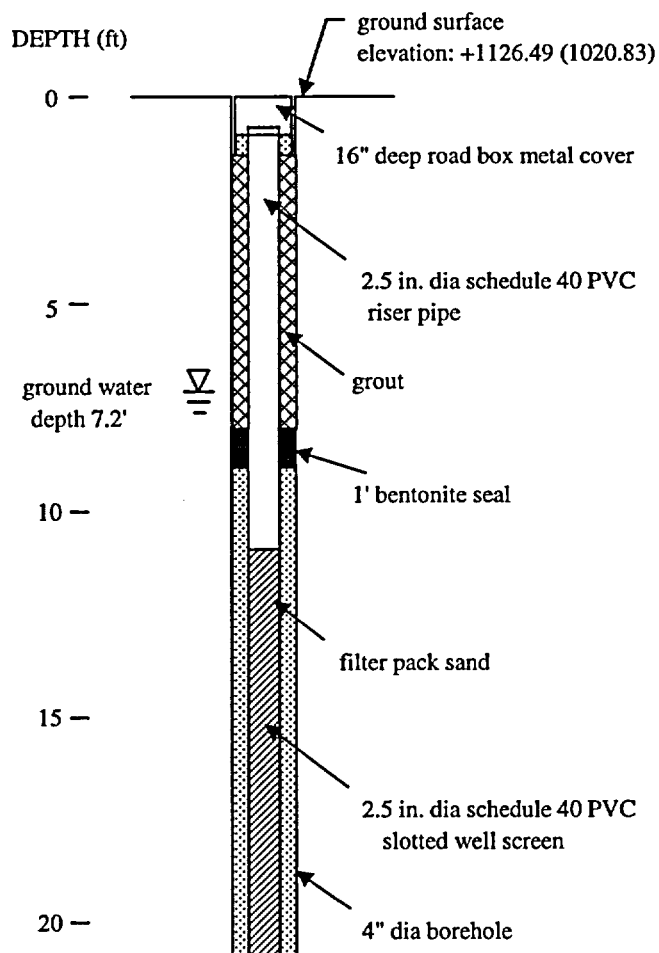


Borehole depth: 7'  
Bottom of well screen: 6.6'  
Top of well screen: 1.6'  
Top of filter sand: 1.6'  
Top of bentonite seal: 0.6'  
Installation date: 12/10/97

Sampled Subsurface Materials:  
0-0.5' Asphalt  
0.5-10' Silty Outwash  
10-15' Till

Contractor: Geosearch  
Engineer: Duke Engineering & Services  
Installation date: 12/10/97

**SCHEMATIC FOR WELL INSTALLATION CW-1**  
**N. of Diesel Generator Building**

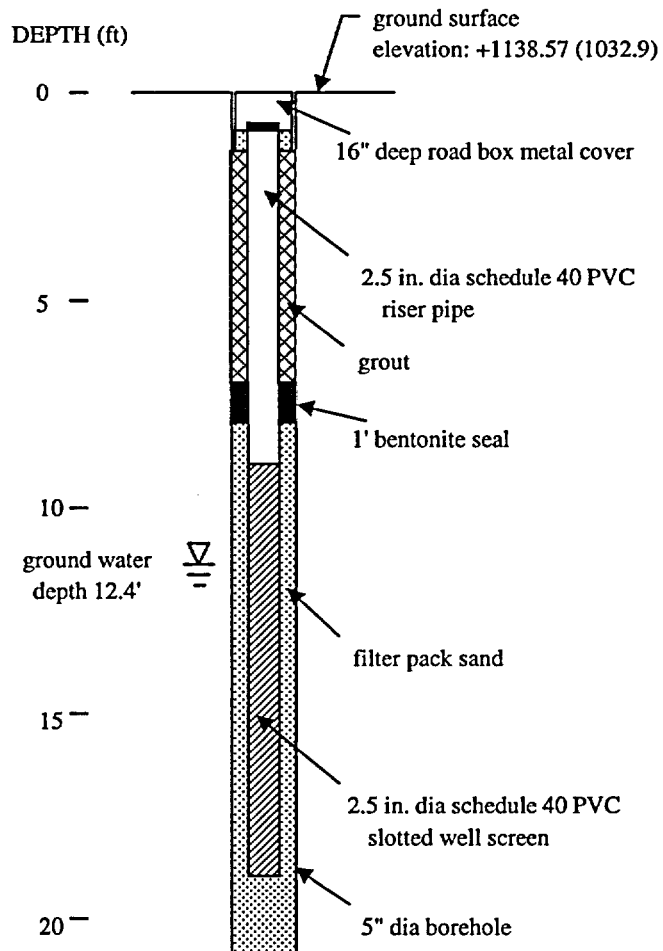


Borehole depth: 21.0'  
 Bottom of well screen: 21.0'  
 Top of well screen: 11.0'  
 Top of filter sand: 9.0'  
 Top of bentonite seal: 8'  
 Installation date: 4/28/93

Inferred Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-12' Bouldery Till  
 12-21' Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic

SCHEMATIC FOR WELL INSTALLATION CW-2  
 N. of old SI Tank

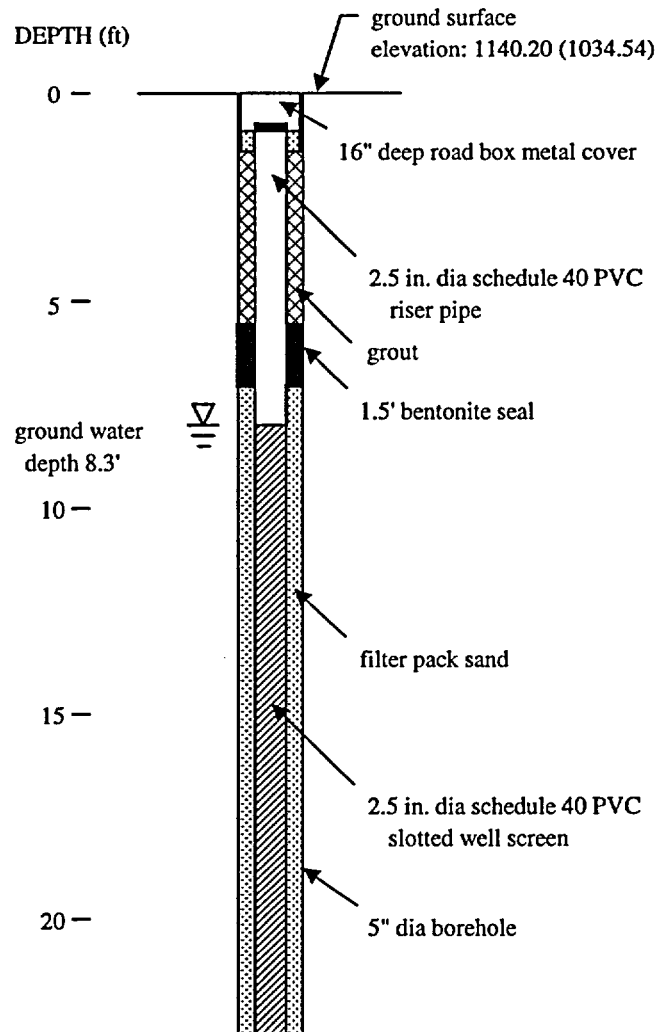


Borehole depth: 21.0'  
 Bottom of well screen: 20.0'  
 Top of well screen: 9.0'  
 Top of filter sand: 9.0'  
 Top of bentonite seal: 8.0'  
 Installation date: 4/29/93

Inferred Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-15' Fill/Outwash  
 15'-21' Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic

SCHEMATIC FOR WELL INSTALLATION CW-3  
 SE of Ion Exchange Pit

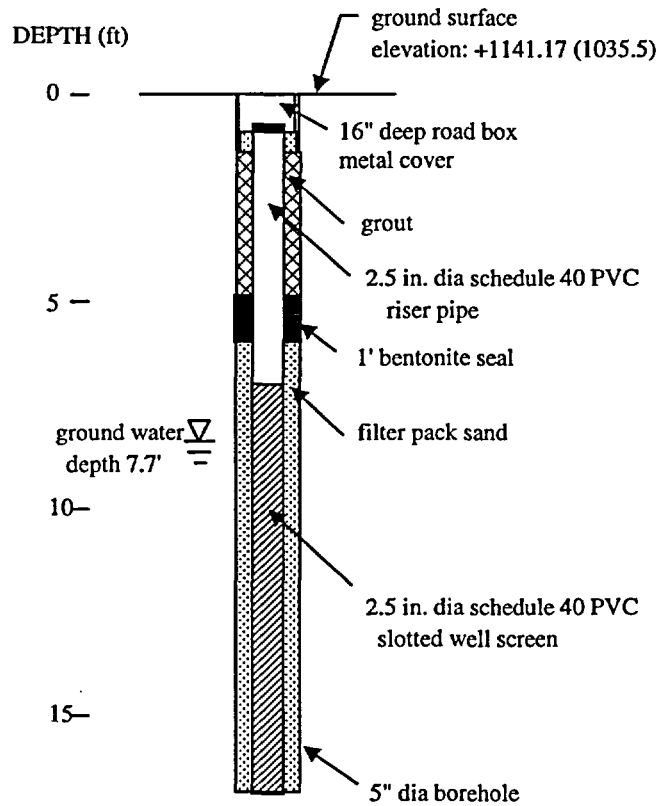


Borehole depth: 23.0'  
 Bottom of well screen: 23.0'  
 Top of well screen: 8.0'  
 Top of filter sand: 7.0'  
 Top of bentonite seal: 5.5'  
 Installation date: 5/3/93

Inferred Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-7.5' Fill/Outwash  
 7.5-19' Till  
 19-23' Bedrock

Contractor: Guild Drilling  
 Engineer: Yankee Atomic

**SCHEMATIC FOR WELL INSTALLATION CW-4**  
Between PCA Storage Buildings

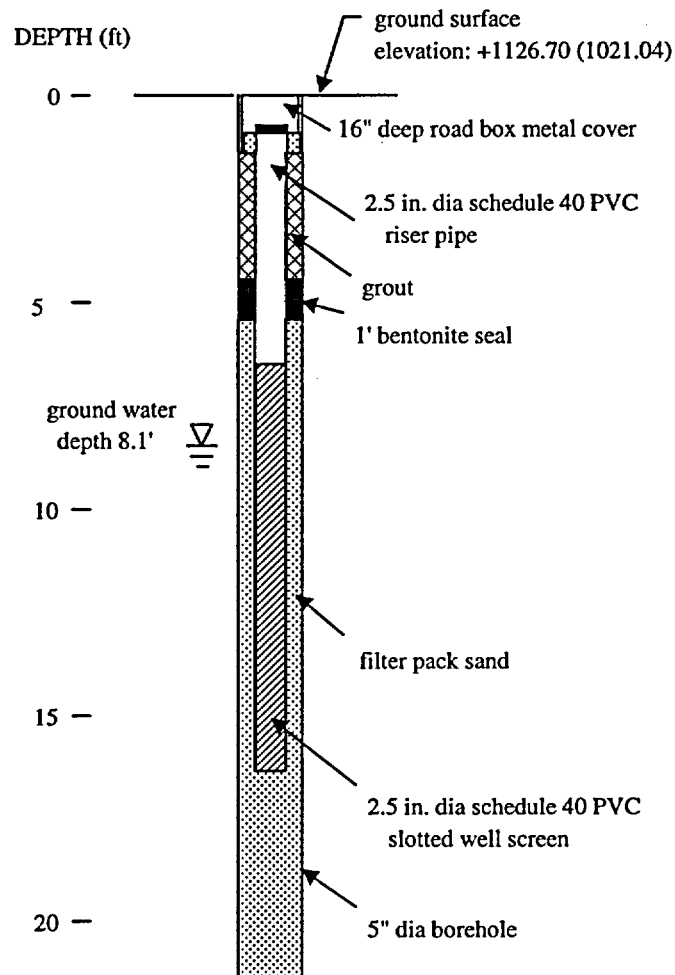


Borehole depth: 17.0'  
Bottom of well screen: 17.0'  
Top of well screen: 7.0'  
Top of filter sand: 5.0'  
Top of bentonite seal: 5'  
Installation date: 5/3-4/93

Inferred Subsurface Materials:  
0-0.5' Asphalt  
0.5-17' Till

Contractor: Guild Drilling  
Engineer: Yankee Atomic

SCHEMATIC FOR WELL INSTALLATION CW-5  
 S. of Service Building



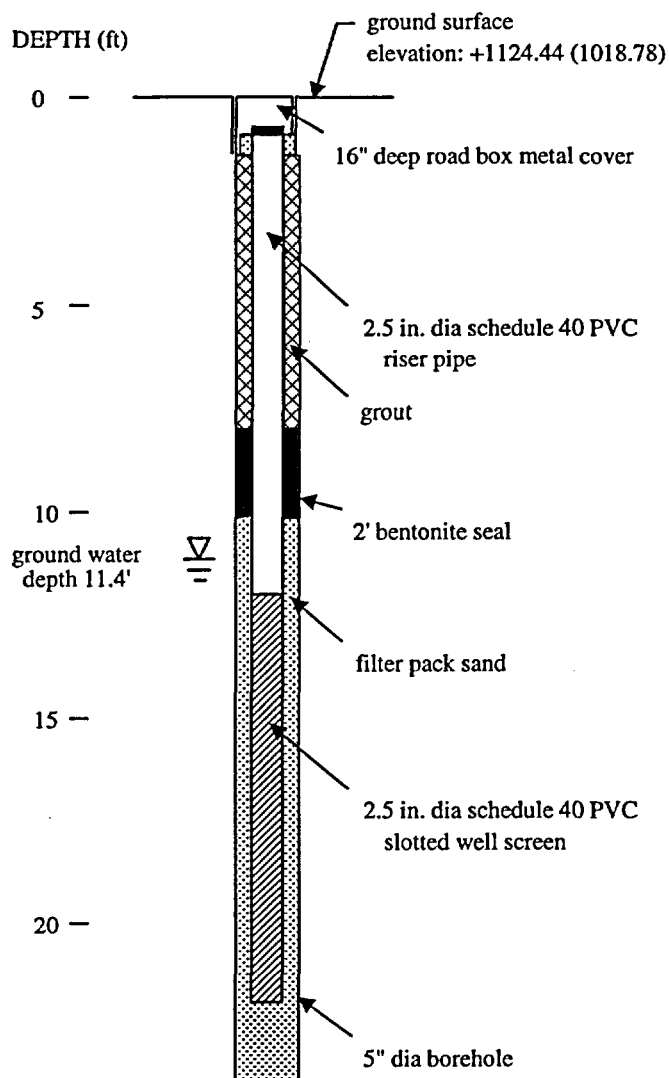
Borehole depth: 21.5'  
 Bottom of well screen: 16.5'  
 Top of well screen: 6.5'  
 Top of filter sand: 5.5'  
 Top of bentonite seal: 4.5'  
 Installation date: 4/27/93

Inferred Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-12' Fill/Outwash  
 13'-21.5' Bedrock

Contractor: Guild Drilling  
 Engineer: Yankee Atomic



SCHEMATIC FOR WELL INSTALLATION CW-6  
 W. of Turbine Building

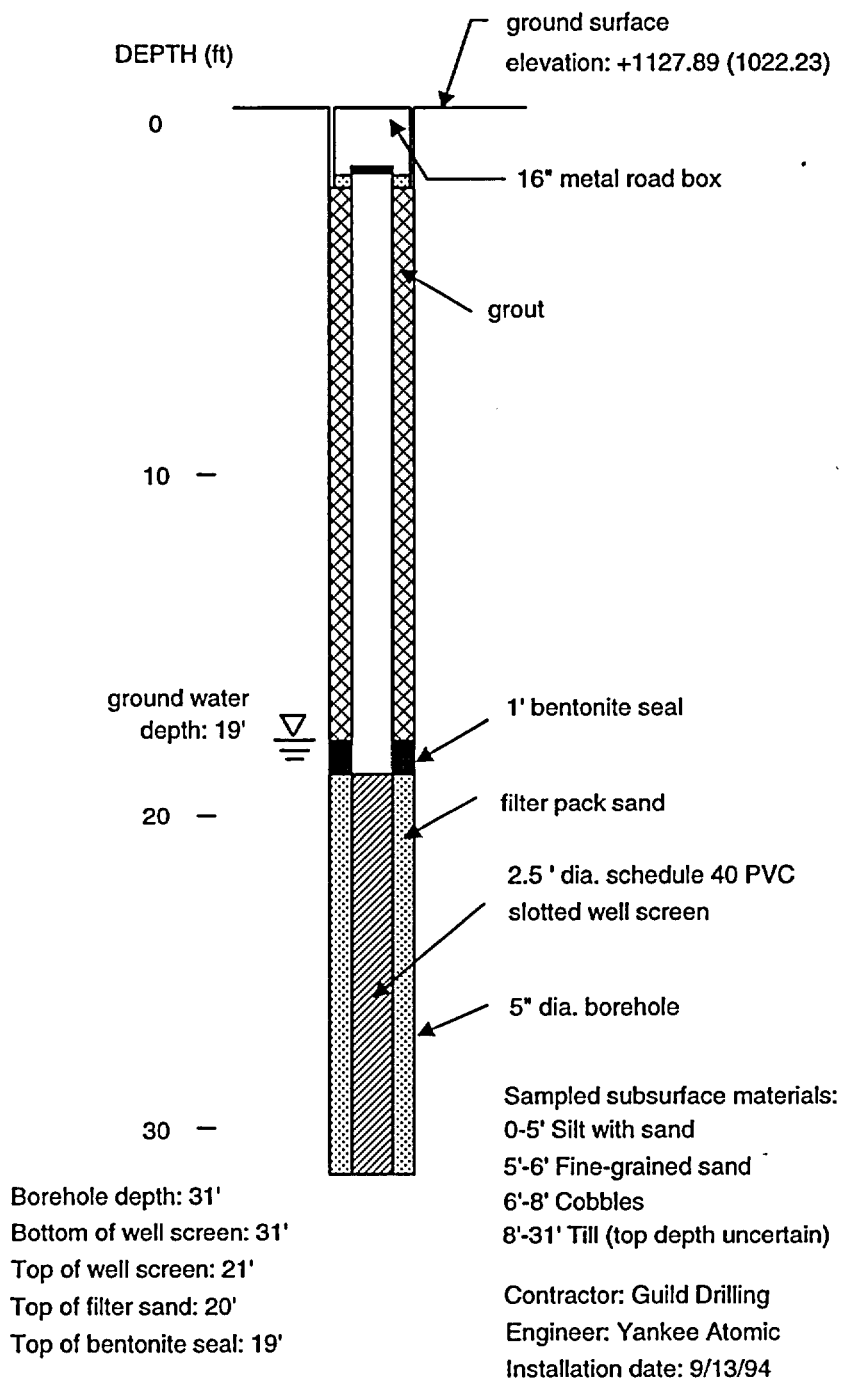


Borehole depth: 24'  
 Bottom of well screen: 22'  
 Top of well screen: 12'  
 Top of filter sand: 11'  
 Top of bentonite seal: 10'  
 Installation date: 4/22-23/93

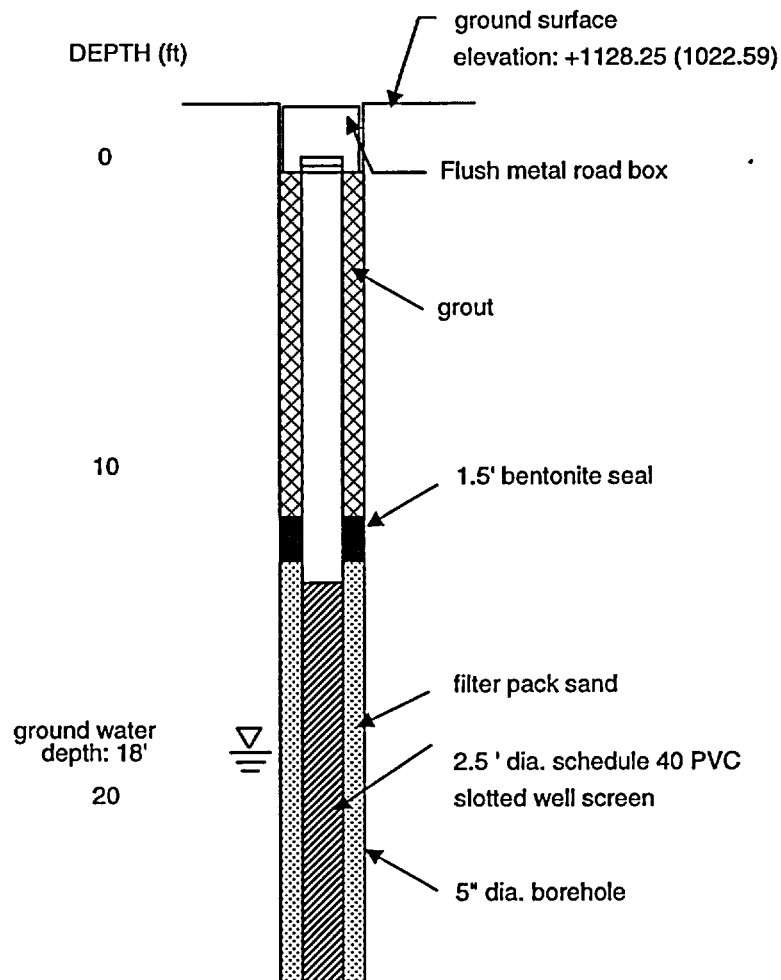
Inferred Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-14' Fill/Outwash  
 12'-24' Till

Contractor: Guild Drilling  
 Engineer: Yankee Atomic

SCHEMATIC FOR WELL INSTALLATION CW-7  
 West of Service Building near former Used Oil UST



SCHEMATIC FOR WELL INSTALLATION CW-8  
Southwest Bay of Turbine Building

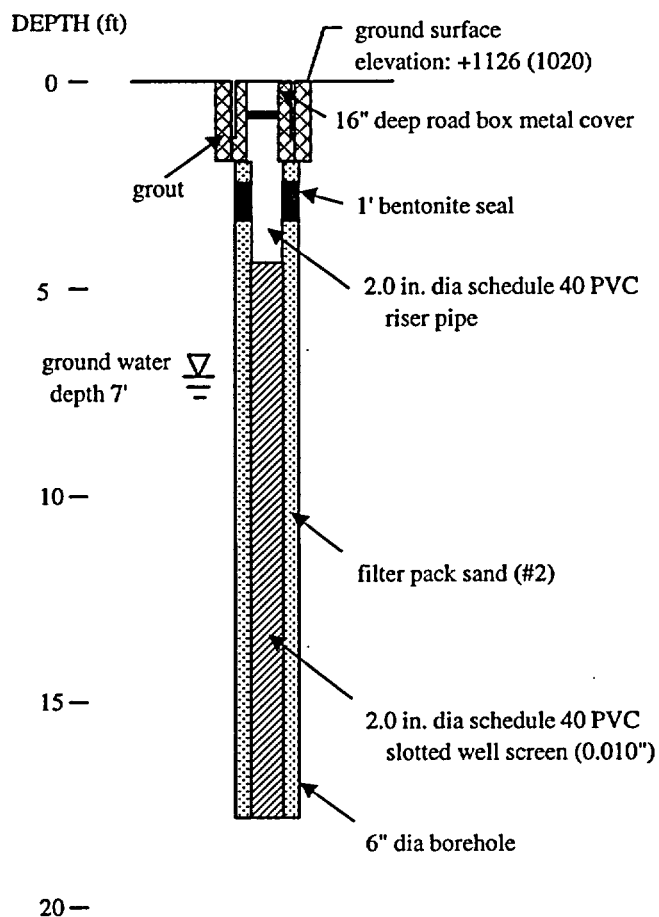


Well depth: 26'  
Bottom of well screen: 26'  
Top of well screen: 16'  
Top of filter sand: 14.5'  
Top of bentonite seal: 13'

Sampled subsurface materials:  
0-1.4' Concrete  
1.4'-5' Sand  
5'-10' Cobbles  
10'-26' Till (top depth uncertain)

Contractor: Guild Drilling  
Engineer: Yankee Atomic  
Installation date: 9/14/94

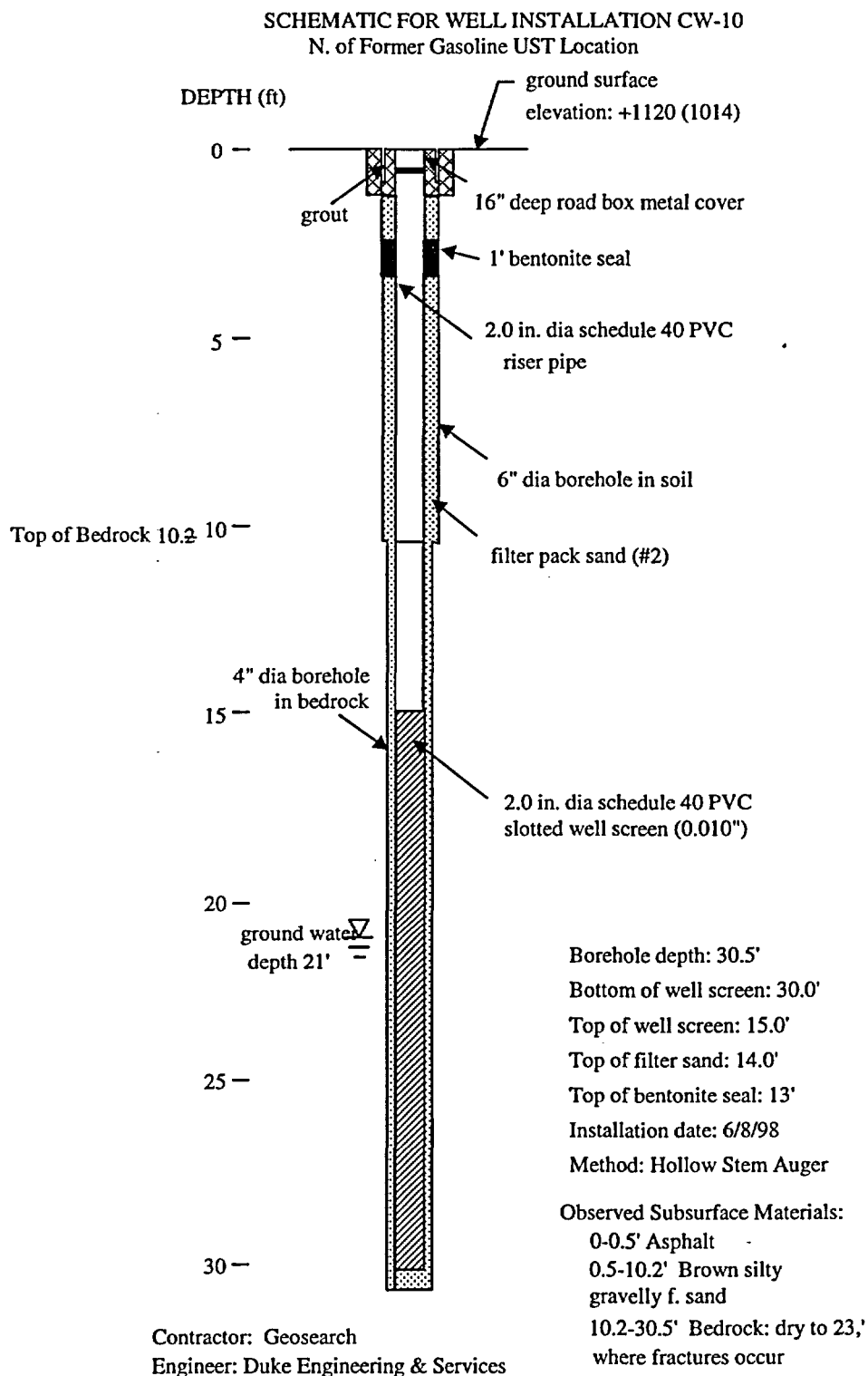
SCHEMATIC FOR WELL INSTALLATION CW-9  
 N. of Diesel Generator Building



Borehole depth: 17.0'  
 Bottom of well screen: 17.0'  
 Top of well screen: 4.0'  
 Top of filter sand: 3.0'  
 Top of bentonite seal: 2'  
 Installation date: 6/8/98  
 Method: Hollow Stem Auger

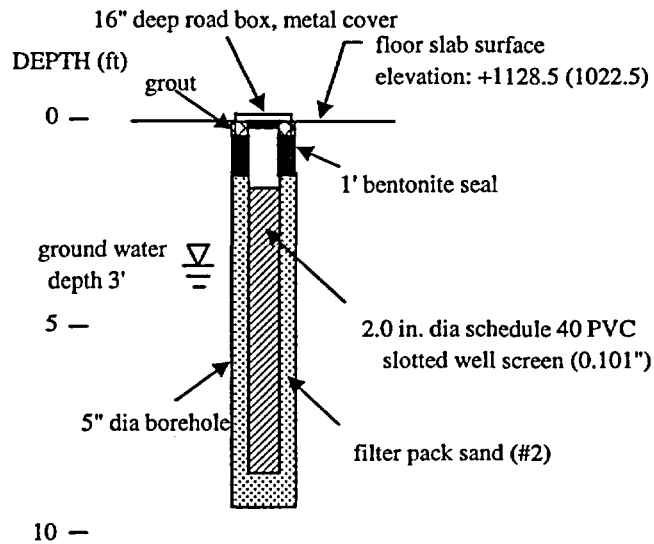
Observed Subsurface Materials:  
 0-0.5' Asphalt  
 0.5-17' Brown dense c.sandy  
 f. gravelly, cobbles silt: Till

Contractor: Geosearch  
 Engineer: Duke Engineering & Services



SCHEMATIC FOR WELL INSTALLATION CW-11

PAB at LP Cooling Pump Area



Borehole depth: 9.5'  
 Bottom of well screen: 9'  
 Top of well screen: 2'  
 Top of filter sand: 1.6'  
 Top of bentonite seal: 0.6'  
 Installation date: 6/11/98

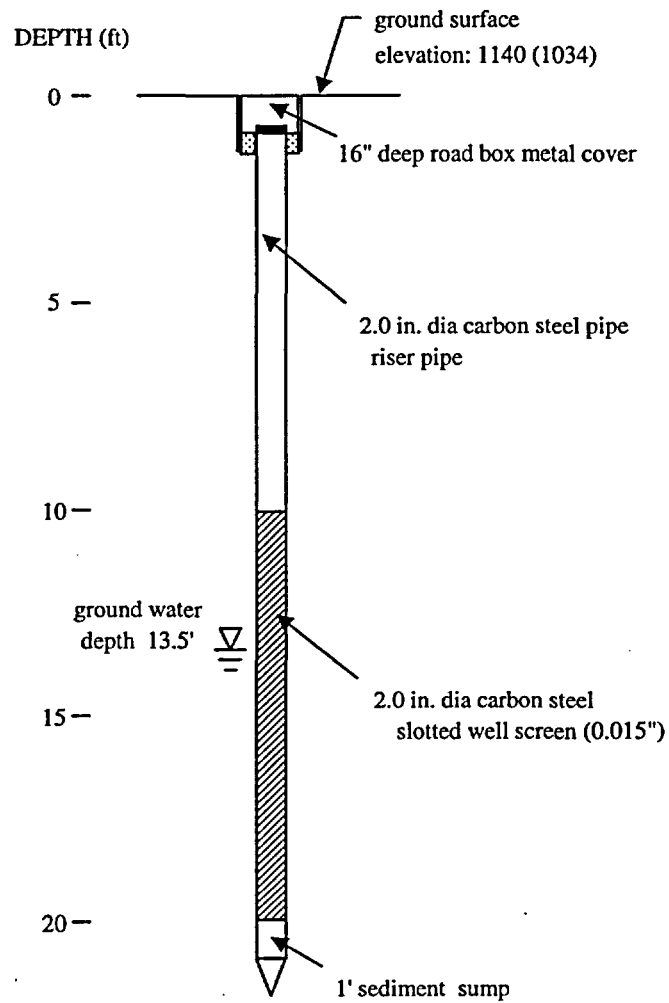
Sampled Subsurface Materials:

0-1.5' Concrete Slab  
 1.5-9.5' Sand & gravel fill

Contractor: Geosearch

Engineer: Duke Engineering & Services

SCHEMATIC FOR WELL INSTALLATION MW-1  
S. of PAB



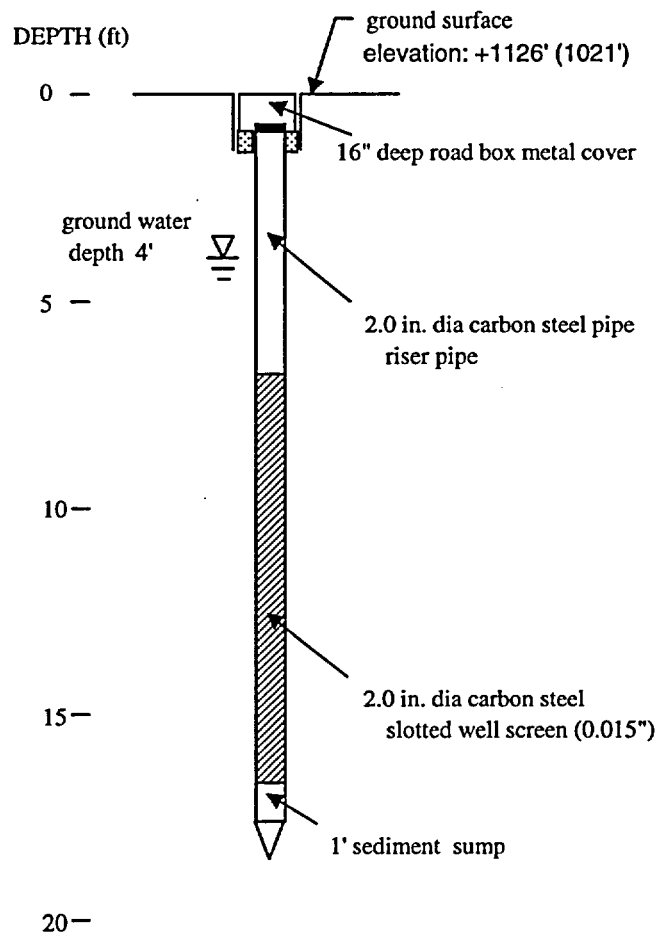
Borehole depth: 21'  
Bottom of well screen: 20'  
Top of well screen: 10'  
Installation date: 4/24/98

Inferred Subsurface Materials:

0-0.5' Asphalt  
0.5-21' Clay/silt?

Contractor: Geosearch  
Engineer: Duke Engineering & Services

SCHEMATIC FOR WELL INSTALLATION MW-2  
 N. of PAB

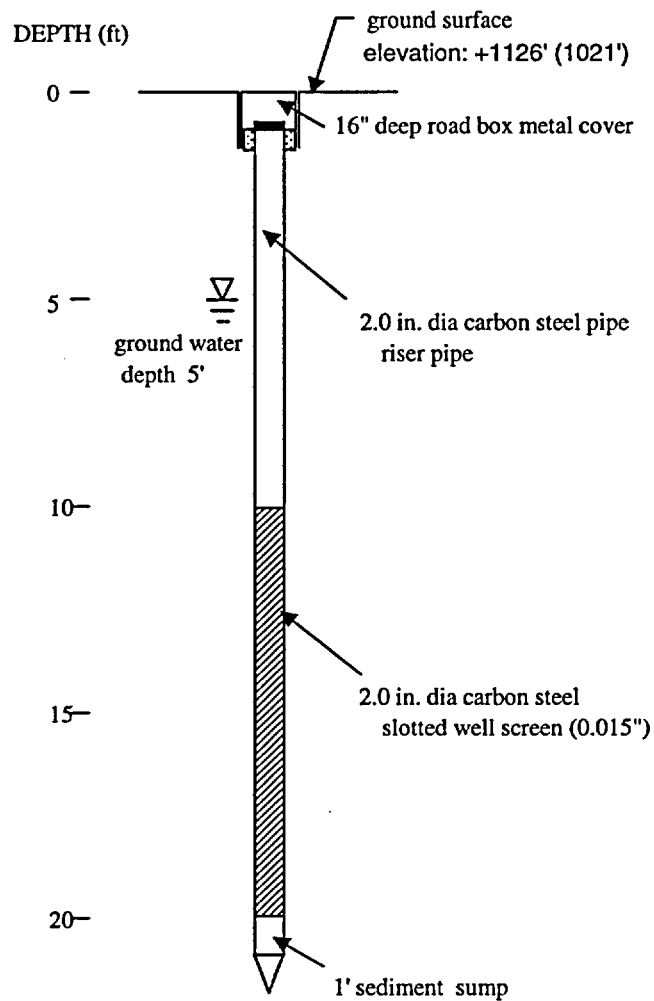


Borehole depth: 18'	Inferred Subsurface Materials:
Bottom of well screen: 17'	0-0.5' Asphalt
Top of well screen: 7'	0.5-11' Fill
Installation date: 4/24/98	10'-18.5' Till
	18.5' Refusal

Contractor: Geosearch  
 Engineer: Duke Engineering & Services



SCHEMATIC FOR WELL INSTALLATION MW-3  
N. of PAB



Borehole depth: 21'  
Bottom of well screen: 20'  
Top of well screen: 10'  
Installation date: 4/24/98  
Note: Casing bent on installation  
causing sampling difficulty

Inferred Subsurface Materials:  
0-0.5' Asphalt  
0.5-11' Fill  
11'-21' Till  
  
Contractor: Geosearch  
Engineer: Duke Engineering & Services

<b>DRILLING LOG for Well #: NSR-1</b> <div style="float: right; text-align: right; font-size: small;"> <b>ERM</b>                      399 Boylston Street, 6th Floor                      Boston, MA 02116                 </div>						<b>SITE MAP</b>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"> <b>Project:</b> Yankee Nuclear Power St.-Rowe  <b>Client:</b> Yankee Atomic Electric Company  <b>Drilling Co:</b> Geosearch  <b>Date Started:</b> 22-Oct-97  <b>Location:</b> Rowe, Massachusetts  <b>Screen Diam:</b> 2.5"  <b>Casing Diam:</b> 2.5"  <b>Boring Depth:</b> 23"  <b>Surface Elev.:</b> </td> <td style="width: 33%; border: none;"> <b>Project Number:</b> 468.01  <b>Logged by:</b> Joe Fiocco  <b>Driller:</b> Pat Goodale  <b>Date Finished:</b> 22-Oct-97  <b>Drilling Method:</b> 4 1/4" ID HSAs &amp; 3 7/8" Air Hammer  <b>Length:</b> 10'  <b>Length:</b> 13'  <b>Well Depth:</b> 23"  <b>MP:</b>  <b>MP Elev.:</b> </td> <td style="width: 33%; border: none;"> <b>Slot Size:</b> 0.01"  <b>Type:</b> PVC  <b>Boring Diam.:</b> 8" (0-20)/4" (20-23)  <b>Depth to GW:</b> ~18'                 </td> </tr> </table>						<b>Project:</b> Yankee Nuclear Power St.-Rowe <b>Client:</b> Yankee Atomic Electric Company <b>Drilling Co:</b> Geosearch <b>Date Started:</b> 22-Oct-97 <b>Location:</b> Rowe, Massachusetts <b>Screen Diam:</b> 2.5" <b>Casing Diam:</b> 2.5" <b>Boring Depth:</b> 23" <b>Surface Elev.:</b>	<b>Project Number:</b> 468.01 <b>Logged by:</b> Joe Fiocco <b>Driller:</b> Pat Goodale <b>Date Finished:</b> 22-Oct-97 <b>Drilling Method:</b> 4 1/4" ID HSAs & 3 7/8" Air Hammer <b>Length:</b> 10' <b>Length:</b> 13' <b>Well Depth:</b> 23" <b>MP:</b> <b>MP Elev.:</b>	<b>Slot Size:</b> 0.01" <b>Type:</b> PVC <b>Boring Diam.:</b> 8" (0-20)/4" (20-23) <b>Depth to GW:</b> ~18'			
<b>Project:</b> Yankee Nuclear Power St.-Rowe <b>Client:</b> Yankee Atomic Electric Company <b>Drilling Co:</b> Geosearch <b>Date Started:</b> 22-Oct-97 <b>Location:</b> Rowe, Massachusetts <b>Screen Diam:</b> 2.5" <b>Casing Diam:</b> 2.5" <b>Boring Depth:</b> 23" <b>Surface Elev.:</b>	<b>Project Number:</b> 468.01 <b>Logged by:</b> Joe Fiocco <b>Driller:</b> Pat Goodale <b>Date Finished:</b> 22-Oct-97 <b>Drilling Method:</b> 4 1/4" ID HSAs & 3 7/8" Air Hammer <b>Length:</b> 10' <b>Length:</b> 13' <b>Well Depth:</b> 23" <b>MP:</b> <b>MP Elev.:</b>	<b>Slot Size:</b> 0.01" <b>Type:</b> PVC <b>Boring Diam.:</b> 8" (0-20)/4" (20-23) <b>Depth to GW:</b> ~18'									
<b>Notes:</b> This boring was completed in two attempts											

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/Hs	Lab Sample # & Analyses
1		Sand	2-2	12"	Brown, fine to medium SAND, trace fine gravel, piece of wood in tip of spoon, well sorted, loose, dry	S-1	1.0	
2		Fill	3-5	0-2'				
3								
4								
5								
6		Misc.	8-9	12"	Greyish-brown, rock fragments, some fine to medium sand and wood fragments, poorly sorted, loose, dry; the wood pieces have a strong chemical odor	S-2	900	NSR-1/S-2/ 5-7 ft VOCs (8260) SVOCs (8270)
7	Fill	10-13			5-7'			
8								
9								
10								
11		Sand	13-13	10"	Brown, fine to medium SAND, trace coarse sand and fine gravel, well sorted, loose, damp	S-3	5.3	
12			15-17			10-12'		
13					Note: air hammered through a boulder from 11-13 feet in second boring			
14					Note: encountered water table at ~17-18 feet			
15					Note: top of bedrock at 20 feet; air hammered to 23 feet			
16					Bottom of Borehole: 23'			
17								
18								
19								
20								
21								
22								
23								
24								
25								

**Footnotes for Blowcounts**

- (1) 140 lb. Hammer
- (2) 300 lb. Hammer
- (3) Slide Hammer

**Key to Well Construction**

- |  |       |
|--|-------|
| <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  Sandpack<br/>  Bentonite Seal                         </div> <div style="width: 45%;">  Well Screen<br/>  Cement                         </div> </div> | Grout |
|--|-------|

<b>DRILLING LOG for Well #: OSR-1</b> <div style="float: right; text-align: right; font-size: small;"> ERM 399 Boylston Street, 6th Floor Boston, MA 02116 </div>						<b>SITE MAP</b>	
Project: <u>Yankee Nuclear Power St.-Rowe</u> Client: <u>Yankee Atomic Electric Company</u> Drilling Co: <u>Geosearch</u> Date Started: <u>22-Oct-97</u> Location: <u>Rowe, Massachusetts</u>			Project Number: <u>468.01</u> Logged by: <u>Joe Flacco</u> Driller: <u>Pat Goodale</u> Date Finished: <u>22-Oct-97</u> Drilling Method: <u>4 1/4" ID HSAs</u>			<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: 0; right: 0; font-size: 8px;">Backstop</div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 10px;">Old Shooting Range</div> <div style="position: absolute; bottom: 0; left: 0; font-size: 8px;">Firing Line</div> </div>	
Screen Diam: <u>2.5"</u> Length: <u>10'</u> Slot Size: <u>0.01"</u> Casing Diam: <u>2.5"</u> Length: <u>3'</u> Type: <u>PVC</u> Boring Depth: <u>33'</u> Well Depth: <u>13'</u> Boring Diam: <u>8"</u> Surface Elev.: _____ MP: _____ Depth to GW: <u>-7'</u> MP Elev.: _____							
Notes:							

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
1	[Pattern]	Sand	3-5	24"	Brown, fine SAND, some coarse sand and fine gravel,	S-1	13.8	
2		Fill	10-12		moderately well sorted, loose, dry	0-2'		
3	[Pattern]							
4								
5								
6								
7		Sand	4-4	12"	Top 6" of spoon: Brown, fine SAND, well sorted, loose,	S-2	50.2	
8		Fill	5-6		damp; Middle of spoon: 2" thick piece of wood (no odor);	5-7'		
9					Bottom 4" of spoon: Grey, fine to very fine SAND, well			
10					sorted, loose, damp			
11	[Pattern]	Sand	9-9	10"	Brown, fine SAND, some coarse sand and fine gravel,	S-3	6.2	
12			23-50/3"		moderately well sorted, loose, wet	10-12'		
13					Bottom of Borehole: 13'			
14	[Pattern]							
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

**Footnotes for Blowcounts**

(1) 140 lb. Hammer

(2) 300 lb. Hammer

(3) Slide Hammer

**Key to Well Construction**

Sandpack

Well Screen

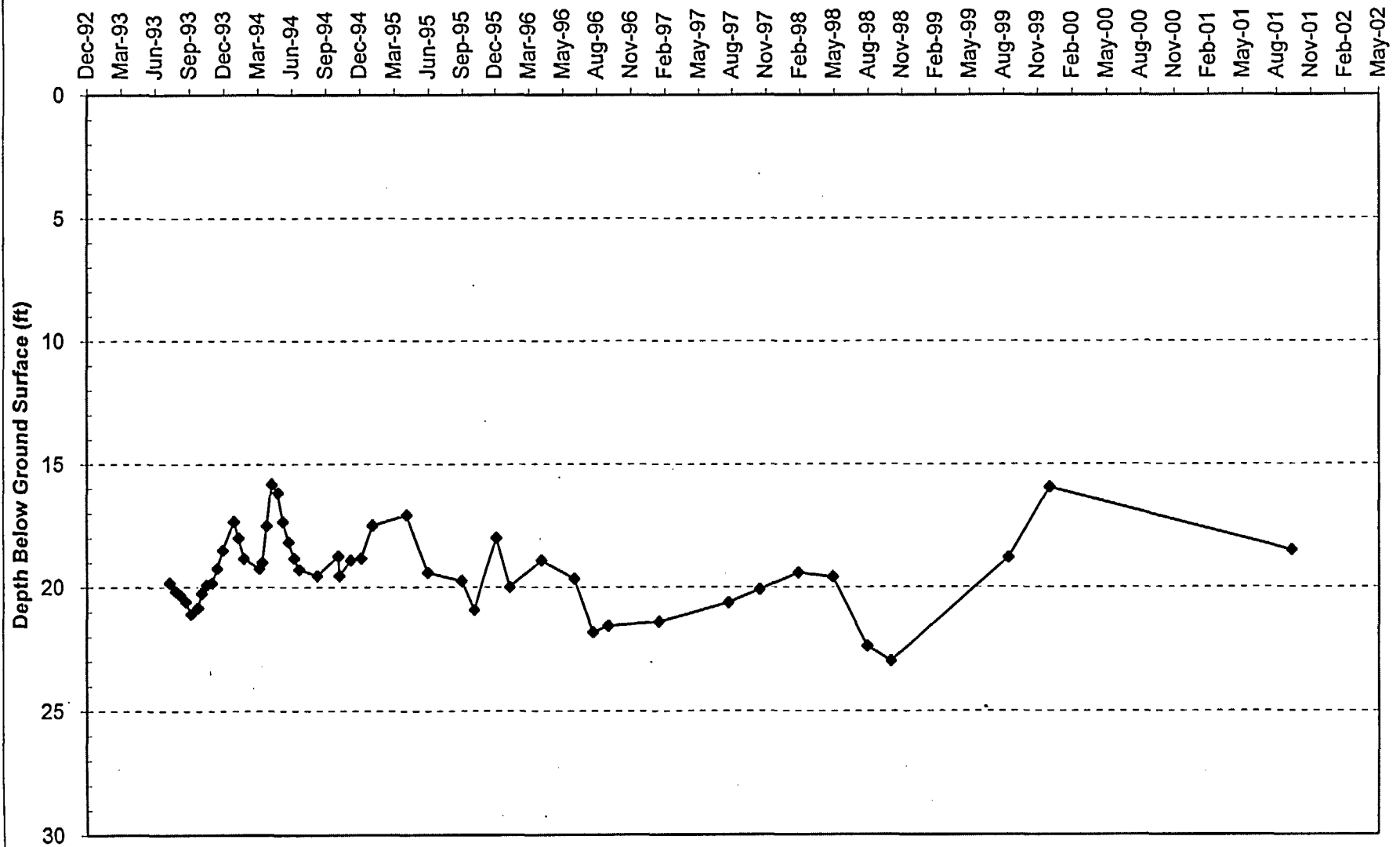
Grout

Bentonite Seal

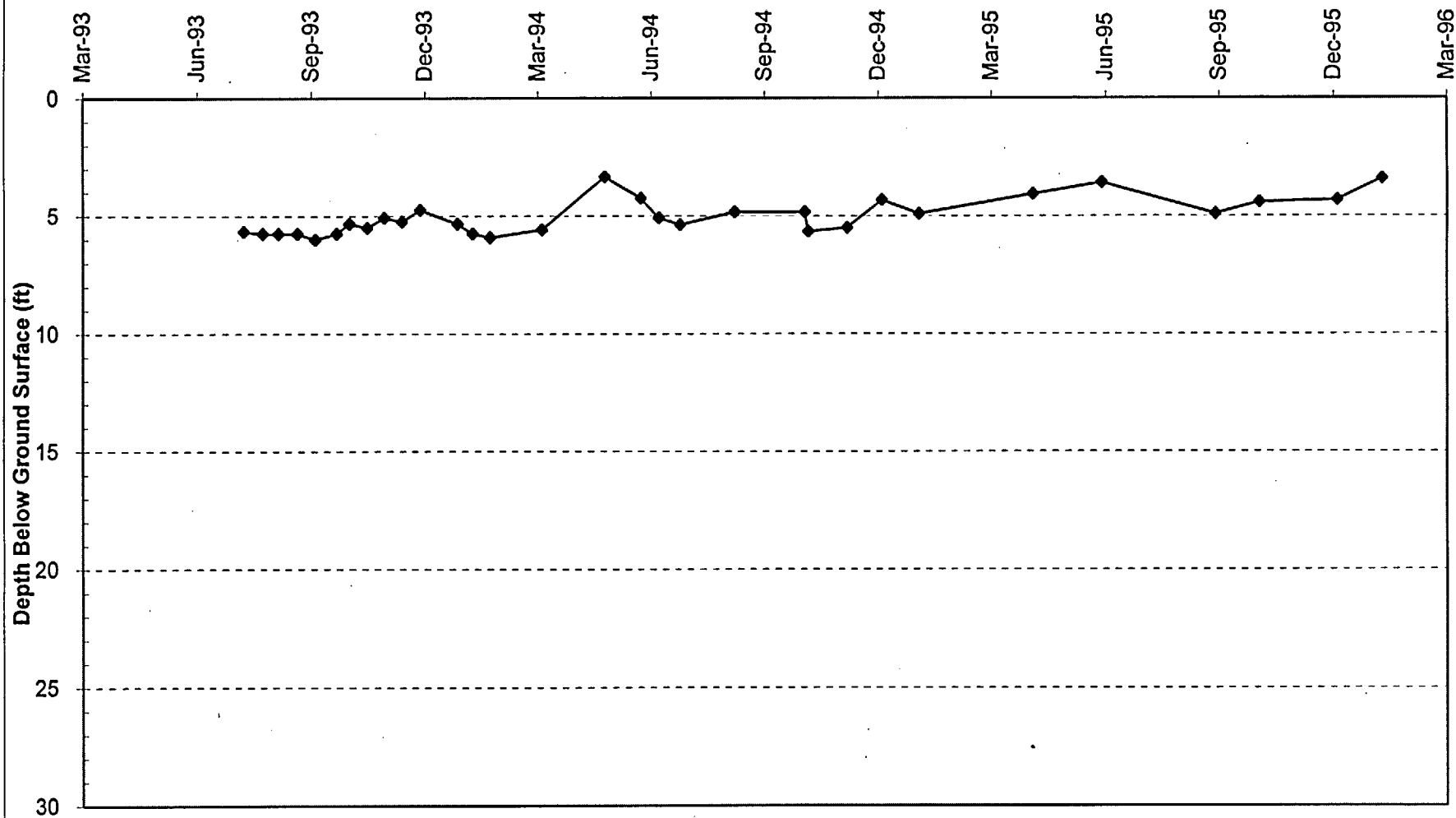
Cement

Attachment 4  
Monitoring Well Ground Water Levels

**Ground Water Level in Well  
B-1**



# Ground Water Level in Well B-3



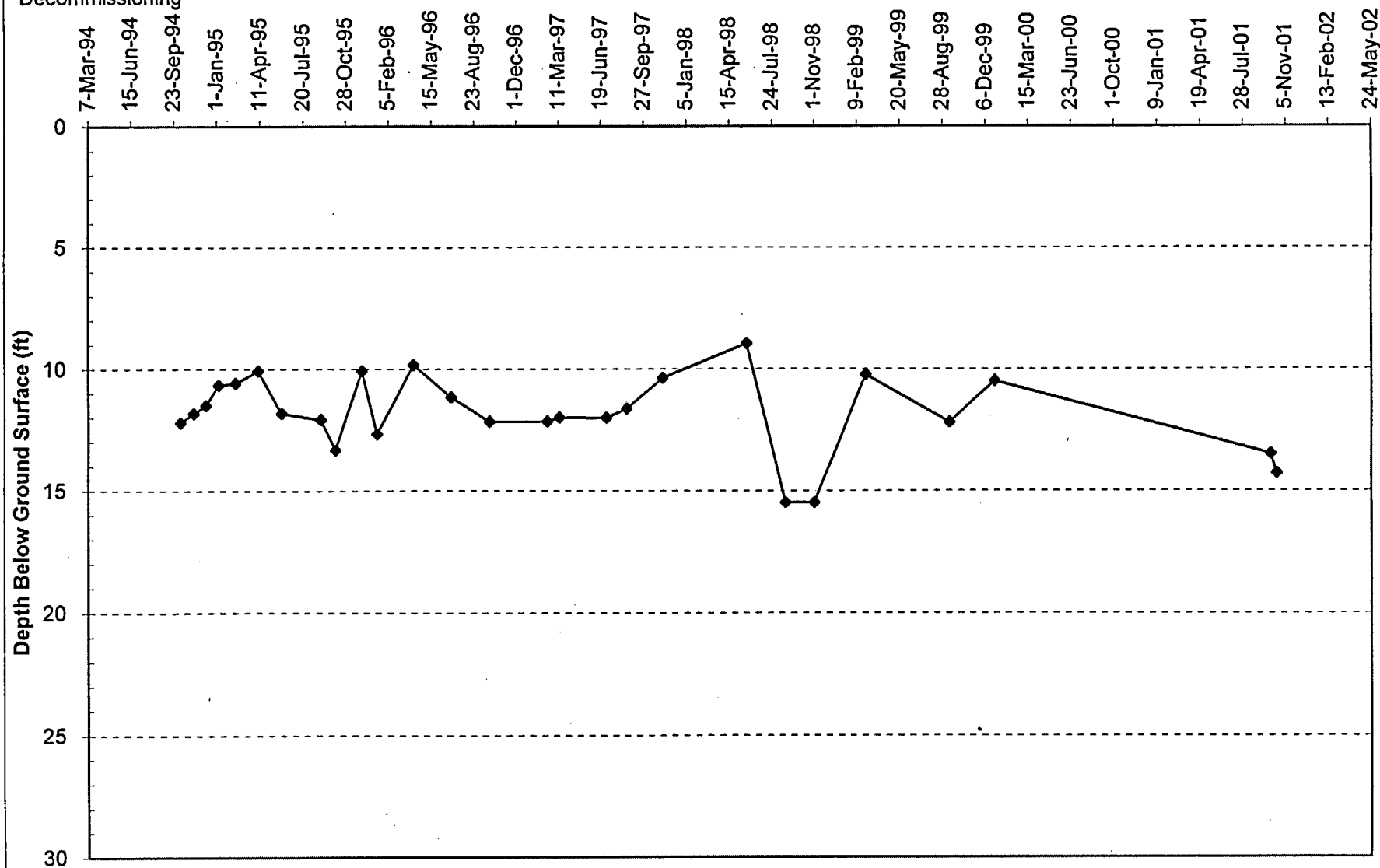
DESD-TD-YR-02-001 Rev. 0

Site Ground Water Data Collection for YNPS

Decommissioning

### Ground Water Level in Well CB-1

Attachment 4: Page 4 of 33

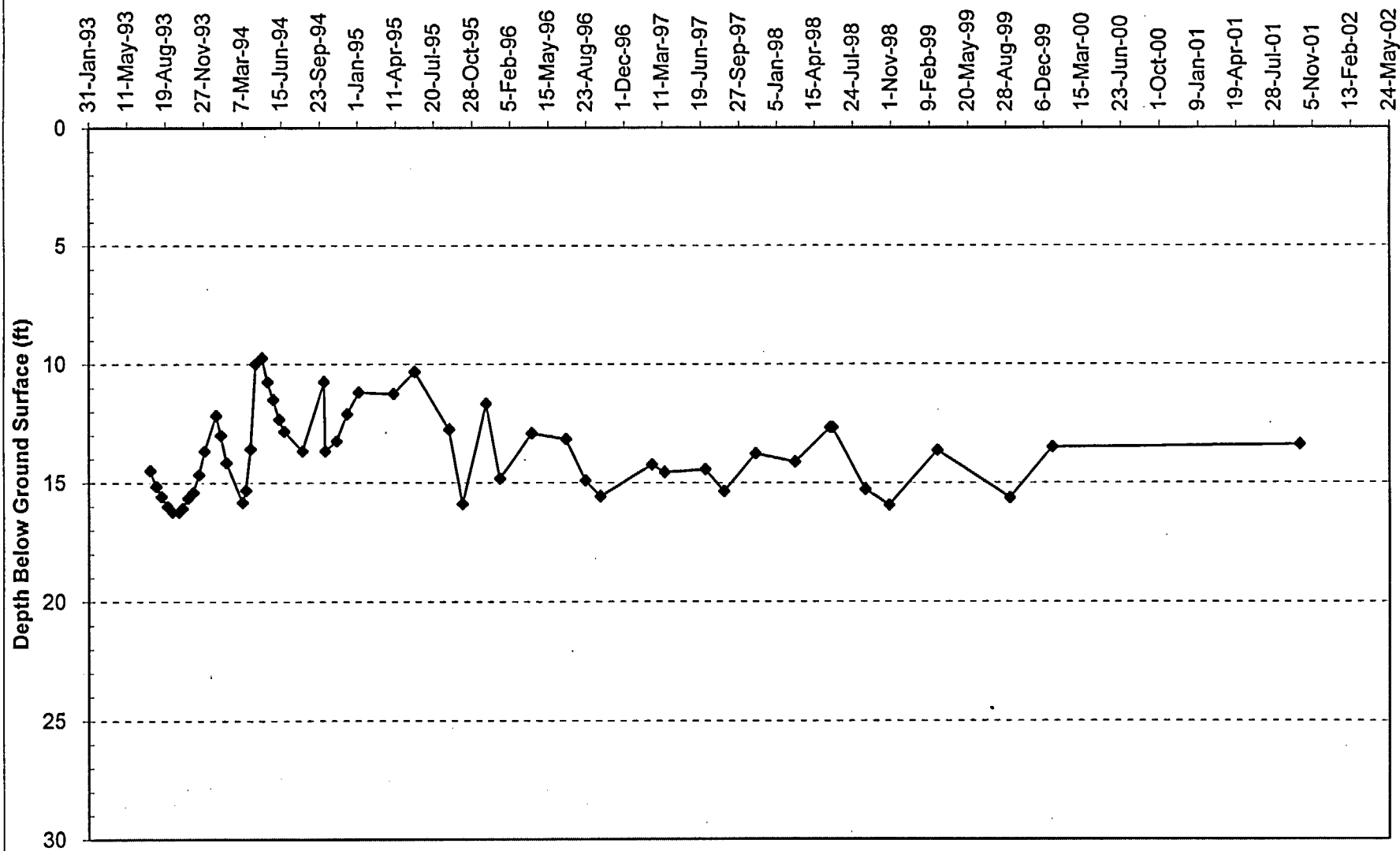


DESD-TD-YR-02-001 Rev. 0

Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well CB-2

Attachment 4: Page 5 of 33



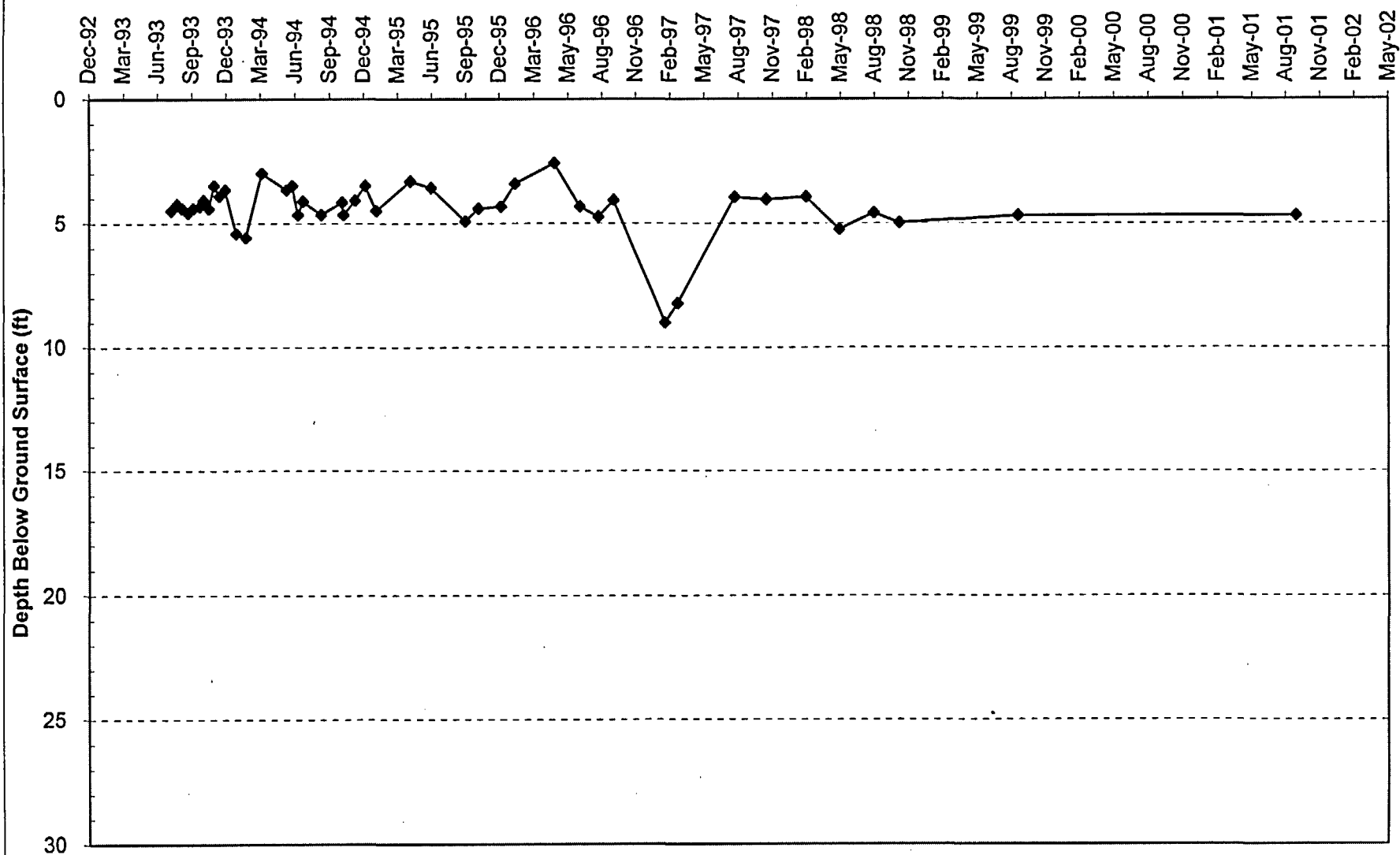


DESD-TD-YR-02-001 Rev. 0

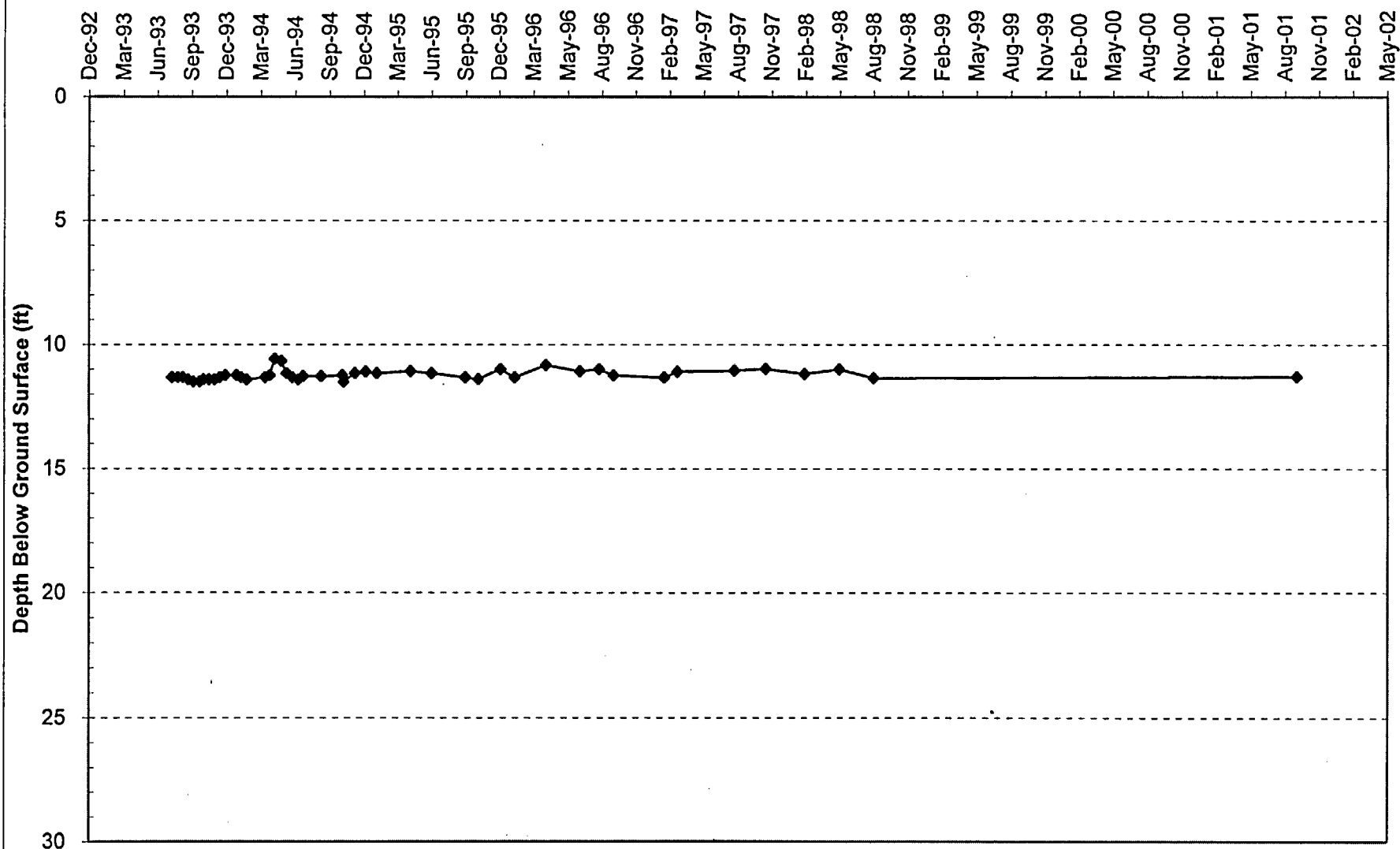
Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well CB-3

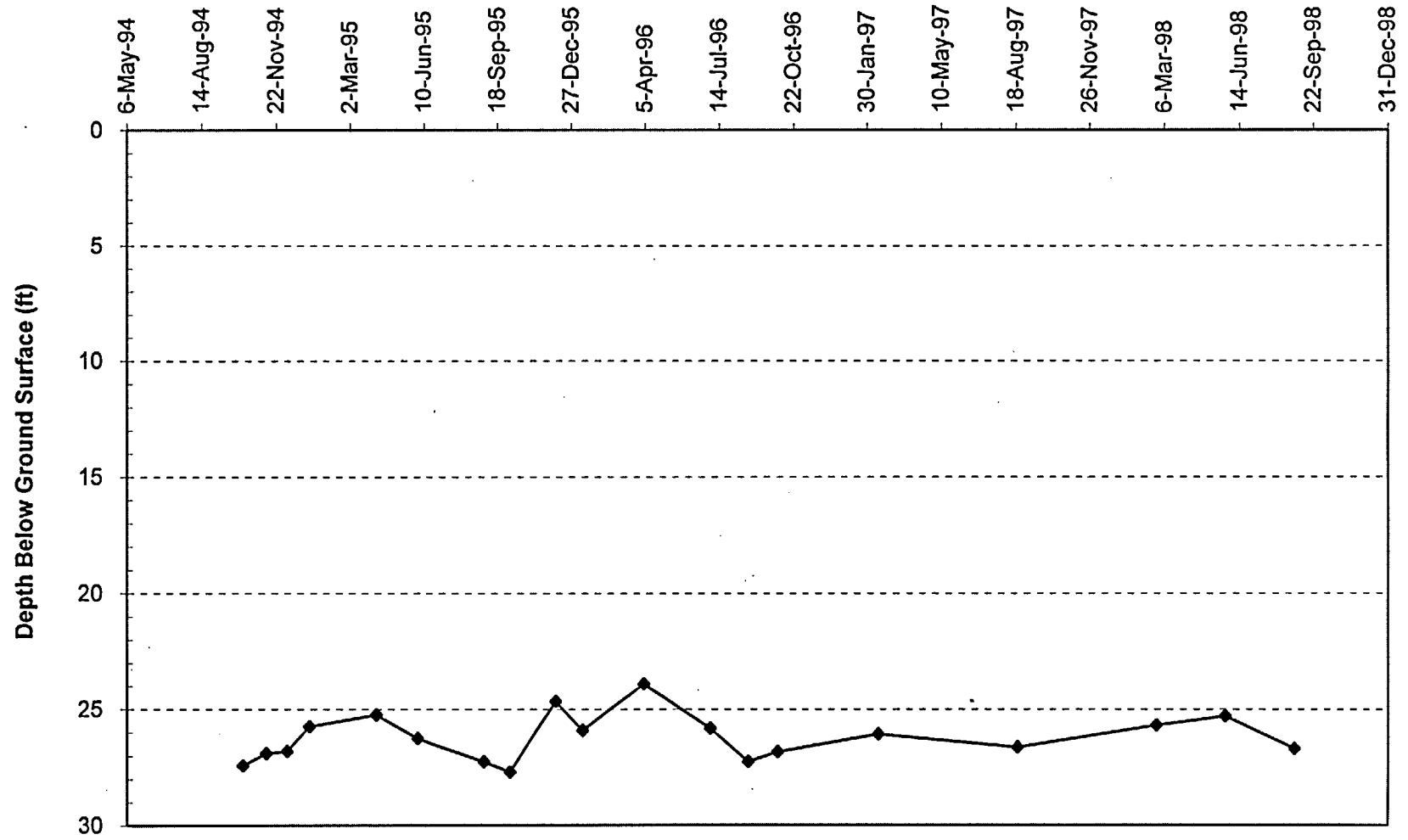
Attachment 4: Page 6 of 33



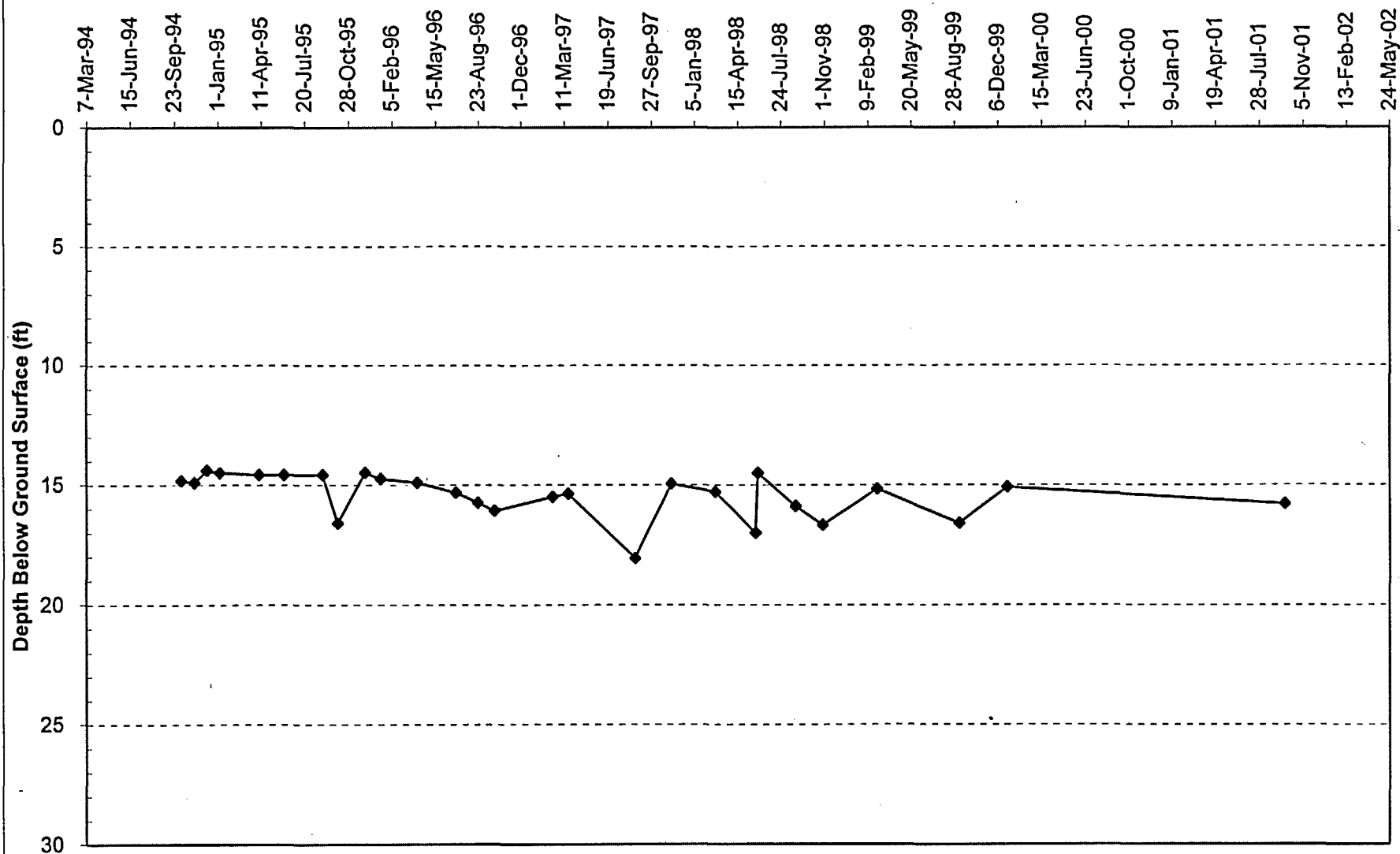
**Ground Water Level in Well  
CB-4**



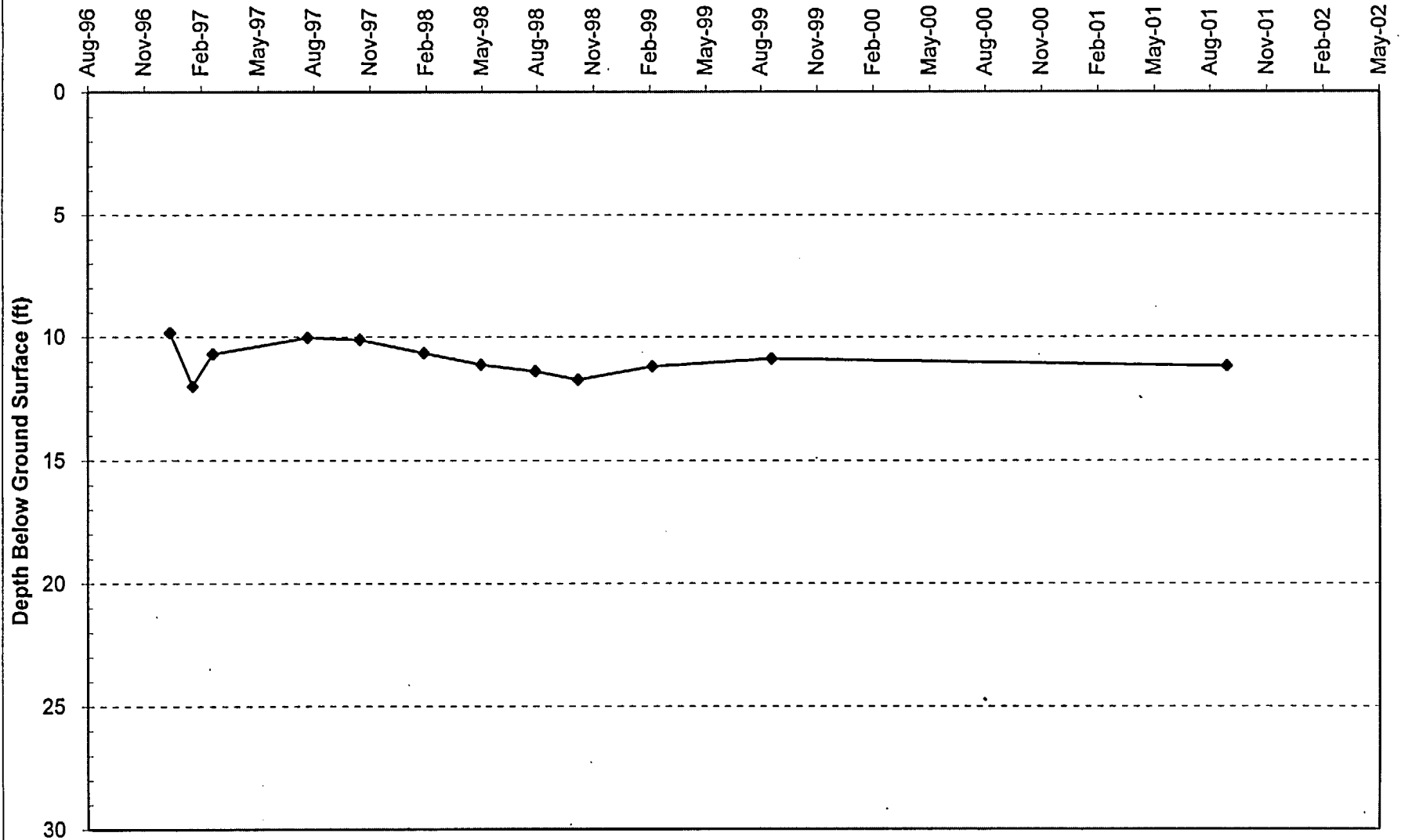
# Ground Water Level in Well CB-5



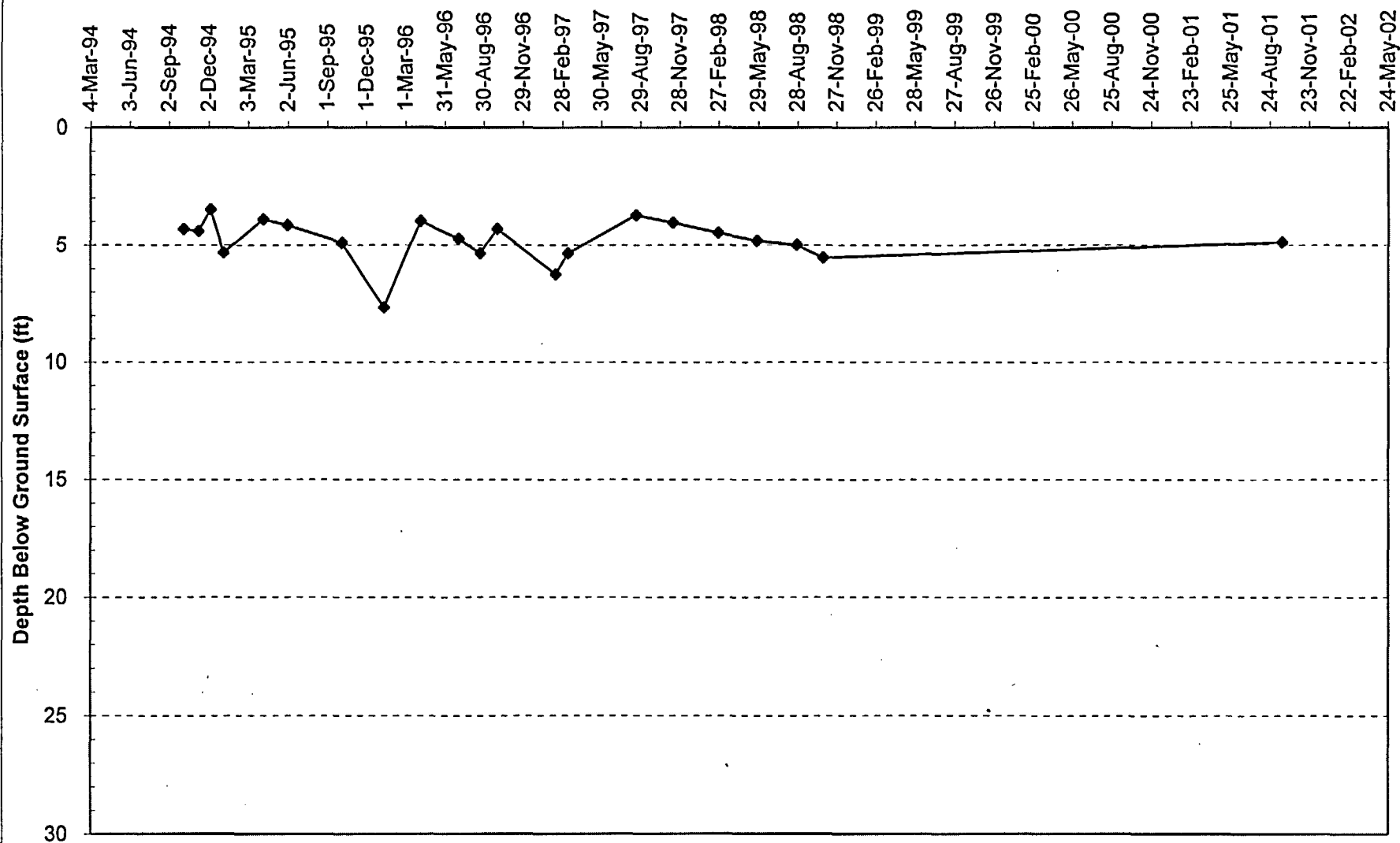
**Ground Water Level in Well  
CB-6**



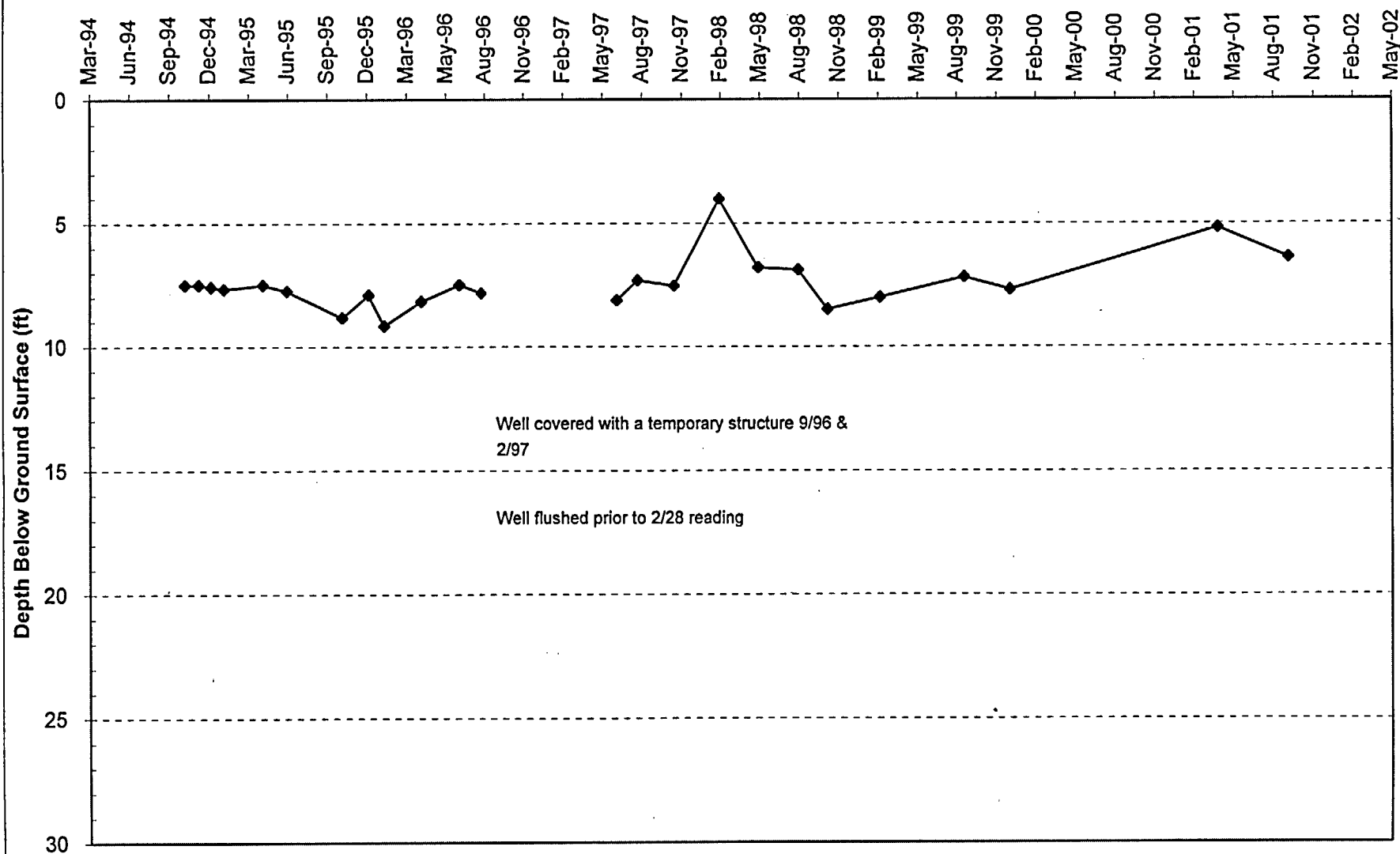
**Ground Water Level in Well  
CB-7**



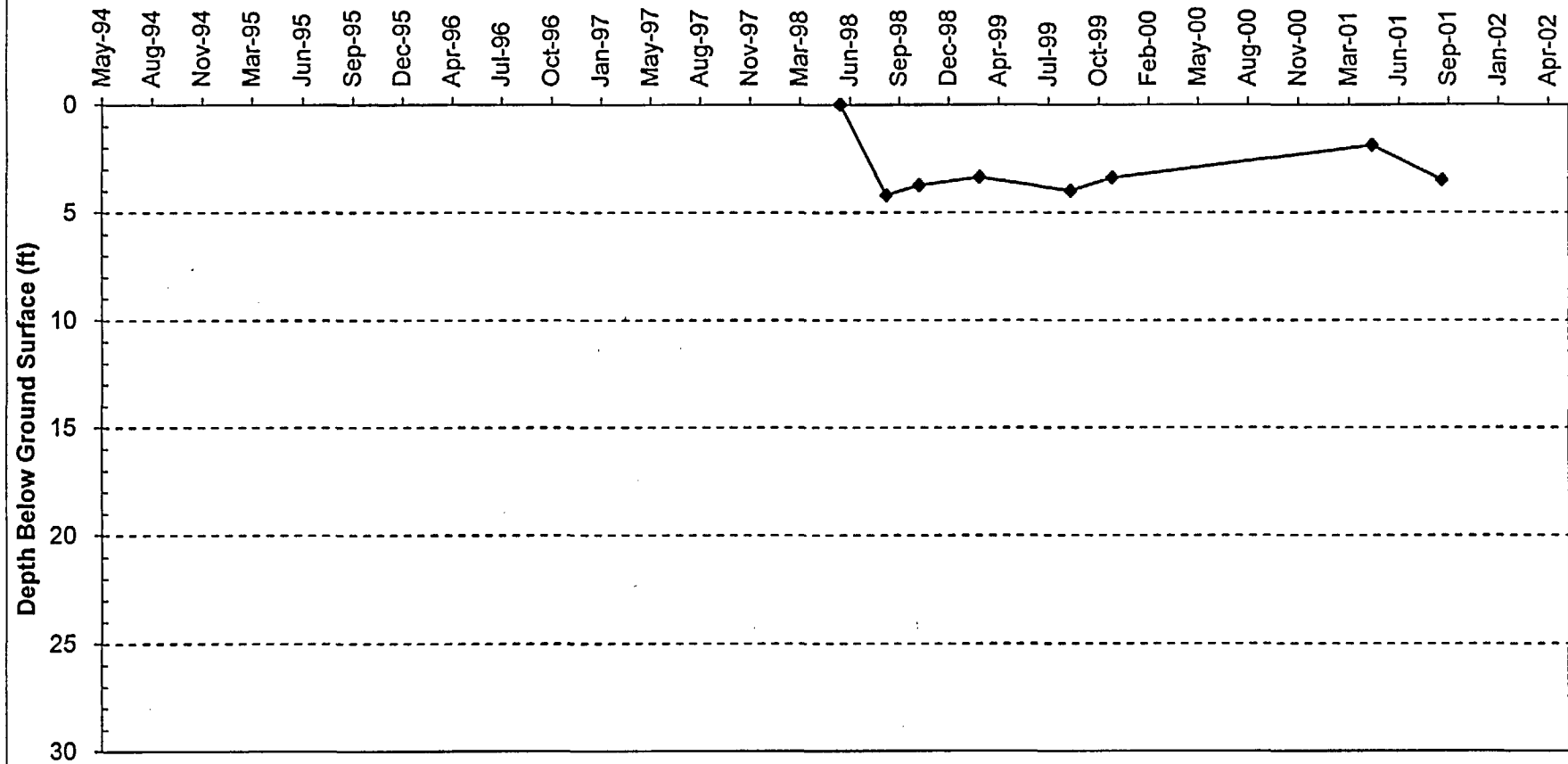
**Ground Water Level in Well  
CB-8**



# Ground Water Level in Well CB-9



# Ground Water Level in Well CB-10



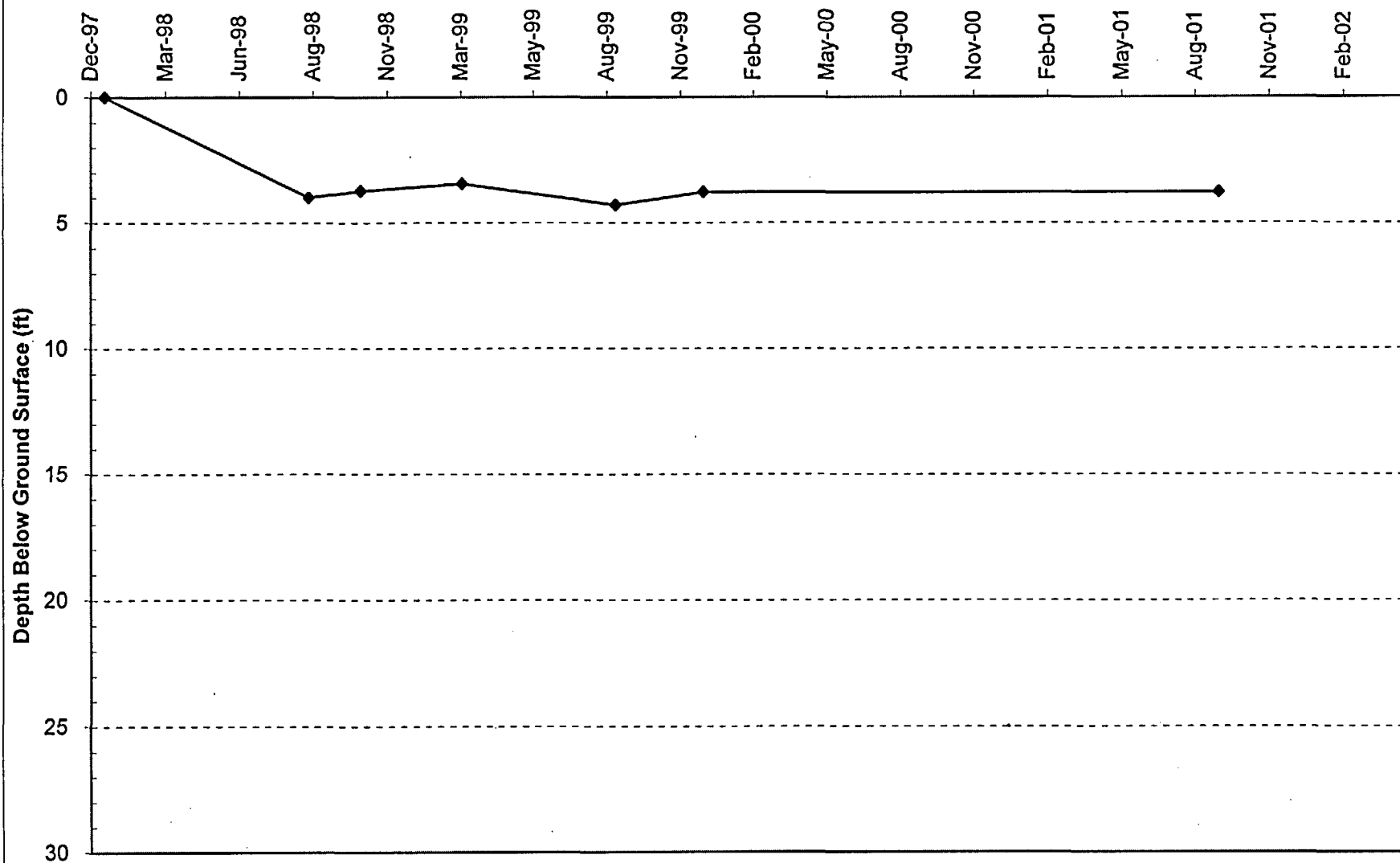


DESD-TD-YR-02-001 Rev. 0

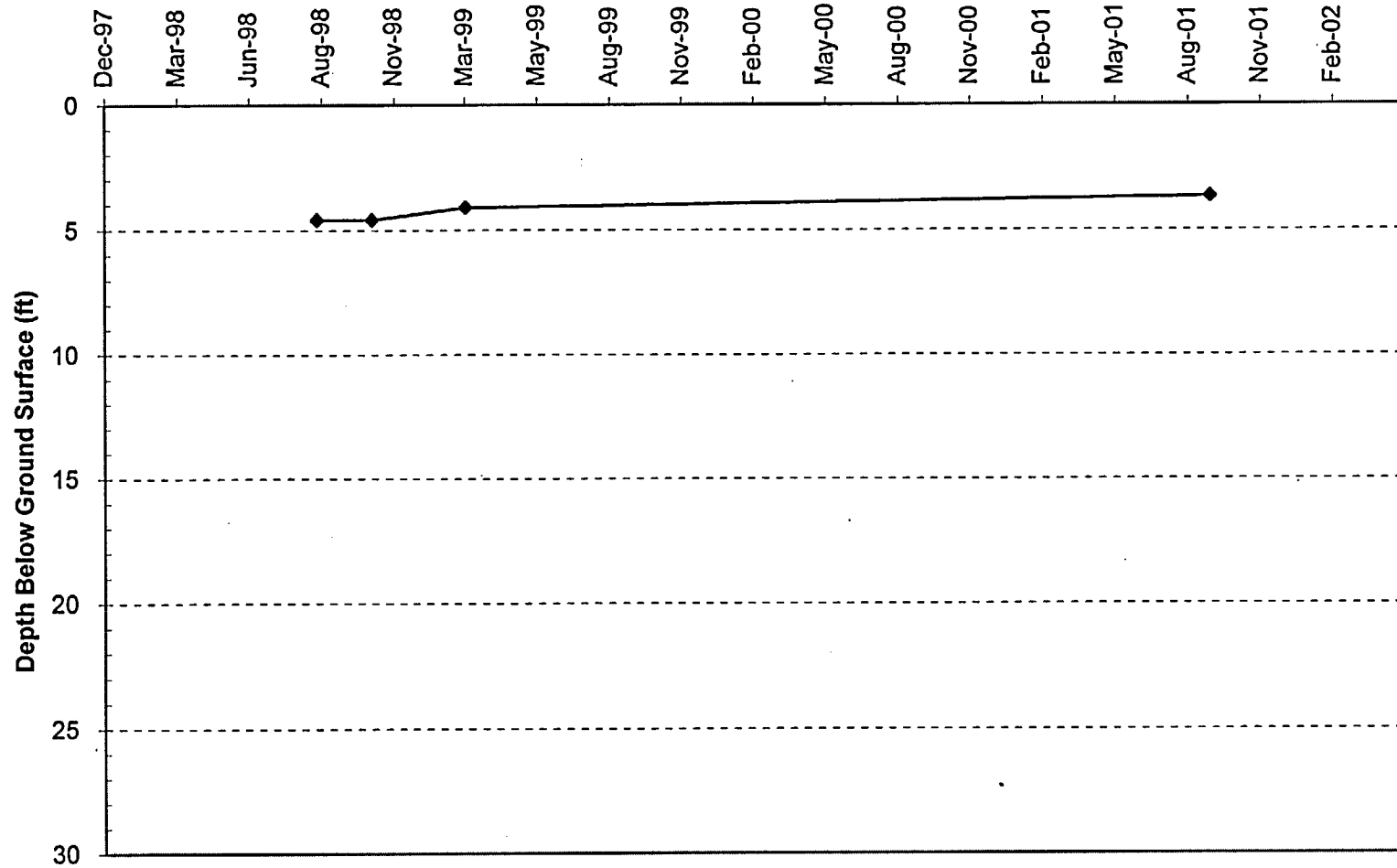
Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well CB-11A

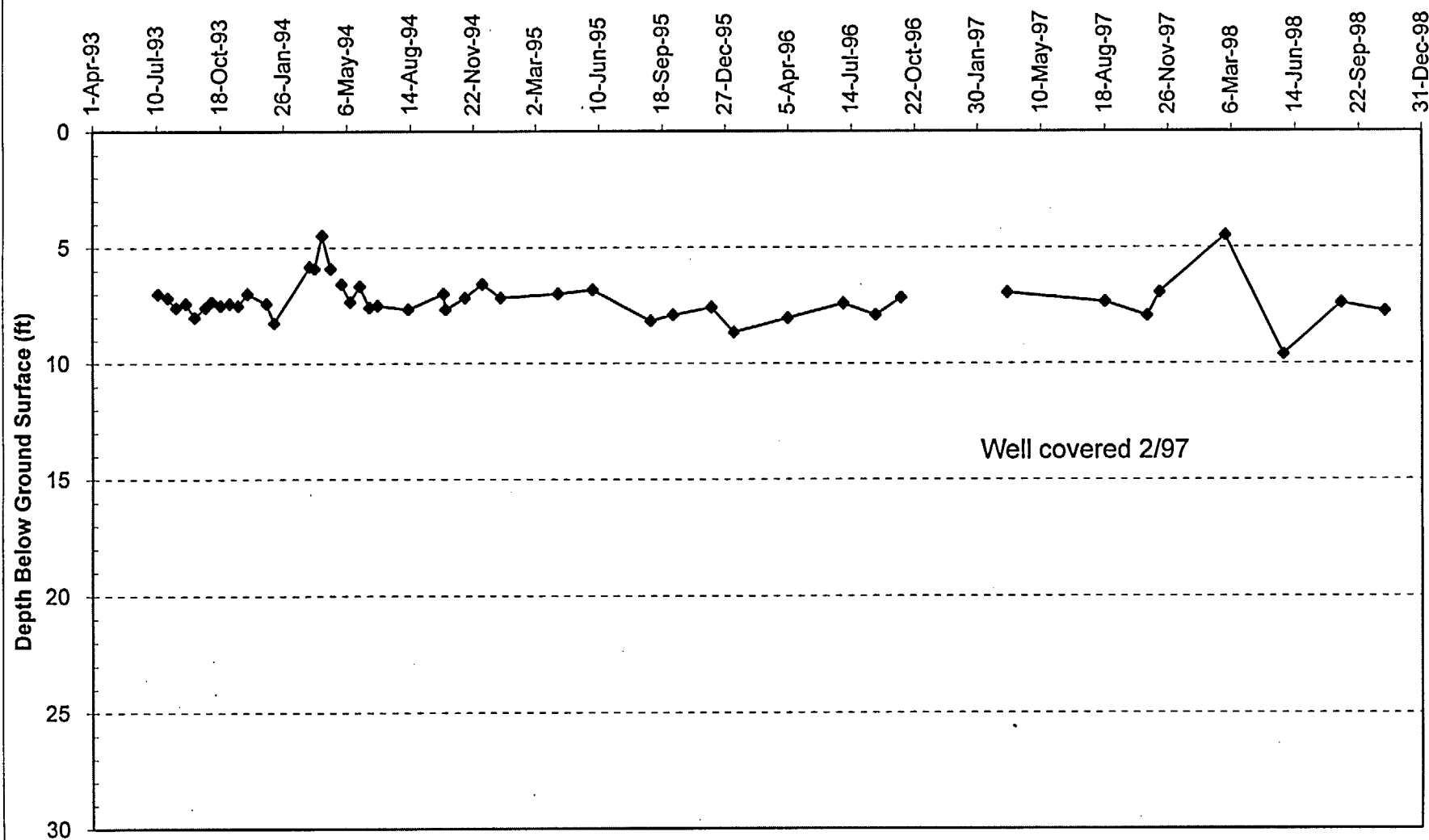
Attachment 4: Page 14 of 33



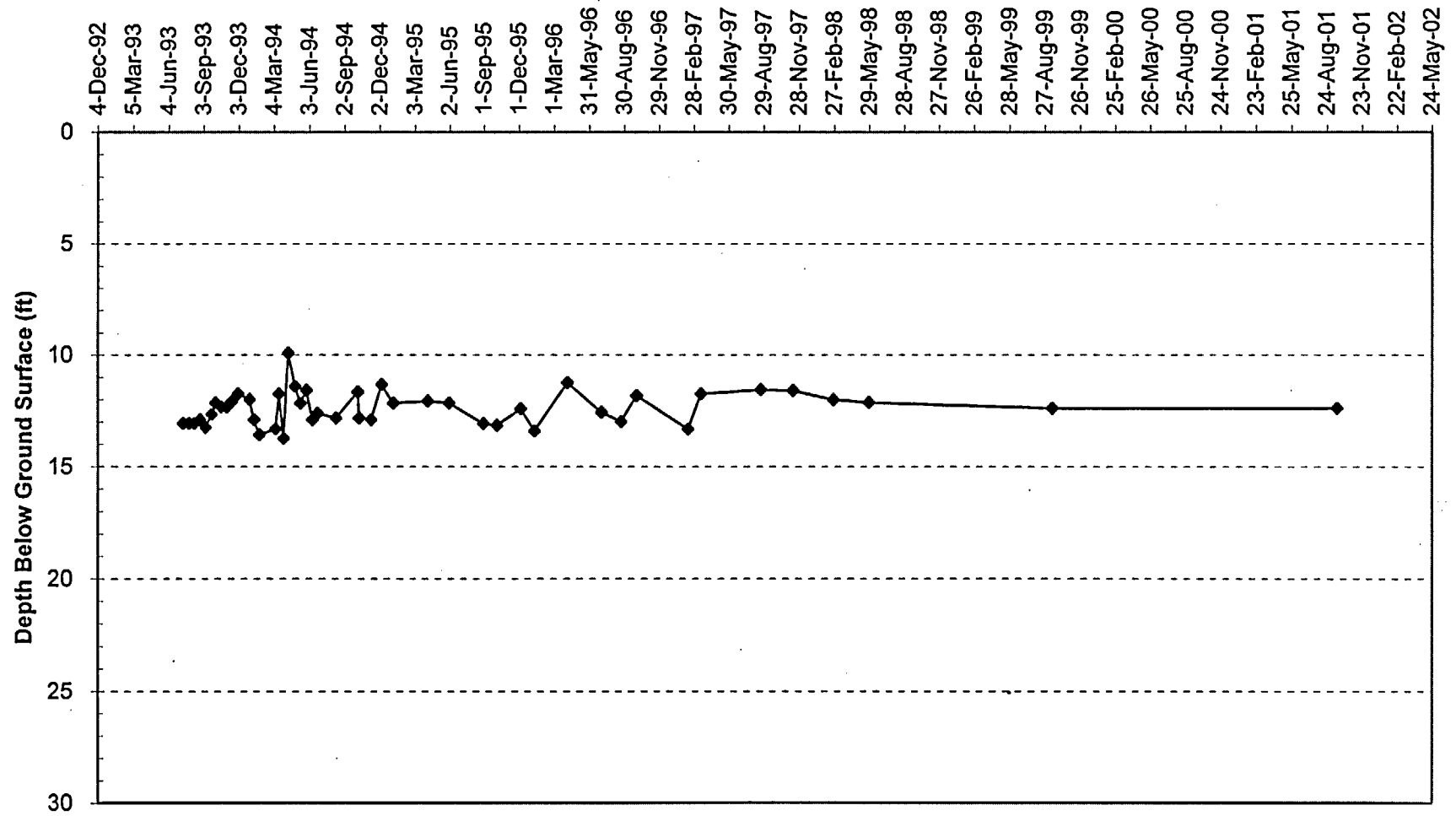
# Ground Water Level in Well CB-12



# Ground Water Level in Well CW-1



# Ground Water Level in Well CW-2

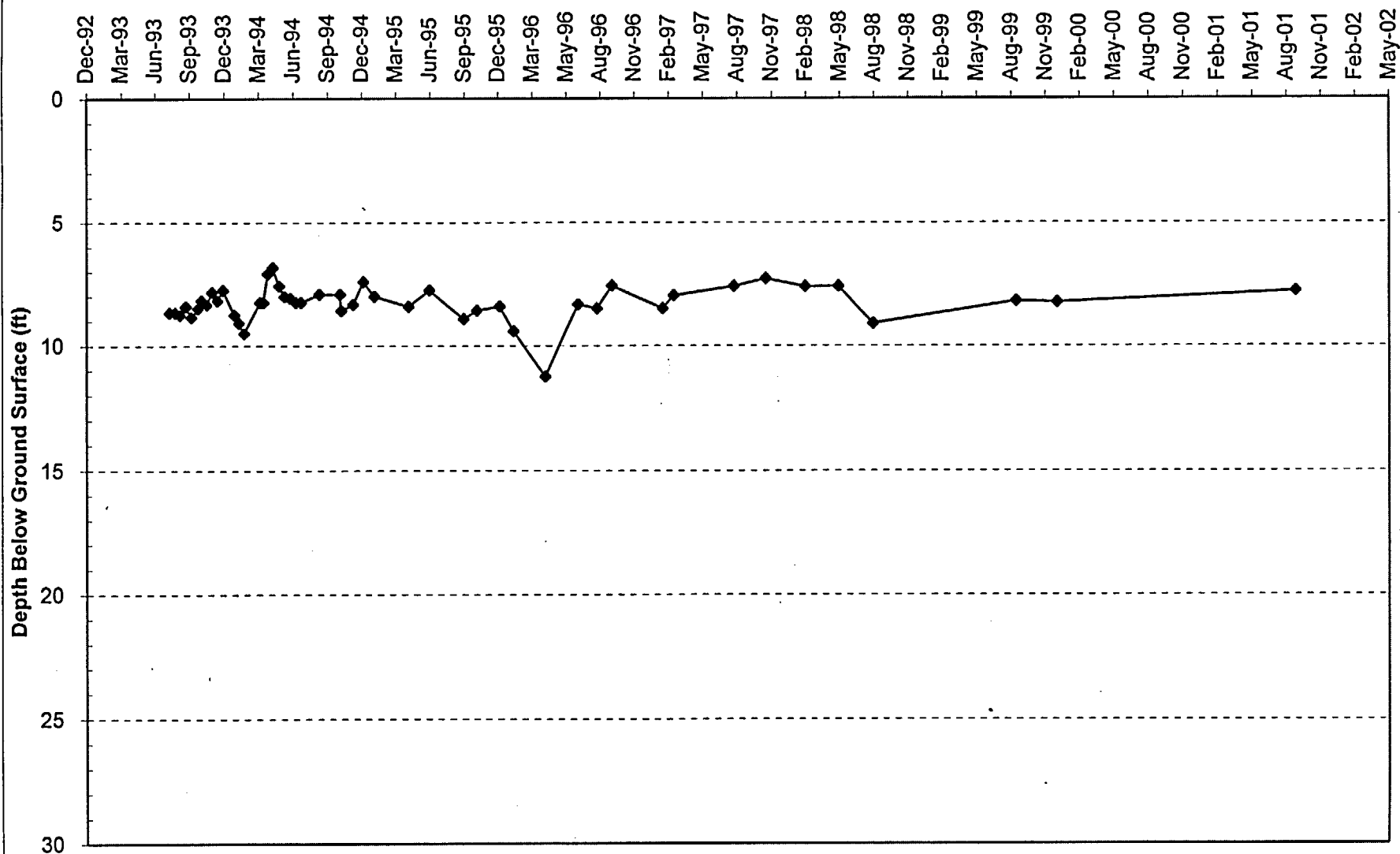


DESD-TD-YR-02-001 Rev. 0

Site Ground Water Data Collection for YNPS  
Decommissioning

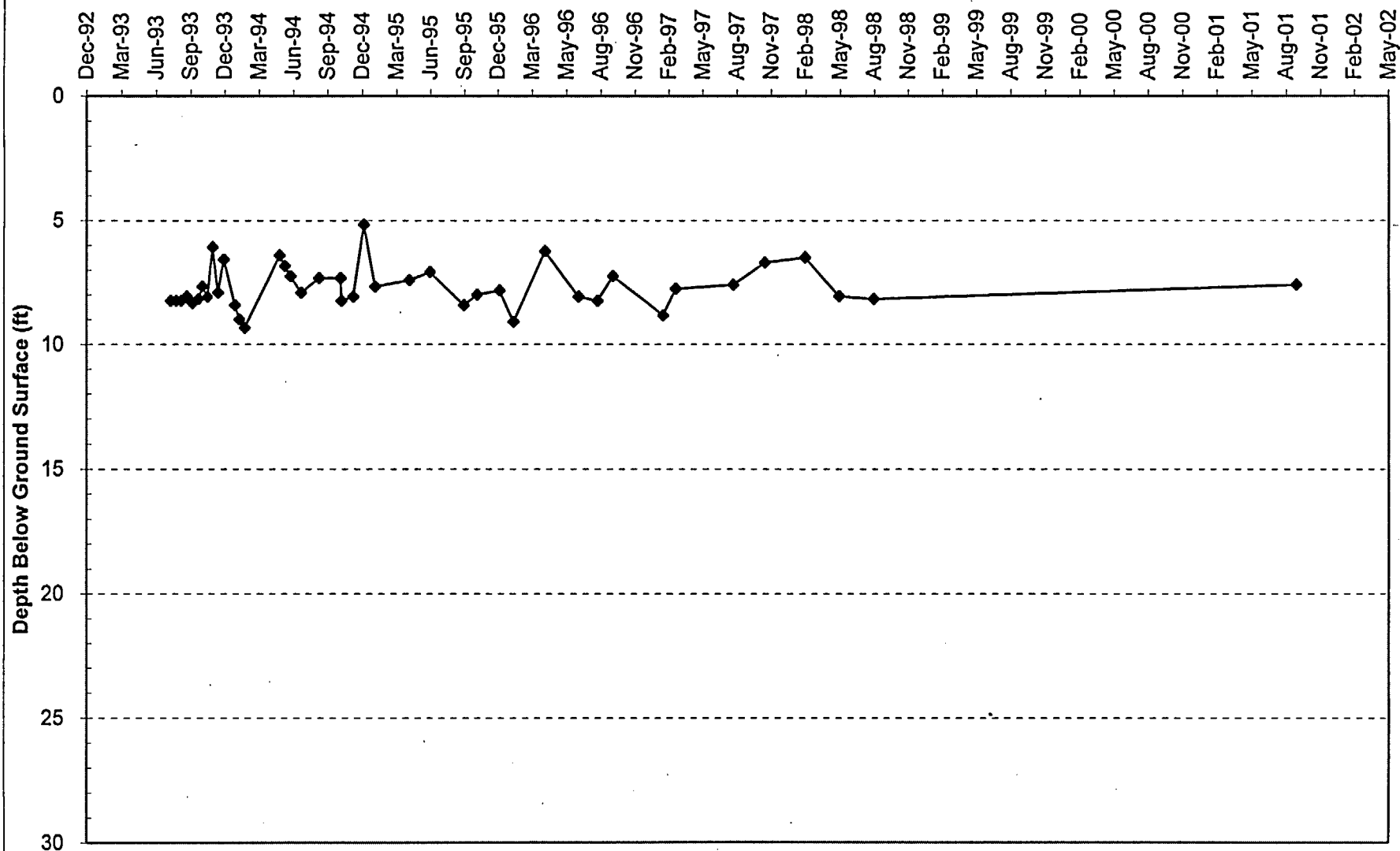
### Ground Water Level in Well CW-3

Attachment 4: Page 18 of 33

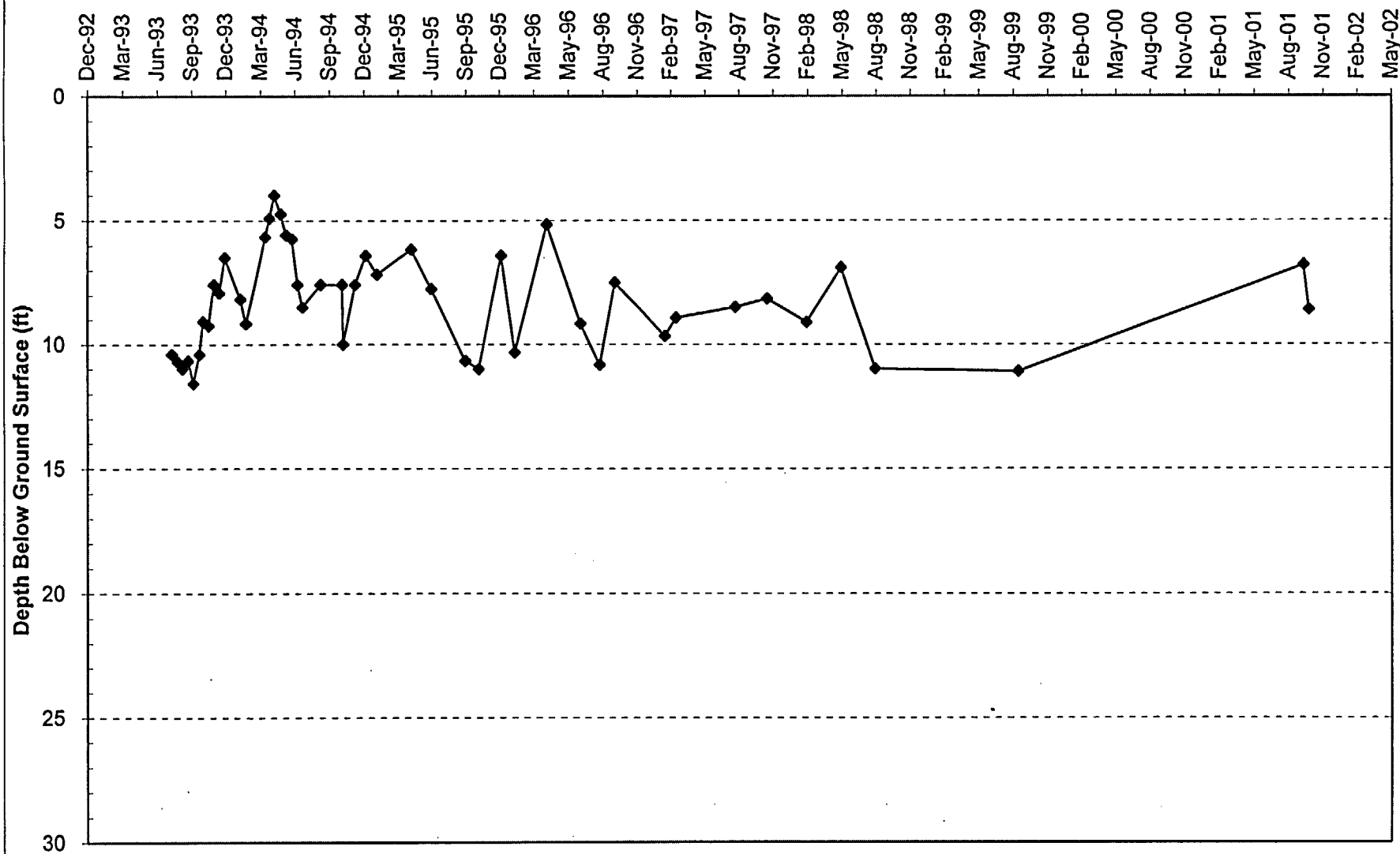


# Ground Water Level in Well

CW-4



# Ground Water Level in Well CW-5

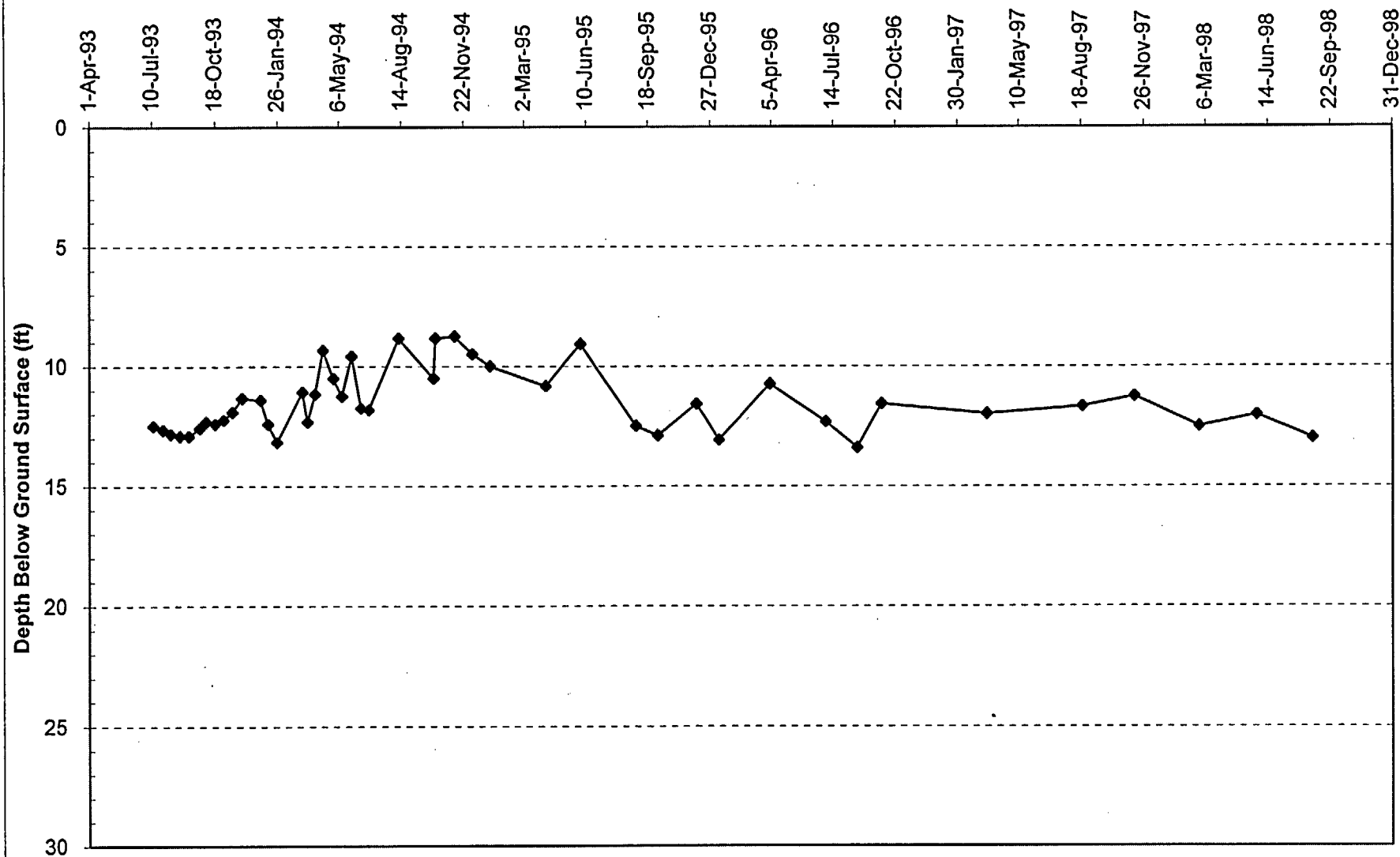


DESD-TD-YR-02-001 Rev. 0

Site Ground Water Data Collection for YNPS  
Decommissioning

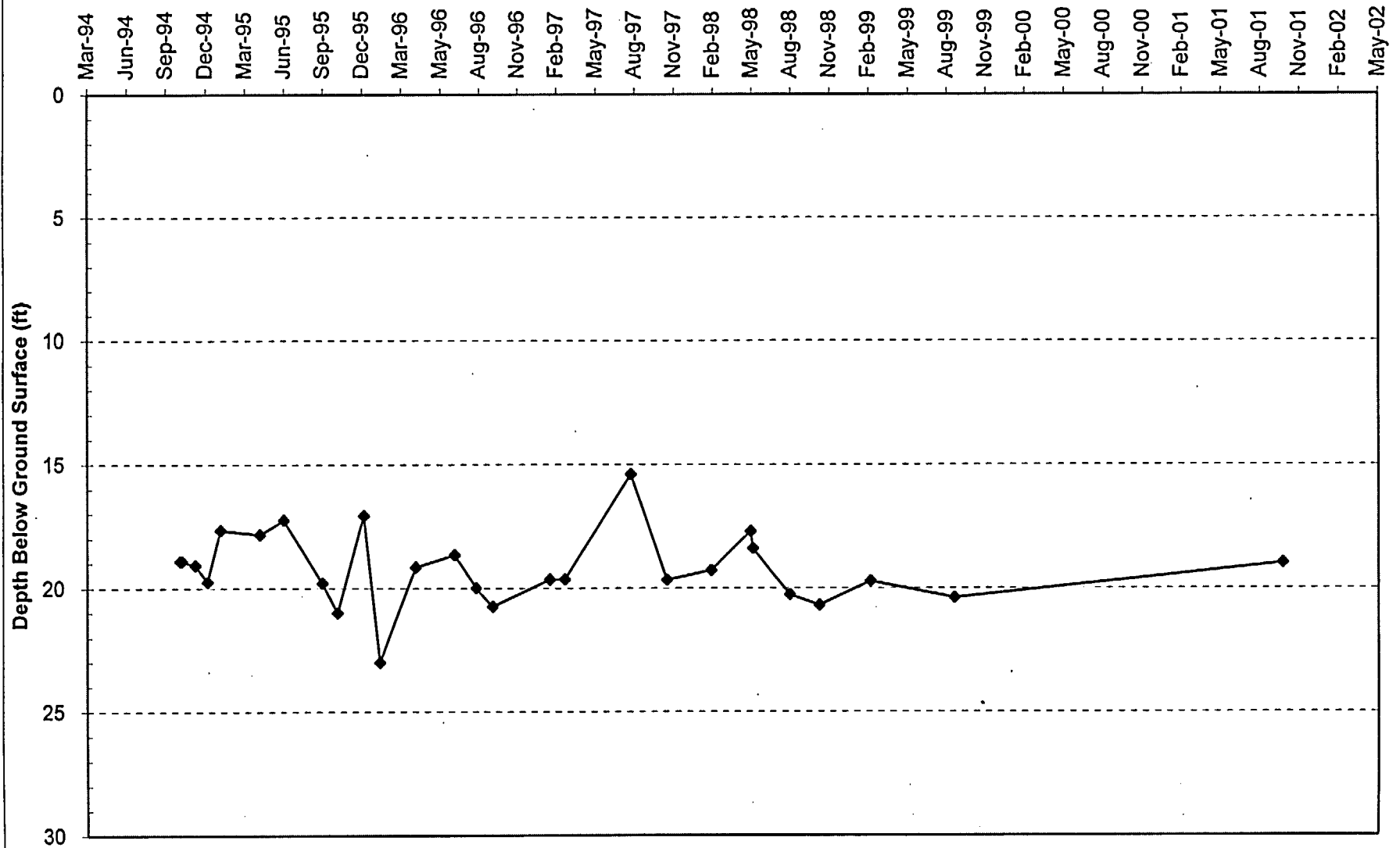
### Ground Water Level in Well CW-6

Attachment 4: Page 21 of 33

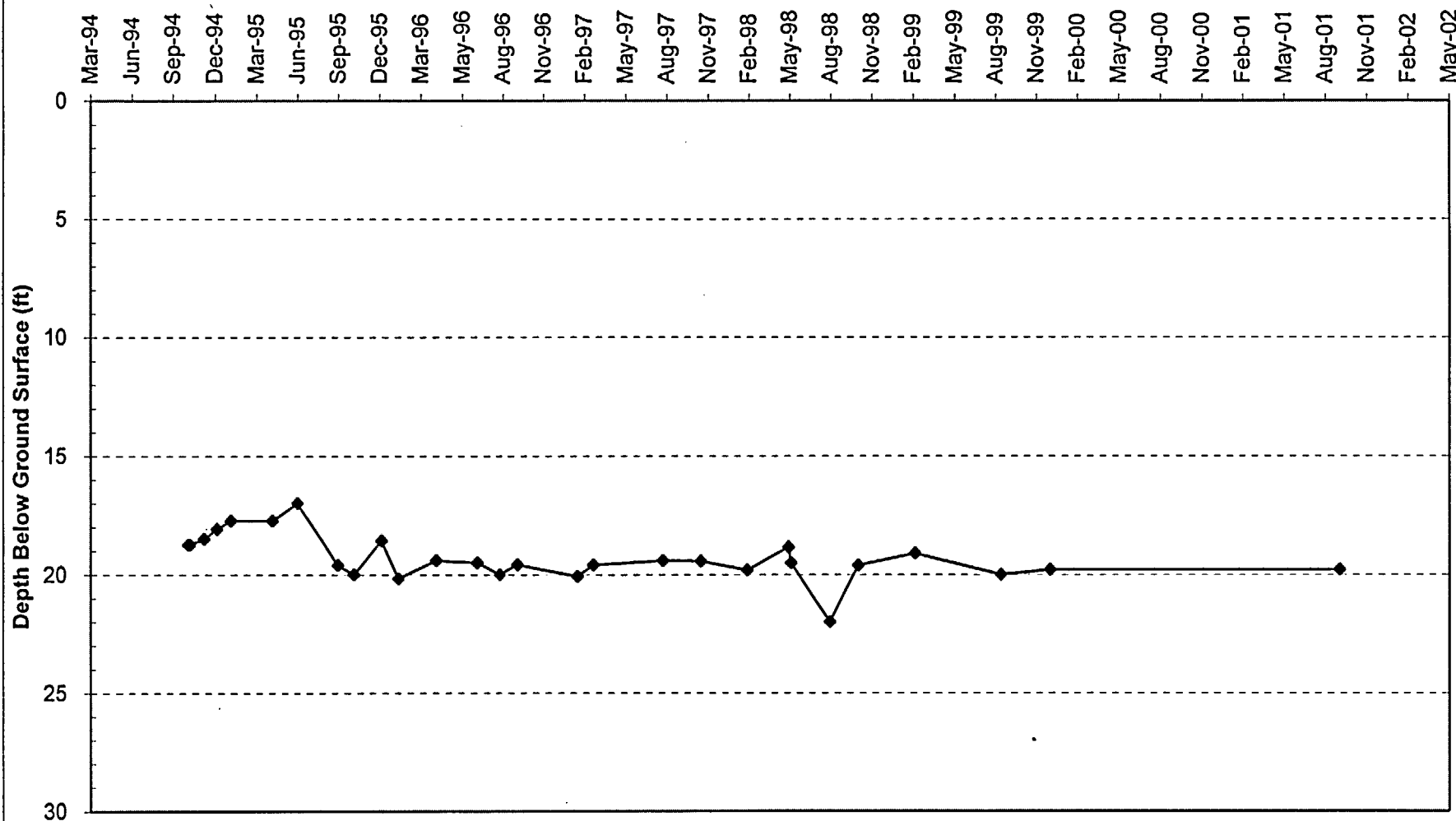




**Ground Water Level in Well  
CW-7**



**Ground Water Level in Well  
CW-8**

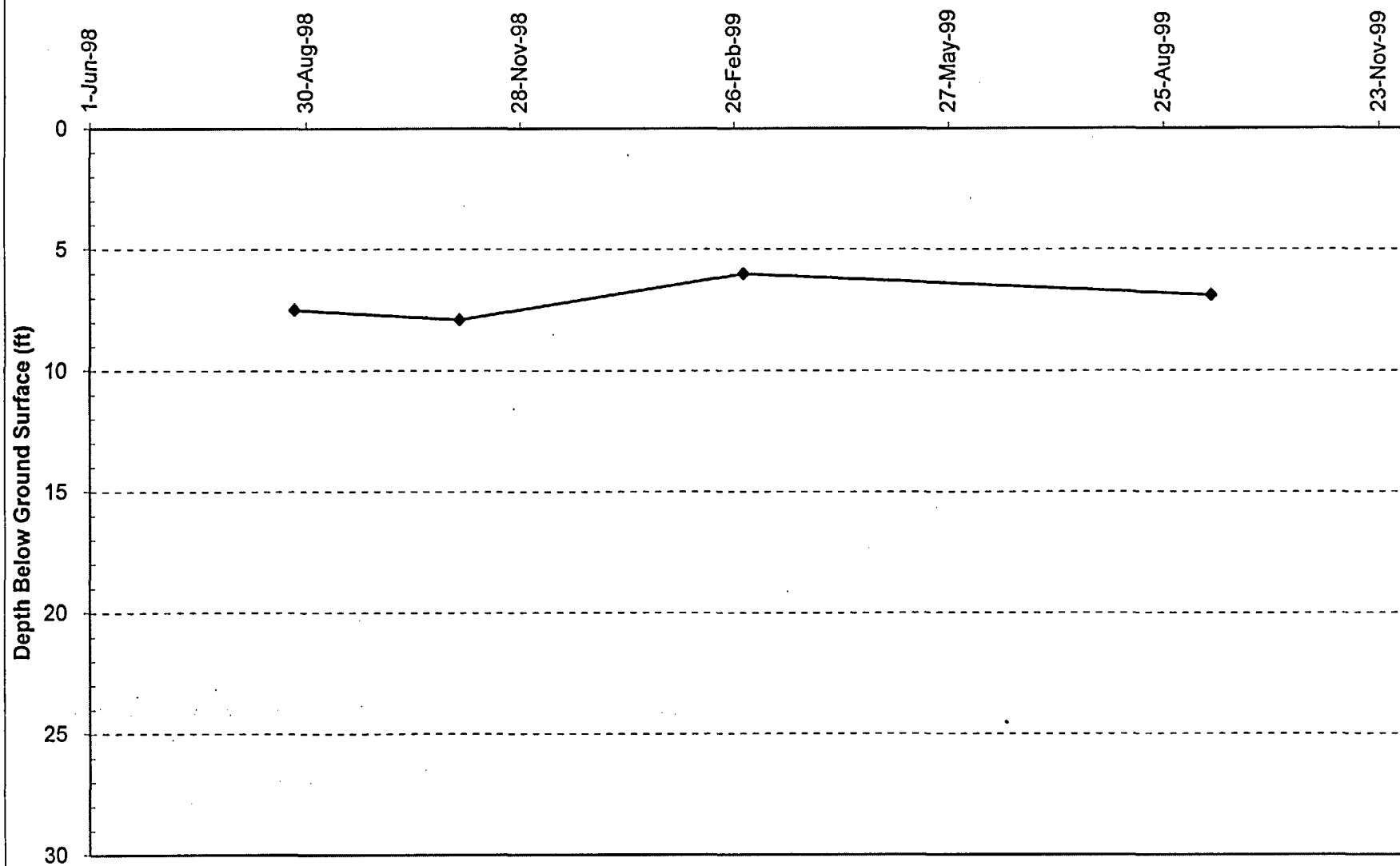


DESD-TD-YR-02-001 Rev. 0

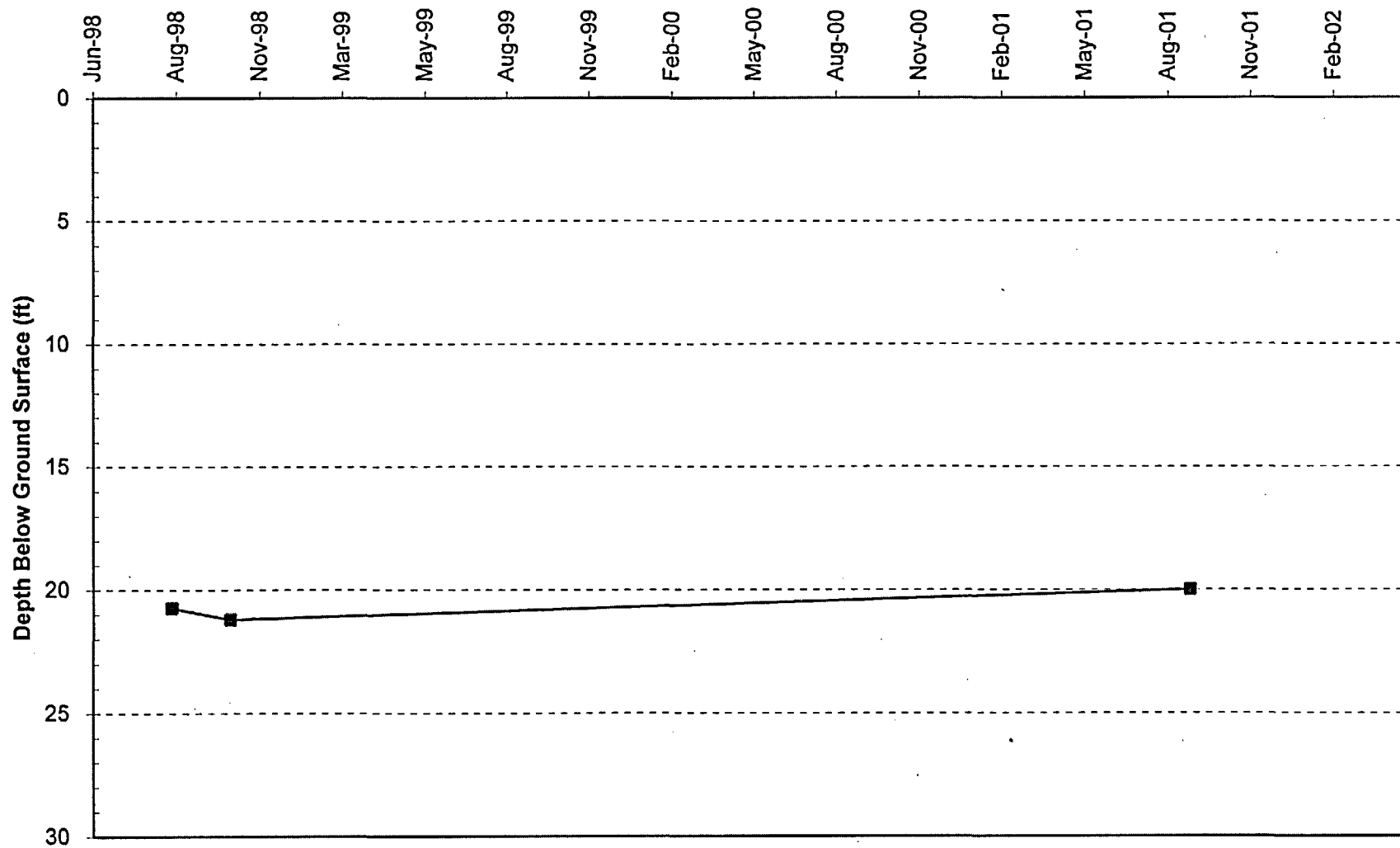
Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well CW-9

Attachment 4: Page 24 of 33



**Ground Water Level in Well  
CW-10**

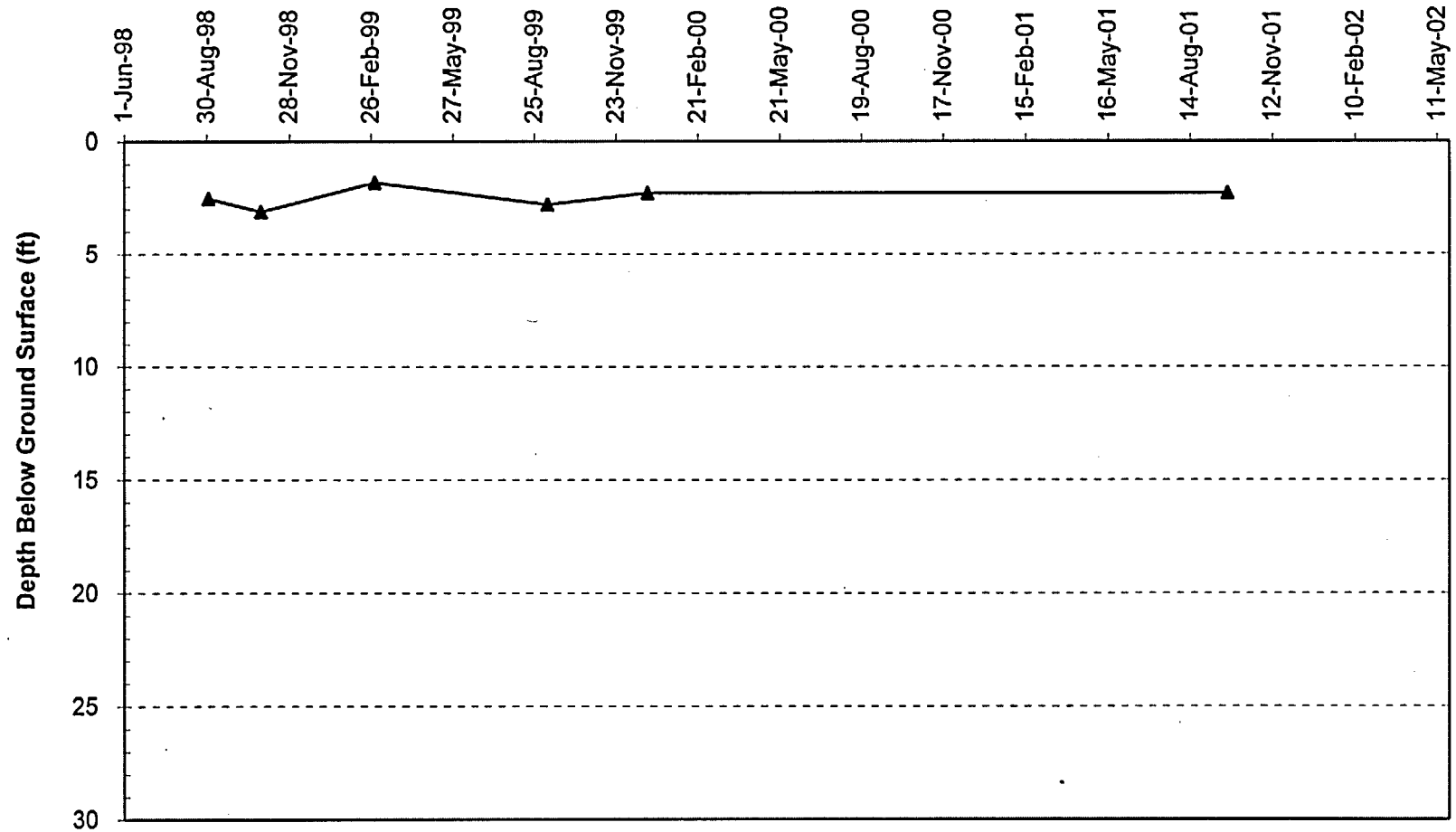


DESD-TD-YR-02-001 Rev. 0

Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well CW-11

Attachment 4: Page 26 of 33

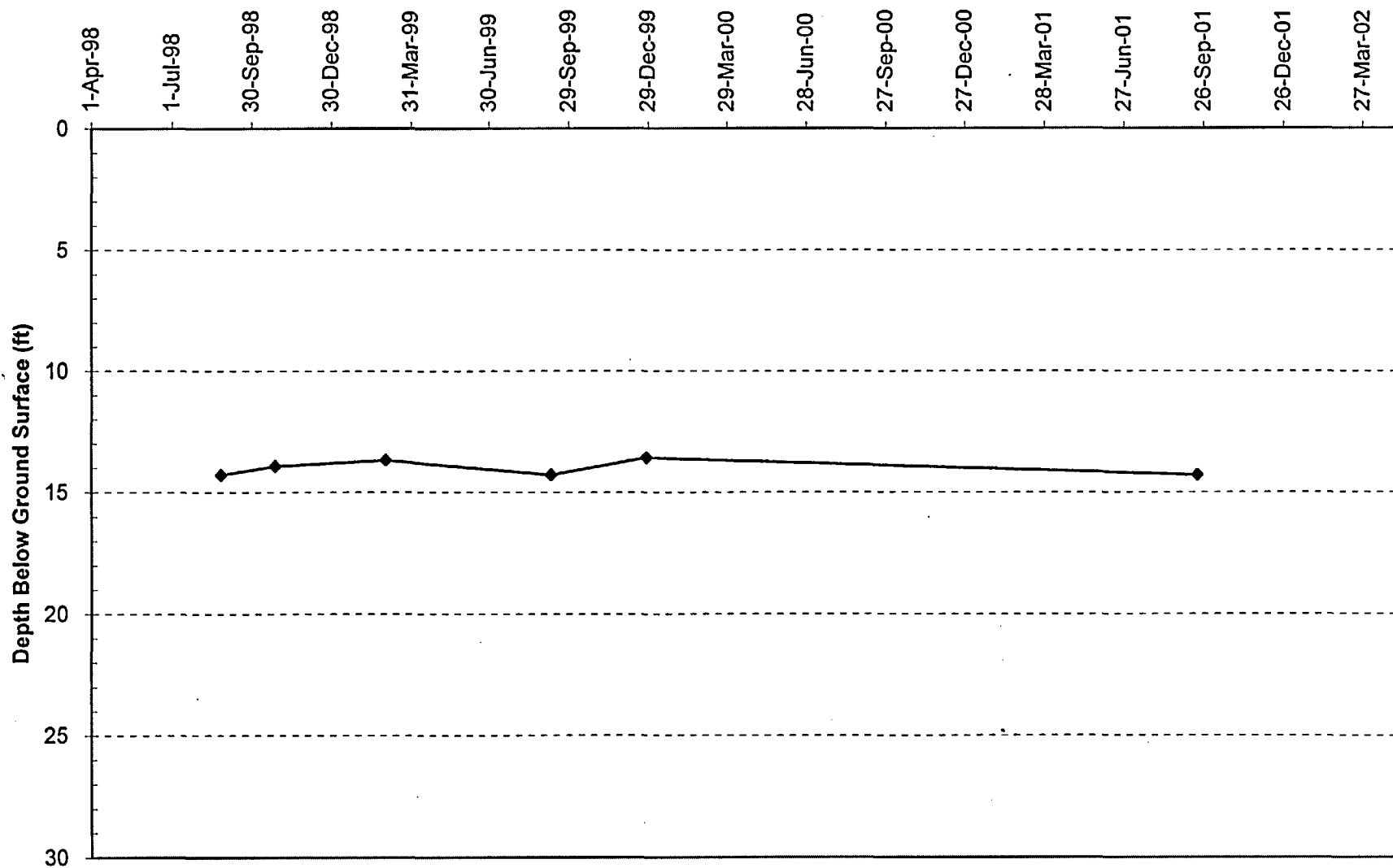


DESD-TD-YR-02-001 Rev. 0

Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well MW-1

Attachment 4: Page 27 of 33

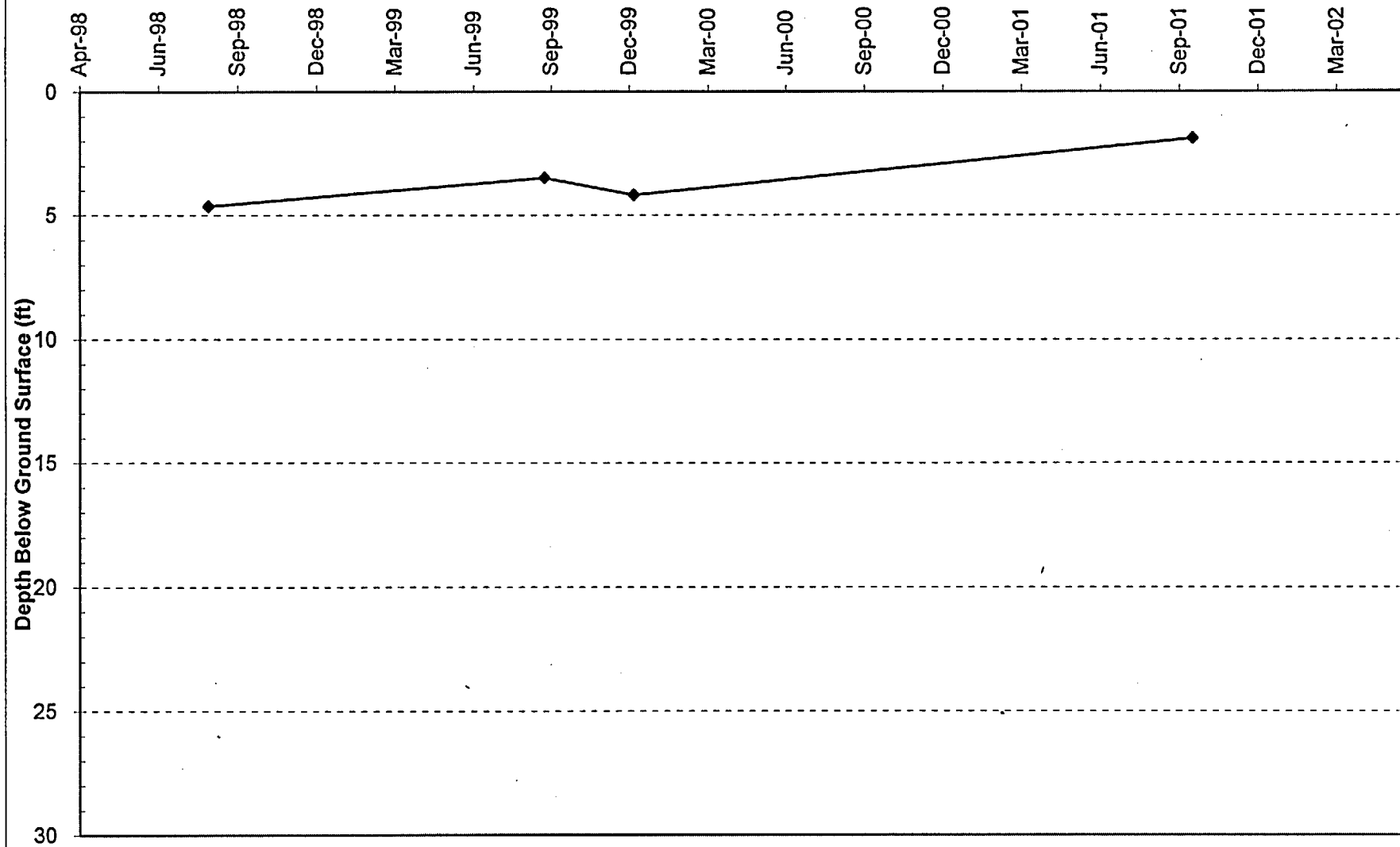


DESD-TD-YR-02-001 Rev. 0

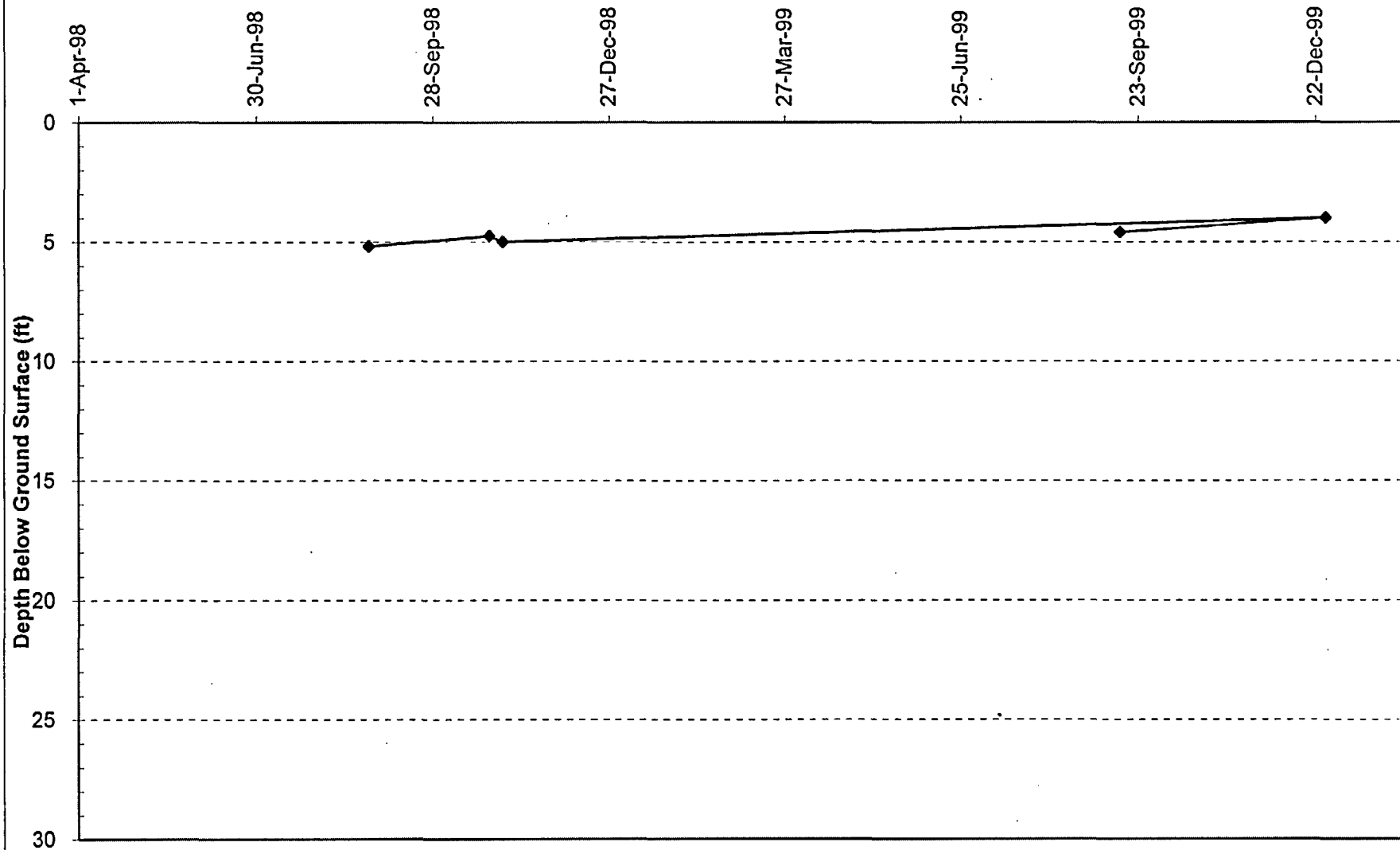
Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well MW-2

Attachment 4: Page 28 of 33



**Ground Water Level in Well  
MW-3**



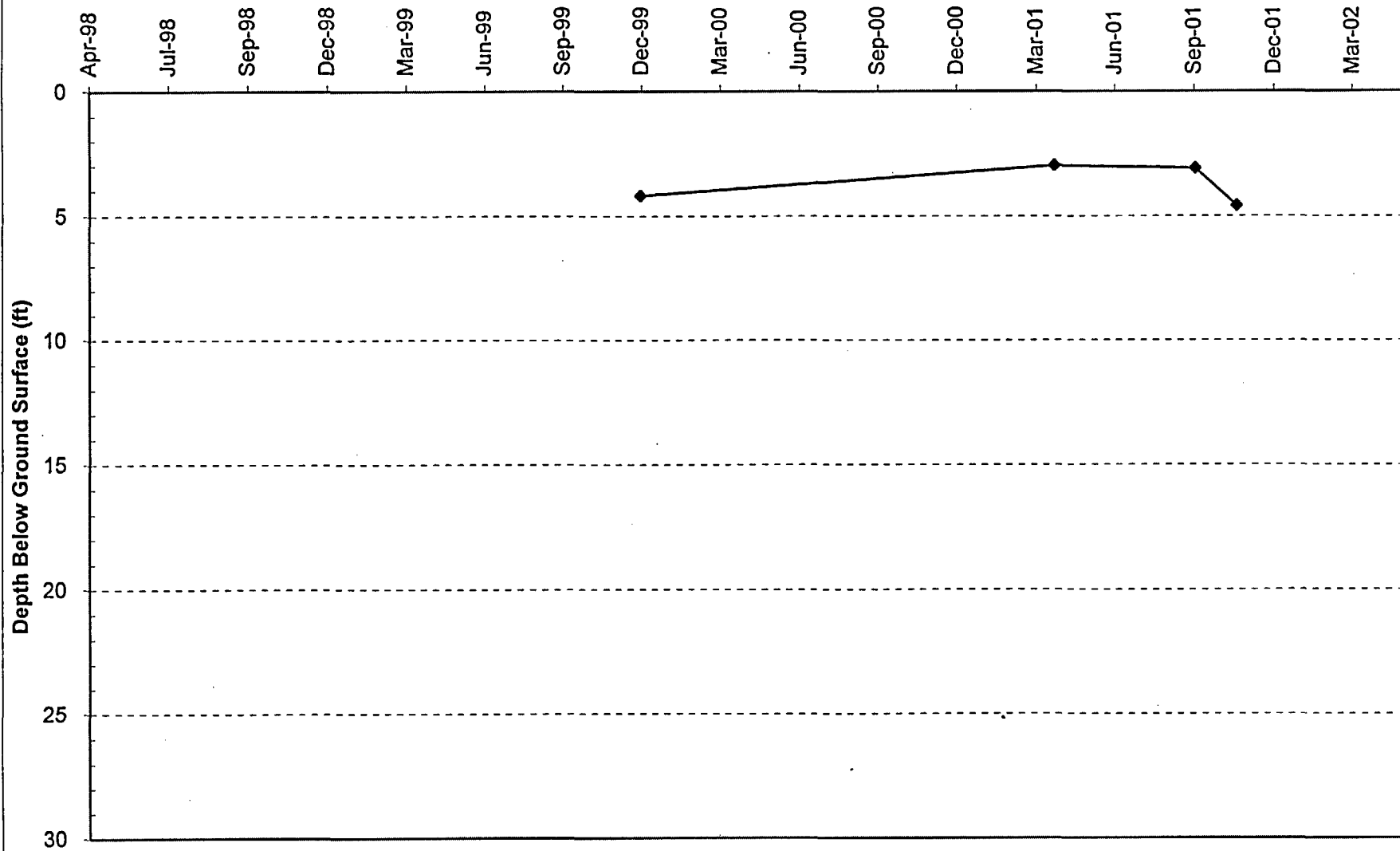


DESD-TD-YR-02-001 Rev. 0

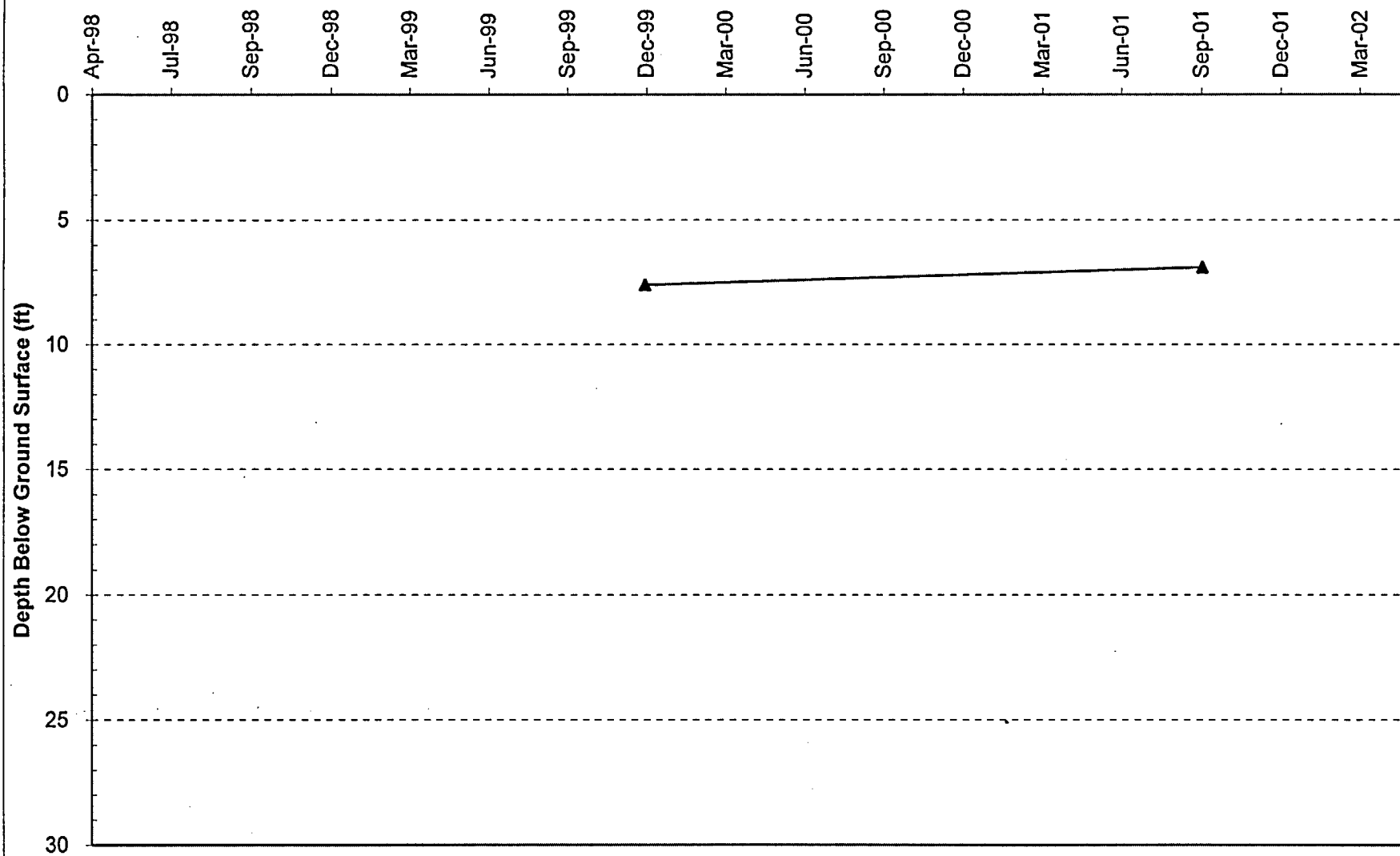
Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well MW-5

Attachment 4: Page 30 of 33



**Ground Water Level in Well  
MW-6**

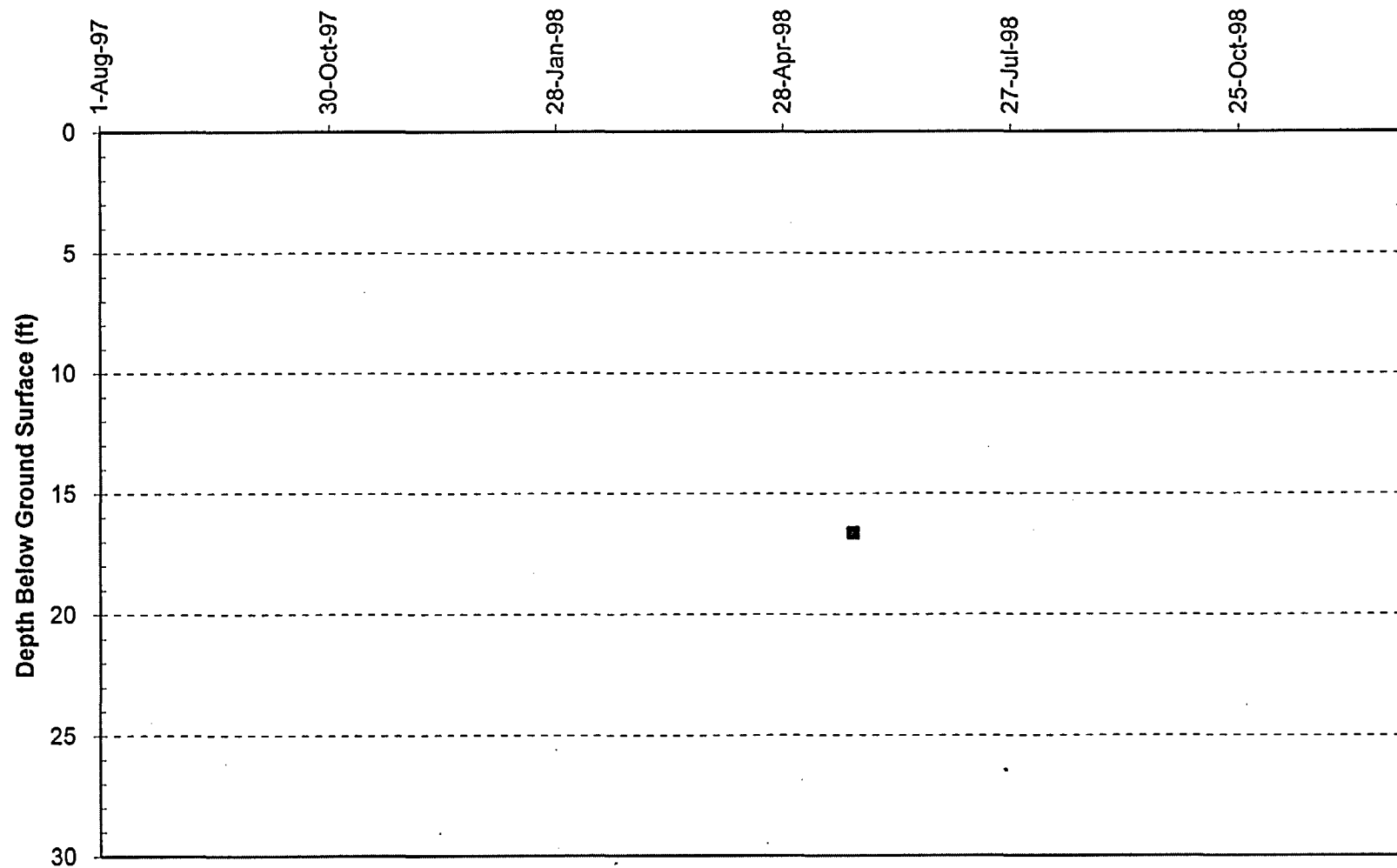


DESD-TD-YR-02-001 Rev. 0

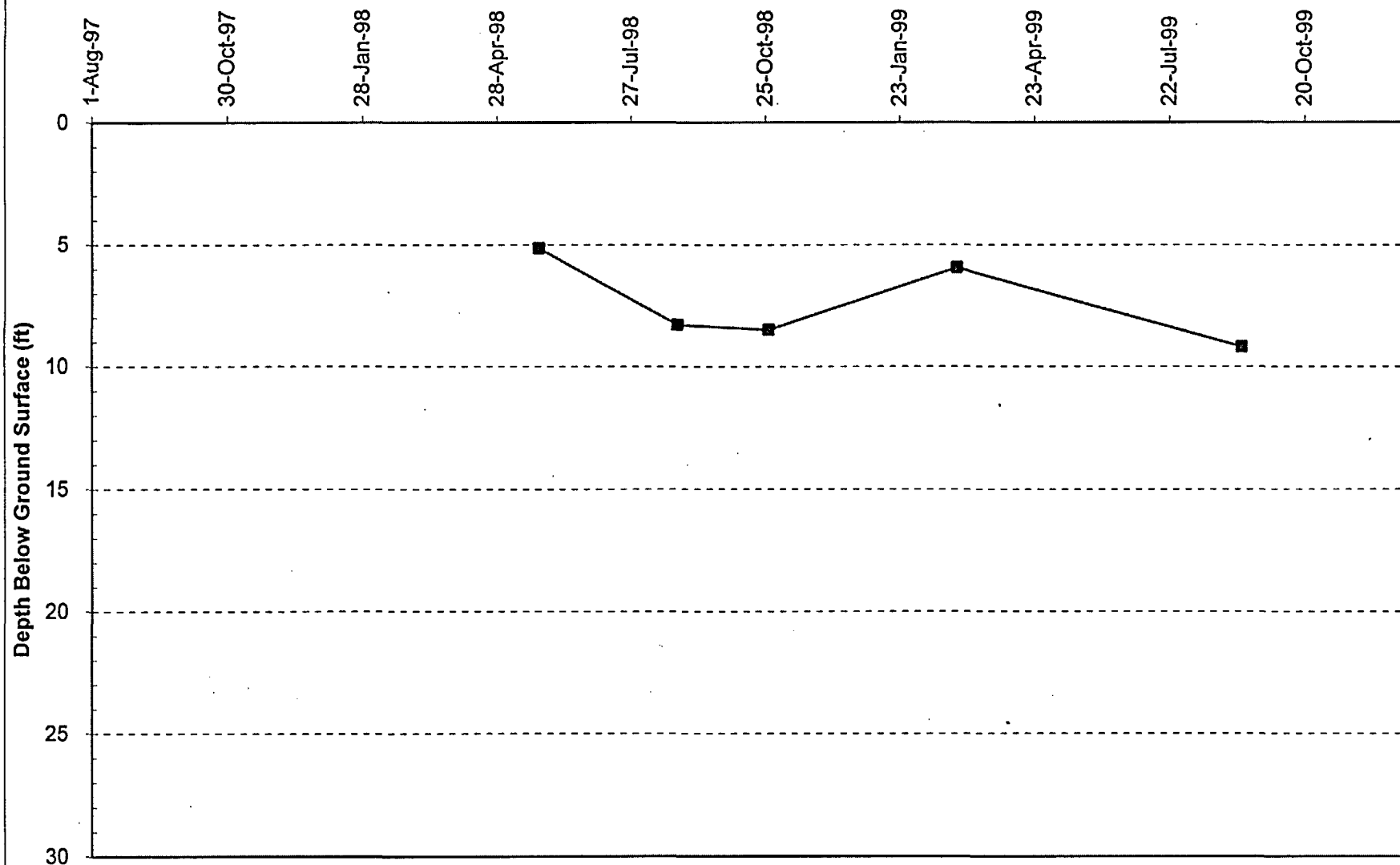
Site Ground Water Data Collection for YNPS  
Decommissioning

### Ground Water Level in Well NSR-1

Attachment 4: Page 32 of 33

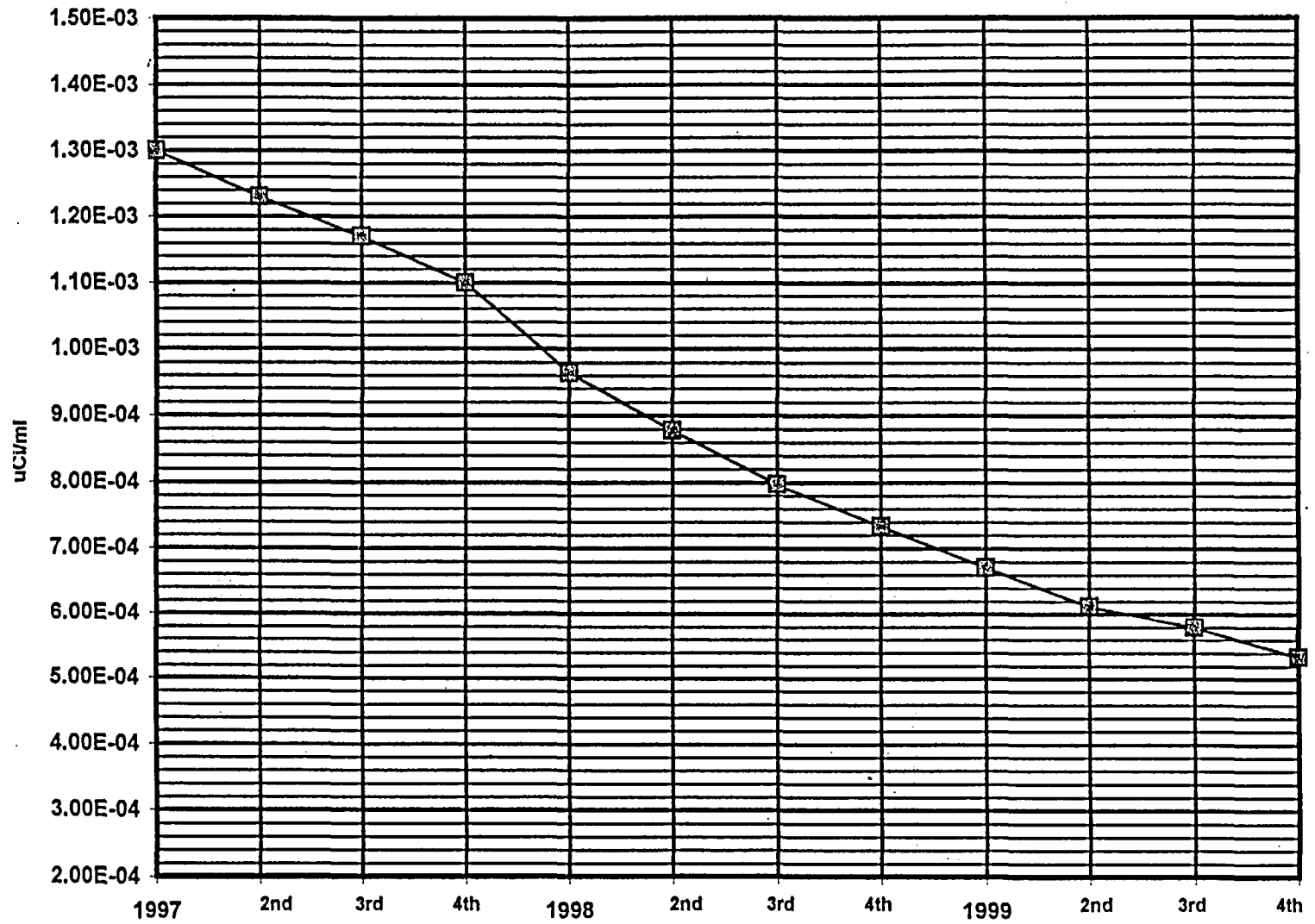


# Ground Water Level in Well OSR-1



Attachment 5  
YNPS Spent Fuel Pool: Concentration of H-3, 1997-1999

## SPENT FUEL PIT AVERAGE QUARTERLY TRITIUM VALUES



# DESIGN VERIFICATION CHECKLIST

QA Record Type N/A

Form DPR-3.9A  
Page 1 of 1  
Revision 4

Document No.: DESD-TD-YR-02-001 Rev.: 1 Page: 1 of 1

Document Title: Site Ground Water Data Collection for YNPS Decommissioning

1.	Were the inputs correctly selected and incorporated into design?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
2.	Are assumptions necessary to perform the design activity adequately described and reasonable? Where necessary, are the assumptions identified for subsequent reverifications when the detailed design activities are completed?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
3.	Are the appropriate quality and quality assurance requirements specified?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	<input type="checkbox"/> N/A
4.	Are the applicable codes, standards and regulatory requirements, including issue and addenda properly identified, and are their requirements for design met?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
5.	Have applicable construction and operating experience been considered?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
6.	Have the design interface requirements been satisfied?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
7.	Was an appropriate design method used?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
8.	Is the output reasonable compared to inputs?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
9.	Are the specified parts, equipment and processes suitable for the required application?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
10.	Are the specified materials compatible with each other and the design environmental conditions to which the material will be exposed?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
11.	Have adequate maintenance features and requirements been specified?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
12.	Are accessibility and other design provisions adequate for performance of needed maintenance and repair?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
13.	Has adequate accessibility been provided to perform the inservice inspection expected to be required during the plant life?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
14.	Has the design properly considered radiation exposure to the public and plant personnel?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
15.	Are the acceptance criteria incorporated in the design documents sufficient to allow verification that design requirements have been satisfactorily accomplished?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
16.	Have adequate pre-operational and subsequent periodic test requirements been appropriately specified?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
17.	Are adequate handling, storage, cleaning and shipping requirements specified?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
18.	Are adequate identification requirements specified?	<input type="checkbox"/> Y	<input type="checkbox"/> N	<input checked="" type="checkbox"/> N/A
19.	Are requirements for record preparation review, approval, retention, etc., adequately specified?	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	<input type="checkbox"/> N/A

Comments:

Verified By:  
(First, MI, Last)

E. F. Maher  
PRINTED/TYPED NAME

  
SIGNATURE

2/3/2003  
DATE