## APPENDIX A WELL CONSTRUCTION DATA

## Key to Exploration Logs

#### **Sample Description**

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

#### **Density/Consistency**

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits is estimated based on visual observation and is presented parenthetically on the test pit logs.

SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Standard Penetration Resistance (N) in Blows/Foot	Approximate Shear Strength in TSF	
Very loose	0 - 4	Very soft	0 - 2	<0.125	
Loose	4 - 10	Soft	2 - 4	0.125 - 0.25	
Medium dense	10 - 30	Medium stiff	4 - 8	0.25 - 0.5	
Dense	30 - 50	Stiff	8 - 15	0.5 - 1.0	
Very dense	>50	Very stiff	15 — 30	1.0 - 2.0	
		Hard	>30	>2.0	

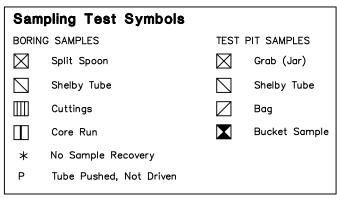
#### Moisture

Dry	Little perceptable moisture
Damp	Some perceptable moisture, probably below optimum

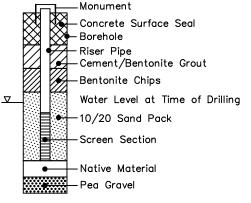
Moist Probably near optimum moisture content

Wet Much perceptable moisture, probably above optimum

#### Legends



#### Groundwater Observations



#### **Test Symbols**

GS Grain Size Classification

**Minor Constituents** 

Not identified in description

Slightly (clayey, silty, etc.)

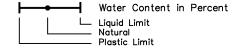
Clayey, silty, sandy, gravelly

Very (clayey, silty, etc.)

- CN Consolidation
- TUU Triaxial Unconsolidated Undrained
- TCU Triaxial Consolidated Undrained
- TCD Triaxial Consolidated Drained
- QU Unconfined Compression
- DS Direct Shear
- K Permeabilty

TV

- PP Pocket Penetrometer Approximate Compressive Strength in TSF
  - Torvane Approximate Shear Strength in TSF
- CBR California Bearing Ratio
- MD Moisture Density Relationship
- AL Atterberg Limits



- PID Photoionization Reading
- CA Chemical Analysis



Estimated Percentage

0 – 5 5 – 12

12 - 30

30 - 50

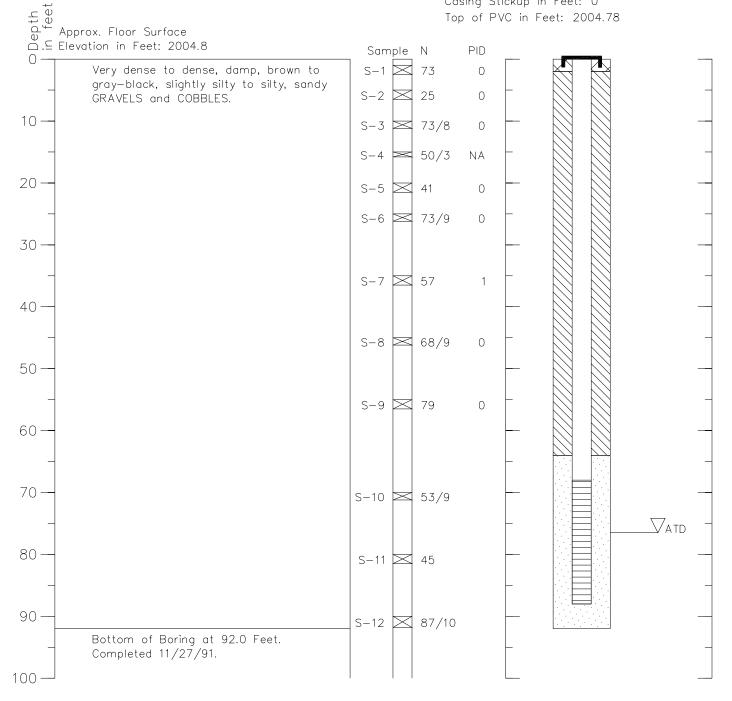
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Geologic Log

Monitoring Well Design

Casing Stickup in Feet: 0 Top of PVC in Feet: 2004.78



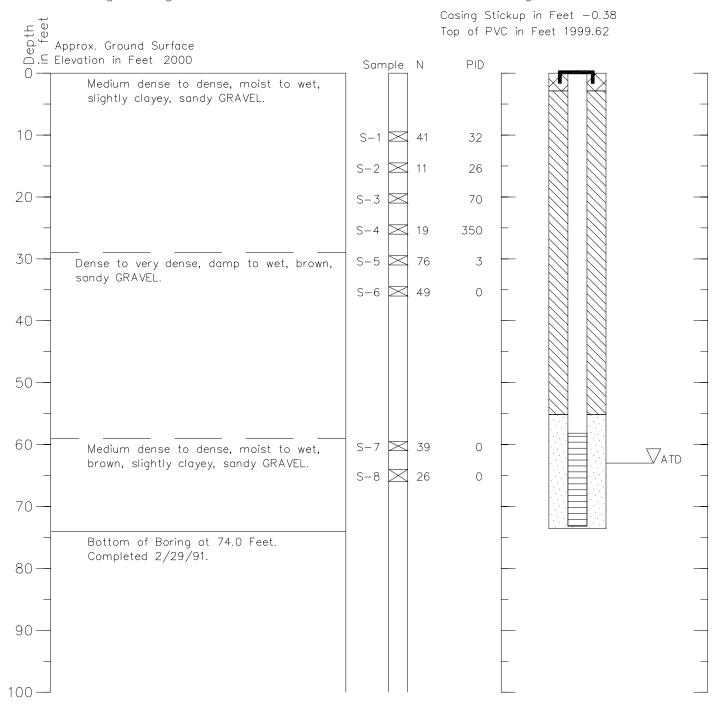
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



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Geologic Log

Monitoring Well Design



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



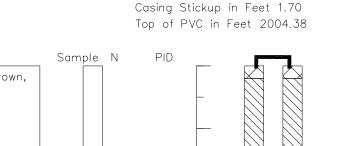
hel 4/14/03 1=1 264476 logs 01.dwg

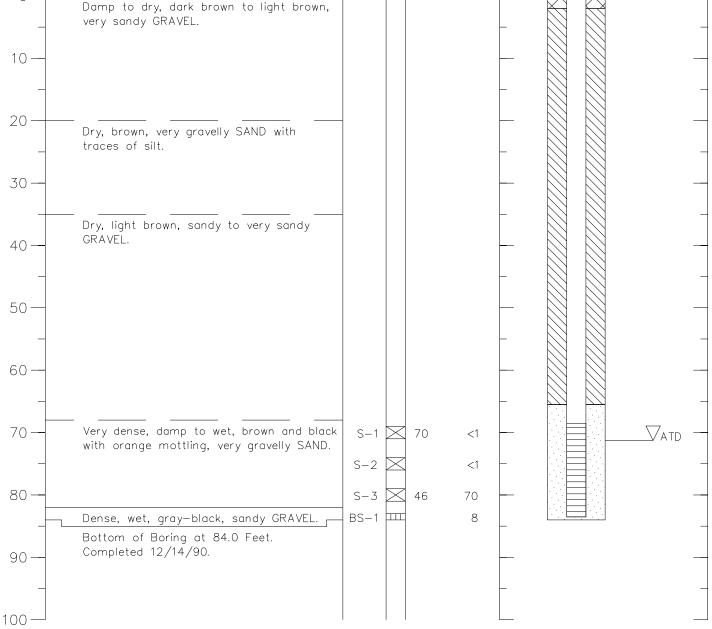
Geologic Log

de de g.⊆ Elevation in Feet 2002.7

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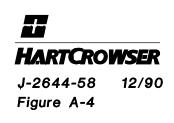
Monitoring Well Design





1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

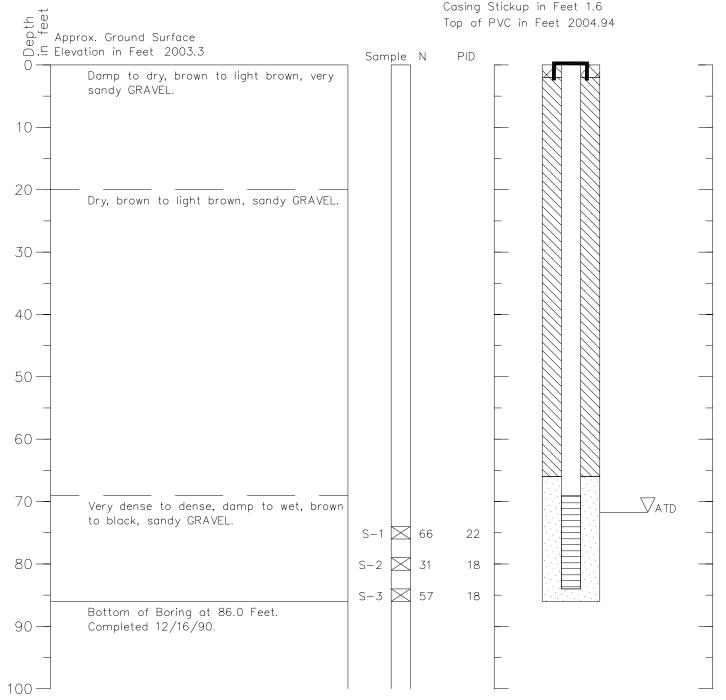


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Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.6 Top of PVC in Feet 2004.94



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

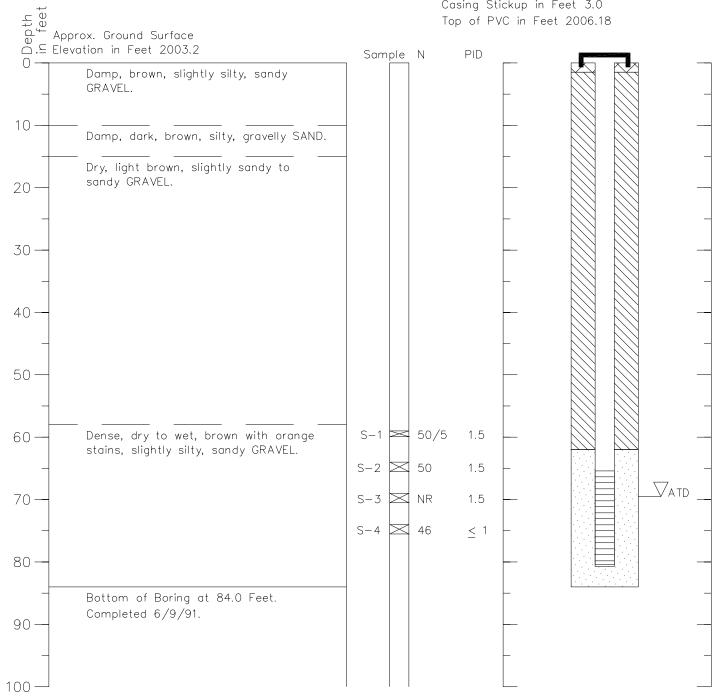


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Geologic Log

Monitoring Well Design

Casing Stickup in Feet 3.0 Top of PVC in Feet 2006.18



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- NR: Not recorded due to repositioning of sampler.



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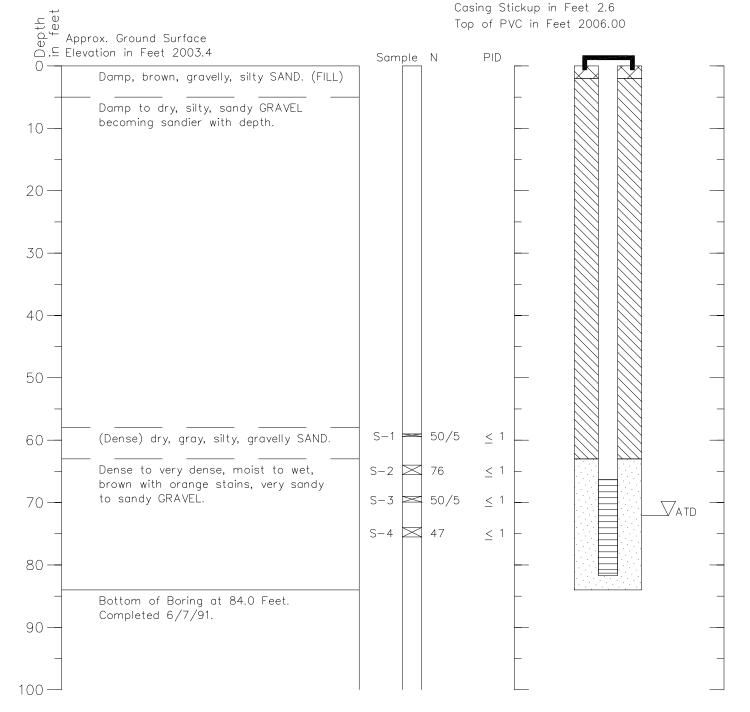
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Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.6 Top of PVC in Feet 2006.00



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



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Geologic Log

Monitoring Well Design Casing Stickup in Feet: 2.4 Top of PVC in Feet 2005. 89

Depth in Feet	Approximate Ground Surface Elevation in Feet: 2003.5	Sample		N PID	
0	Dry, brown, sandy GRAVEL.				
5		S-1	Ш	0	
-	Dry, brown, slightly silty, sandy GRAVEL.				
10		5-2		0	
-					
15-		5-3		0	
20-		S-4		0	
-					
25-		S-5		0	
-	Dry, brown, slightly silty, gravelly SAND.				
30-		S-6	Ш	0	
-	Dry, brown, slightly silty, sandy GRAVEL.				
35- -		5-7	Ш	0	
-					
40-	— Grades coarser.	S-8	Ш	0	
-					
45-		5-9	Ш	0	
-					
50-	]				

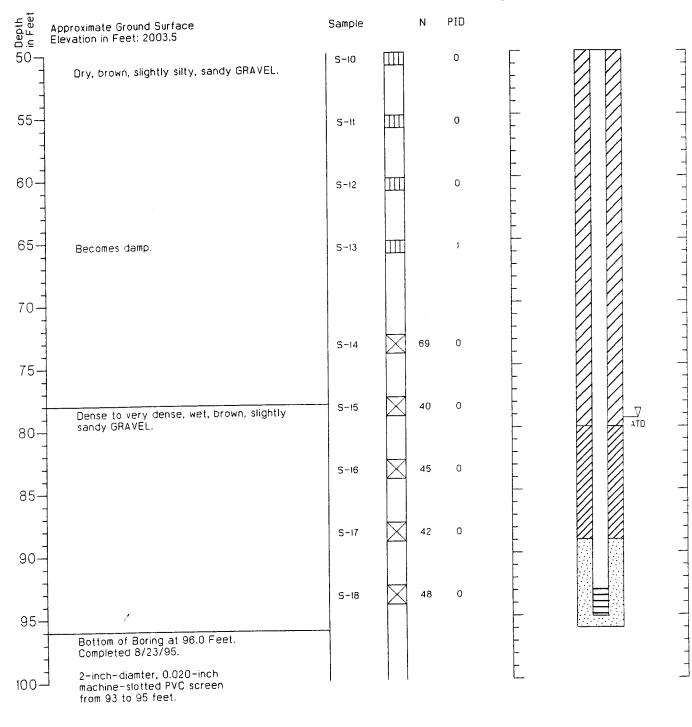
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive
- and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

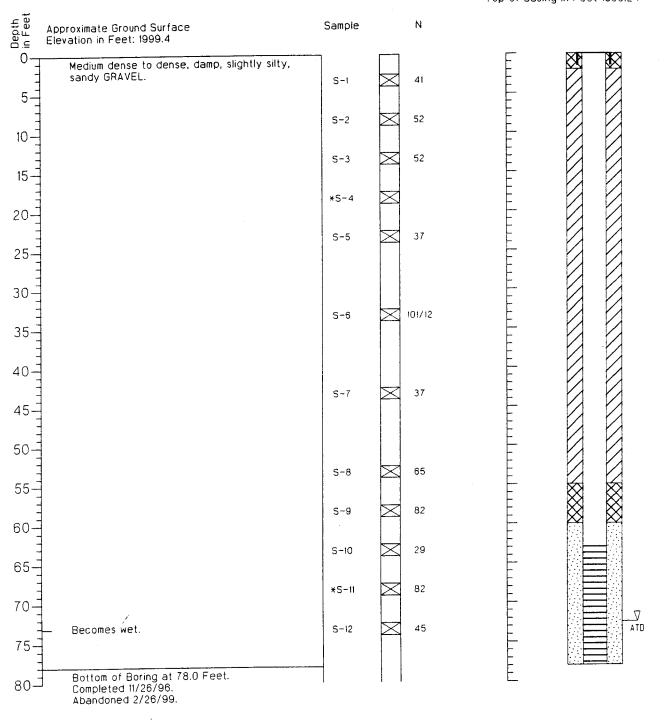
Monitoring Well Design Casing Stickup in Feet: 2.4 Top of PVC in Feet 2005.89



- Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log



 Refer to Figure A-1 for explanation of descriptions and symbols.

- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



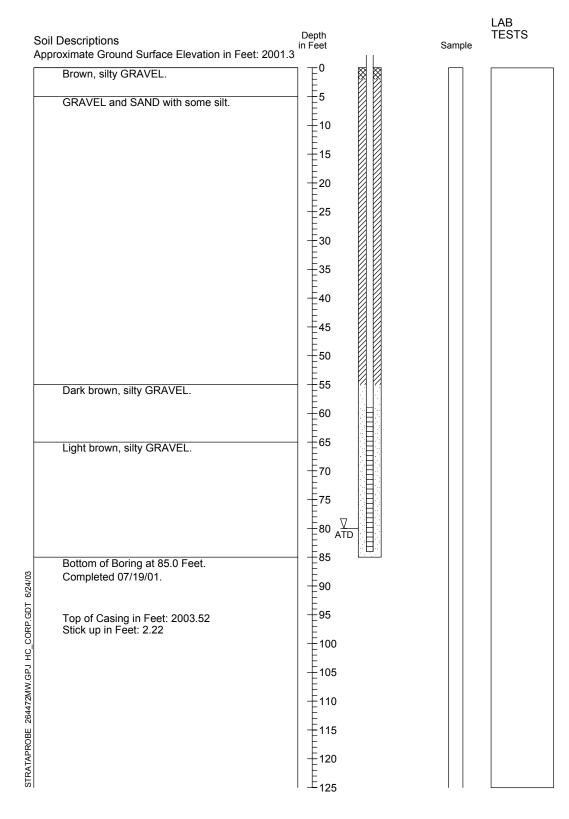
Monitoring Well Design Casing Stickup in Feet: -0.16 Top of Casing in Feet 1999.24

Soil Descriptions Approx. Ground Surface Elevation in Feet: 1999.1	Depth in Feet	LAB TESTS Sample
Light brown SAND and GRAVEL.	-5 -10	
Dark brown SILT and GRAVEL.	— F 88	
Bottom of Boring at 88.0 Feet. Completed 02/26/99. Casing Stickup in Feet: 2.78 Top of Casing in Feet: 2001.88	-15 -20 -25 -30 -35 -40 -45 -55 -60 -65 -70 -75 -80 -85	
Bottom of Boring at 88.0 Feet. Completed 02/26/99.	= 90  95	
Casing Stickup in Feet: 2.78 Top of Casing in Feet: 2001.88	100	



- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

### Monitoring Well Log HL-MW-7S



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



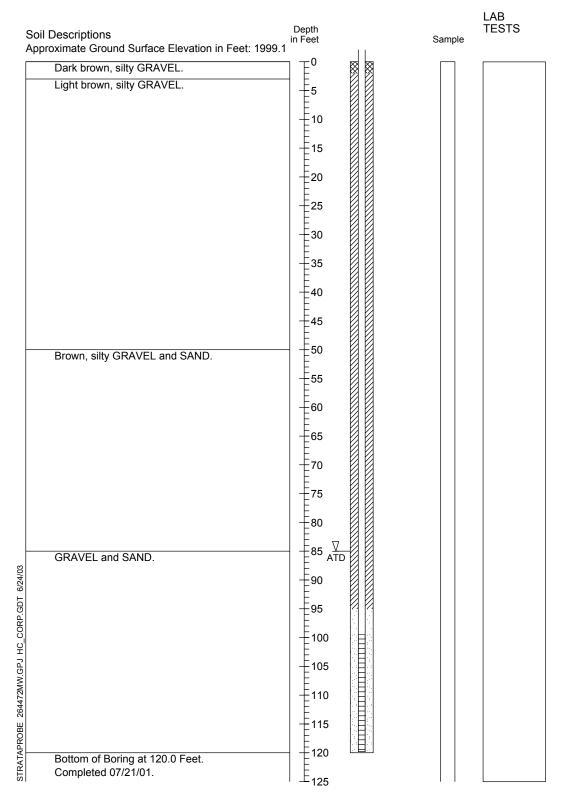
### Monitoring Well Log HL-MW-8D

Soil Descriptions Approximate Ground Surface Elevation in Feet: 2001	Depth in Feet .5	LAB TESTS Sample
Brown, silty GRAVEL and SAND.	∃ E° ₿₿	
Light brown GRAVEL and SAND with trace silt.	-5 +10 +15 +20 -25 +30 +35 +40 +45 -50	
Dark brown, silty GRAVEL.		
Light brown, silty GRAVEL.		
GRAVEL and SAND. GRAVEL and SAND. GRAVEL and SAND. GRAVEL and SAND. Top of Boring at 105.0 Feet. Completed 07/18/01. Top of Casing in Feet: 2003.40 Stick up in Feet: 1.9		
Bottom of Boring at 105.0 Feet. Completed 07/18/01.		
Top of Casing in Feet: 2003.40 Stick up in Feet: 1.9	-115 -120 -125	

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



### Monitoring Well Log HL-MW-9D

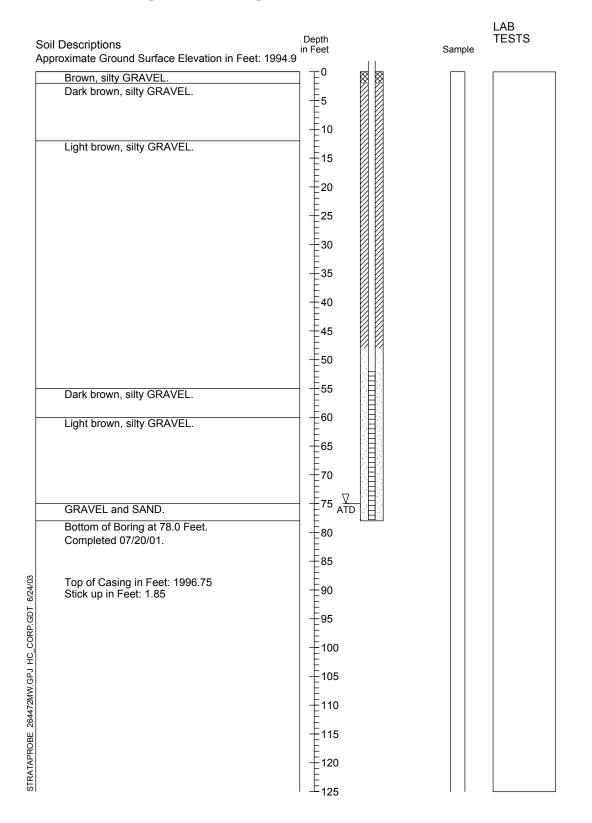


Top of Casing in Feet: 2001.0 Stick up in Feet: 1.9

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Groundwater rever, if indicated, is at time of driving (CFD) of rotate specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



### Monitoring Well Log HL-MW-10S



**HARTCROWSER** 2644-72 07/01 Figure A-14

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.

### Monitoring Well Log HL-MW-11D

il Descriptions proximate Ground Surface Elevation in Fee	Depth in Feet	LAB TESTS Sample
Brown, silty GRAVEL.		
Dark brown, silty GRAVEL.		
,,,	-5	
Light brown, silty GRAVEL.	-15	
	- <u>E</u> 20	
	-25	
	-30	
	÷40	
	45	
Dark brown, silty GRAVEL.		
Dark brown, sitty GRAVEE.		
	-55	
Light brown, silty GRAVEL.		
	-65	
	- <u>-</u> 70	
GRAVEL and SAND.	<b>+</b> 75 <u>↓</u>	
	95	
Bottom of Boring at 98.0 Feet.		
Completed 07/20/01.	<u></u>	
•	-105	
Top of Casing in Feet: 1996.69	<u>–</u> 110	
Stick up in Feet: 1.79	I E	
	115	
	120	
	「上125	

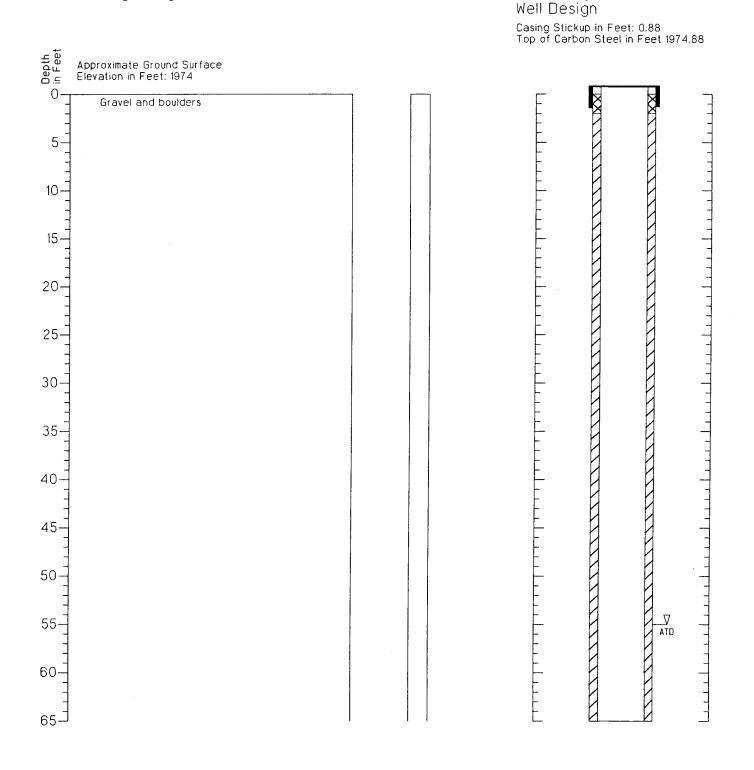


1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
 Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.

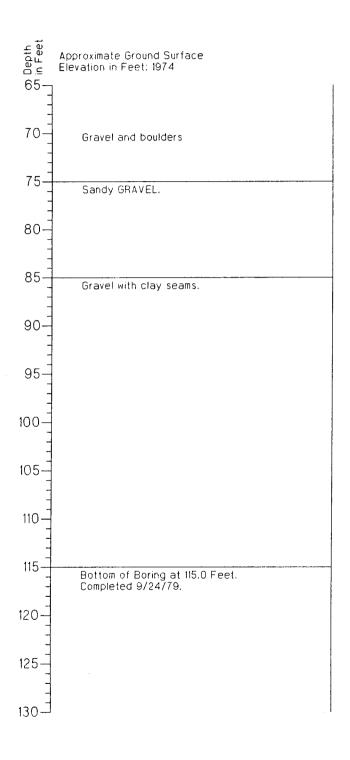
Geologic Log

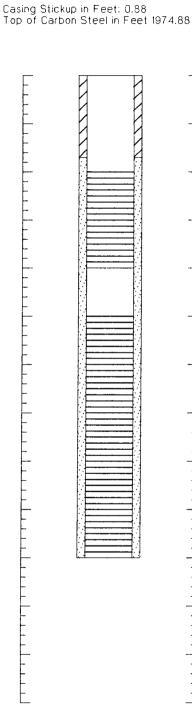


- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive
- and actual changes may be gradual.
   Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log





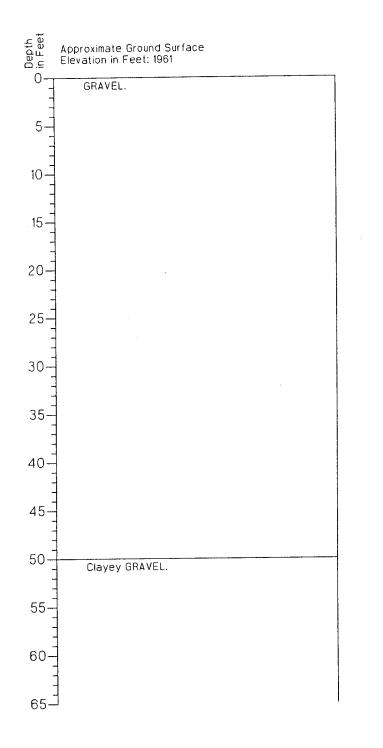
Monitoring Well Design

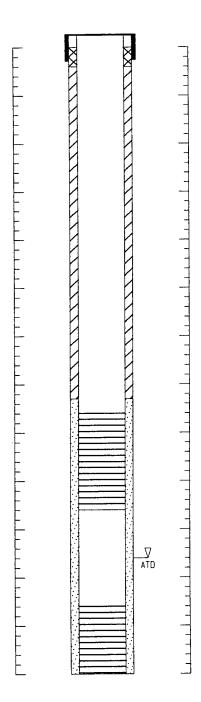
- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design Casing Stickup in Feet: 1.37 Top of Carbon Steel in Feet 1962.37

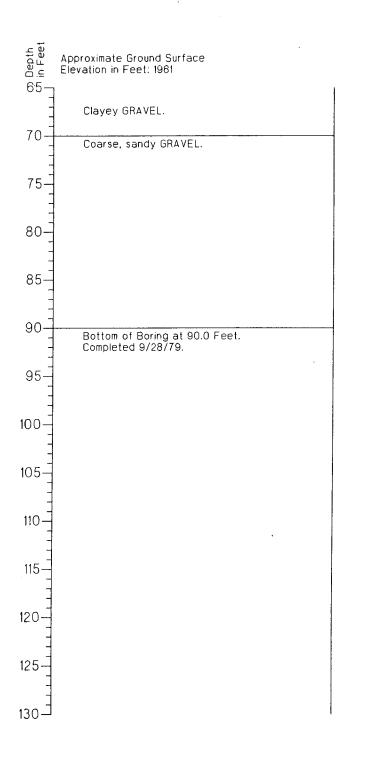






- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
- (ATD) or for date specified. Level may vary with time.

Geologic Log



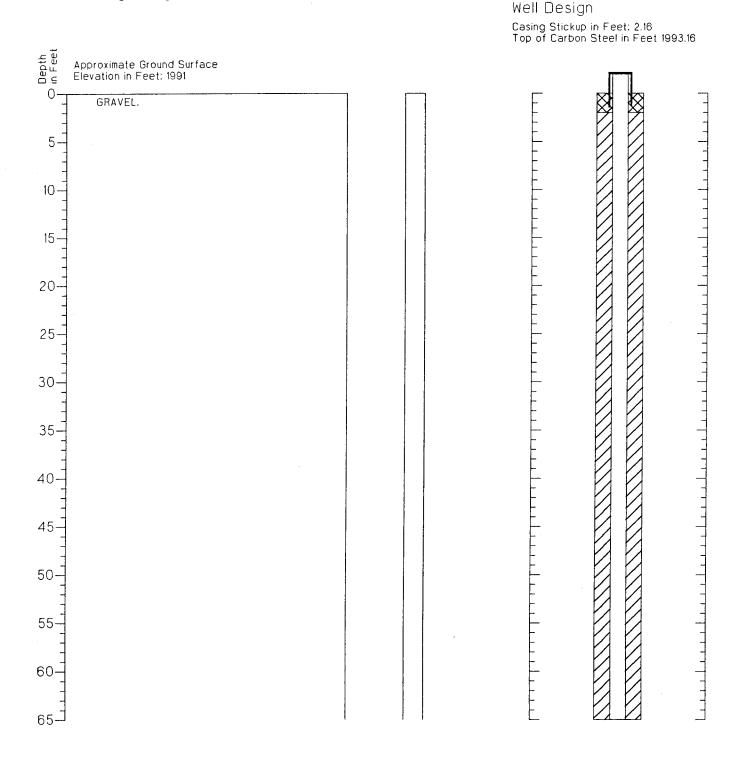
Monitoring Well Design Casing Stickup in Feet: 1.37 Top of Carbon Steel in Feet 1962.37



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Geologic Log

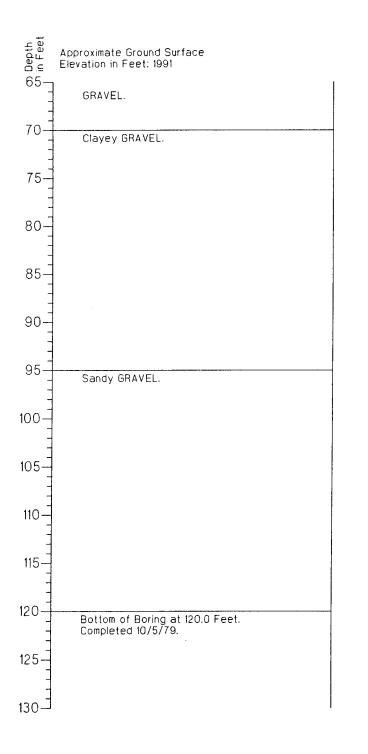


1. Refer to Figure A-1 for explanation of descriptions and symbols.

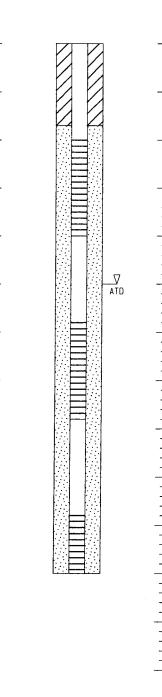
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log



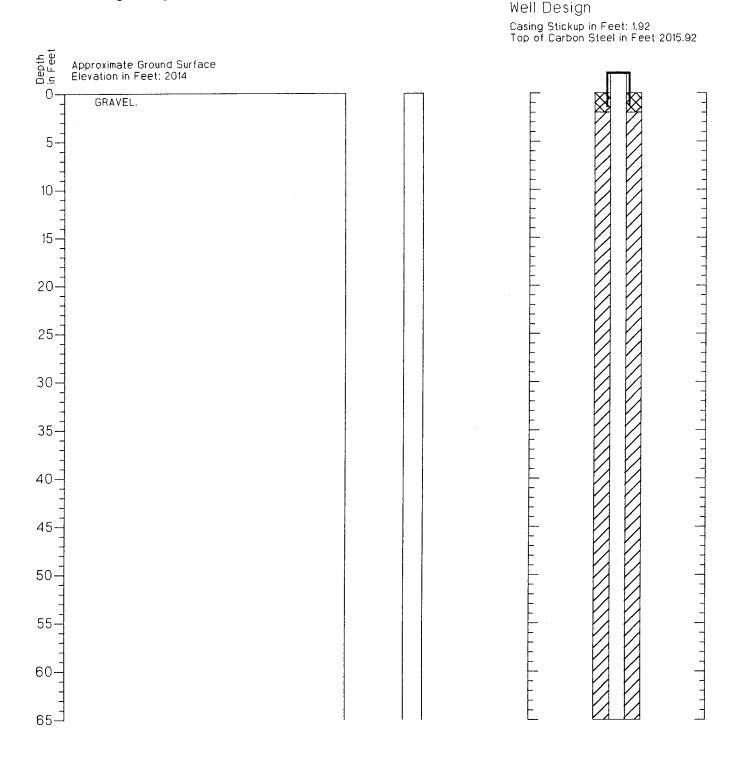
Monitoring Well Design Casing Stickup in Feet: 2.16 Top of Carbon Steel in Feet 1993.16



- Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

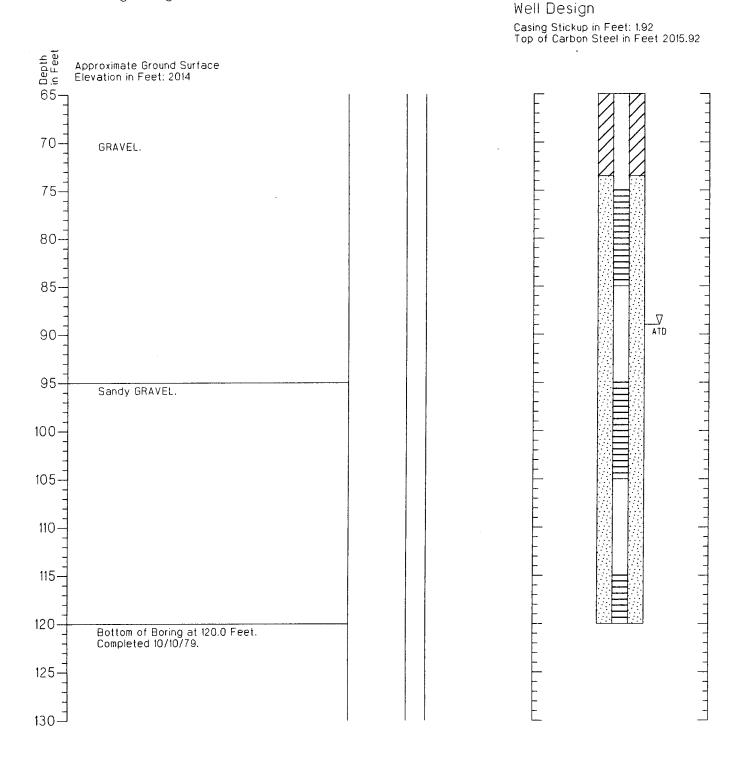


1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

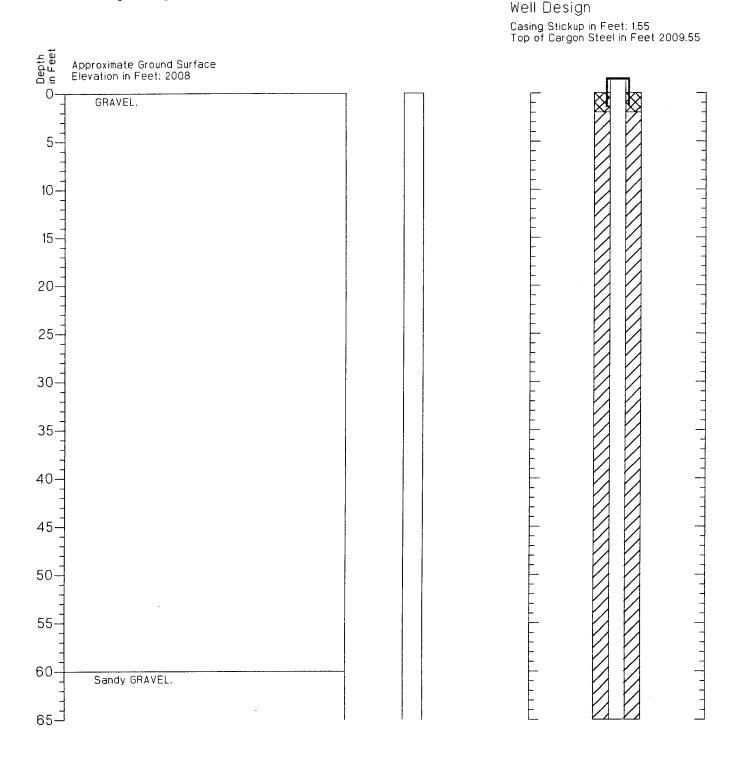


1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
- (ATD) or for date specified. Level may vary with time.



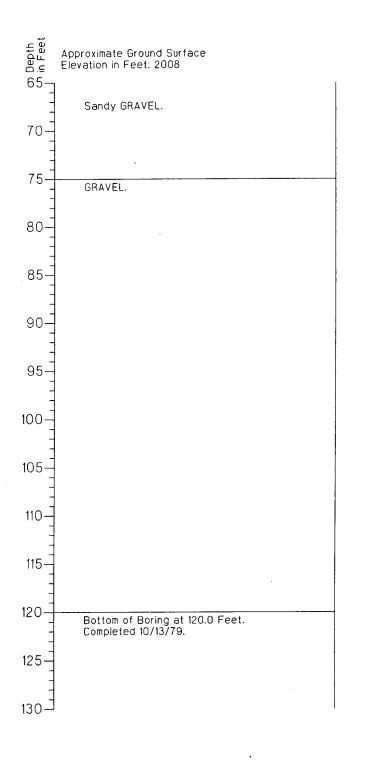
Geologic Log

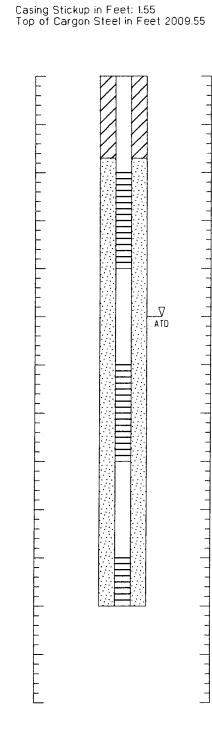


- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive
- and actual changes may be gradual.
   Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER J-2644-58 10/79 Figure A-20 1/2

Geologic Log





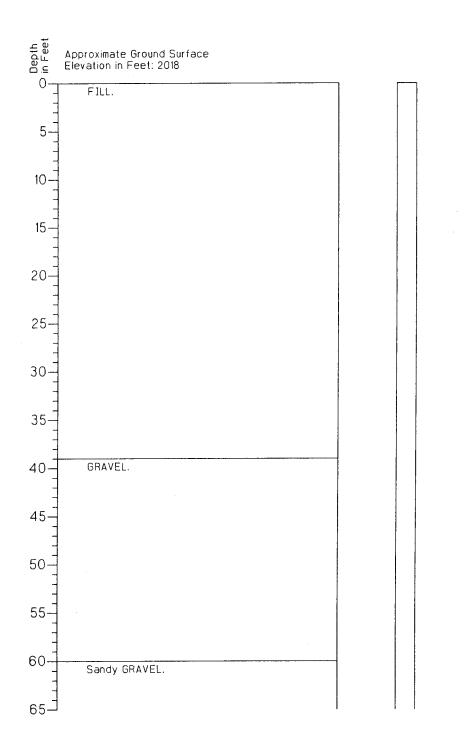
Monitoring

Well Design

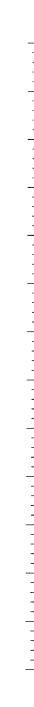
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log



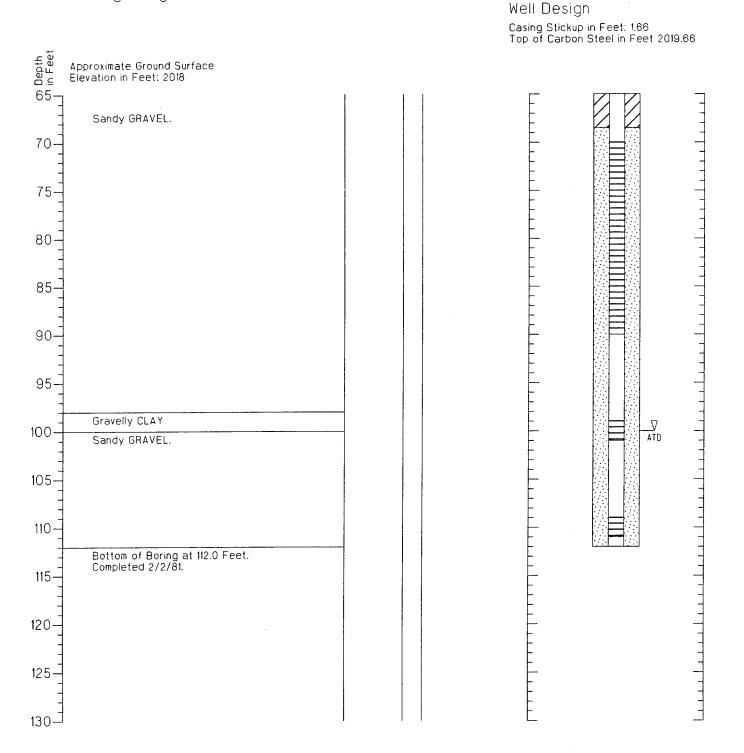
Monitoring Well Design Casing Stickup in Feet: 1.66 Top of Carbon Steel in Feet 2019.66



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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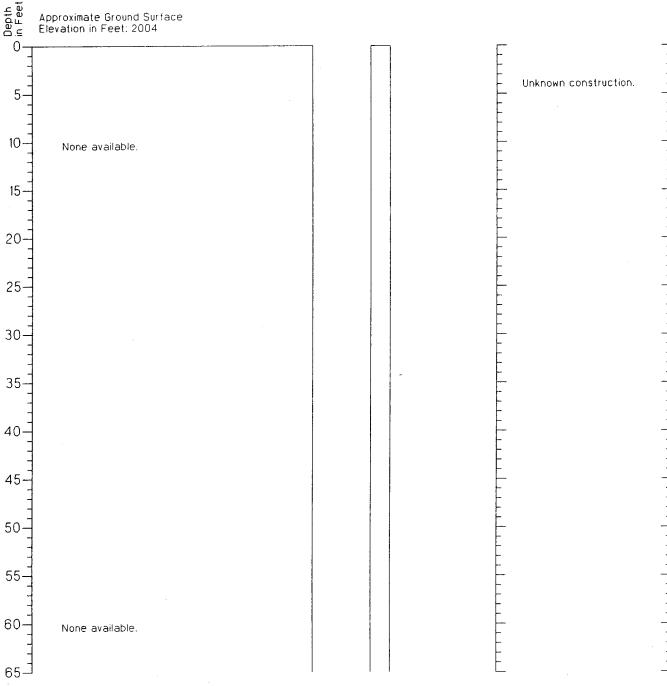
Geologic Log



- I. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

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Geologic Log



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Monitoring

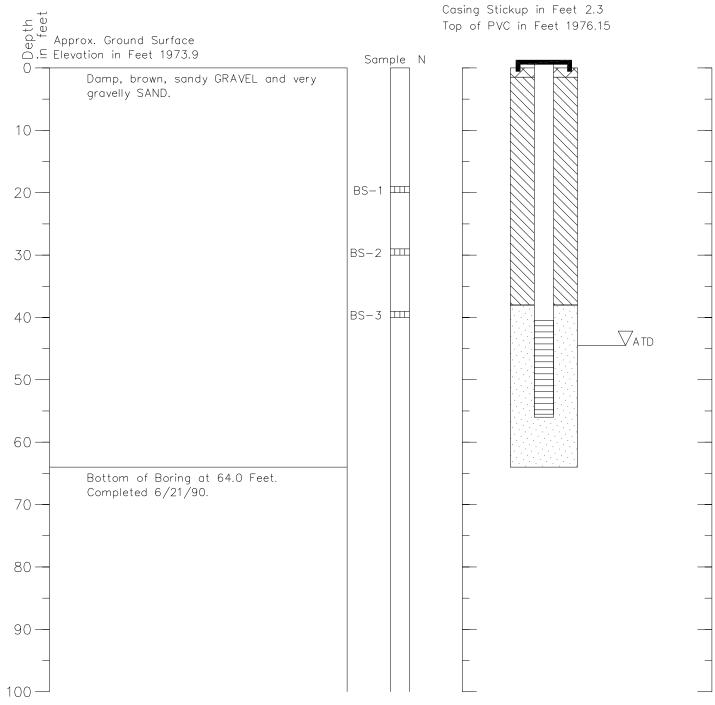
Well Design

Casing Stickup in Feet: 0.9 Top of PVC in Feet 2004.9

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.3 Top of PVC in Feet 1976.15



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

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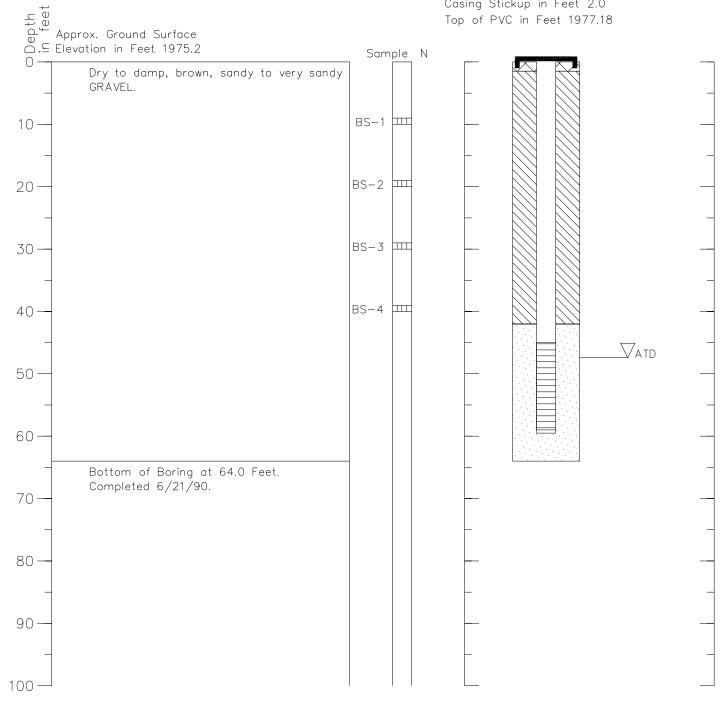
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.0 Top of PVC in Feet 1977.18



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

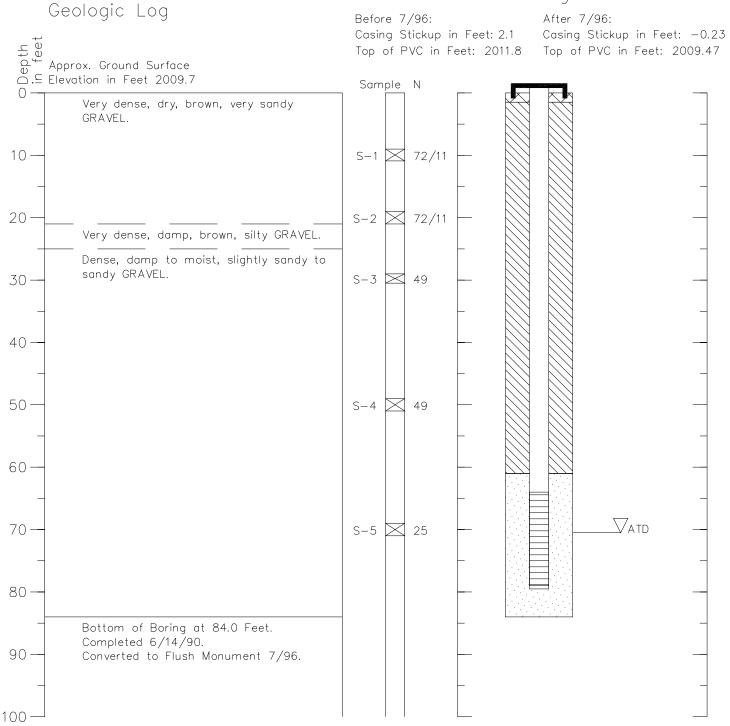
hel 4/14/03 1=1

264476 logs 07.dwg

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



### Monitoring Well Design



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

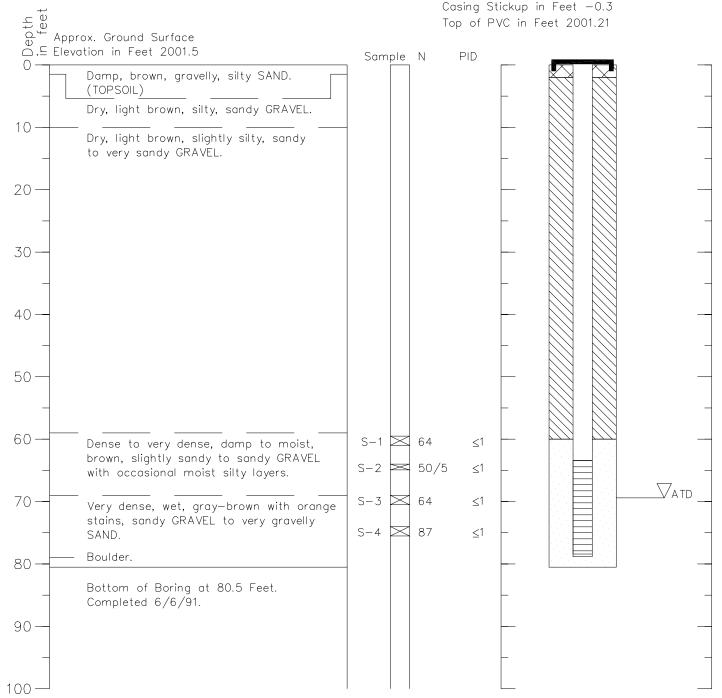


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Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.3 Top of PVC in Feet 2001.21



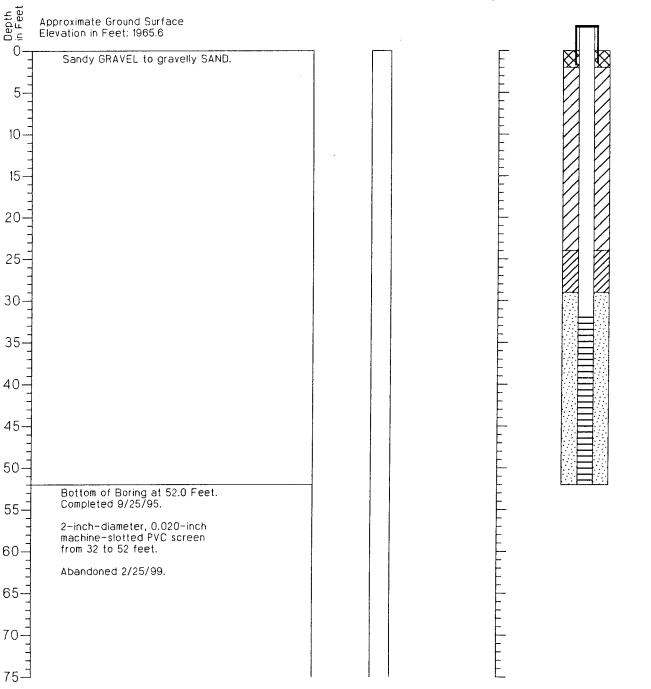
1. Refer to Figure A-1 for explanation of descriptions and symbols.

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Geologic Log

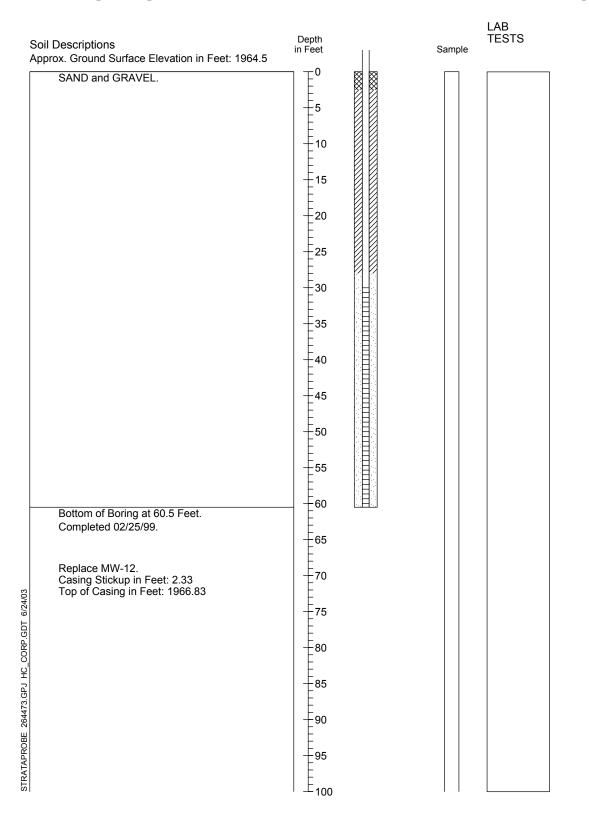


 Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Monitoring Well Design Casing Stickup in Feet: 2.88 Top of PVC in Feet 1968.48



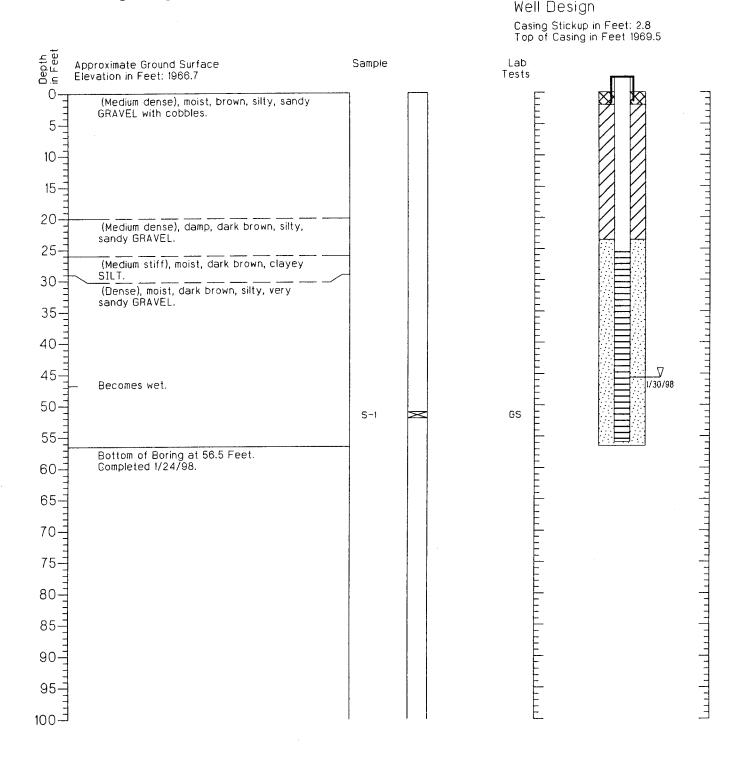




1. Refer to Figure A-1 for explanation of descriptions and symbols.

- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Geologic Log



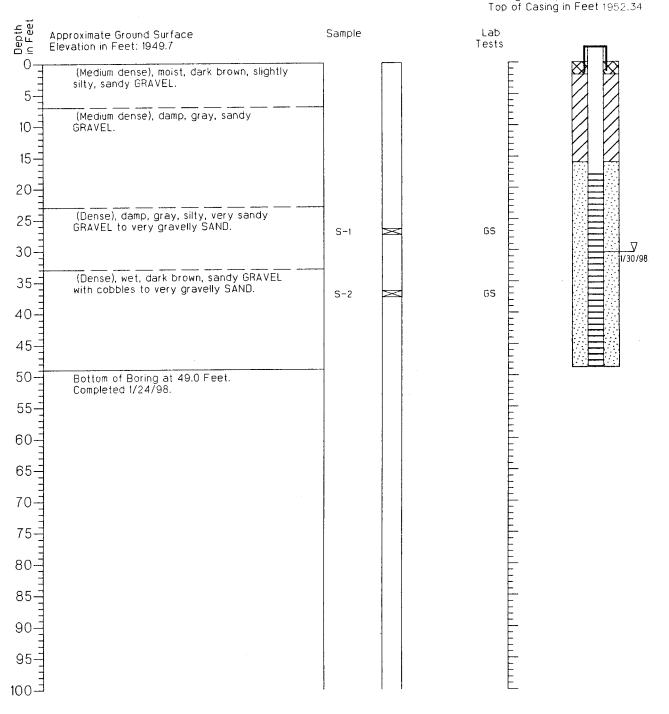
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Monitoring

Geologic Log



 Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

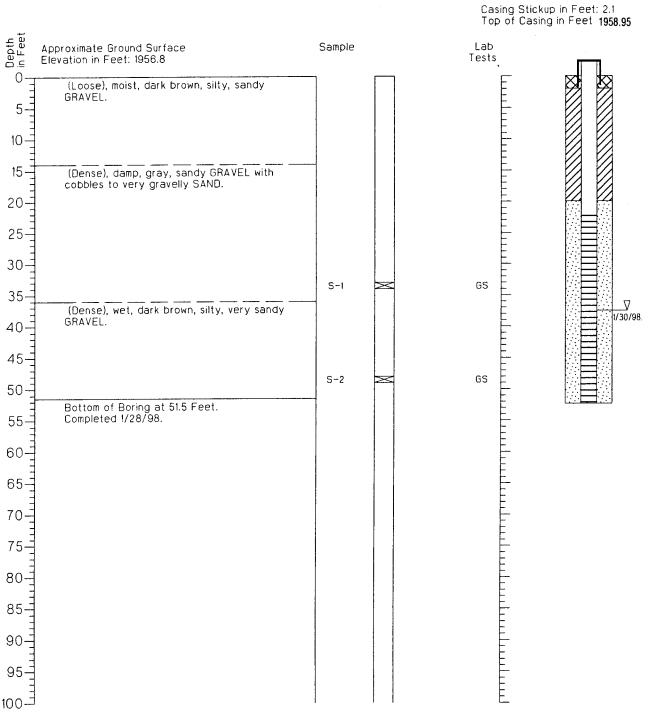


Monitoring

Well Design

Casing Stickup in Feet: 2.6

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

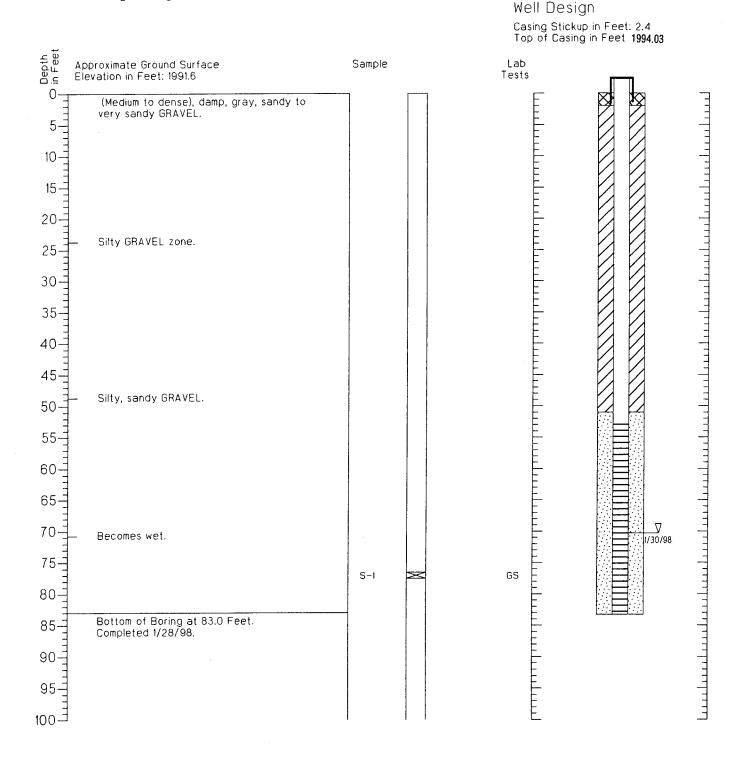
 Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Monitoring

Well Design

Geologic Log



 Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. HARTCROWSER J-2644-66 1/98 Figure A-32

Monitoring

# Monitoring Well Log MW-17S

	Descriptions oximate Ground Surface Elevation in Feet: 1990.9	Depth in Feet	Sample	TESTS
	(Loose), dry, light brown, sandy GRAVEL with cobbles.			
	(Dense), dry, light brown, silty, sandy GRAVEL with cobbles.			
	(Loose), dry, gray-brown, sandy GRAVEL.			
	(Dense), dry, light brown, silty, sandy GRAVEL with cobbles.	-25		
	(Dense), dry, medium brown, silt-bound GRAVEL with cobbles.	30		
$\left[ \right]$	(Loose), moist, dark brown, sandy GRAVEL.	40		
	(Dense), dry, light gray-brown, silty GRAVEL with cobbles.	45		
	(Dense), dry, dark brown, silt-bound GRAVEL.	50		
	(Loose), dry, light brown, sandy GRAVEL with cobbles.	60		
	(Dense), dry, dark brown, silt-bound GRAVEL.			
K	(Loose), dry, light brown, sandy GRAVEL with cobbles.	 70		
	(Loose), wet, dark brown, sandy GRAVEL with cobbles.			
	Boulder.	_ <del>_</del> 85		
6/24/03	(Loose), wet, dark brown, sandy GRAVEL with cobbles.			
CORP.GDT	Bottom of Boring at 90.0 Feet. Completed 06/26/01.			
STRATAPROBE 264472MW.GPJ HC_	Top of Casing in Feet: 1992.81 Stick up in Feet: 1.91	- 105 - 110 - 110 - 115 - 120		
STRAT				

**HARTCROWSER** 2644-72 06/01 Figure A-33

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.

## Monitoring Well Log MW-18D

Soil Descriptions Approximate Ground Surface Elevation in Feet: 1990	Depth in Feet	Sample	LAB TESTS
(Loose), dry, light brown, sandy GRAVEL			
(Dense), dry, light brown, silt-bound			
GRAVEL with cobbles.	-10		
(Loose), dry, gray-brown, sandy GRAVEL with cobbles.			
	25		
(Dense), dry, light brown, silt-bound GRAVEL.			
(Dense), dry, medium brown, silty GRAVEL with cobbles.	35		
(Loose), moist, dark brown, sandy GRAVEL.	40		
(Loose), moist, gray brown, sandy GRAVEL.	-45		
(Dense), dry, dark brown, silt-bound GRAVEL with cobbles.	50		
(Loose), dry, light brown, sandy GRAVEL with cobbles.			
(Dense), dry, dark brown, silt-bound GRAVEL.			
(Loose), moist, dark brown, sandy GRAVEL with cobbles.			
(Loose), wet, dark brown, sandy GRAVEL with cobbles.	75 ATD		
Smear zone with black staining to 85 feet.			
Tight, wet, medium brown, silty, sandy GRAVEL.			
Bottom of Boring at 100.0 Feet. Completed 06/27/01.	100		
Bottom of Boring at 100.0 Feet. Completed 06/27/01. Top of Casing in Feet: 1992.73 Stick up in Feet: 1.93	-110 -115 -120		
	120 125		

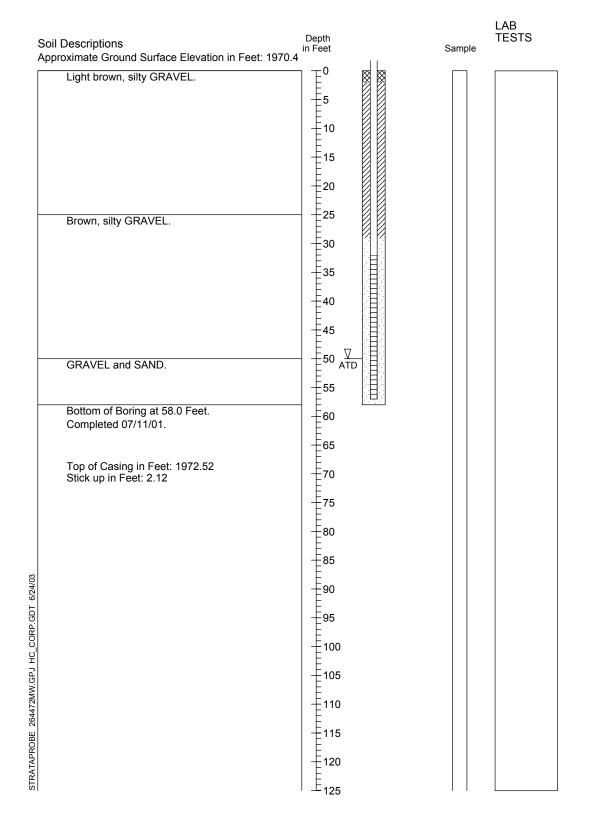
1. Refer to Figure A-1 for explanation of descriptions and symbols. 2. Soil descriptions and stratum lines are interpretive and actual changes

- may be gradual.

Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
 Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



### Monitoring Well Log MW-19S

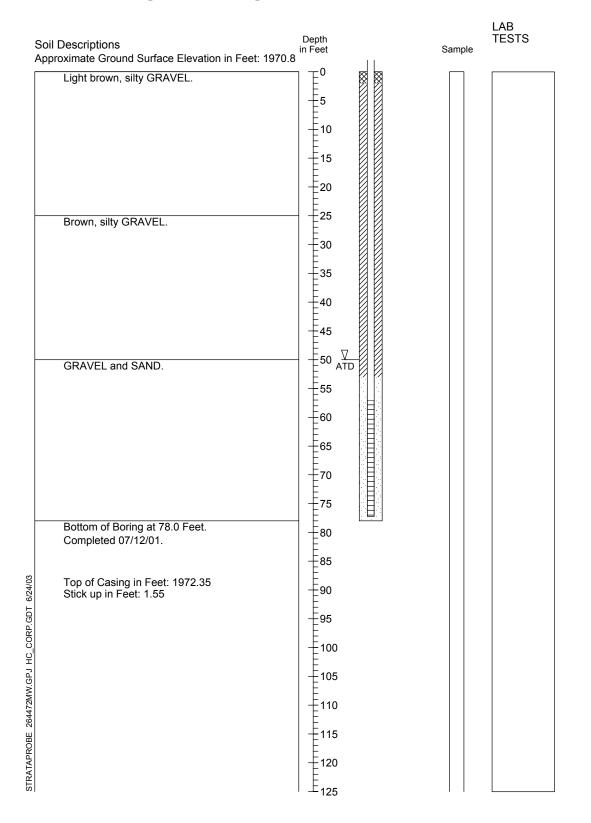


1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



### Monitoring Well Log MW-20D



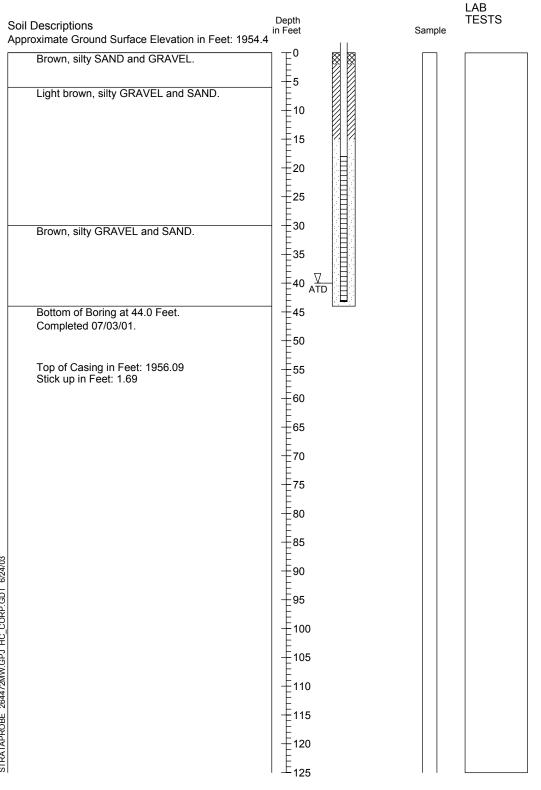
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date

 Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
 Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



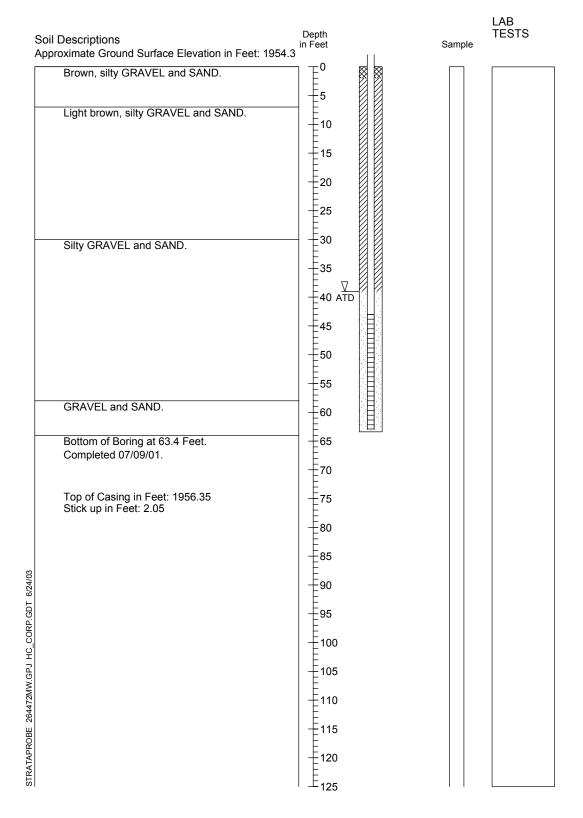
### Monitoring Well Log MW-21S



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



### Monitoring Well Log MW-22D



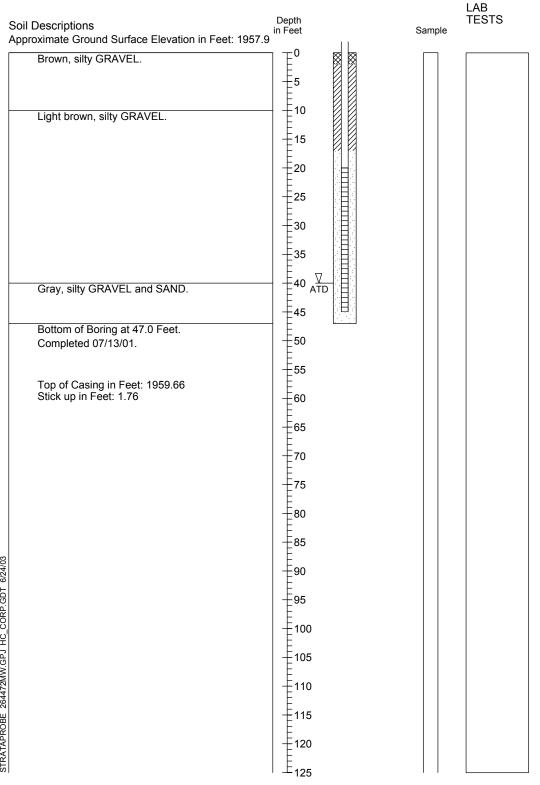
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date

 Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
 Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



### Monitoring Well Log MW-23S



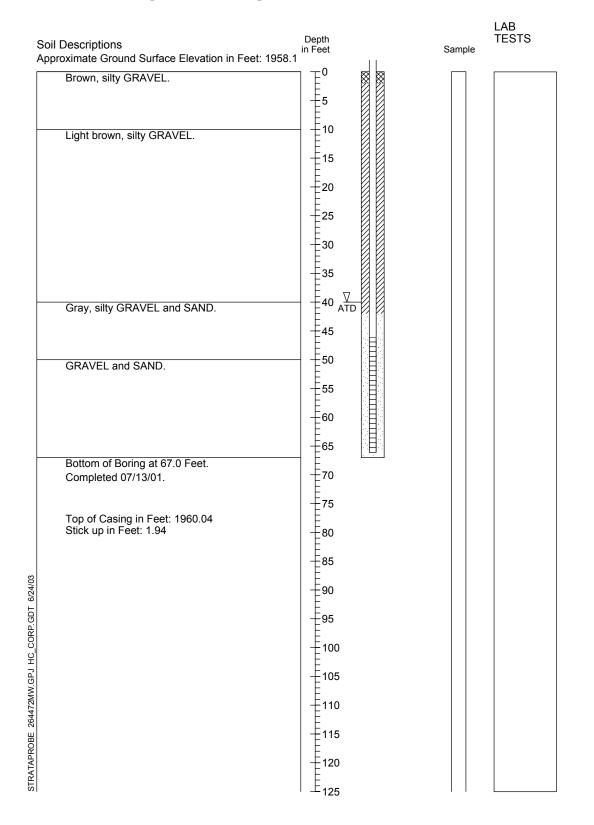
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.



STRATAPROBE 264472MW.GPJ HC\_CORP.GDT 6/24/03

### Monitoring Well Log MW-24D



**HARTCROWSER** 2644-72 07/01 Figure A-40

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwate rever, in indicated, is at time of drining (ATD) of for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.

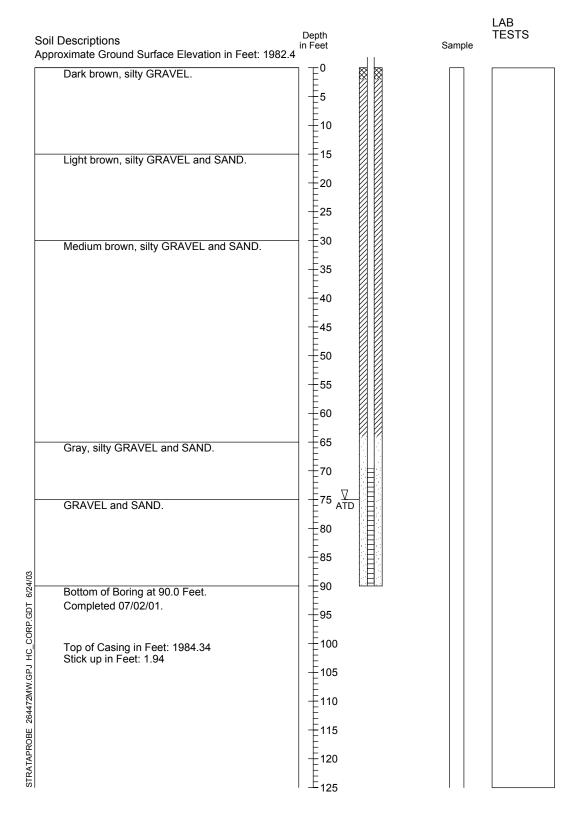
# Monitoring Well Log MW-25S

Soil Descriptions Approximate Ground Surface Elevation in Feet: 1982.0	Depth in Feet	Sample	LAB TESTS
(Loose), dry, light brown, silty, sandy GRAVEL with cobbles.			
(Loose), dry, light brown, sandy GRAVEL with cobbles.	10		
(Loose), dry, medium brown, silty, sandy GRAVEL with cobbles.	-15 -20		
(Loose), dry, light to dark brown, sandy GRAVEL with cobbles.	25		
(Dense), dry, medium brown, silt-bound GRAVEL.	30		
(Loose), moist, medium brown, silty GRAVEL with cobbles.			
(Dense), dry, light brown, silt-bound GRAVEL with cobbles.			
(Loose), moist, dark brown, sandy GRAVEL.	45 <sub>↓</sub>		
(Dense), dry, light brown, silt-bound GRAVEL with cobbles.			
(Loose), moist, dark brown, sandy GRAVEL with cobbles.			
(Dense), dry, dark brown, silt-bound GRAVEL.			
(Loose), dry, dark black-brown, sandy GRAVEL with cobbles.			
(Loose), wet, light gray, sandy GRAVEL with cobbles.			
(Loose), wet, medium to light brown, silt-bound GRAVEL with cobbles. Bottom of Boring at 70.0 Feet. Completed 06/28/01.	70		
Top of Casing in Feet: 1984.10 Stick up in Feet: 2.1			
5 2	+100   =		
	-115		
	120		
	L = 125		



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
   Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.

### Monitoring Well Log MW-26D



**HARTCROWSER** 2644-72 07/01 Figure A-42

1. Refer to Figure A-1 for explanation of descriptions and symbols.

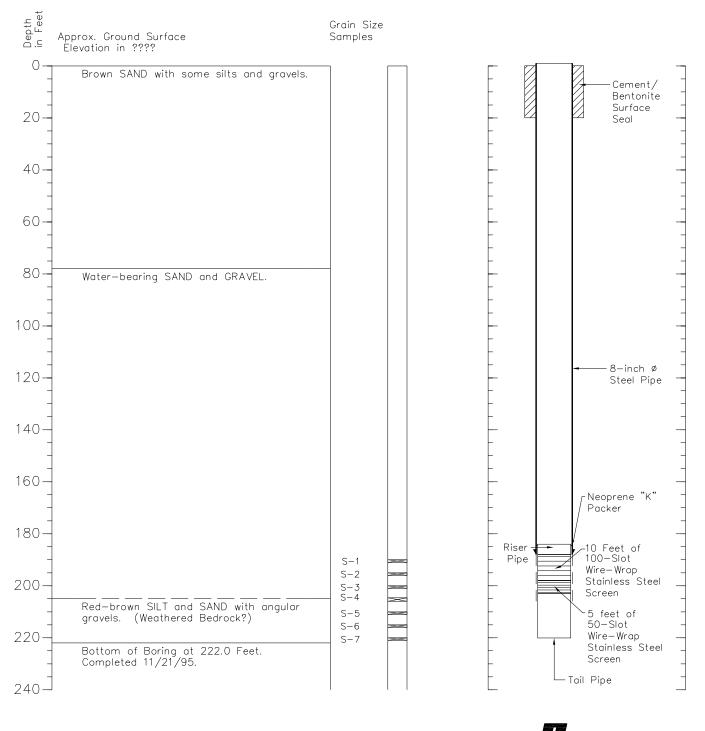
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date

 Groundwater rever, if indicated, is at time of driving (CFD) of rotate specified. Level may vary with time.
 Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and measured stick up. Actual TOC elevation will be surveyed at a later date.

# Boring Log and Construction Data for North Supply Well

Geologic Log

Monitoring Well Design



- Refer to Figure B-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 10.dwg

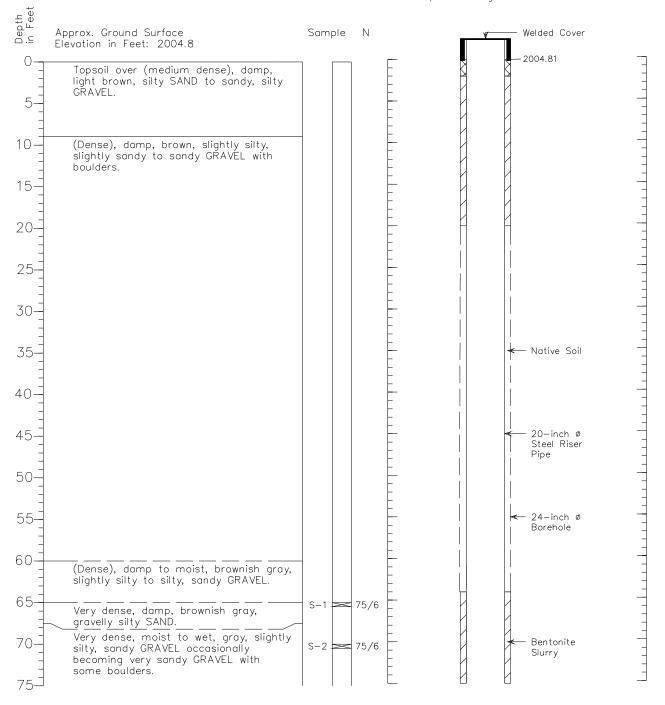
 Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. **HARTCROWSER** J-2644-73 11/95 Figure A-43

### Boring Log and Construction Data for Extraction Well OH-EW-1

Well Design

Geologic Log

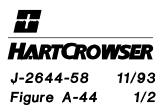
Casing Stickup in Feet: -3.15 Top of Casing in Feet: 2007.95



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling

HEL 4/14/03 1=1 264476 logs 11.dwg

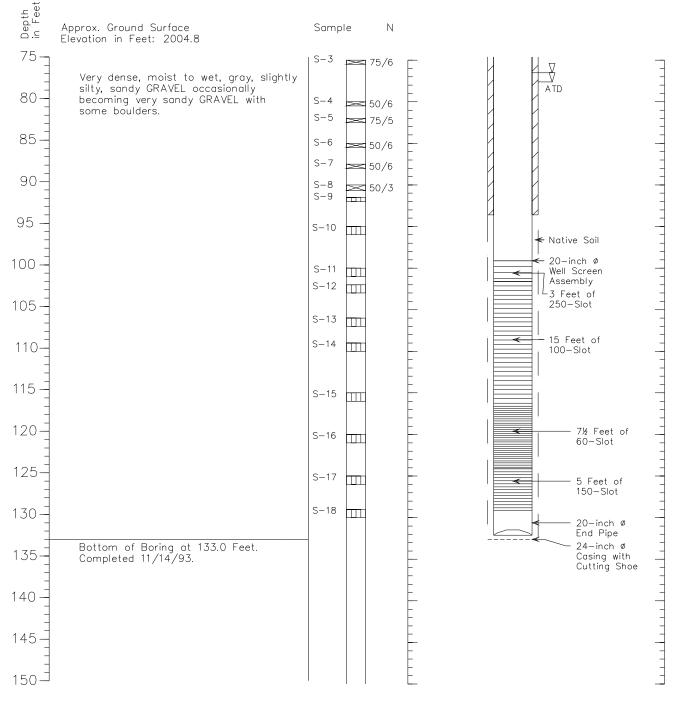
(ATD) or for date specified. Level may vary with time.

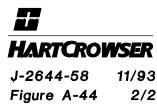


### Boring Log and Construction for Extraction Well OH-EW-1

Geologic Log

Well Design

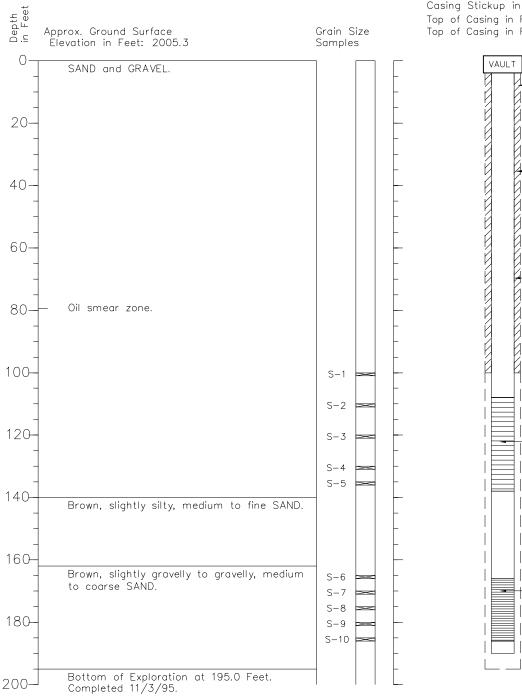




- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

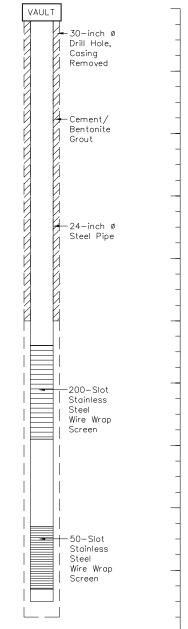
# Boring Log and Construction Data for Extraction Well OH-EW-2

Geologic Log



Well Design

Casing Stickup in Feet: -2.2 Top of Casing in Feet: 2003.1 Top of Casing in Feet: 2000.76 (Post 1996)





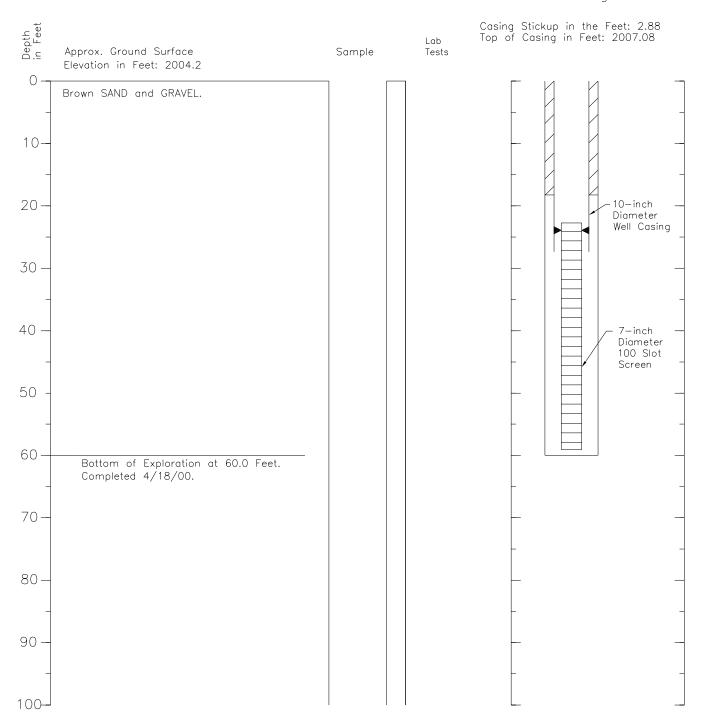
hel 4/14/03 1=1 264476 logs 12.dwg

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log and Construction Data for Recirculation Well OH-EW-2-US

Geologic Log

#### Extraction Well Design

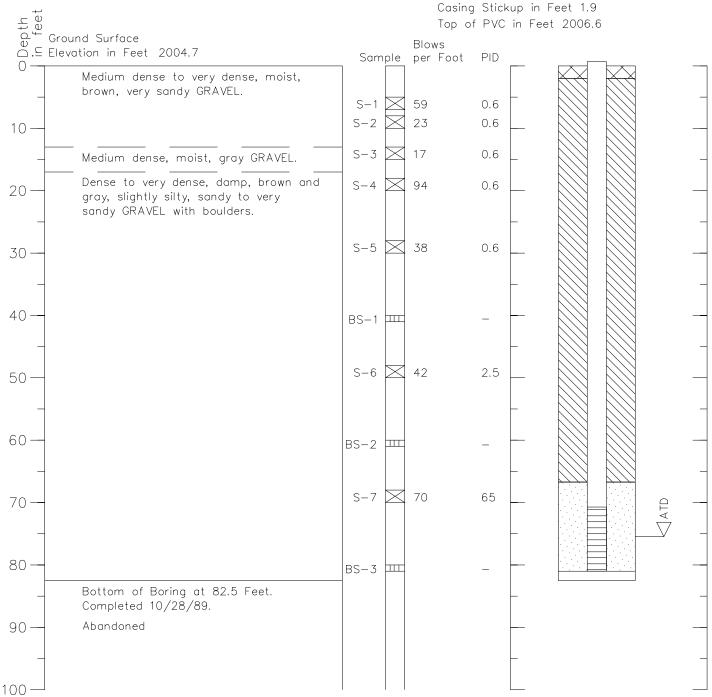


 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.9 Top of PVC in Feet 2006.6



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

HEL 4/14/03 1=1 264476 logs 14.dwg

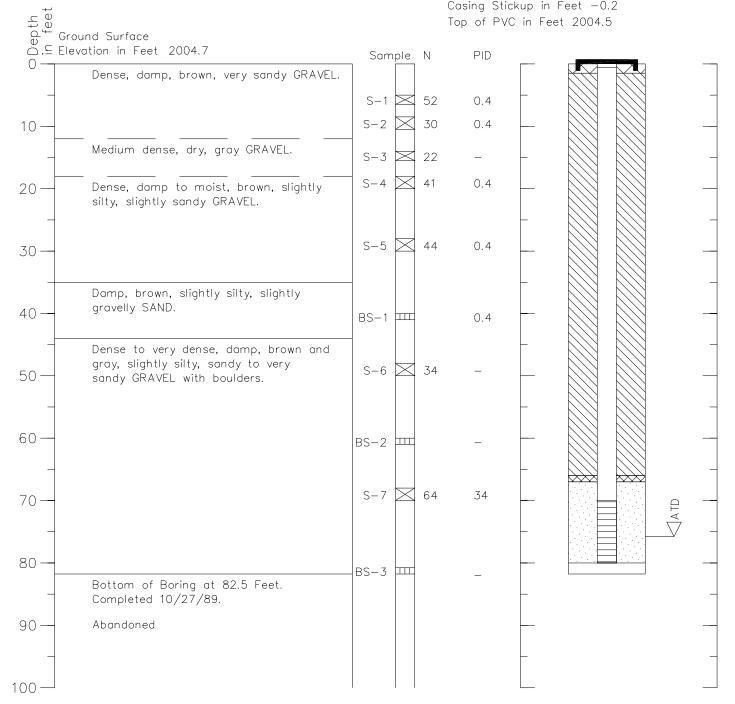
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

-+--HARTCROWSER J-2264-58 10/89 Figure A-47

Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.2Top of PVC in Feet 2004.5



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

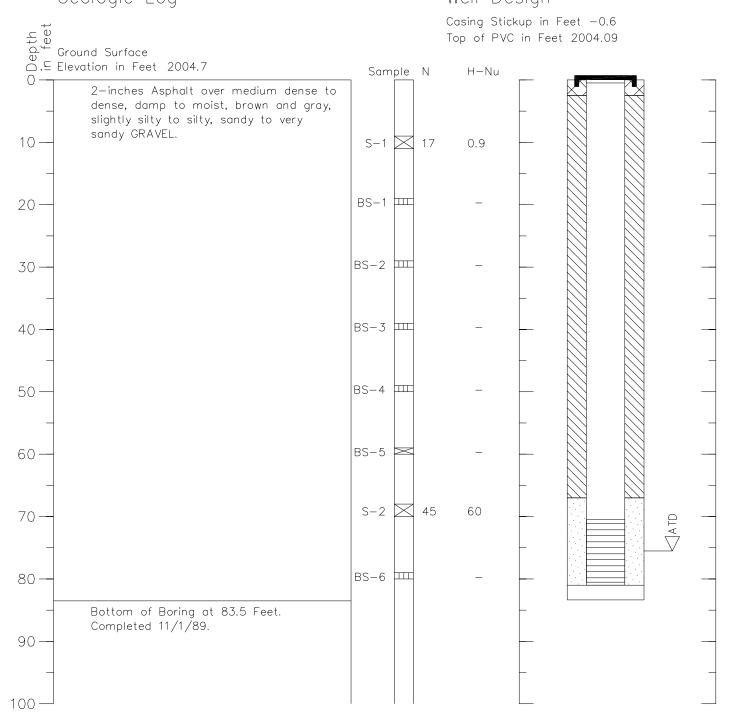
hel 4/14/03 1=1 264476 logs 15.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.6 Top of PVC in Feet 2004.09



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

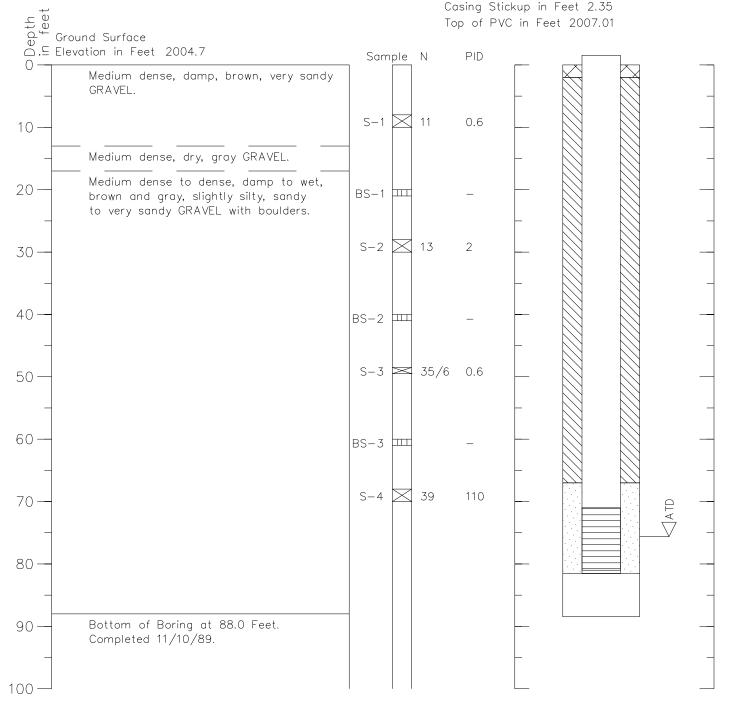
hel 4/14/03 1=1 264476 logs 16.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.35 Top of PVC in Feet 2007.01



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 17.dwg

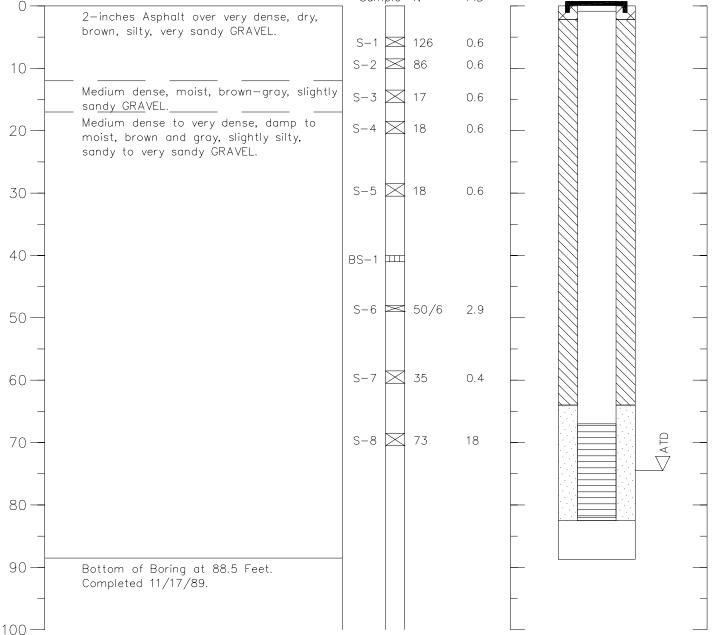


Geologic Log

Ground Surface Generation in Feet 2005.0

Monitoring Well Design

Casing Stickup in Feet -0.45 Top of PVC in Feet 2004.51 PID Sample N S-1 🖂 126 0.6 86 0.6



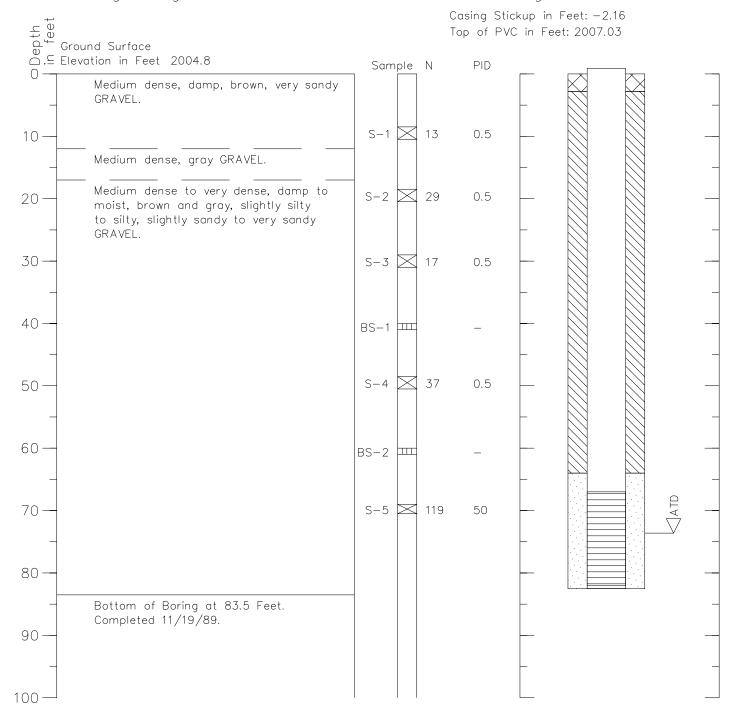
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/03 1=1 264476 logs 18.dwg

Geologic Log

Monitoring Well Design



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

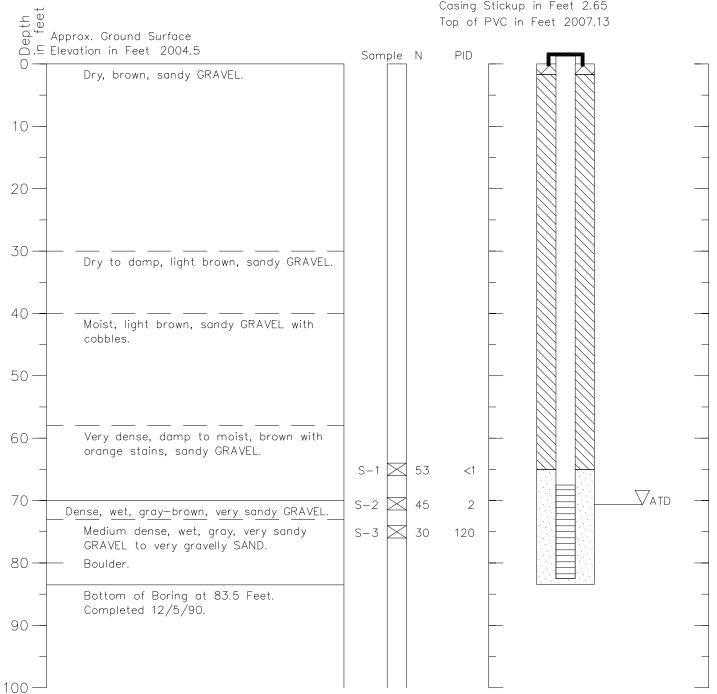


hel 4/14/03 1=1 264476 logs 19.dwg

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.65 Top of PVC in Feet 2007.13



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

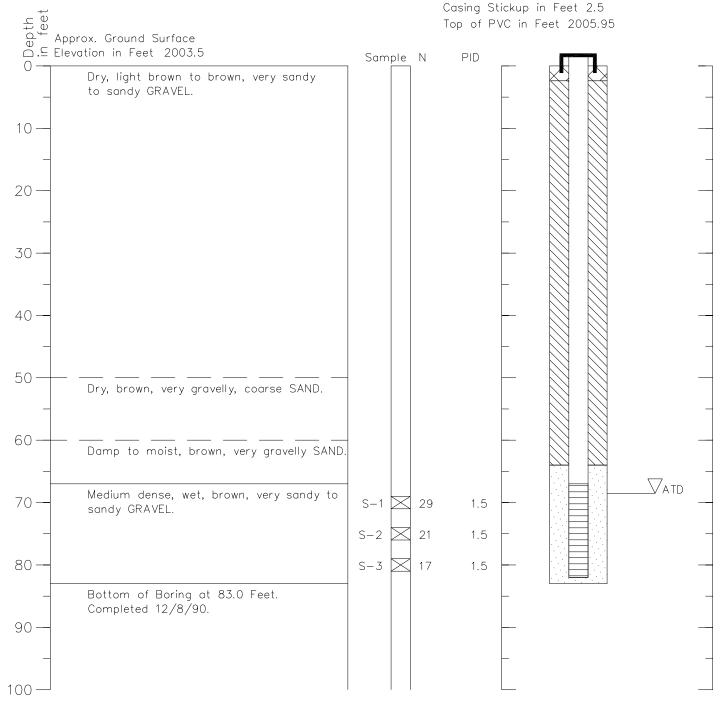
hel 4/14/03 1=1 264476 logs 20.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.5 Top of PVC in Feet 2005.95



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

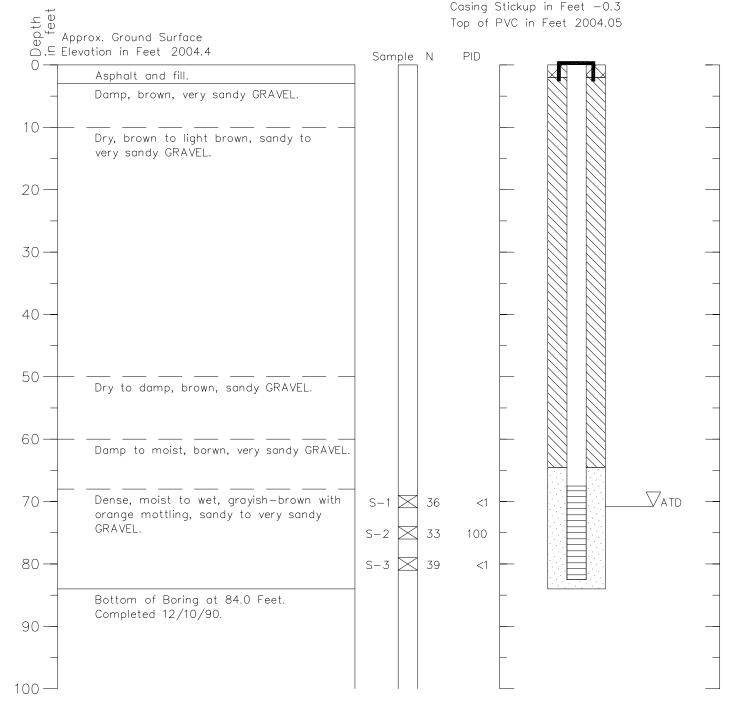
hel 4/14/03 1=1 264476 logs 21.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.3Top of PVC in Feet 2004.05



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

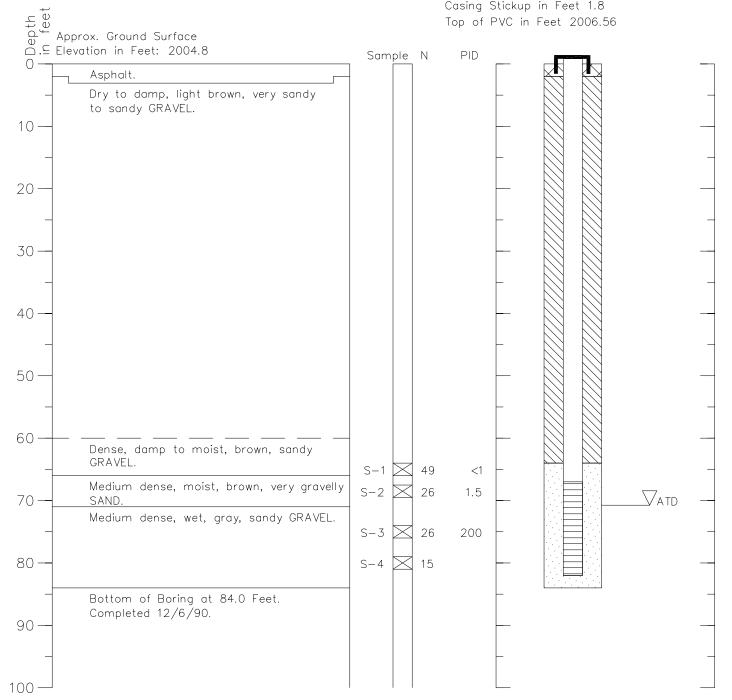
hel 4/14/03 1=1 264476 logs 22.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.8 Top of PVC in Feet 2006.56



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

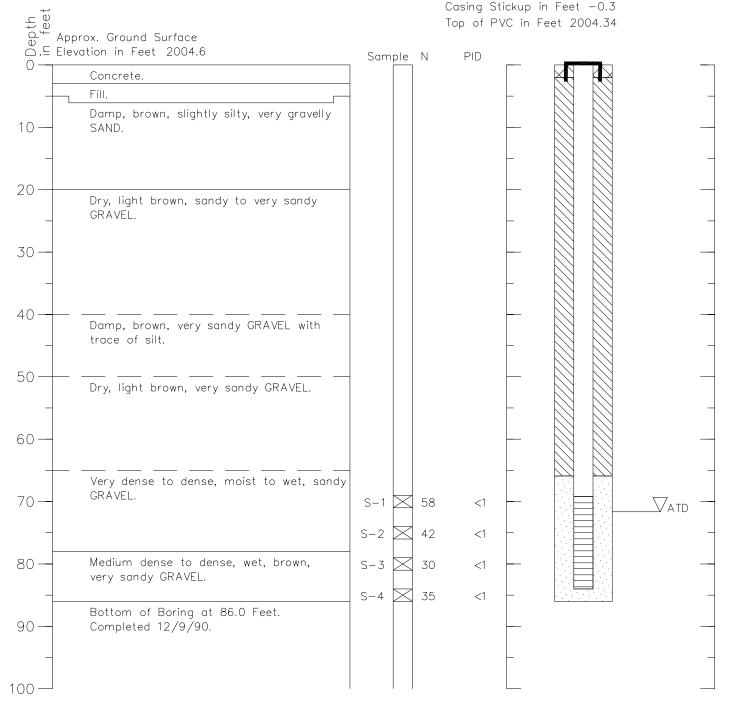
hel 4/14/03 1=1 264476 logs 23.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.3Top of PVC in Feet 2004.34



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

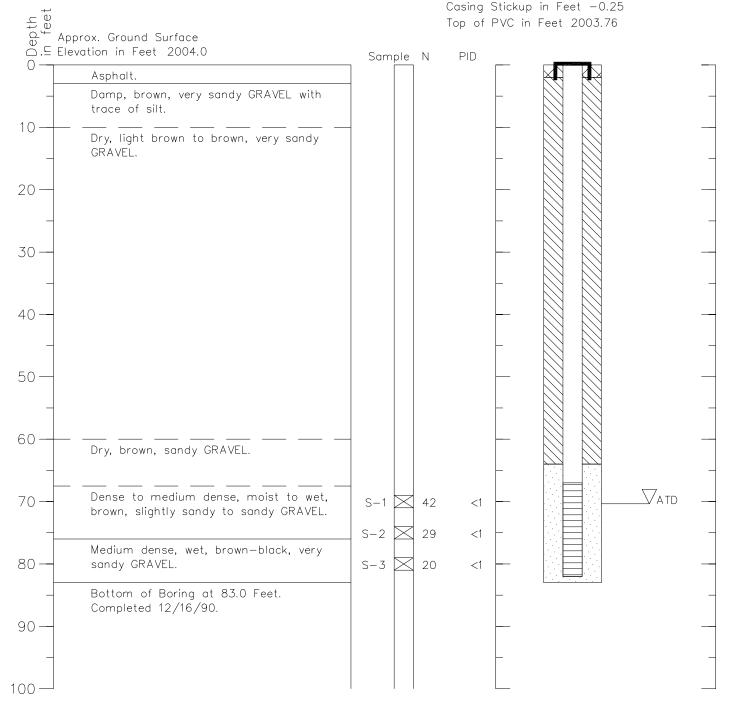
hel 4/14/03 1=1 264476 logs 24.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.25Top of PVC in Feet 2003.76



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

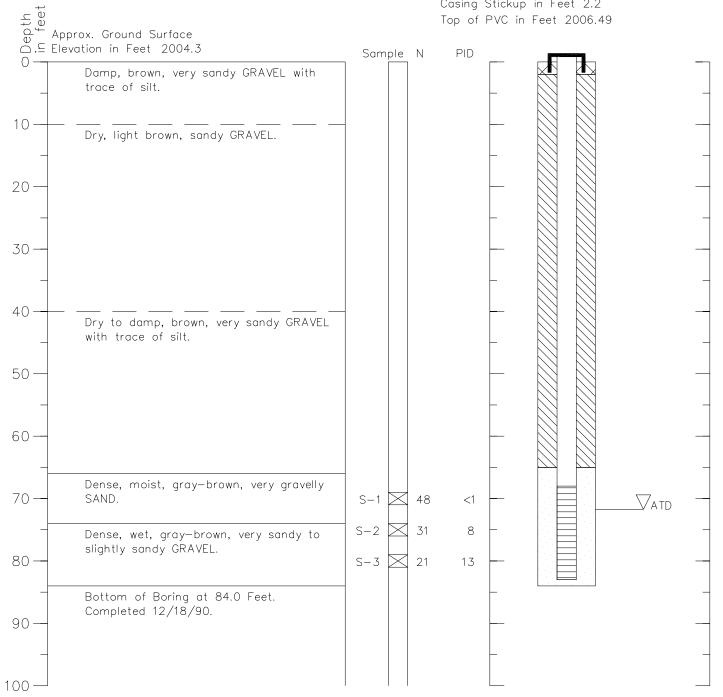
hel 4/14/03 1=1 264476 logs 25.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.2 Top of PVC in Feet 2006.49



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

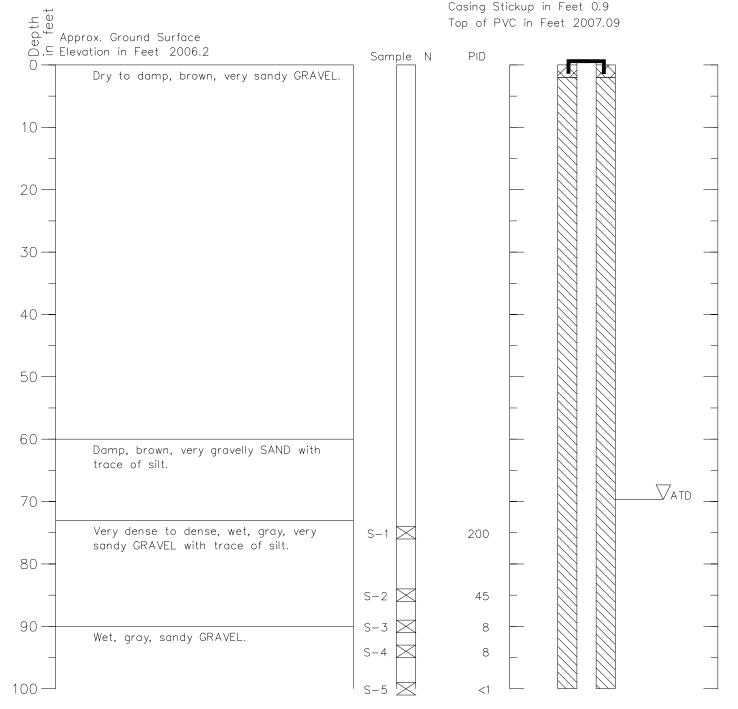
hel 4/14/03 1=1 264476 logs 26.dwg



Geologic Log

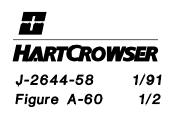
Monitoring Well Design

Casing Stickup in Feet 0.9 Top of PVC in Feet 2007.09



1. Refer to Figure A-1 for explanation of descriptions and symbols.

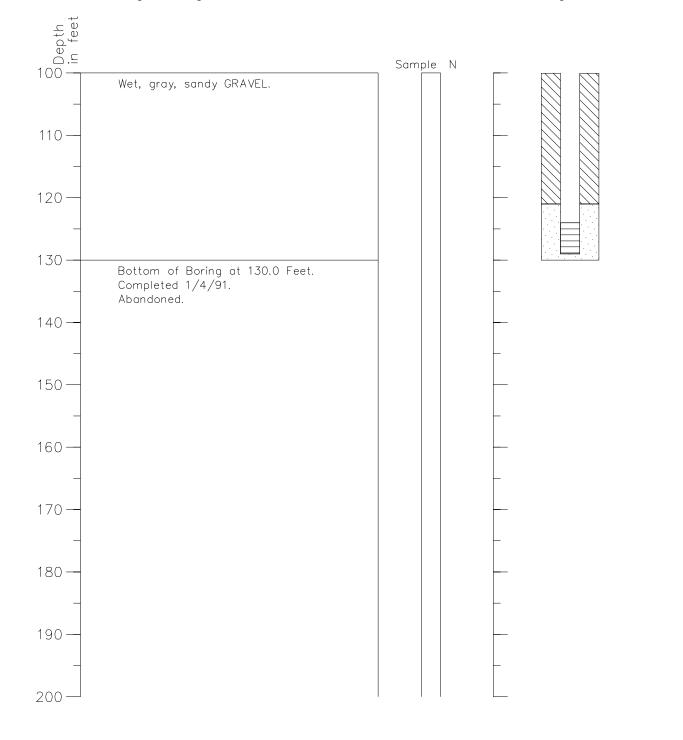
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/03 1=1 264476 logs 27.dwg

Geologic Log

Monitoring Well Design



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

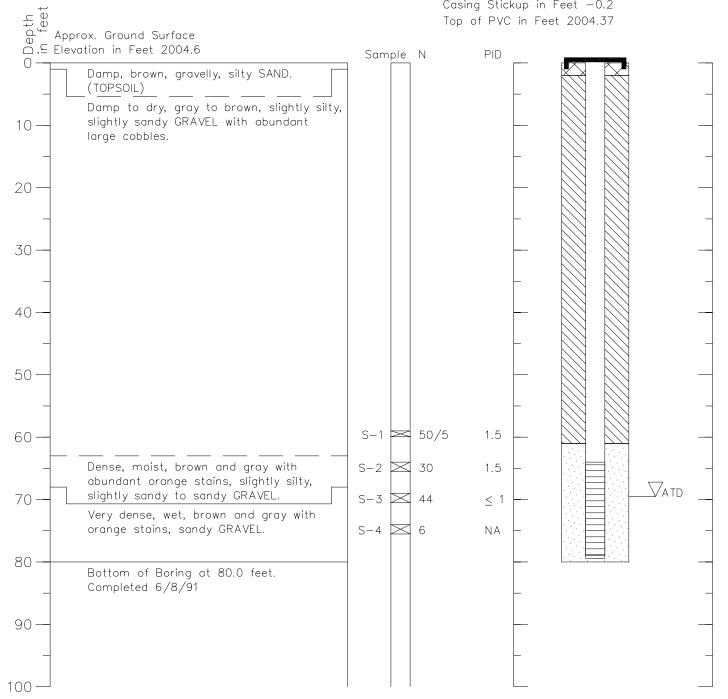


hel 4/14/03 1=1 264476 logs 27.dwg

Geologic Log

Monitoring Well Design

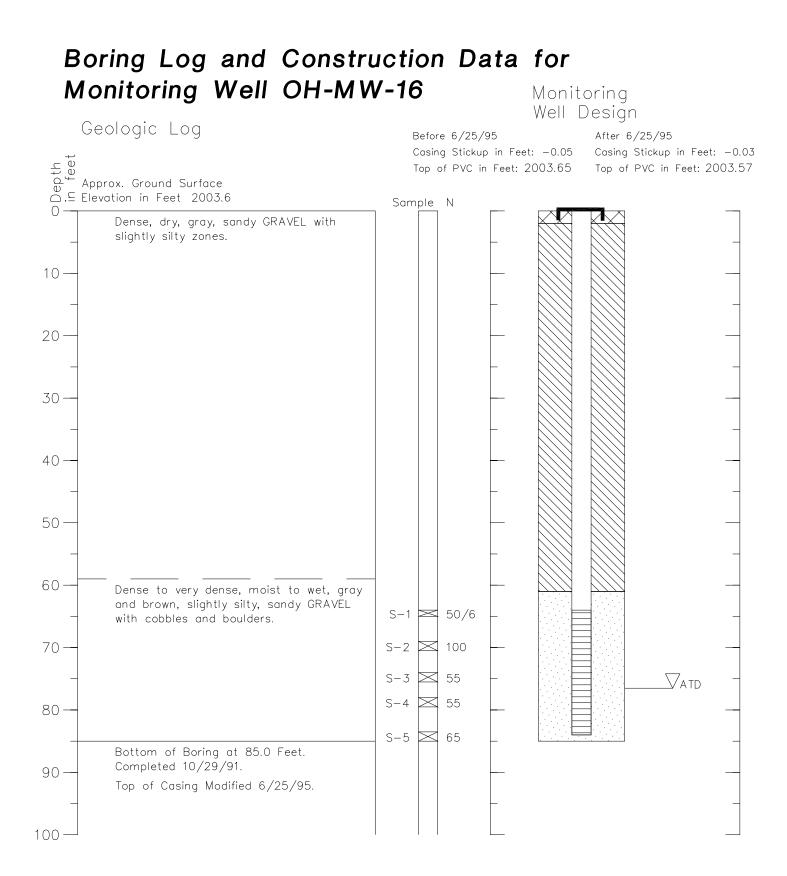
Casing Stickup in Feet -0.2 Top of PVC in Feet 2004.37



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. NA: Not analyzed due to poor sample recovery.

HARTCROWSER J-2644-58 6/91 Figure A-61



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

4/14/03 1=1 76 logs 29.dwg

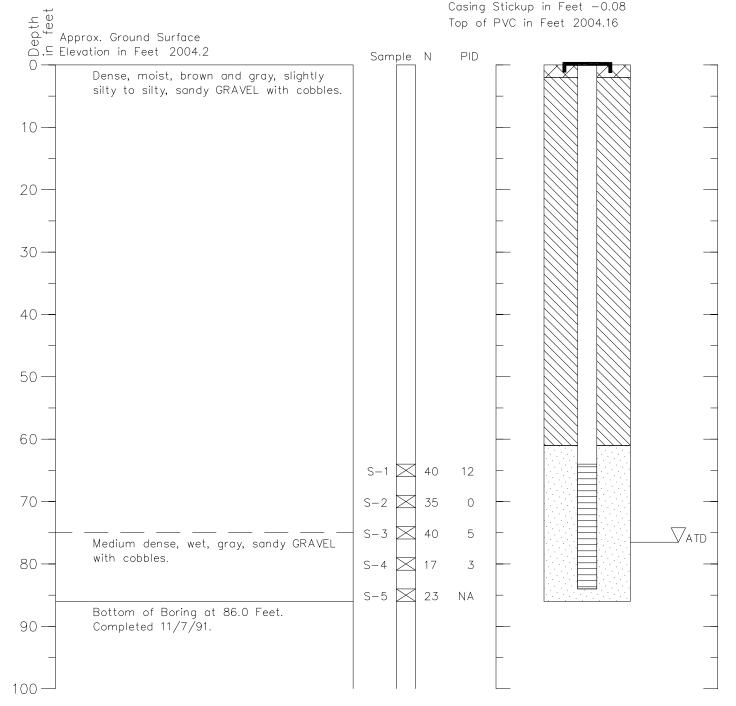
hel 4/ 264476 1 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

**HARTCROWSER** J-2644-58 10/91 Figure A-62

Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.08 Top of PVC in Feet 2004.16



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

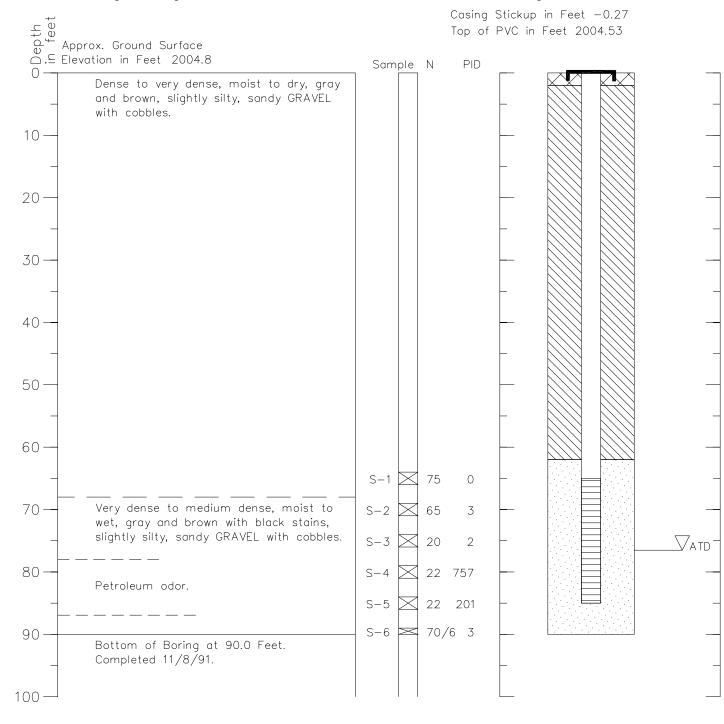
hel 4/14/03 1=1 264476 logs 30.dwg

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 31.dwg

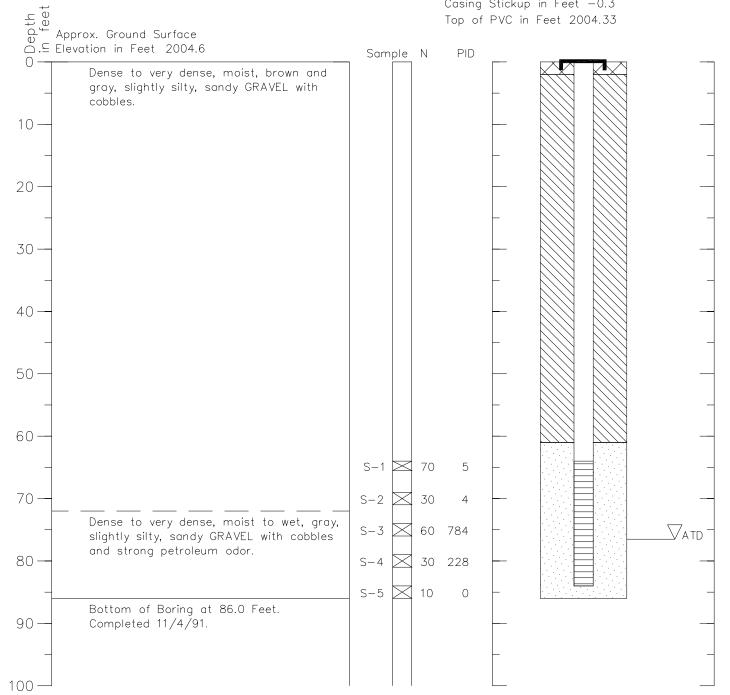
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

#### Monitoring Well Design

Casing Stickup in Feet -0.3Top of PVC in Feet 2004.33



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 32.dwg

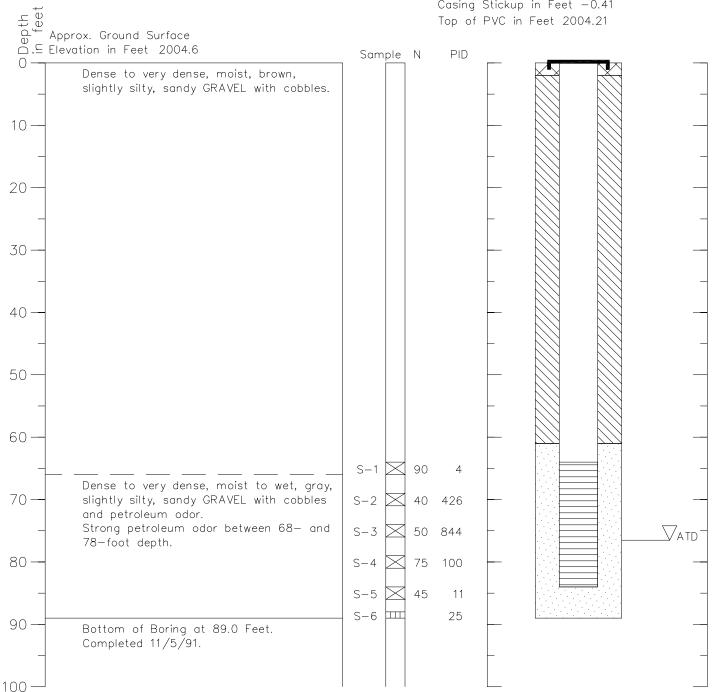
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.41 Top of PVC in Feet 2004.21



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

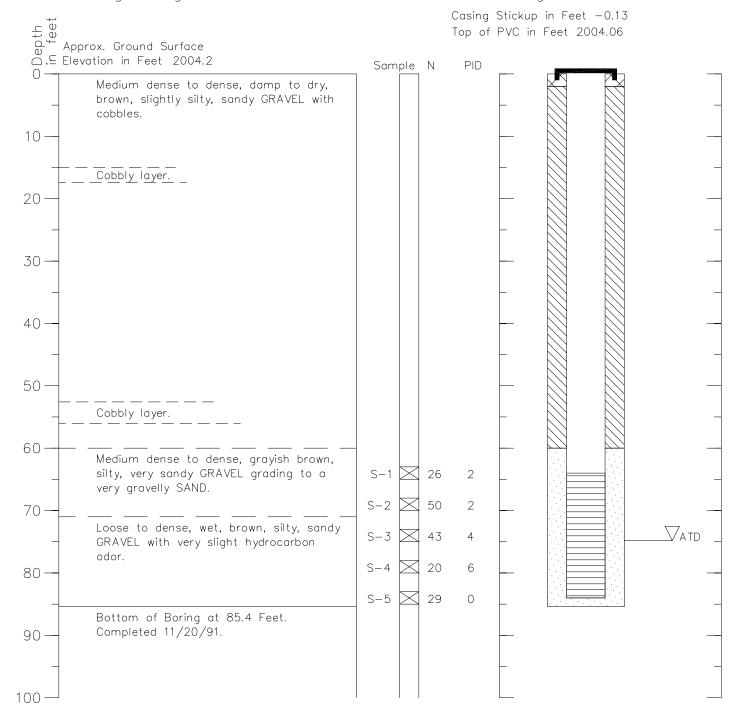
hel 4/14/03 1=1 264476 logs 33.dwg

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 34.dwg

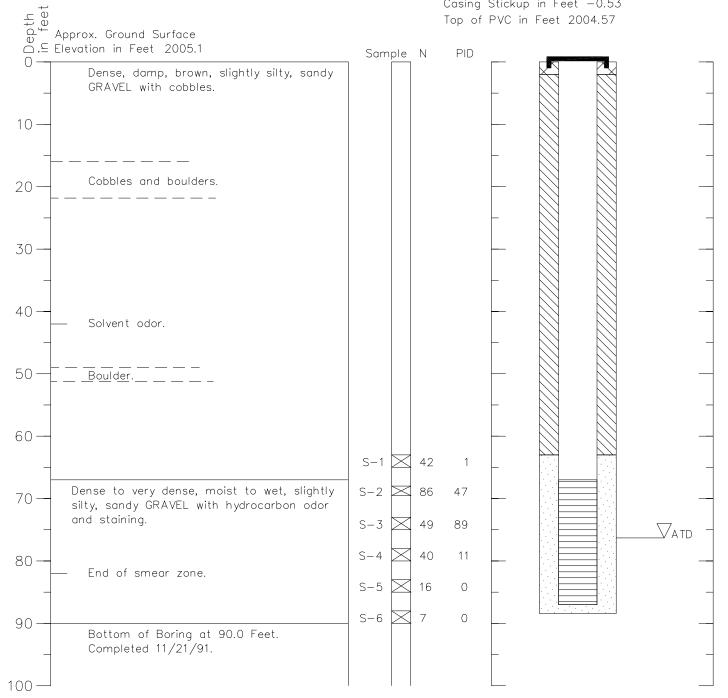
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.53 Top of PVC in Feet 2004.57



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 35.dwg

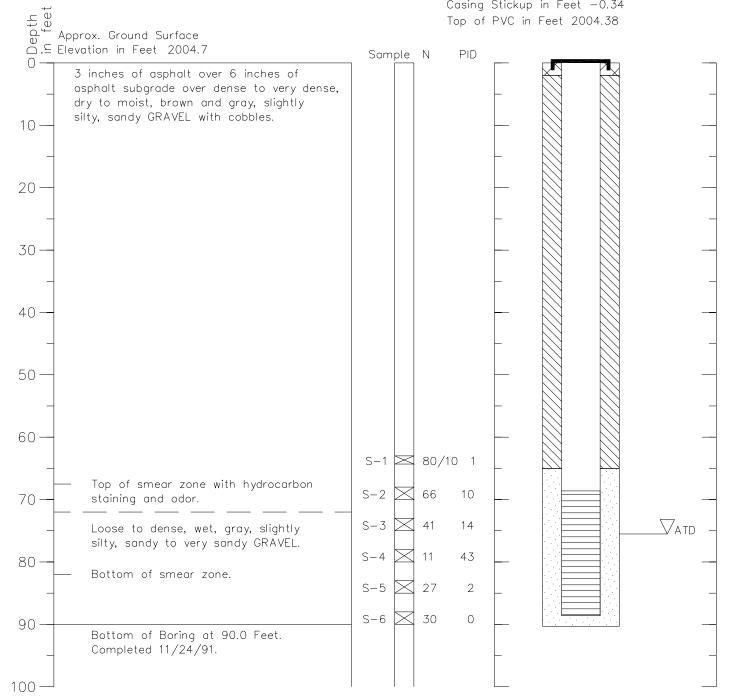
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.34 Top of PVC in Feet 2004.38



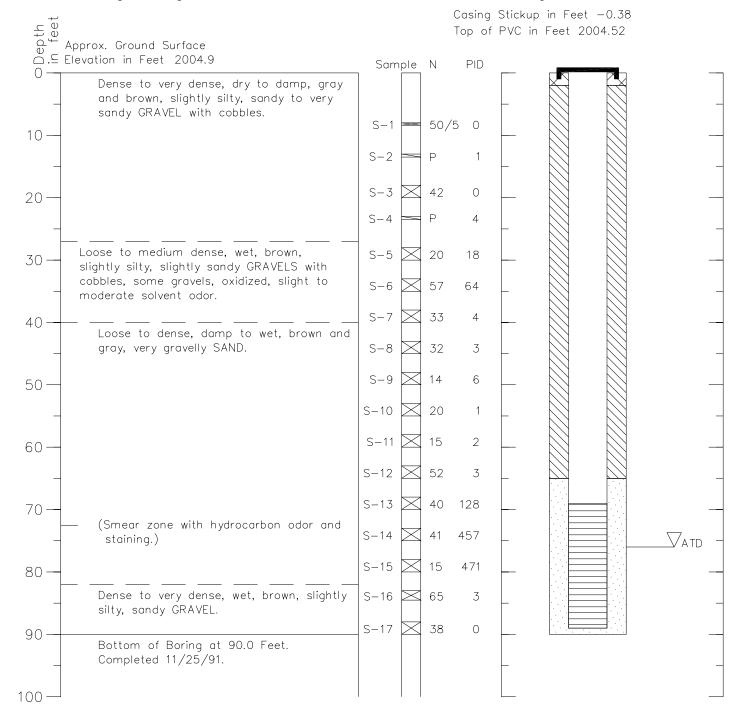
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/03 1=1 264476 logs 36.dwg

Geologic Log

Monitoring Well Design



 Refer to Figure A-1 for explanation of descriptions and symbols.

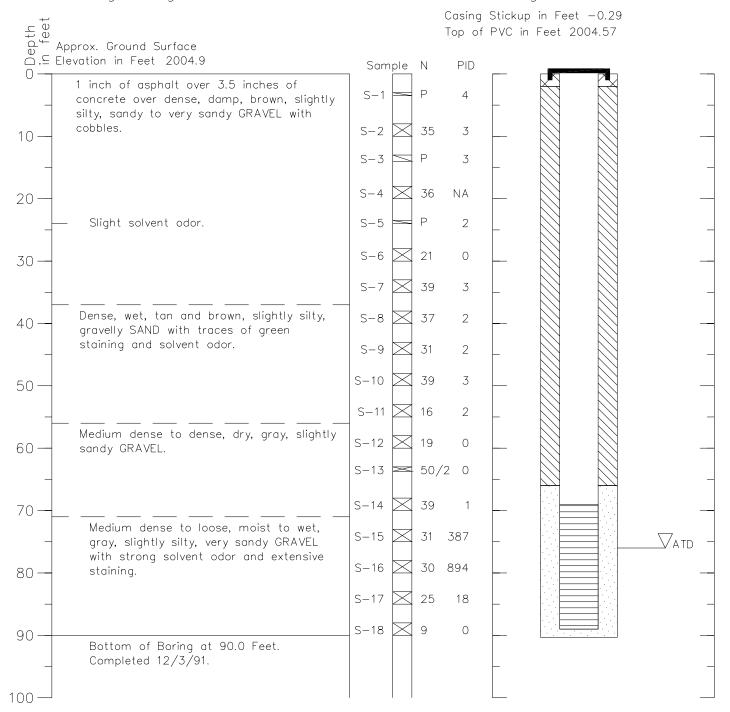
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/03 1=1 264476 logs 37.dwg

Geologic Log

Monitoring Well Design



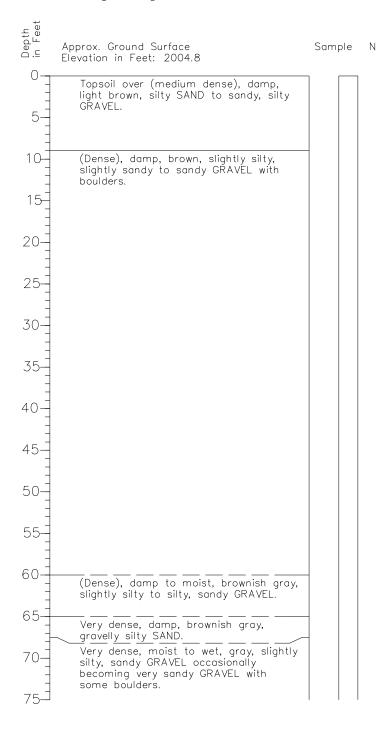
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/03 1=1 264476 logs 38.dwg

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

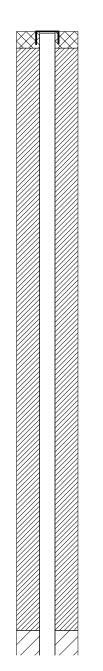


Geologic Log



Well Design

Casing Stickup in Feet: -0.3 Top of Casing in Feet: 2004.5



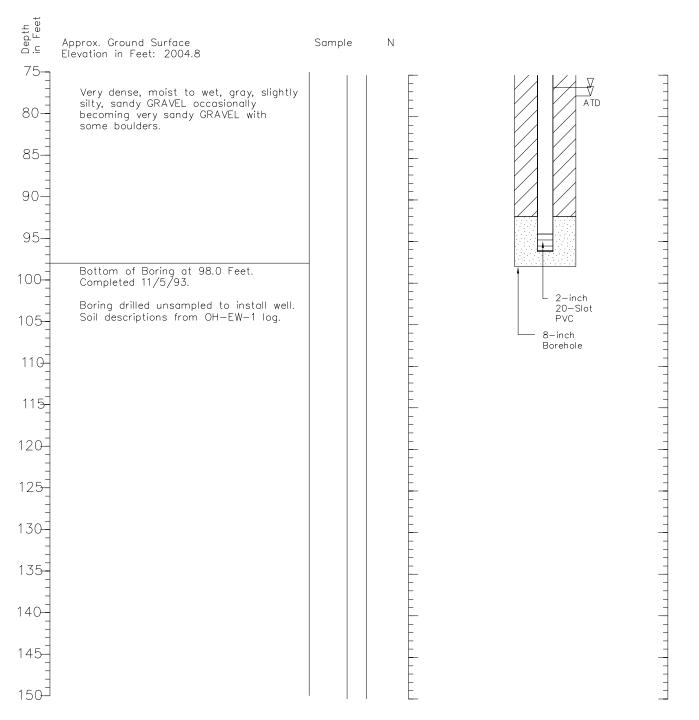
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
  - (ATD) or for date specified. Level may vary with time.

-HARTCROWSER J-2644-58 11/93 Figure A-72 1/2

Geologic Log

Well Design

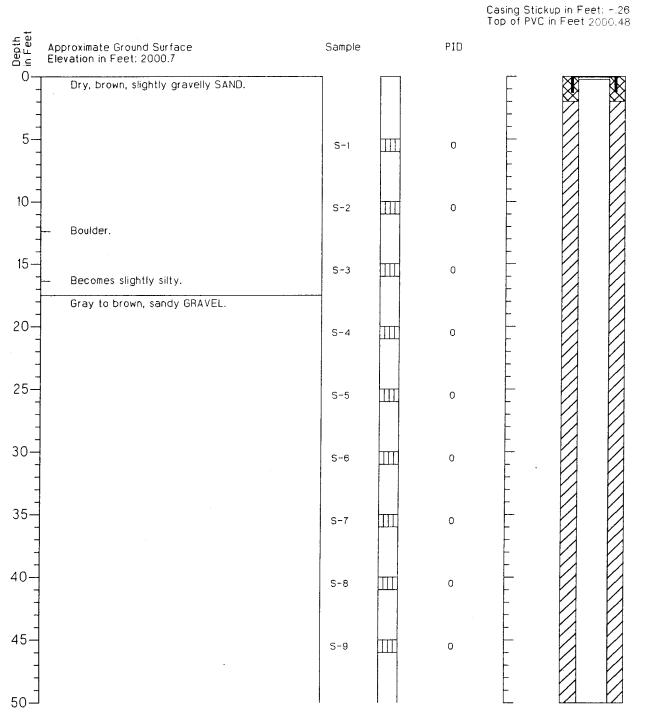


1. Refer to Figure A-1 for explanation of descriptions and symbols.

 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Ground water level, if indicated, is at time of drilling

Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



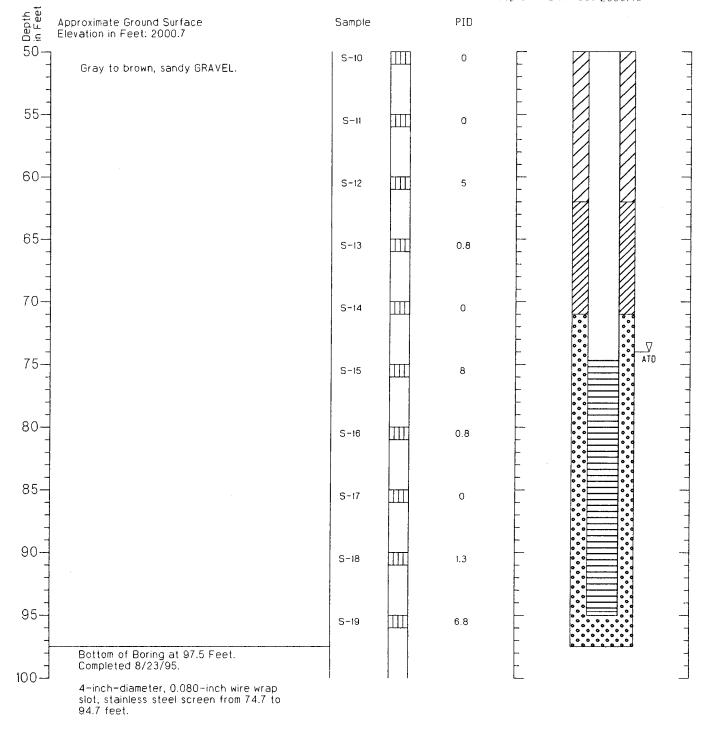
Monitoring

Well Design

Geologic Log



Casing Stickup in Feet: -.26 Top of PVC in Feet 2000.48

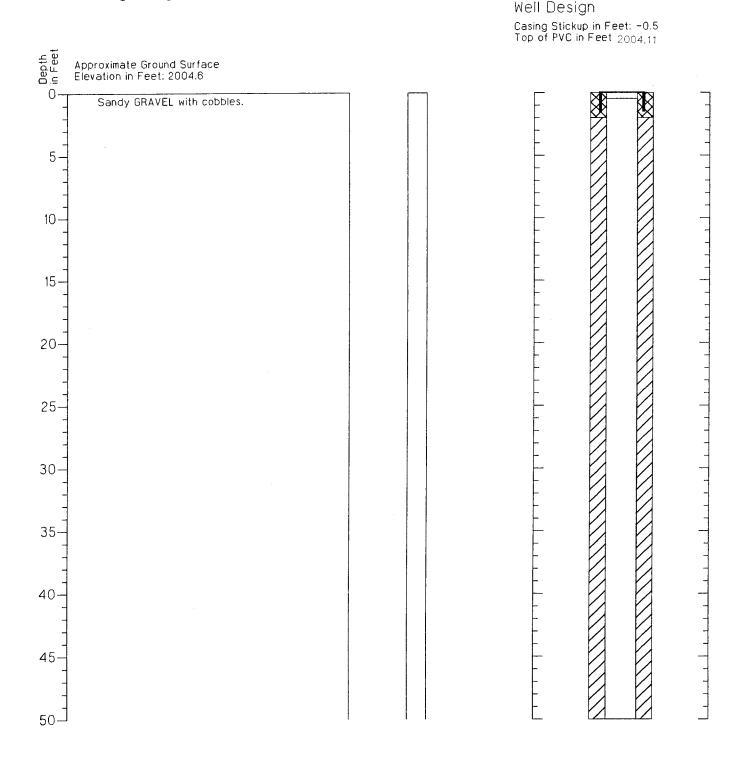


1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log



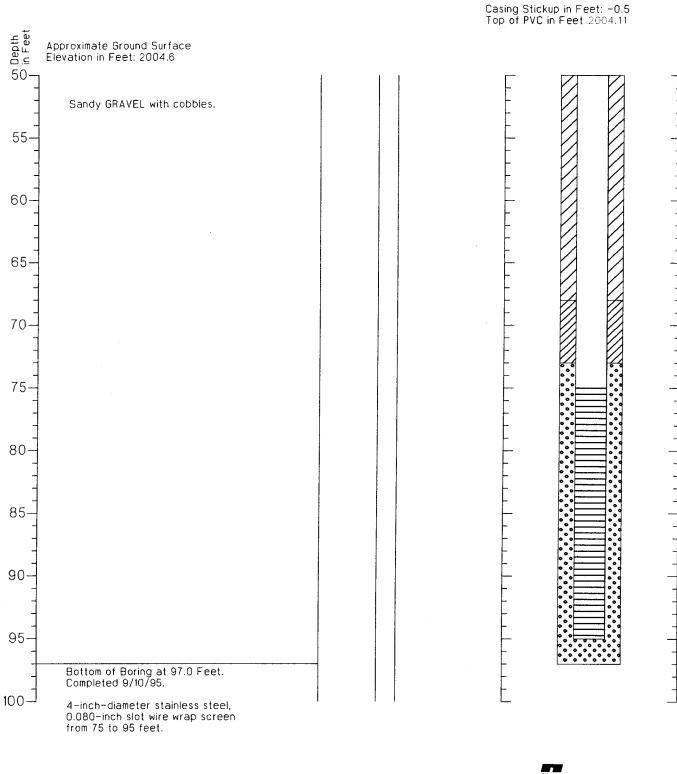
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
- (ATD) or for date specified. Level may vary with time.



Monitoring

Geologic Log

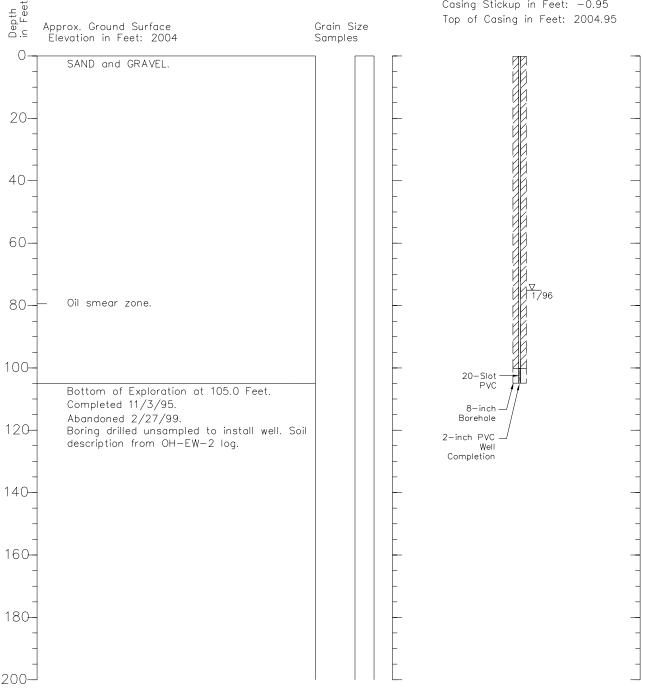


- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Monitoring Well Design

Geologic Log

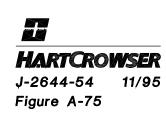


Well Design

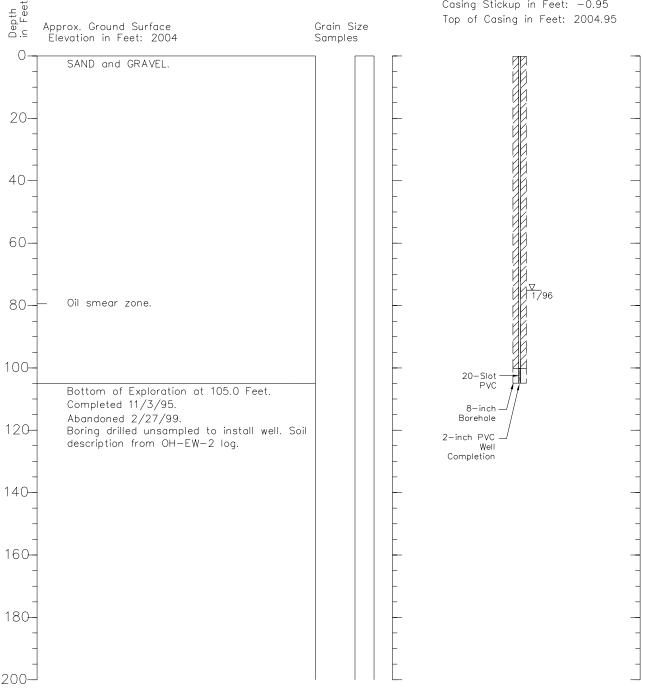
Casing Stickup in Feet: -0.95

hel 4/14/03=1 264476 logs 40.dwg

- 1. Refer to Figure A-1 for explanation of descriptions and symbols. 2. Soil descriptions and stratum lines are interpretive
- and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
  - (ATD) or for date specified. Level may vary with time.



Geologic Log

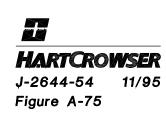


Well Design

Casing Stickup in Feet: -0.95

hel 4/14/03=1 264476 logs 40.dwg

- 1. Refer to Figure A-1 for explanation of descriptions and symbols. 2. Soil descriptions and stratum lines are interpretive
- and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
  - (ATD) or for date specified. Level may vary with time.

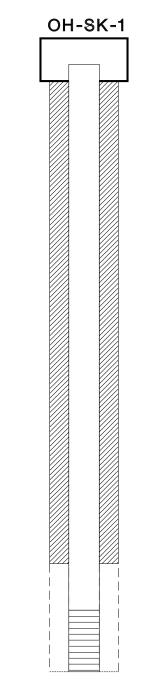


#### Boring Log and Construction Data for Skimming Well OH-SK-1 (formerly OH-SK-A)

Geologic Log

Depth in Feet	Approx. Ground Surface Elevation in Feet: 2004.8
0	Topsoil over (dense), damp, light brown, silty, gravelly SAND to dry silty, sandy GRAVEL.
10- 10- 15-	(Dense), dry to damp, brown to tan-gray, slightly silty to silty, sandy to very sandy GRAVEL with cobbles and boulders.
20-	
25-	
35-	
40	
50-	(Dense), dry to damp, brown to tan-gray,
55- 60-	slightly silty to silty, sandy to very sandy GRAVEL with cobbles and boulders.
65	(Dense), moist, gray, silty to very silty, sandy GRAVEL. (Dense), moist to wet, slightly silty to silty,
70-	sandy to very sandy GRAVEL with cobbles.
75-	

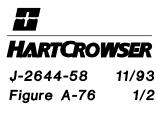
Well Design Casing Stickup in Feet: -1.79 Top of Steel in Feet: 2003.01



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E



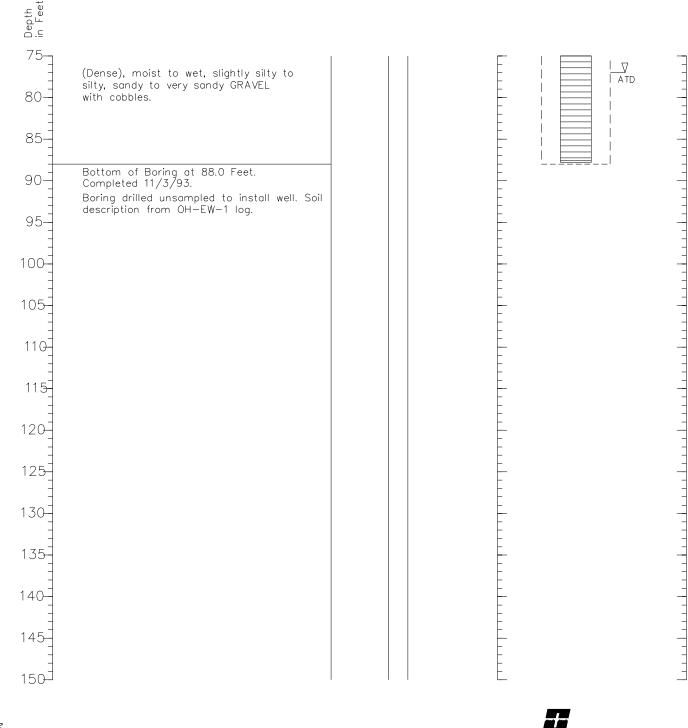


- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
- (ATD) or for date specified. Level may vary with time.

#### Boring Log and Construction Data for Skimming Well OH-SK-1 (Formerly OH-SK-A)

Geologic Log





- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
   Ground water level, if indicated, is at time of drilling
  - (ATD) or for date specified. Level may vary with time.

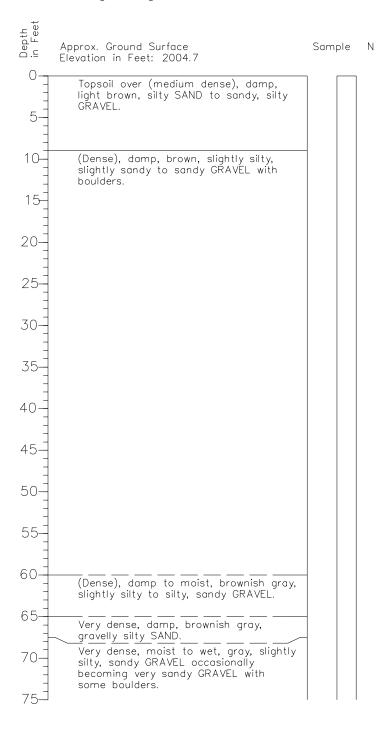
**HARTCROWSER** J-2466-58 11/93 Figure A-76 2/2

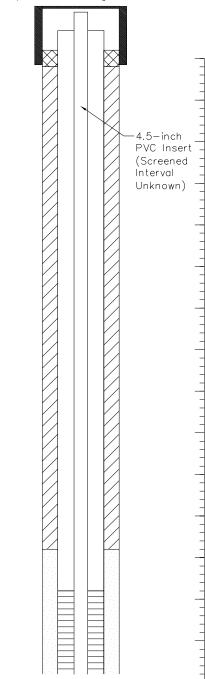
#### Boring Log and Construction Data for Skimming Well OH-SK-2 (Formerly OH-SK-B)

Well Design

Geologic Log

Casing Stickup in Feet: 2.02 Top of Casing in Feet: 2006.72 Top of PVC Casing in Feet: 2007.94





- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 3. Ground water level, if indicated, is at time of drilling
  - (ATD) or for date specified. Level may vary with time.

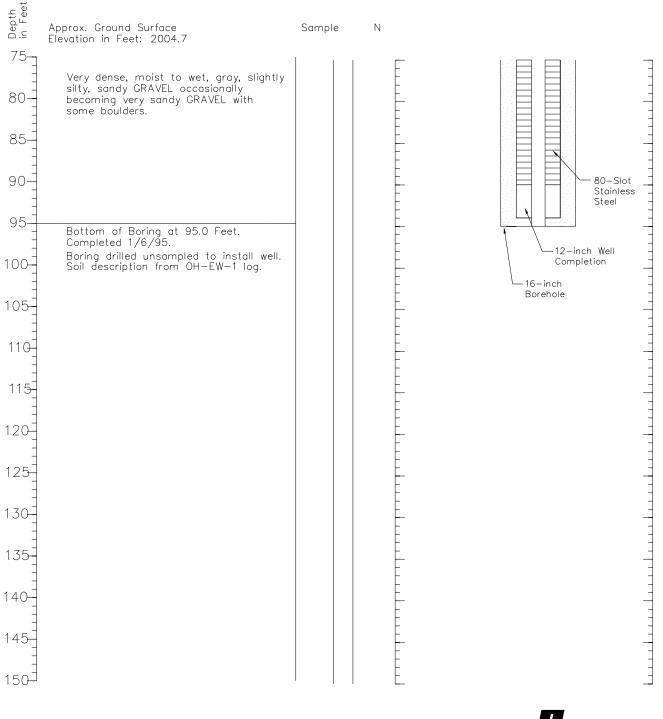
-+--HARTCROWSER J-2644-58 1/95 Figure A-77 1/2

\_ 4/14/03 1=1 logs 42.dwg HEL 264476 1

#### Boring Log and Construction Data for Skimming Well OH-SK-2 (Formerly OH-SK-B)

Geologic Log

Well Design



HEL 4/14/03 1=1 264476 logs 42.dwg

- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive
- and actual changes may be gradual.
   Ground water level, if indicated, is at time of drilling.
- (ATD) or for date specified. Level may vary with time.

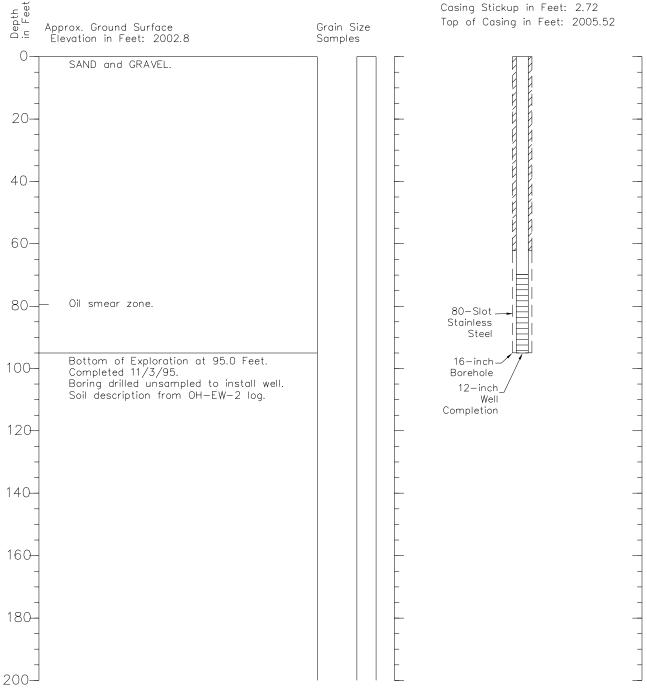


#### Boring Log and Construction Data for Skimming Well OH-SK-3

Geologic Log

Well Design

Casing Stickup in Feet: 2.72 Top of Casing in Feet: 2005.52



HEL 4/14/03=1 264476 logs 43.dwg

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



#### Well Log OH-SK-4

Geologic Log

Depth in Feet

0.

10

20-

30 -

40

50

60

70

80.

90

100-

### Casing Stickup in Feet: 2.48 Top of Casing in Feet: 2007.38 Lab Approx. Ground Surface Sample Tests Elevation in Feet: 2004.9 Brown, silty GRAVEL. 8-inch-Diameter Well Casing SAND and GRAVEL with some Silt. Gray SAND and GRAVEL. K-Packer 8-inch-Telescoping 80-Slot Screen Gray SAND and GRAVEL with some Silt. Bottom of Exploration at 91.0 Feet. Completed 6/30/01.

- Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and stick up reported by Holt Drilling. Actual TOC elevation will be surveyed at a later data.

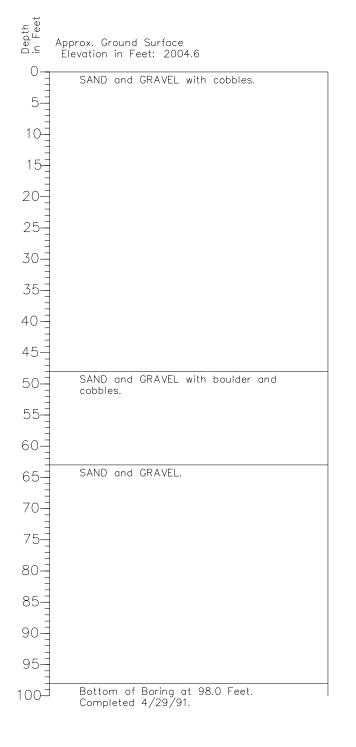


Extraction Well Design

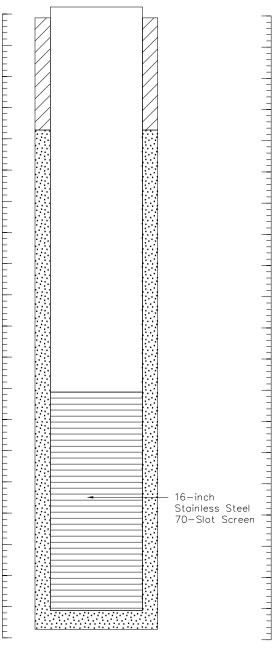
HEL 4/14/03 1=1 264476 logs OH-SK-4.dwg

#### Boring Log and Construction Data for **Extraction Well TF-EW-1**

Geologic Log



Well Design Casing Stickup in Feet: 1.73 Top of Steel Casing in Feet 2006.33





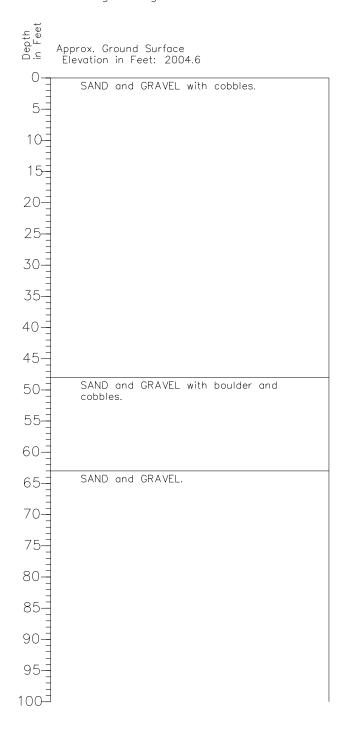
................

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

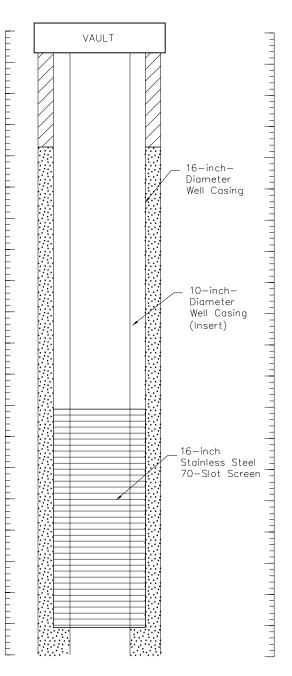
264476 logs 45.dwg hel 4/14/03=1

### Boring Log and Construction Data for Extraction Well TF-EW-1 Deepened April 29, 2000

Geologic Log



#### Well Design Casing Stickup in Feet: -1.05 Top of Steel Casing in Feet: 2003.55 Vault Base in Feet: 2001.9



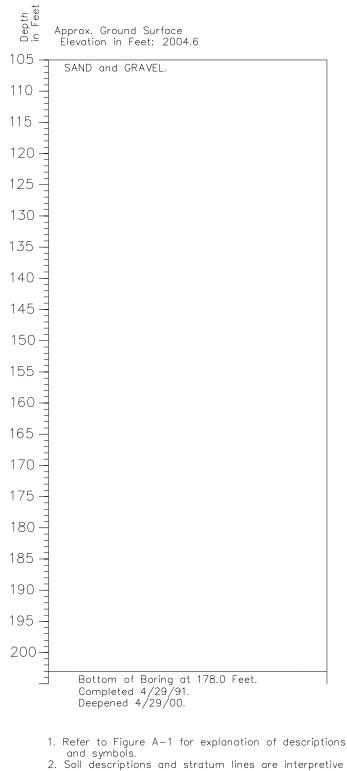
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



### Boring Log and Construction Data for Extraction Well TF-EW-1 Deepened April 29, 2000

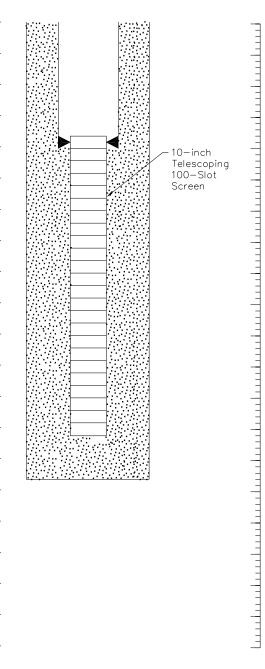
Geologic Log



and actual changes may be gradual.

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Well Design Casing Stickup in Feet: -1.05 Top of Steel Casing in Feet 2006.55



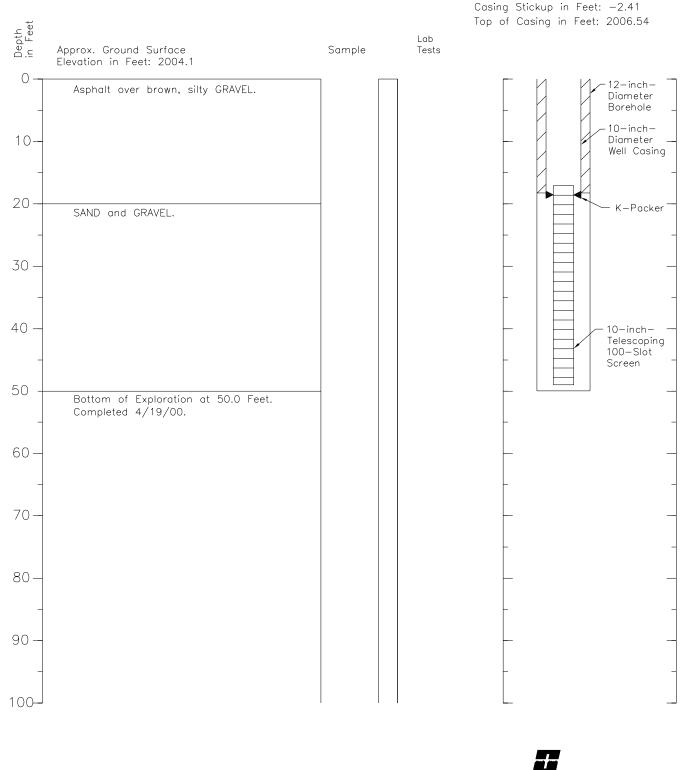
**HARTCROWSER** J-2644-73 4/00 Figure A-81 2/2

hel 4/14/03=1 264476 logs 44.dwg

## Boring Log and Construction Data for Recirculation Well TF-EW-1-US

Geologic Log

Extraction Well Design

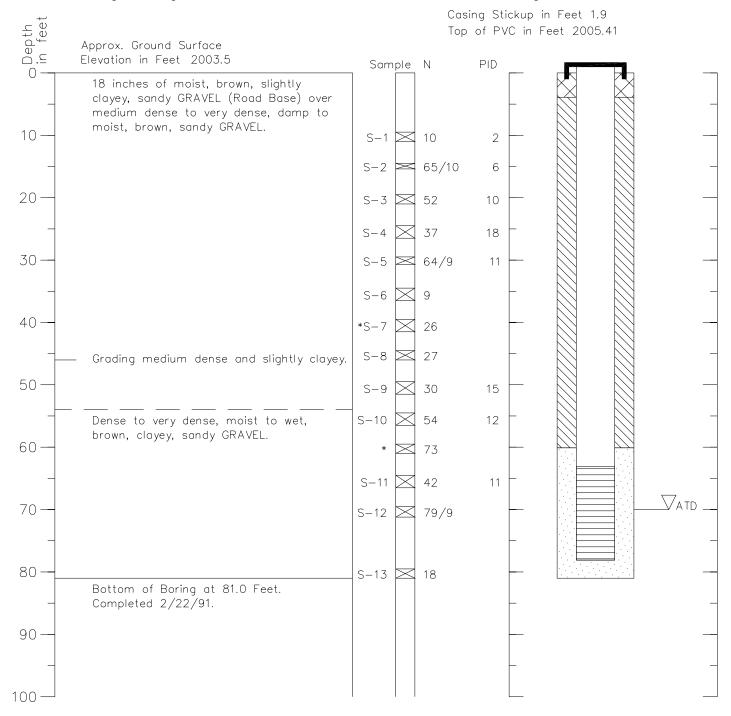


HEL 4/14/03 1=1 264476 logs 46.dwg

 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. HARTCROWSER J-2644-73 4/00 Figure A-82

Geologic Log

Monitoring Well Design



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/031=1 264476 logs 47.dwg

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.9

de de g.⊆ Elevation in Feet 2003.7 Top of PVC in Feet 2005.60 PID Sample N ()18 inches of damp, brown, sandy GRAVEL (Road Base) over very dense, damp to moist, brown, slightly clayey to clayey, very sandy GRAVEL. 10-S-1 🔀 51 0 20-S-2 🖂 61 0 S−3 🖂 51 0 30-S−4 🔀 51 0 40-S-5 🔀 21 Medium dense to very dense, moist to wet, brown, slightly clayey, very sandy 50-GRAVEL. S−6 🖂 45/8 0 60-S−7 🖾 45 VATD \_ S−8 🖂 50/3 70-S-9 80 -Bottom of Boring at 79.5 Feet. Completed 2/23/91. 90-100

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/031=1 264476 logs 48.dwa

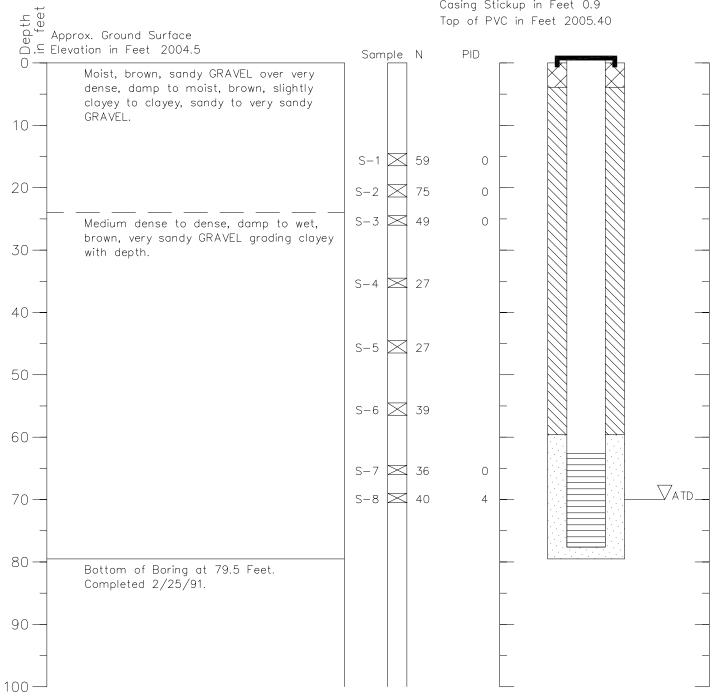
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 0.9 Top of PVC in Feet 2005.40



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

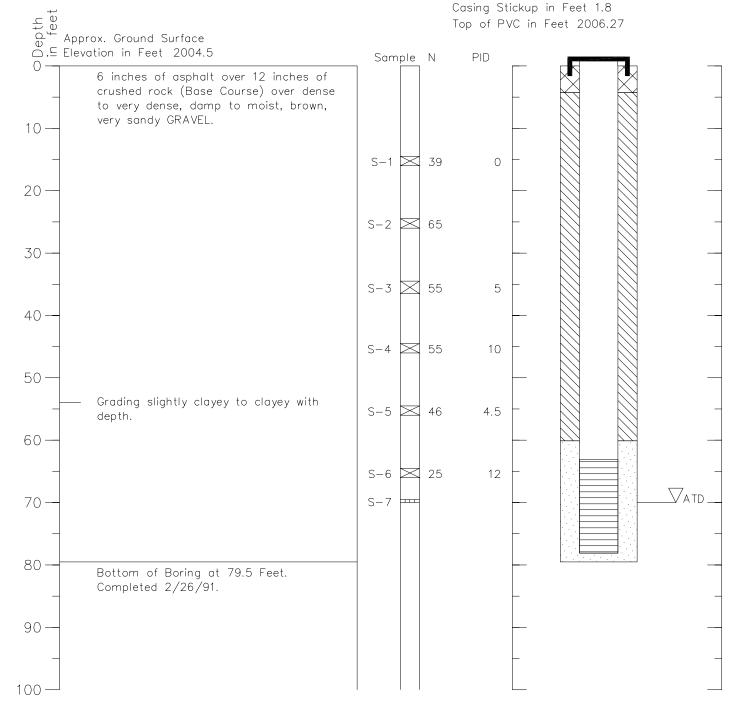


264476 logs 49.dwg 4/14/031=1 hel

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.8 Top of PVC in Feet 2006.27



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/031=1 264476 logs 50.dwg

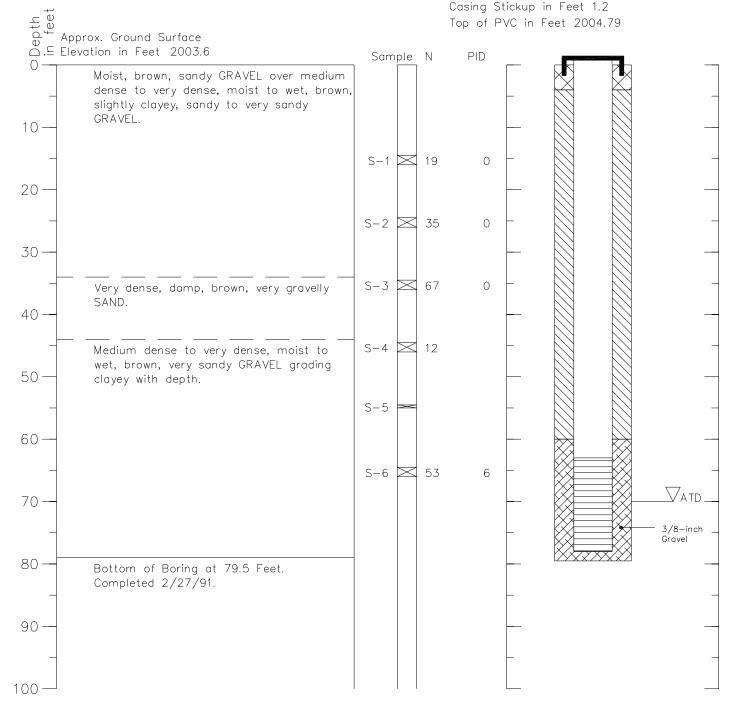
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.2 Top of PVC in Feet 2004.79



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

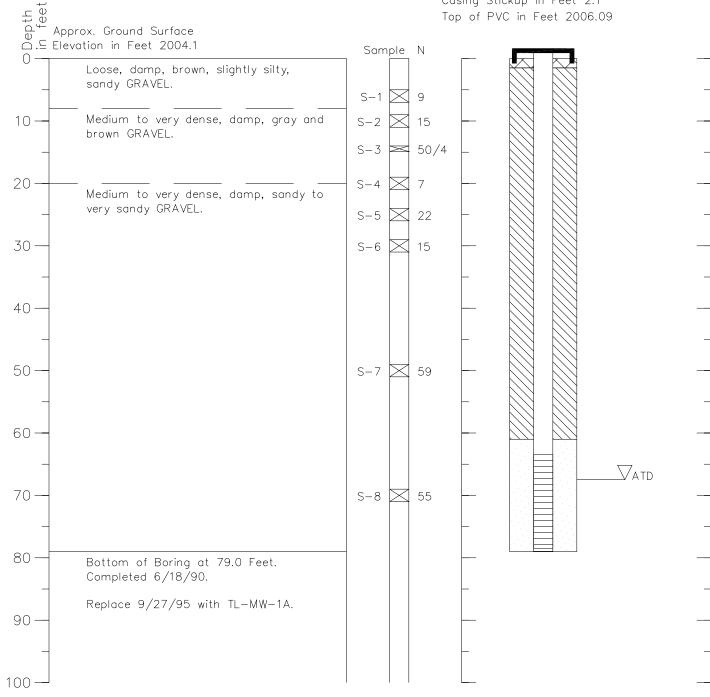


hel 4/14/031=1264476 logs 51.dwg

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.1 Top of PVC in Feet 2006.09



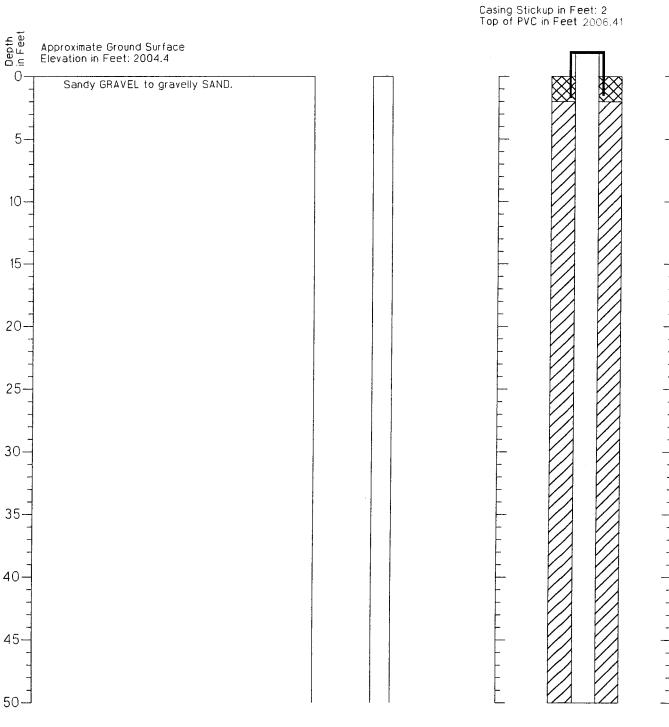
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/031=1 264476 logs 52.dwg

## Boring Log and Construction Data for Observation Well TL-MW-1A

Geologic Log



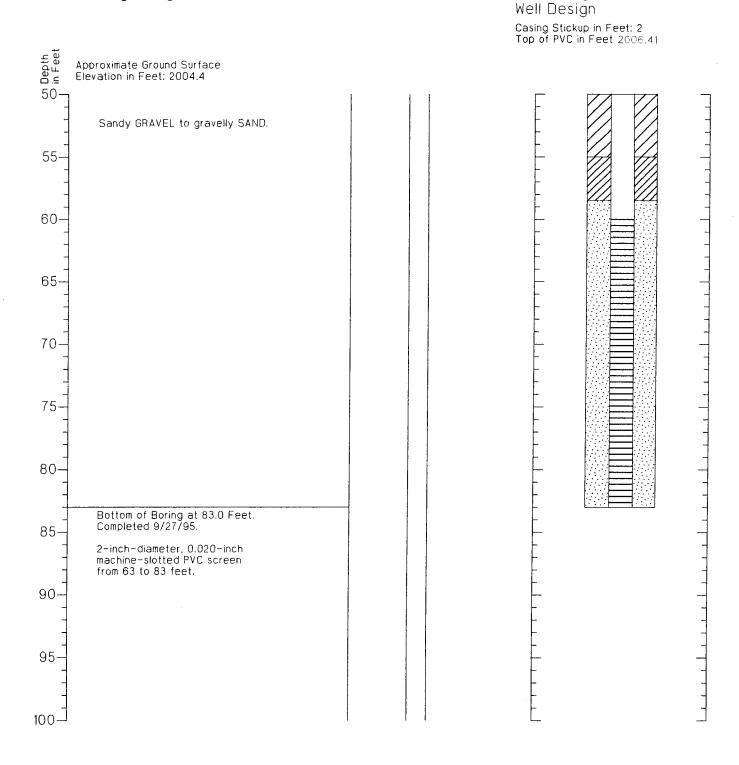
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Monitoring Well Design

#### Boring Log and Construction Data for Observation Well TL-MW-1A

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

 Image: Constraint of the second system

 HARTCROWSER

 J-2644-58
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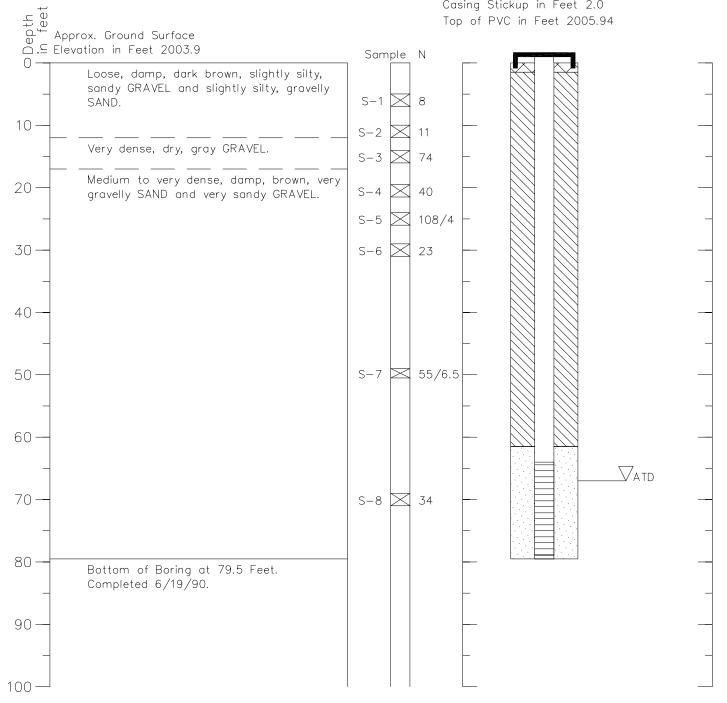
 Figure A-89
 2/2

Monitoring

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.0 Top of PVC in Feet 2005.94



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/031=1 264476 logs 53.dwn

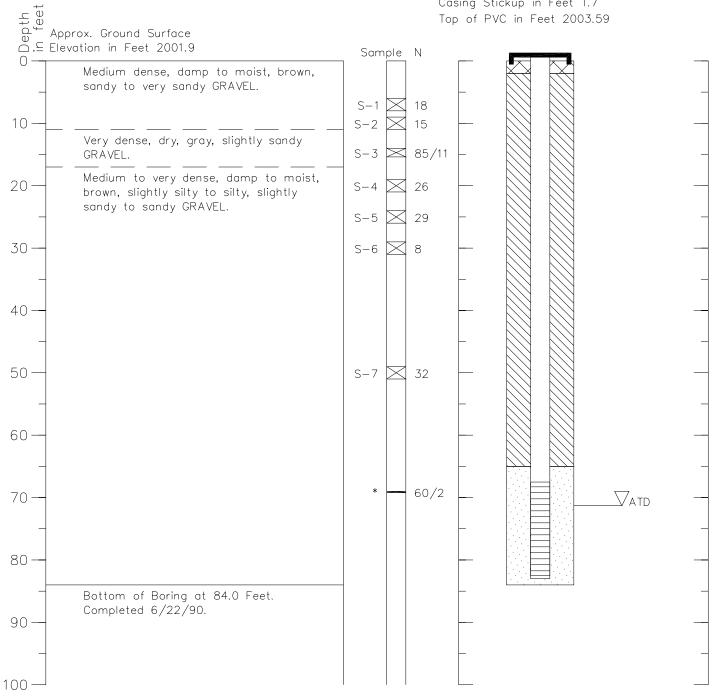
3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.7 Top of PVC in Feet 2003.59



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

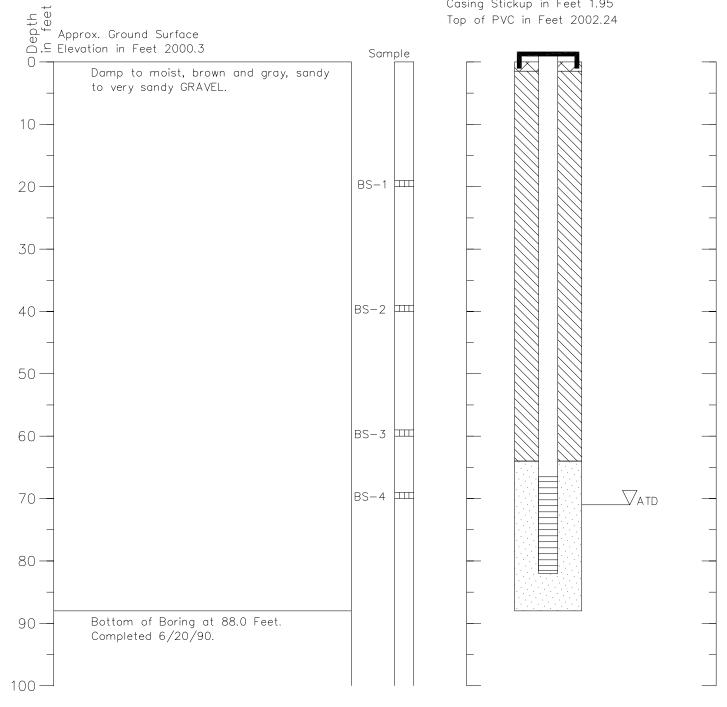


hel 4/14/031=1 264476 logs 54.dwg

Geologic Log



Casing Stickup in Feet 1.95 Top of PVC in Feet 2002.24

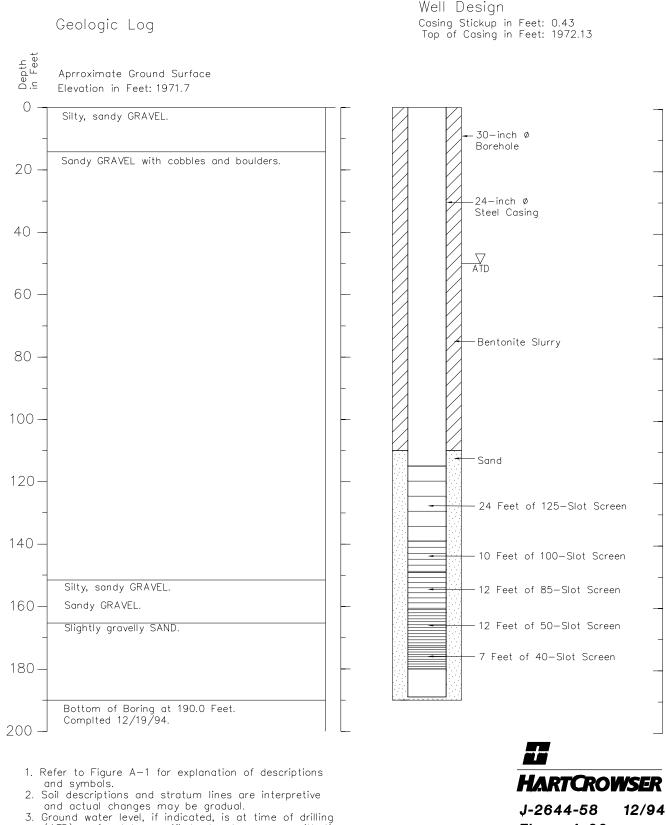


- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

264476 logs 55.dwg hel 4/14/031=1



#### Boring Log and Construction Data for **Extraction Well WW-EW-1**



(ATD) or for date specified. Level may vary with time.

[= 56.dwg

4/14/03 logs

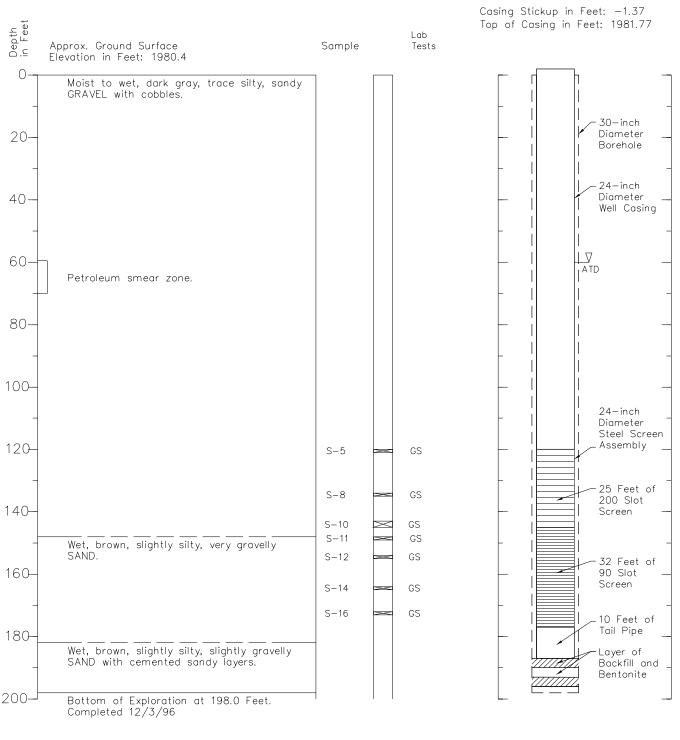
hel 4/<sup>-</sup> 264476

Figure A-93

#### Boring Log and Construction Data for Extraction Well WW-EW-2

Geologic Log

Extraction Well Design



HARTCROWSER J-2644-61 12/96 Figure A-94

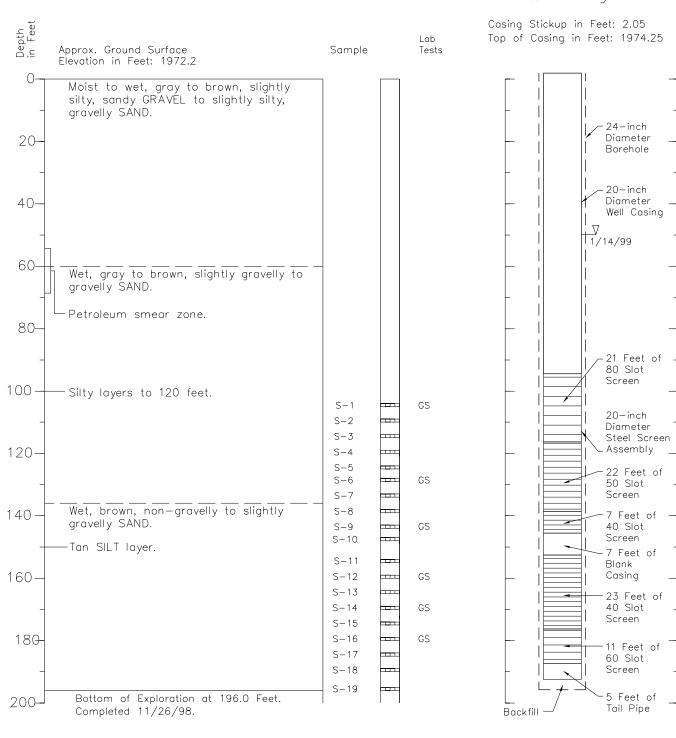
hel 4/14/03 1=1 264476 logs 57.dwg

1. Soil descriptions and stratum lines are interpretive and actual changes may be gradual. 2. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log and Construction Data for Extraction Well WW-EW-3

Geologic Log

#### Extraction Well Design





 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Ground water level, if indicated, is at time of drilling

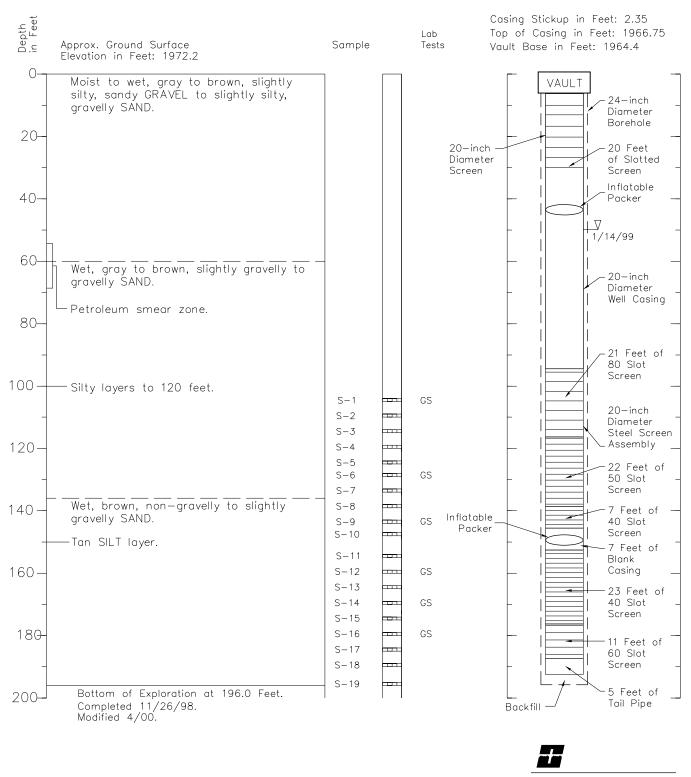
(ATD) or for date specified. Level may vary with time.

**HARTCROWSER** J-2644-66 11/98 Figure A-95 1/2

#### Boring Log and Construction Data for Extraction Well WW-EW-3 Modified April 2000

Geologic Log

#### Extraction Well Design



hel 4/14/031=1 264476 logs 58.dwg

 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Ground water level, if indicated, is at time of drilling

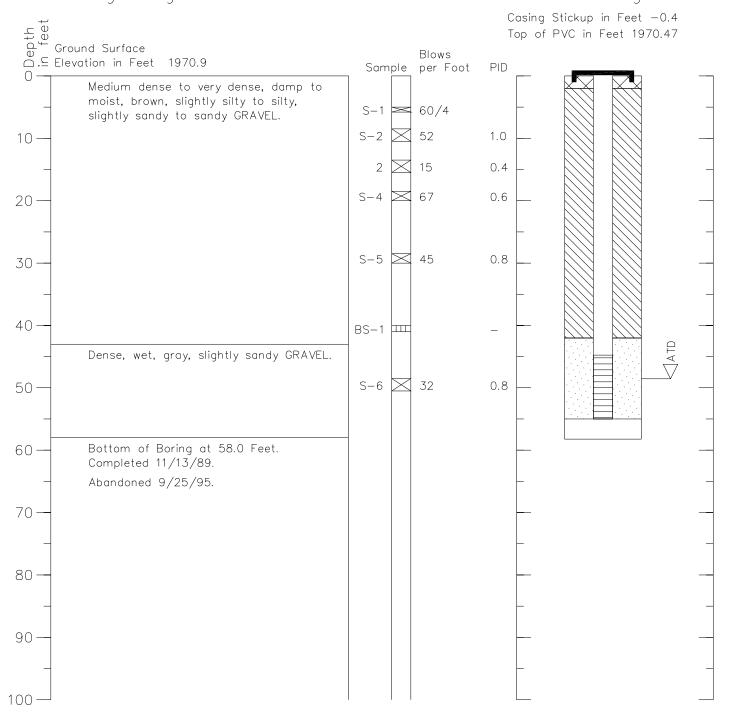
(ATD) or for date specified. Level may vary with time.

**HARTCROWSER** J-2644-73 4/00 Figure A-95 2/2

Geologic Log

#### Monitoring Well Design

Casing Stickup in Feet -0.4



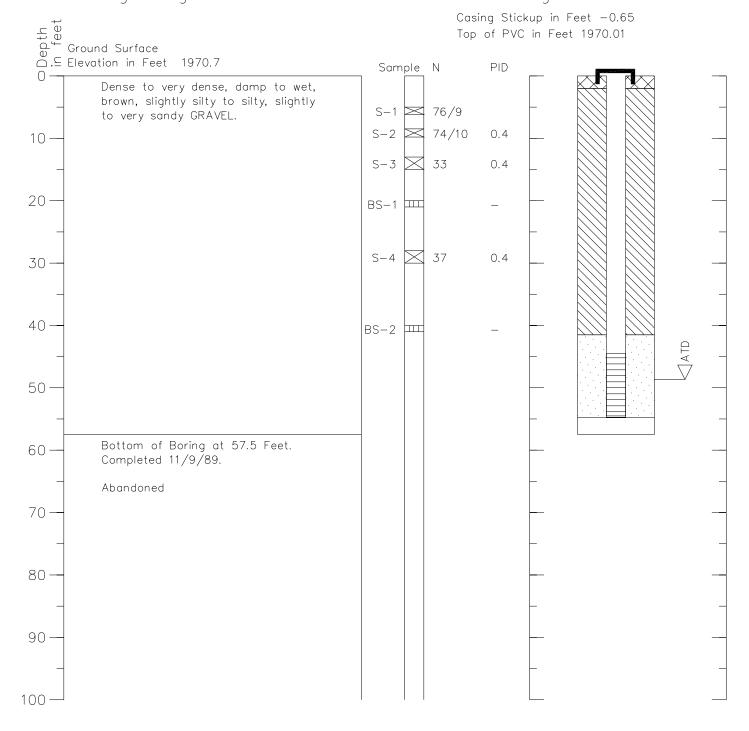
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/031=1 264476 logs 60.dwg



Geologic Log

Monitoring Well Design

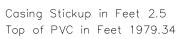


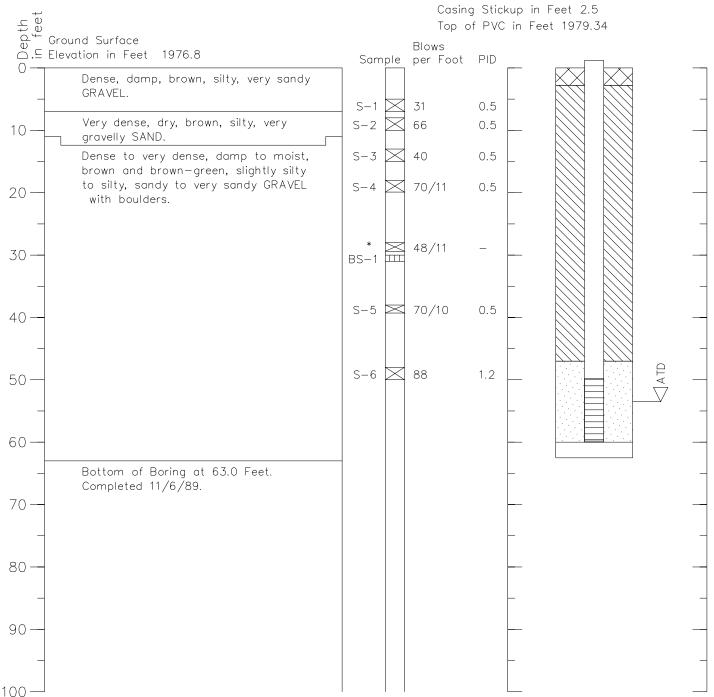
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



Geologic Log

Monitoring Well Design





1. Refer to Figure A-1 for explanation of descriptions and symbols.

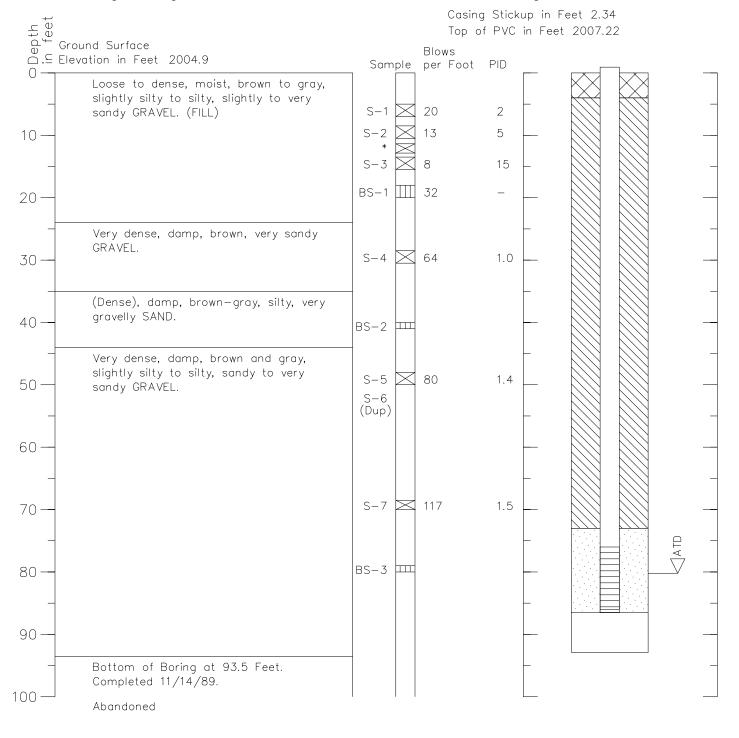
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



hel 4/14/031=1 264476 logs 62.dwg

Geologic Log

Monitoring Well Design

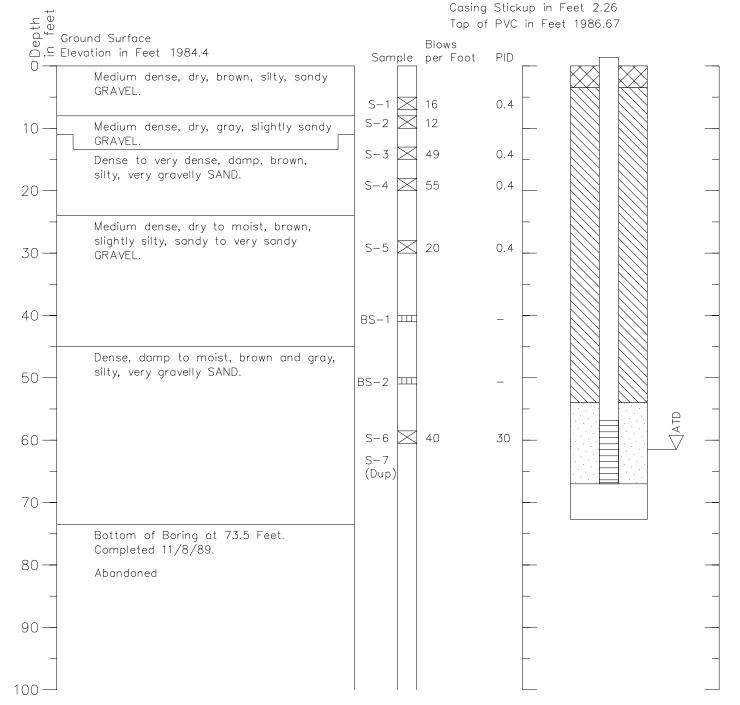


- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/031=1 264476 logs 63.dwg



# Boring Log and Construction Data for Monitoring Well WW-MW-5 Geologic Log



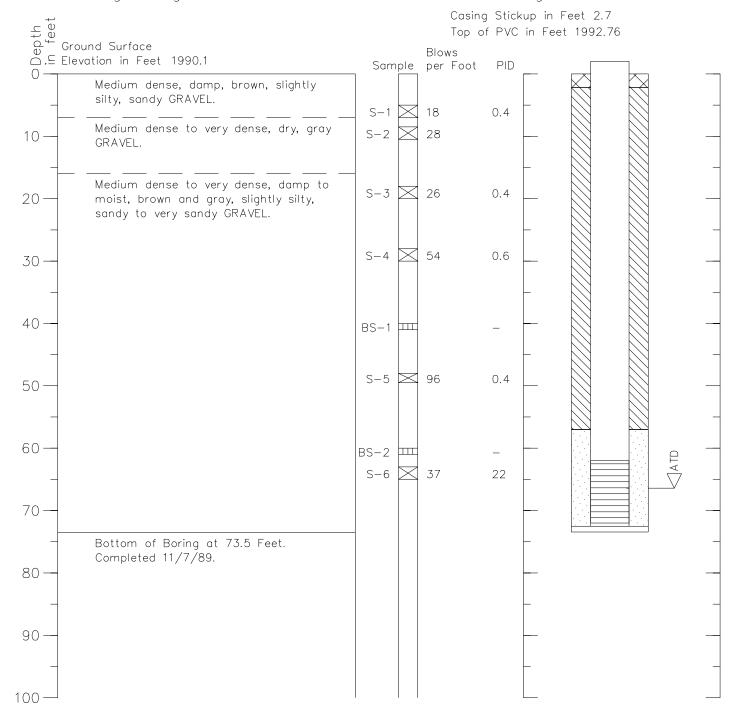
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

hel 4/14/031=1 264476 logs 64.dwg



Geologic Log

Monitoring Well Design



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

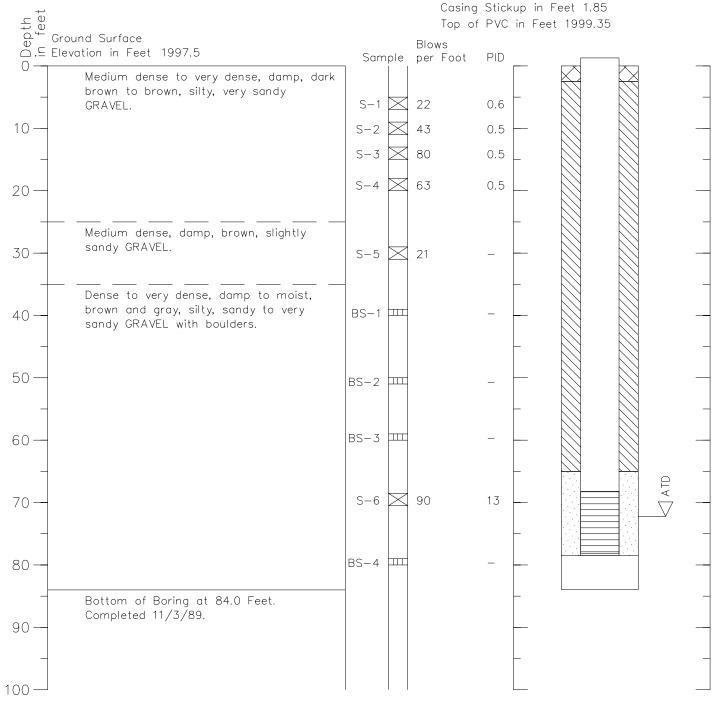


hel 4/14/031=1 264476 logs 65.dwg

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.85 Top of PVC in Feet 1999.35



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

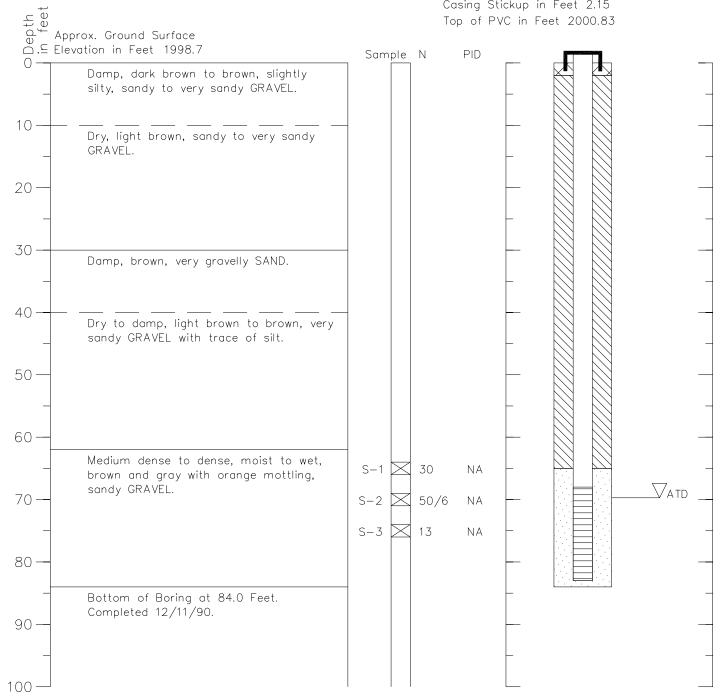


hel 4/14/031=1 264476 logs 66.dwg

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.15 Top of PVC in Feet 2000.83



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

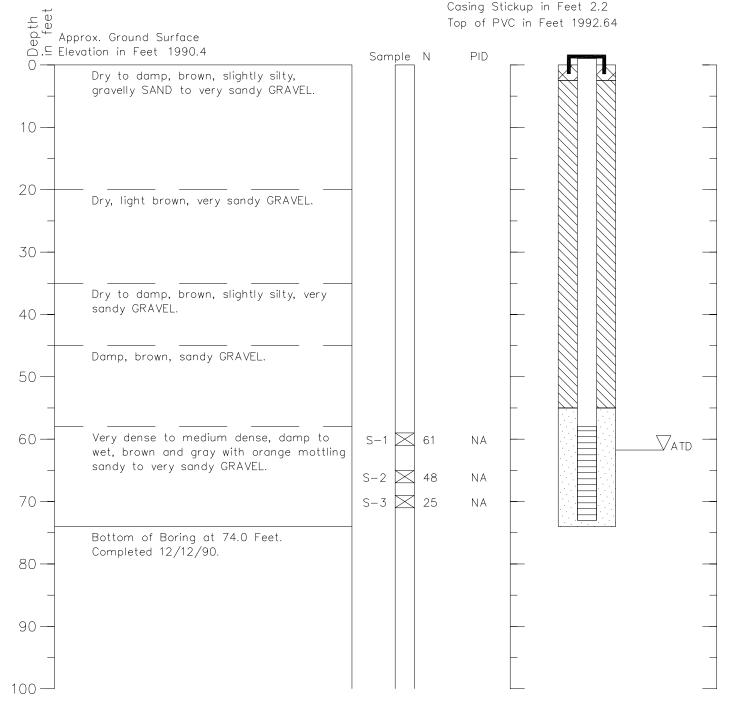
hel 4/14/031=1 264476 logs 67.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.2 Top of PVC in Feet 1992.64



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

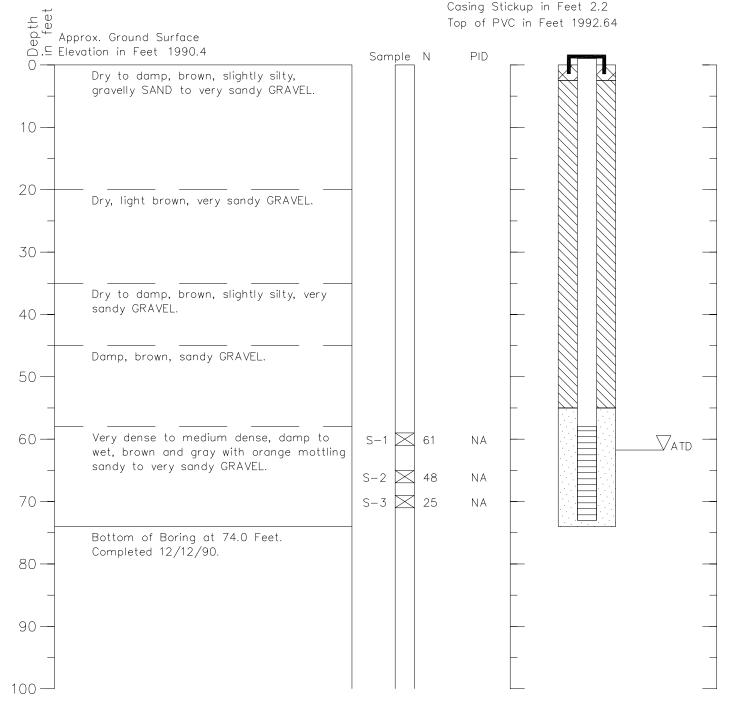
hel 4/14/031=1 264476 logs 68.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.2 Top of PVC in Feet 1992.64



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

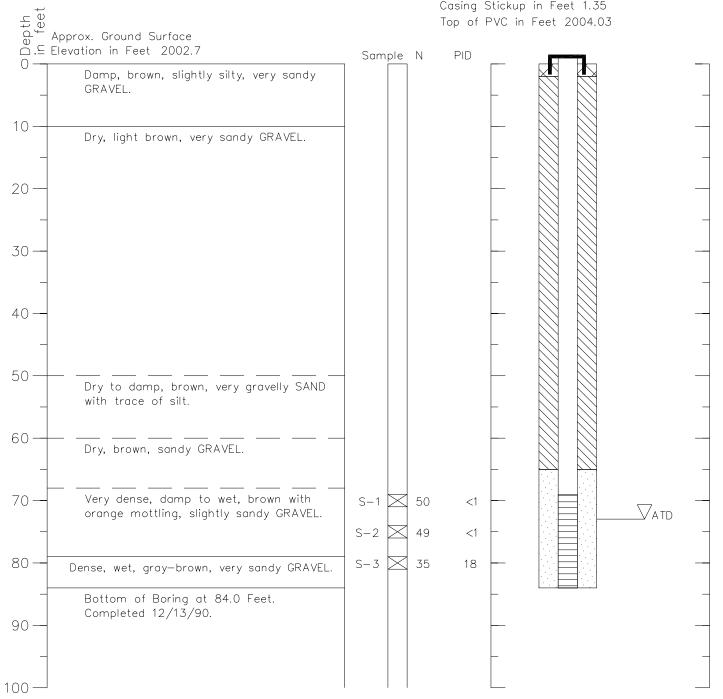
hel 4/14/031=1 264476 logs 68.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.35 Top of PVC in Feet 2004.03



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

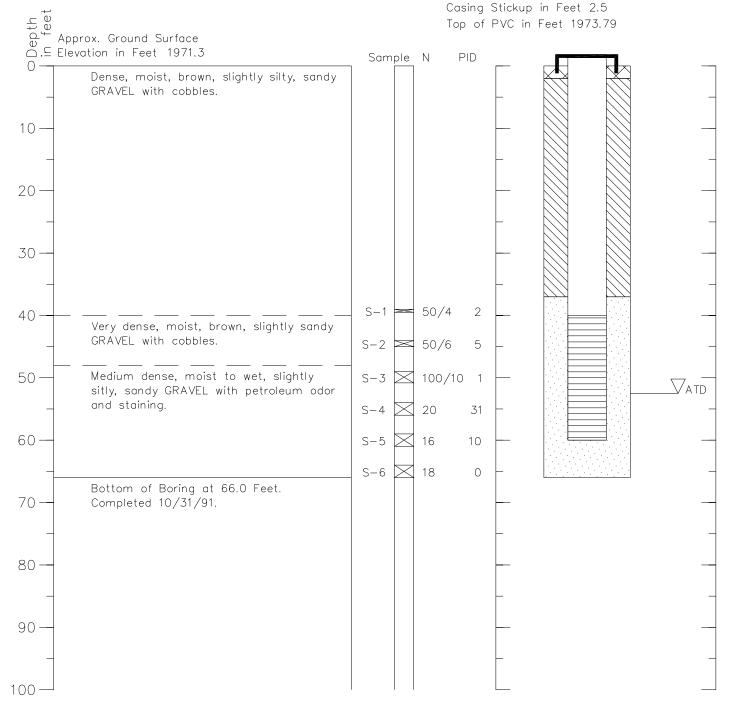
hel 4/14/031=1 264476 logs 69.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.5 Top of PVC in Feet 1973.79



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

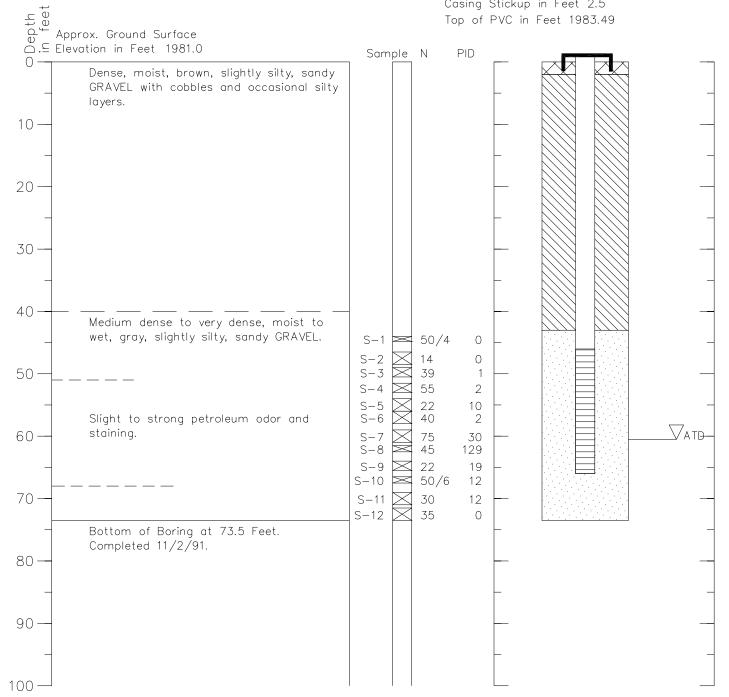


hel 4/14/031=1 264476 logs 70.dwg

Geologic Log

Monitoring Well Design

Casing Stickup in Feet 2.5 Top of PVC in Feet 1983.49



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

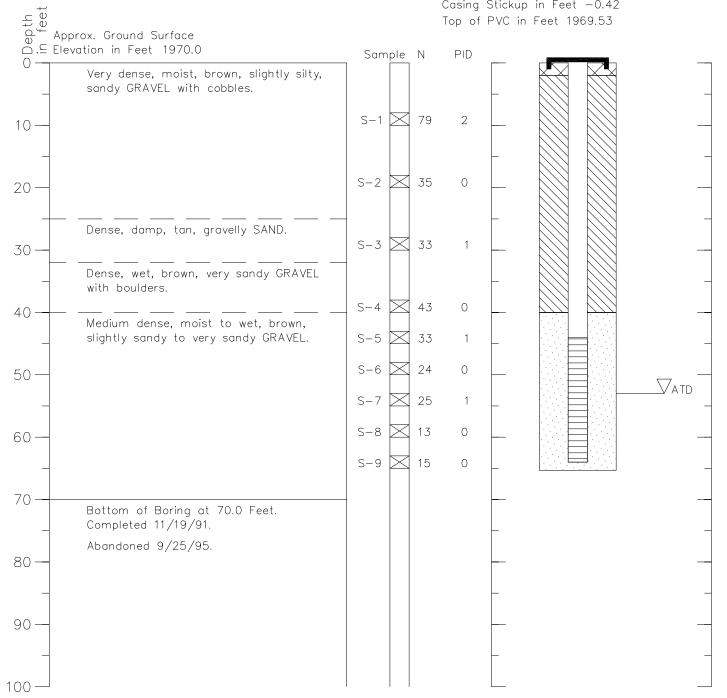
hel 4/14/031=1 264476 logs 71.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet -0.42Top of PVC in Feet 1969.53



1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

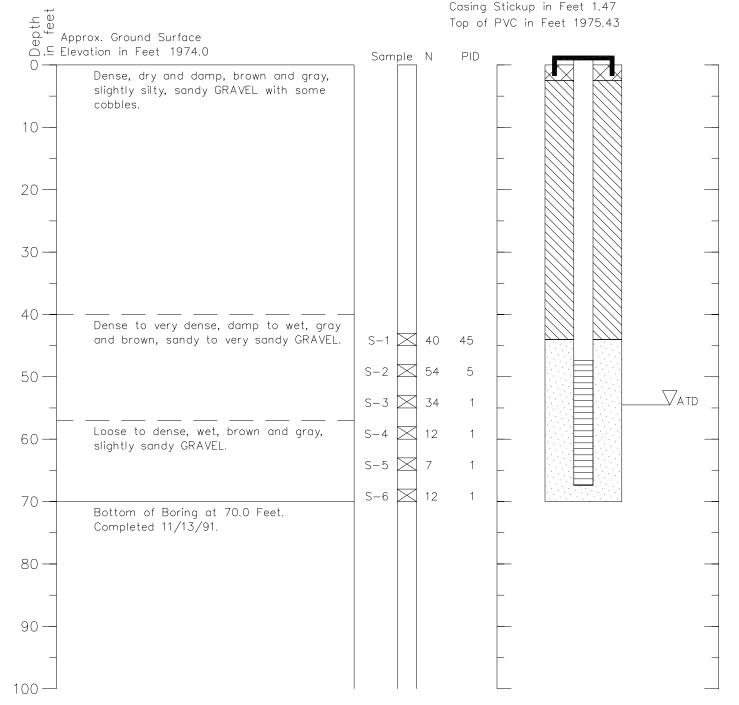
hel 4/14/031=1 264476 logs 73.dwg



Geologic Log

Monitoring Well Design

Casing Stickup in Feet 1.47 Top of PVC in Feet 1975.43



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



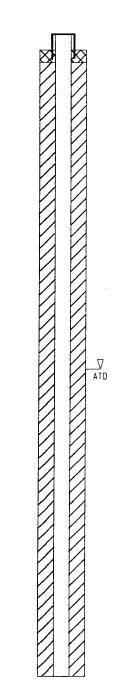
hel 4/14/031=1 264476 logs 74.dwg

Geologic Log

Depth O in Feet	Approximate Ground Surface Elevation in Feet: 1970.5	
Ē	Sandy GRAVEL. (FILL)	
5-1		
10 -	Sandy GRAVEL with cobbles.	
15-		
20-		
25-		
30-		
35-		
40-		
45-		
50-	Sandy GRAVEL.	
55-		
60-		
65-		
70-	Sandy GRAVEL with boulders and cobbles.	
75-		
E		
85-		
90-		
95-		
100		

Monitoring Well Design Casing Stickup in Feet: 2.62 Top of PVC in Feet 1973.12

Ē

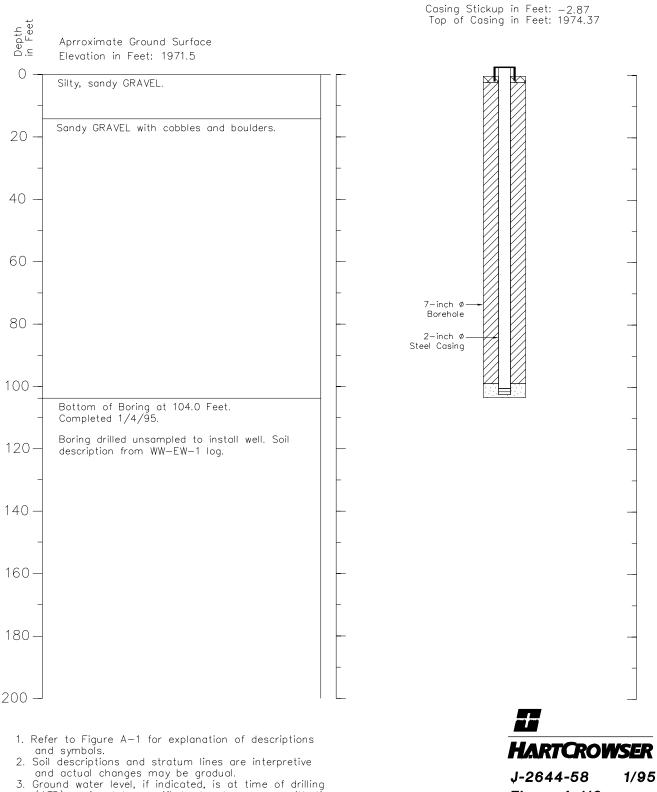




 Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

Geologic Log



(ATD) or for date specified. Level may vary with time.

Figure A-112

Well Design

hel 4/14/03 1=1 264476 logs 75.dwg

Geologic Log

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Depth in Feet	Approximate Ground Surface Elevation in Feet: 1971.9	Sample	
-0	Dry, brown to dark brown, slightly silty,	]	
5-	sandy GRAVEL.	S-1	
10-	Dry, gray, slightly sandy GRAVEL.	S-2	
15 -	Dry, brown, slightly sandy GRAVEL.	S-3	
20-		S-4	
25-		S-5	ш
30-		S-6	шт
35-		S-7	ш
40-	— Becomes damp.	S-8	
45-		5-9	
50-	Dry, brown, slightly sandy GRAVEL.	S-10	ш
55-		S-11	
60-		S-12	
65-	Bottom of Boring at 62.5 Feet. Completed 8/17/95.		
70-	2-inch-diameter 0.020-inch machine-slotted PVC screen from 42 to 57 feet.		
75-			
80-			
85-			
90-			
95-			
100 E		1	

Monitoring Well Design Casing Stickup in Feet: 2.84 Top of PVC in Feet 1974.74

1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

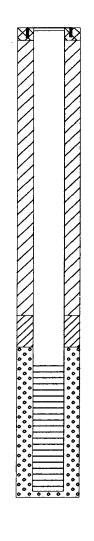


Geologic Log

Depth O in Feet	Approximate Ground Surface Elevation in Feet: 1982.9	
	Sandy GRAVEL to gravelly SAND with cobbles.	
5		
10-1		
15-1		
20-		
25-		
30-		
35-		
40-		
45-		
50-		
55-		
60-		
65-		
70-		
75-	Bottom of Boring at 75.0 Feet. Completed 9/20/95.	
80-	Completed 9/20795. 4-inch-diameter, 0.080-inch wirewrap slot	
85-	steel screen from 54 to 74 feet.	
90-		
95-		
ا- 100		

Monitoring Well Design Casing Stickup in Feet: -0.45 Top of PVC in Feet 1982.46

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- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.



#### Boring Log and Construction Data for Skimming Well WW-SK-1

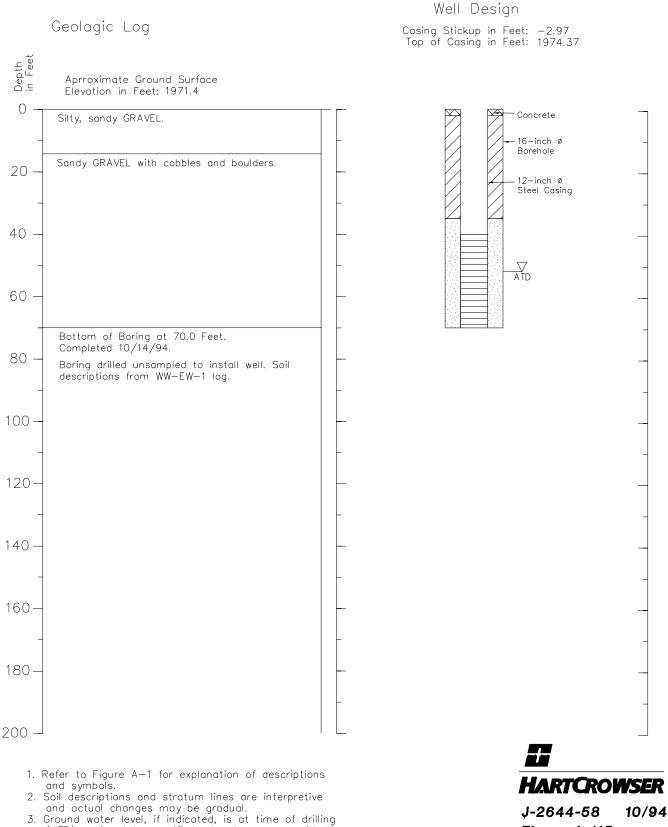


Figure A-115

(ATD) or for date specified. Level may vary with time.

hel 4/14/03 1=1 264476 logs 76.dwg

#### Well Log WW-SK-2

Geologic Log

#### Casing Stickup in Feet: 2.47 Depth in Feet Top of Casing in Feet: 1979.67 Lab Approx. Ground Surface Sample Tests Elevation in Feet: 1977.2 0. Brown, silty SAND and GRAVEL. 8-inch-Diameter 10 Well Casing 20-30 -40 K-Packer Gray SAND and GRAVEL. 8-inch-Telescoping 50 80-Slot Screen Moist to wet SAND and GRAVEL. 60-Bottom of Exploration at 68.0 Feet. 70. Completed 6/26/01. 80 90 100-

# HEL 4/14/03 1=1 264476 logs SK-2.dwg

- Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and stick up reported by Holt Drilling. Actual TOC elevation will be surveyed at a later data.



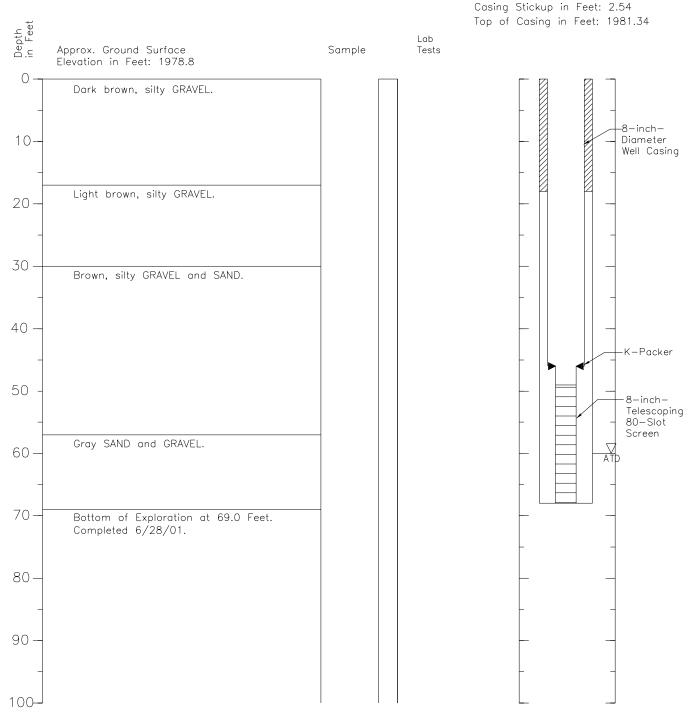
Extraction Well Design

#### Well Log WW-SK-3

Geologic Log



Well Design



HEL 4/14/03 1=1 264476 logs SK-3.dwg

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
   Groundwater level, if indicated, is at time of drilling
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

 Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and stick up reported by Holt Drilling. Actual TOC elevation will be surveyed at a later data.

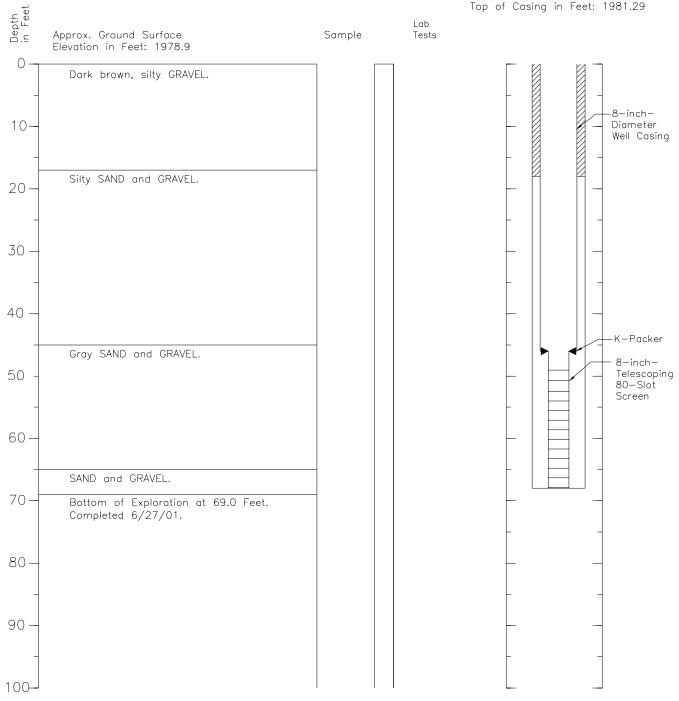


#### Well Log WW-SK-4

Geologic Log

#### Extraction Well Design

Casing Stickup in Feet: 2.39 Top of Casing in Feet: 1981.29





- Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- Top of casing (TOC) elevation was calculated based on surveyed ground surface elevation and stick up reported by Holt Drilling. Actual TOC elevation will be surveyed at a later data.



Geologic Log

ы Бр						
Depth in Feet	Approximate Ground Surface Elevation in Feet: 2003	Sample		Ν	Lab Tests	<b>[</b> ]
0 5 5	Dense to very dense, moist, dark gray GRAVEL with oli-like odor.	S-1	$\square$	48		
10-		5-2	$\bowtie$	68		
15-	<ul> <li>Oily odor dissipates with depth.</li> </ul>	S-3	$\times$	67		
20	Dense to very dense, damp, light brown to brown, slightly sandy GRAVEL.	S-4	$\times$	80	CA	
25-		S-5	$\times$	71	CA	
30-		×				
35-		S-6	X	39		
40-1		S-7	X	42		
45-		S-8	X	52	CA	
50-1	<ul> <li>Slight oil-like odor between 43 and 53 feet.</li> </ul>	S-9	X	79		
55-1	Very dense, damp, brown, slightly silty, sandy GRAVEL.	S-10	×	76	CA	
60-	Very dense, moist, brown GRAVEL wiwth an oil-like odor.	S-11	$\times$	59		
65-	Very dense, moist, brown, gravelly SAND with an oil∼like odor.	5-12	$\boxtimes$	63	CA	
70-1	Very dense, moist, brown, sandy GRAVEL with a slight to moderate oil-like odor.	S-13	Ш			
75-	Very dense, wet, gray, sandy GRAVEL with a strong oil-like odor.	S-14				
80-	Very dense, wet, brown, slightly silty GRAVEL with a slight oil-like odor.	S-15				
85-	Very dense, wet, gray GRAVEL with a slight oil-like odor.	S-16				
90-		S-17				-
95- 100-	Bottom of Boring at 91.5 Feet. Completed 1/13/99. Note: Water samples collected on March 25, 1999, and June 9, 1999, submitted for chemical analysis.					-

1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Ground water level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



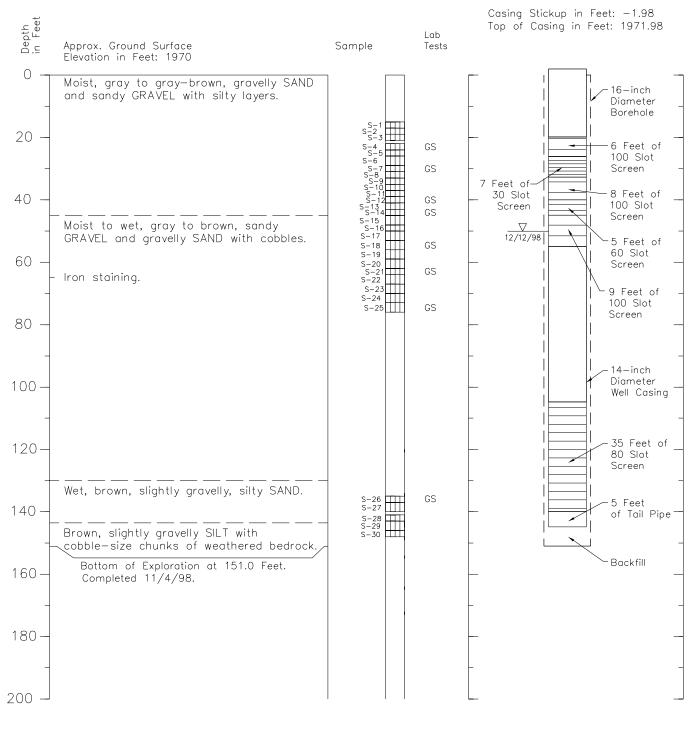
Monitoring Well Design

Casing Stickup in Feet: 2.0 Top of Casing in Feet 2005

# Boring Log and Construction Data for Recirculation Well WW-UVB-1

Geologic Log

#### Recirculation Well Design



 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Ground water level, if indicated, is at time of drilling

(ATD) or for date specified. Level may vary with time.

**HARTCROWSER** J-2644-69 11/98 Figure A-120



Photograph A-1 - HL-MW-28DD 0 to 4 feet below ground surface.



Photograph A-2 - HL-MW-28DD 4 to 8 feet below ground surface.



Photograph A-3 - HL-MW-28DD 8 to 18 feet below ground surface.



Photograph A-4 - HL-MW-28DD 18 to 26 feet below ground surface.



Photograph A-5 - HL-MW-28DD 26 to 33 feet below ground surface.



Photograph A-6 - HL-MW-28DD 33 to 42 feet below ground surface.



Photograph A-7 - HL-MW-28DD 42 to 46 feet below ground surface.



Photograph A-8 - HL-MW-28DD 46 to 50 feet below ground surface.



Photograph A-9 - HL-MW-28DD 50 to 54 feet below ground surface.



Photograph A-10 - HL-MW-28DD 54 to 57 feet below ground surface.



Photograph A-11 - HL-MW-28DD 57 to 61 feet below ground surface.



Photograph A-12 - HL-MW-28DD 65 to 70 feet below ground surface.



Photograph A-13 - HL-MW-28DD 70 to 74 feet below ground surface.



Photograph A-14 - HL-MW-28DD 74 to 78 feet below ground surface.



Photograph A-15 - HL-MW-28DD 78 to 82 feet below ground surface.



Photograph A-16 - HL-MW-28DD 82 to 98 feet below ground surface.



Photograph A-17 - HL-MW-28DD 98 to 108 feet below ground surface.



Photograph A-18 - HL-MW-28DD 108 to 109 feet below ground surface.



Photograph A-19 - HL-MW-28DD 109 to 118 feet below ground surface.



Photograph A-20 - HL-MW-28DD 118 to 133 feet below ground surface.



Photograph A-21 - HL-MW-28DD 133 to 140 feet below ground surface.



Photograph A-22 - HL-MW-28DD 140 to 144 feet below ground surface.



Photograph A-23 - HL-MW-28DD 144 to 148 feet below ground surface.



Photograph A-24 - HL-MW-28DD 148 to 150 feet below ground surface.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

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County		
Area		
Man		
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MATERIAL Transarile driller's terminology literally but paraphrane terial water-bearing, so state and record static level if ind-writere datum unless otherwise indicated. Correlat chie. Following log of materials, list all casings, perforat Coarse gravel & boulders Coarse gravel	(feet) As neressary, reported. Give to with strate tons, screen, o 0 16	in parenthes depths in fr raphic columnes (4.) 16 70
MATERIAL Transaribe driller's tarminology literally but paraphrase terial water-barring, so state and record static level if y land-opface datum union otherwise indicated. Correla this Following log of materials, list all casings. perforat Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Crevel with hardpan & clay	(feet) At mercesary, reported. Give to with stratig ions, screens, of 0 16 70	(fort) in parenthese depths in fr raphic columna.) 16 70 86
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so state and record static level if i land-ourface datum unless otherwise indicated. Correla chile Following log of materials, list all casings, perforat <u>Coarse gravel &amp; boulders</u> <u>Coarse gravel</u> & boulders <u>Coarse gravel</u> <u>Gravel with hardpan &amp; clay</u> <u>Coarse gravel</u>	(feet) as mercesary, reported. Give is with stratig sone, screen, o 0 16 70 86	(feet) in parenthese depths in ( rephic column ide.) 16 70 86 96
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so state and record static level if i land-surface datum unless otherwise indicated. Correla state. Following log of materials, list all casings, perforat Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Gravel with hardpan & clay Coarse gravel Hardpan & gravel	(feet) As nor-ceary, reputed. Give to with stratig tone, screens, e 0 16 70 86 96	(feet) in parenthese depths in ( rephic columne) ite.) 16 70 86 96 101
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so state and record static level if a land-ourface datum unless otherwise indicated. Correlasi state and correlasion of materials, list all casings. perform Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Gravel with hardpan & clay Coarse gravel Hardpan & gravel Gravel and sand	(feet) as nor-ceary, reported. Give so with stratege tons, screens, of 16 70 86 96 101	(feet) in parenthese depths in for suphic columner te.) 16 70 86 96 101 103
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so state and record static level if i land-ourface datum unless otherwise indicated. Correla chila Fallowing log of materials, list all casings, perforat <u>Coarse gravel &amp; boulders</u> <u>Coarse gravel &amp; boulders</u> <u>Coarse gravel</u> <u>Gravel with hardpan &amp; clay</u> <u>Coarse gravel</u> <u>Hardpan &amp; gravel</u> <u>Gravel and sand</u> <u>Fine gravel and clay</u>	(feet) as mercesary, reported. Give to with stratig sone, screens, of 16 70 86 96 101 103	(feet) in parenthese depths in ( rephic columne) ite.) 16 70 86 96 101 103 110
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so state and record static level if land-ourface datum unless otherwise indicated. Correla state. Following log of materials, list all casings, perforat Coarse gravel & boulders Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Gravel with hardpan & clay Coarse gravel Hardpan & gravel Gravel and sand Fine gravel State and clay Fine gravel	(feet) As nercessary, reported. Give to with strate sone, screens, of 16 70 86 96 101 103 110	(feet) in parenthese depths in ( rephic column ie.) 16 70 86 96 101 103 110 112
MATERIAL Transarile driller's terminology literally but paraphrase torial water-bearing, so state and record static level if land-ourface datum unless otherwise indicated. Correla state. Following log of materials, list all casings, perforat Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Bardpan & gravel Bardpan & gravel Gravel and sand Fine gravel and clay Fine gravel Coarse gravel	(feet) As nor-ceary, reported. Give to with strate tone, screens. 0 16 70 86 96 101 103 110 112	(feet) in parenthese depths in ( resphic column ite.) 16 70 86 96 101 103 110 112 132
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so state and record static level if i land-ourface datum unless otherwise infattic Correla chile. Fallowing log of materials, list all catings, perforat <u>Coarse gravel &amp; boulders</u> <u>Coarse gravel &amp; boulders</u> <u>Coarse gravel</u> <u>Coarse gravel</u> <u>Bardpan &amp; gravel</u> <u>Gravel and sand</u> <u>Fine gravel</u> <u>Coarse gravel</u> <u>Coarse gravel</u> <u>Fine gravel</u>	(feet) As nor-ceary, reported. Give to with strategies one, screens, of 16 70 86 96 101 103 110 112 132	(feet) depths in ( rephic column te.) 16 70 86 96 101 103 110 112 132 134
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so take and record static level if i land-ourface datum unless otherwise indicated. Correla charge gravel & boulders Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Gravel with hardpan & clay Coarse gravel Hardpan & gravel Gravel and sand Fine gravel and clay Fine gravel Coarse gravel Coarse gravel Coarse gravel Coarse gravel Coarse gravel Coarse gravel Coarse gravel	(feet) as nor chary, mouth direction o with stratig one, screens, d 0 16 70 86 96 101 103 110 112 132 134	(feet) in parenthese depths in ( raphic columnie) 16 70 86 96 101 103 110 112 132 134 138
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MATERIAL Transarile driller's terminology literally but paraphrase land-optace detum unless otherwise indicatic level if i land-optace detum unless otherwise indicatic level if i coarse gravel & boulders Coarse gravel & boulders Coarse gravel & boulders Coarse gravel & boulders Coarse gravel & day Coarse gravel Hardpan & gravel Gravel and sand Fine gravel and clay Fine gravel Coarse gravel	(feet) as nor chary, mouth direction o with stratig one, screens, d 0 16 70 86 96 101 103 110 112 132 134	(feet) in parenthese depths in ( raphic columnie) 16 70 86 96 101 103 110 112 132 134 138
MATERIAL Transarile driller's terminology literally but paraphrase terial water-bearing, so tate and record static level if i land-ourface datum unless otherwise infattic Correla state and correct datum unless otherwise infattic correla tad-ourface datum unless otherwise infattic level if Coarse gravel & boulders Coarse gravel & boulders Coarse gravel & boulders Coarse gravel Bardpan & gravel Gravel and sand Fine gravel and clay Fine gravel Coarse gravel Coarse gravel	(feet) as nor chary, mouth direction o with stratig one, screens, d 0 16 70 86 96 101 103 110 112 132 134	(feet) in parenthese depths in ( raphic columnie) 16 70 86 96 101 103 110 112 132 134 138

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	LOG.—Continued No	Terrystee	Durta	
1103F	Margeria.	TREEXHING (fest)	(feet)	
	Depth forward			
	SWL: 98' on Marsh 5, 1963			
	No well test made.			
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The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

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₩eU 1. 1	DEFARIMENT OF COULT	TION E8	
ELL LO	)G		
	- Driller		
	Drillers record	·	
ocation:	State of WASHINGTON		
Coun	tySpokane	1	
Агев			
Map.			
	07 . / m25 N P //	hagram of S	iection
) <del>r</del> illina	Kolman Drilling Company	•••••••••••••••••••	
	-		****
	Date	•••••••••••••••••••••••••••••••••••••••	, 19
Men	Irvin Water Dirstict # 6		
_	N. 3120 Buller, Spokane,	asii ina	
Add	rface, datum19.89ft.above		
Touch mu	steen datum		
Lidillu su	11ace, attainin Delow	Dims.	
SWL:	7.8	Dims	
CORRE- LATION	78	Trom (feet) necressury, in	To (feet) parentheses
CORRE- LATION	78	Trom (feet) necressury, in	To (feet) parentheses
CORRE- LATION	Actemate Matematemate Matemate Matematemate Matematemate Matematematematematematematematematematem	Trom (feet) necressury, in	To (feet) parentheses
CORRE- LATION	MATERIAL MATERIAL MATERIAL Materibes determined by the static level if reput d-surface datum unless otherwise indicated. Correlate w Following log of materials, list all casings, perforations Municipal supply	Trom (feet) necressury, in	To (feet) parentheses
CORRE- LATION	MATERIAL MATERIAL MATERIAL Materibes driller's terminology literally but y araphrise as the water-bearing, an state and record static level if repo- d-surface datum unless otherwise indicated. Correlate w - Following log of materials, list all casings, perforation Municipal supply boulders and gravel	From (feet) necessary, in orted, Give d with stratigre s, screens, etc	To (fest) parentheses. cpths in fect phic columb. s.)
CORRE- LATION	MATERIAL MATERIAL MATERIAL Materiber detiller's terminology literally but y araphrise as al water-bearing, an state and record static level if reput d-surface datum unless otherwise indicated. Correlate w - Following log of materiale, list all casings, perforation Municipal supply boulders and gravel gravel	From (fest) necessary, in orted, Give d of hastation a, seriens, etc. 0	To (fest) parenth-see. koths in feet phic columa. c.) 22
CORRE- LATION	MATERIAL MATERIAL MATERIAL Materibes detilier's terminology interaily but y araphrise as a la water-besting, an state and record static lovel if repo- d-surface datum unless otherwise indicated. Correlate a - Following log of materials, list all casings, perforation Municipal supply boulders and gravel gravel hardpan	From (fest) merssury, in orted. Give d ith stratigre s, screens, etc D 22	To (fest) parenth-see. koths in feet phic columa. c.) 22
CORRE- LATION	MATERIAL MATERIAL MATERIAL MATERIAL Materibes deliber's terminology literally but y araphrase as al water-bearing, an state and record static level if repu- d-surface datum unless otherwise indicated. Correlate w . Following log of materials, list all casings, perforation Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117'	From (fest) merssury, in orted. Give d ith stratigre s, screens, etc D 22	To (fest) parenth-see. koths in feet phic columa. c.) 22
CORRE- LATION	MATTRIAL MATTRIAL MATTRIAL Mattrial your your and the second static level if report d-surface datum unless otherwise indicated. Correlate a -rollowing log of materials, list all casings, perforation Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3"	From (fest) recussury, in rted. Give d (th stratigre s, scrices, etc. D 22 100	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
CORRE- LATION	MATTRIAL MATTRIAL MATTRIAL Mattrial your your and the second static level if report d-surface datum unless otherwise indicated. Correlate a -rollowing log of materials, list all casings, perforation Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3"	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
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CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
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CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
CORRE- LATION	NATERIAL MATERIAL MATERIAL MATERIAL Mater-bearing, an state and record static lovel if report d-surface datum unless otherwise indicated. Correlate m d-surface datum unless otherwise indicated. Correlate m Municipal supply boulders and gravel gravel hardpan Casing: 16" from 0' to 117' Perforations: 3/8" by 3" 540 perf. from	From (rest) rect. (ive d rith stratigre a, scrictus, et 0 22 100 83' to	To (feet) parenth-see. cpths in feet phic columa, a) 22 100 117
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The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

VELL	LOG	Unrecord	ed
	by Driller		
	Driller's record	•	
	n: State_of WASHINGTON		ļ
Cou	anty Spokane		
Аге			
Ma	p		1
NV.	Vi NE V sec. 3 T. 25N, R. 44	Diagram of	Section
Drilling	Co. Holman Drilling Corp.		
Ad	dress 3410 E. 9th Spokane, Was	ont 16	L
	thod of Drilling Cable Date S		
	Trentwood Irrigation Dist. #3		
	dress E. 14115 Trent Ave., Sp		
and s	urface, datum		
7	7 <sup>1</sup> Date Sept. 15 <sup>1000</sup>	6 mine . 16	5" x 12
SWL:.!.	Date Coper again, 19.99	e Dims.:	*
Const-	M	From	
	34 A 178 8 1 6 7.		To
LATION ( Tra	MATERIAL	(feet)	(feet)
(Tra If materi below lar	nacribe driller's terminology literally but , imphrase a ini water-bearing, an state and record static level if re id-surface datum unless otherwise indicated. Correlate s. Following log of materials, list all casings, perforation	(fest) is necessary, in ported. Give d with stratigre	(feet) parenthese lepths in fe phic polum
(Tra If materi below lar	inscribe driller's terminology literally but , irmpbrase a ind water-bearing, an state and record static level if re- ad-surface datum unless otherwise indicated. Correlate 8. Following log of materials, list all casings. perforation [rrigation]	(fest) a new-seary, in ported. Give d with stratigree one, screeks, etc	(feet) parenthese lepths in fe sphic colum c.)
(Tra If materi below lar	neribe dritter's terminology literally but , implorate a ind water-bearing, an state and record static level if re- d-surface datum unless otherwise indicated. Correlate s. Following log of materials, list all casings. perforation Irrigation Topsoil	(fest) is necessary, in ported. Give d with stratigre	(foet) parenthese lepths in fe sphac column c.)
(Tra If materi below lar	Inscribe dritter's terminology literally but , implorate a ind water-bearing, an etablic and record static level if re- de-surface datum unless otherwise indicated. Correlate Pollowing log of materiale, list all casings, perforation Irrigation Topsoil Grave	(feet) a navessary, in ported Give d with stratigra ons, acress, st 0 1	(feet) parenth:se loping in fe spinc column c.) 1 25
(Tra If materi below lar	Insettibe dritter's terminology literally but , irmpbrase a al water-bearing, an state and record dutic level of re- d-surface datum unless officerwise indicated. Correlate Bolowing log of materials, list all casings. perforation Irrigation Topsoil Gravel Gravel, boulders	(feet) is never sharp, in ported Give d with stratigre ons, screeks, sta 0 1 25	(feet) parenthese (pthy in fe aphic column c.) 1 25 32
(Tra If materi below lar	Inscribe drifter's terminology literally but , irsubrase a sal water-bearing, ao state and record static level if re- de-unface datum unless otherwise indicated. Correlate Following log of materials, list all casings. perforation Irrigation Topsoil Gravel Gravel, boulders Gravel 3/4 -4"	(feet) a navessary, in ported Give d with stratigra ons, acress, st 0 1	(feet) parenthese (pthy in fe aphic column c.) 1 25 32
(Tra If materi below lar	Inscribe drifter's terminology literally but , insubrase a sal water-bearing, an state and record static level if re- de-unface datum unless otherwise indicated. Correlate Following log of materials, list all casings. perforation Irrigation Topsoil Gravel Gravel, boulders Gravel 3/4 -4 <sup>11</sup> Boulder	(feet) a nerosanry, in ported. Give d with stratigre 0 0 1 25 32	(feet) parenth:se lipthy in fe ipthy in fe
(Tra If materi below lar	Inscribe drifter's terminology literally but , irsubrase a sal water-bearing, ao state and record static level if re- de-unface datum unless otherwise indicated. Correlate Following log of materials, list all casings. perforation Irrigation Topsoil Gravel Gravel, boulders Gravel 3/4 -4"	(feet) a net-samy, in ported. Give d with stratigre 0 1 25 32 46	(feet) parenthese (pthy in fe aphic column c.) 1 25 32 46 47 54
(Tra If materi below lar	Insertible dritter's terminology literally but a irrational mater-bearing, an attain and record static level if re- de-surface datum unless otherwise indicated. Correlate Following log of materials, list all casings. perforation Topsoil Gravel Gravel, boulders Gravel 3/4 -4" Boulder Gravel 2-4"	(feet) a normalized Give d with stratigre 0 1 25 32 46 47 54 84	(feet) parenthese inputs in fe sphie column c-) 1 25 32 46
(Tra If materi below lar	neeribe dritter's terminology literally but a trapbrase a al water-bearing, as state and record static level if re- de-unface datum unless otherwise indicated. Correlate Following log of materiale, list all cusings. perforation Topsoil Gravel Gravel, boulders Gravel 3/4 -4" Boulder Gravel 2-4" Gravel 2-4" Gravel 2-1", loose Gravel 2-1", tight	(feet) a new-same, in ported Give d with stratigre 0 1 25 32 46 47 54	(feet) parenthese (pthy in fe sphic column c.) 1 25 32 46 47 54 84
(Tra If materi below lar	neeribe dritter's terminology literally but a trapbrase a al water-bearing, as state and record static level if re- de-unface datum unless otherwise indicated. Correlate Following log of materiale, list all cusings. perforation Topsoil Gravel Gravel, boulders Gravel 3/4 -4" Boulder Gravel 2-4" Gravel 2-4" Gravel 2-1", loose Gravel 2-1", tight	(feet) a normalized Give d with stratigre 0 1 25 32 46 47 54 84	(feet) parenth.se ipthy in fe ipthy ipthy in fe ipthy ipthy ipthy in fe ipthy ipthy ipt
(Tra If materi below lar	Insertible dritter's terminology literally but a irretibration in water-bearing, an attain and record static level if re- de-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. perforation Topsoil Gravel Gravel, boulders Gravel 3/4 -4" Boulder Gravel 2-4" Gravel 2-4" Gravel 2-4" Gravel 2-1", loose Gravel 1-1", tight Gravel 1-1", loose Casing: 16" from 2-122!	(feet) a net-samy, in ported Give d with stratigre 0 1 25 32 46 47 54 84 102	(feet) parenthese ipphy in fe ipphy in fe
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(Tra If materi below lar	neeribe dritter's terminology literally but a tratibuse a nal water-bearing, as state and record static level if re- de-unface datum unless otherwise indicated. Correlate Pollowing log of materiale. list all casings. perforation Topsoil Gravel Gravel, boulders Gravel 3/4 -4" Boulder Gravel 2-4" Gravel 2-4" Gravel 2-4" Gravel 2-1", loose Gravel 2-1", tight Gravel 2-1", loose Casing: 16" from 2-122' Perforated from 88-118' Surface sealed with bentonite st	(feet) s noticed Give d with stratign 0 1 25 32 46 47 54 84 102 108 urry to 1	(feet) parenth:se ipthy in fe ipthy in fe ipthic iolum  1 25 32 46 47 54 84 102 108 120
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A TROPI	MATTRIAL	TERCENTER (feet)	Dert (feet)	
	Depth forward			
	Recovery too rapid to measure July 23, 1964 Temp: 45°			
	July 23, 1964			
	Temp: 45°			
	Pump: turbine - surface moto:	r (not r	urchase	
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The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

STATE	WELL REPORT Application		1.00
(1) OWNER: Name TREATUCED IRC DIST	OF WASHINGTON Permit No.		09.7
(2) LOCATION OF WELL: County Spindag	Address N 4405 SELLIUPH RI	<u>), S</u>	P-ADN
if and distance from section or subdivision corner	JULY NUL NE Sec 2 +	5 N. R	Hww
BRODOG THE			
Irrigation [] Test Well [] Other	Pormation: Describe by color, character, size of mater show thickness of aquijers and the kind and nature of stratum penetrated, with at least one entry for each	al and sta	
(4) TYPE OF WORK: Owner's number of well of ingre than one).	stratum penetrated, with at least one entry for each	the mater	not in eac
New well 🗸 Method: Dug 🗌 Bore	MATERIAL	FROM	TO
Despensed 🔲 Cable 🖉 Driv	mo MND + GRAVEL 3" Mill	0	76
Reconditioned D Rotary D Jette	0  = 156yLDERS	76	78
(5) DIMENSIONS: Diameter of well 2.0 in	SAND + CRAUEL 3"MIN	78	89
Dritled 236 ft Depth of completed well 174	GRAVEL I" MIN.	84	108
(6) CONSTRUCTION DETAILS:	- CEAVEL 3"MIN X	108	137
Coring install 1 4 a	GRAVEL + SOND 2"MIN K	137	751
Casing installed: 20 " Diam. from t 2 h. to /21	GARNUGL + SAND I"MIN X	151	154
Diam. from (	$ = \frac{2\pi N P}{2} = DI(IKH CLAV) $	154	236
	. n.		
Perforations: Yes D No 🕱			
Type of perforator used			
Size of perforations			
perforations from		1	
perforations from			
Screens: Yes A No D	DEARINE STRATA		
Manufacturer's Name JUHHSCH Type STAINLESS Model No STD.			
		<u> </u>	
Diam 2.0 Slot aize 120 from 1.3.5. ft. to 1.5.1		12	
Gravel packed: Yes D No D Size of gravel:	·····		
Gravel placed from	<b>n</b> .		
Surface seal: Yes M No To what depthy 20		<del>otriit</del> –	
material used in seal S G (16 A) T G (C C T	SPONARI I		
Did any strata contain unusable water? Yes [] No			
Type of water?			
	= <u><u><u></u></u><u><u><u></u><u></u><u><u></u><u></u><u><u></u><u></u><u></u><u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u></u></u></u>		
PUMP: Manufactures's Name  Type			
Lipper and the second sec	Ent.		
WATER LEVELS: Land-ourface elevation			
tic level 7/15/0	L		
Det Suiste Inch Date			
Artesian water is controlled by			
	•		
lowered below static laural			
	Work started 4/10 1981. Completed 7.	2.d.	1.81
1d: / 500 gel/min. with 4, 4 ft. drawdown efter hr			
30:0 - 7.4	This well was drilled under much to the		
	true to the best of my knowledge and belief.	unis rep	ai 1100
overy data (time taken as sero when pump turned off) (water level measured from well top to water level)	Halan Da	•	
me Water Level Time Water Level Time Water Level	NAME HOLMAN DRILLING CO (Person, firm, or corporation) (Typ	AND	
4.N. 102.6	(Typ	or print	•
	Address E 3410 97H AUE SPORBAE WA 79		
, of vest 7/15/81	SPURBAE WA TIG	502	•
at	[Signed] angel & Italine (Well Driller)	rn	
stan flow	(Weil Driller)		
stan flow	License No. 0189 Date 8/19		. 01
8/31/81 MUSE ADDITIONAL			.7.1
7 1 2 1 1 2 1 1 7 1 4			
USE ADDITIONAL	HETE IF NECESSARY		

TID-96

LAY HUFFA S

Trentwood Irrigation District #3 N. 4402 Sullivan Rd. Spokane, Washington 99216 922-7532 Well Log: (Well #5 Record by: Dritter Source: Engineer's record Location: NW2, NW2, Sec. 1, T. 25 N., R. 44 E.W.M. Spokane County, Washington Drilling Co: E. A. Holman Drilling Co. S. 601 Pines Rd. Spokane, Washington 99206 Method of Drilling: Cable Date: Feb. 15, 1968 Owner: Trentwood Irrigation District #3 N. 4402 Sullivan Rd. DIAGHAM 0. SECT ION Spokane, Washington 99216 SWL: 104" •• . Date: Feb. 15, 1968 Dims: 16" x 159' Material From (feet) To (feet) Sand & gravel 0 10 Sand, silt & pea gravel 10 18 Sand & gravel 18 59 Sand, silt & pea gravel 59 81 Cemented sand & gravel 81 84 Sand & gravel 84 102 Very hard packed gravel 102 104 Good clean washed gravel up to 14" 104 110 Gravel, to 2" 110 112 Gravel, to 14" 112 117 Gravel, to 3" 117 122 Gravel, to 31" 122 130 Gravel, to 2<sup>1</sup>/<sub>2</sub>" Gravel, to 3" 130 140 140 150 9' of casing welded on top and back filled around to raise ground level. Casing: 16" 0' to 159" Perforated from 110' to 145' Pump: 200 h.p. deep well turbine, Layne & Bowler.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

	Well # 1 App1. 11195Division of water Res Per. 10027	TON ERVATIO	N
WE		SOURCES	
Reco	LLOG Drilder		· . • • • • • • • • • • •
Sour	rd by Drilder Driller's record		
Loca	tion: State of WASHINGTON		
Ċ	CountySpokane	6-3	[
	lrea		
N			· · · · · · · · · · · · · · · · · · ·
	$\frac{44}{10} = \frac{1}{100} $		
	Walls Watte	Liagiam	ul Section
	ddress Walla Halla, WA		
M Owne	dethod of Drilling Cable Date Spokane Industrial Park ddress N. 3808 Sullivan Road		, 19
A	N. 3808 Sullivan Road	, inc.	<b>.</b>
Land	surface, datum	, spoka	me, wa
SWL:	76'2'bate Sept 10 1970	Dims.:	
CORRE- LATEON	MATERIAL	Trom	To
		(feet)	(feet)
(Tro If mater below in if fensible	Inscribe driller's terminology literally but i araphrase an isl water-bearing, so state and record static level if rej ad-sufface datum unless otherwise indicated. Corretate 6. Following log of materiale, list all casings, perforation	(feet) i nortusury, jp Jortud. Give with stratigr MB. Screens, et	(feet)
(Tri lf mater below las if fensibj	ameerike driller's terminology literally but 1 srauhrase mi is water-bearing, so state and record static level if rep nd-surface detum unless otherwise indicated. Corretate - Following log of materials, list all casings. perforation Industrual use	(feet) s necressary, in Jostud. Give n with stratigr h8. surcess, et	(feet)
(Tri lif mater below la; lif fensibj	gravel	(feet) netwasury, i nortid. Give with stratur nb. screams, et 0	(feet)
(Tri If mater below land If fensibl	gravel Casing: 12" from 0' 60 1	B netweskry, in Dortud. Give : with stratigr NB. Screins, et	(fest) a parentheses. depths in fact aphic column, ac.)
(Tri If mater below la: If fensibi	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	b motionary, in Jonated. Give with stratigr hb, screens, et 0 50 *	(feet) a parentheses, depths in feet aphie column, a.)
(Tr. If mater below ia if fenaibi	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	B notcessary, is Jostud. Give with stratigr h, screens, et 0	(feet) n parentheses dupths in-fart aphic culumn, a.) 160 0 20 7
(Tr) If mater below las If feasibi	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	s norvasury, ji Jortid. Give with strata, et 0 0 50 ! 50 !	(feet) n parentheses dupths in-fart aphic culumn, a.) 160 0 20 7
(Tri if mater below la if feasibilit 	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	s norvasury, ji Jortid. Give with strata, et 0 0 50 ! 50 !	(feet) n parentheses dupths in-fert aphic culumn, a.) 160 0 20 7
(Tri if maker below la if femaib	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	s norvasury, ji Jortid. Give with strata, et 0 0 50 ! 50 !	(feet) n parentheses dupths in-fart aphic culumn, a.) 160 0 20 7
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	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	s norvasury, ji Jortid. Give with strain, et 0 0 50 ! 50 !	(feet) n parentheses dupths in-fert aphic culumn, a.) 160 0 20 7
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Contraction of the second seco	gravel Casing: 12" from 0' 60 1 Surface Seal: concrete g	s norvasury, ji Jortid. Give with strain, et 0 0 50 ! 50 !	(feet) n parentheses, d-plhs fr-fact aphic culumn, a.) 160 0 20 7

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	ell # 2 - STATE OF WASHING	17/1 M	
WELI	ppl. 11196 Division of Water Res er. 10028, Cert 7130		T
Recor Sourc	d by <u>A. A. Durand</u> Driller record		
Locuti	ion: State of WASIIINGTON		
C	ountySpokane		{•;+
	rea		İ
М	ap		
	14 SH sec. 1 T 25N R 44 F.		Section
Ac	idress Walla Walla, WA		
TAX (	eulod of Drilling Caule		
Owner.		1	
Ad	dress Roa	d, Spol	ane,
Land s	uriace, datum		
SWL:	UK Date Sent 10	-	
	UK Date Sppt 10 19.71	0 Dims.: <u>1</u>	6."x12
COLRS-	MATERIAL	From (feet)	To (feet)
COLRS-	MATERIAL	From (feet)	To (feet)
CORRE- LATION (Tra	MATERIAL nacribe driller's terminology literally but a reaphrase a al water-bearing, an state and record state level if re-	From (feat)	To (feet)
CORRE- LATION (Tra	MATERIAL necribe driller's terminology literally but 1 cruphrase as al water-bearing, an state and record static level if re- d-surface datum unless otherwise indicated. Correlate a. Following log of materials, list all cusing. performing	From (feat)	To (feet)
CORRE- LATION (Tra	MATERIAL nacribe driller's terminology literally but a reaphrase a al water-bearing. An state and record state level if re-	From (fest) s norsanary, in potent Gave d with stratigre n8, s.revel, etc.	To (feet) parenthese with in fer while column
CORRE- LATION (Tra	MATERIAL nacribe driller's terminology literally but 1 sraphrase as al water-bearing, as state and record data level if re d-surface datam unless otherwise indicated. Correlate a. Following log of materials, list all casings. performition Industrial gravel Casing: 16" from 01 to 1	From (feat) S DECEMBER, In Ported Gave d with stratigre int, s. races, etc.	To (feet)
CORRE- LATION (Tra	NATERIAL necribe driller's terminology literally but 1 craphenese as a) weber-bearing, an state and record state level if re- d-surface datum unless otherwise indicated. Correlate Following log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1	From (feet) s nortanary. (n portoil Grave d with Atratigr ns. s. ct. ns. etc 0 20 1	To (feet) parenthese physic column 
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) patenthese phare column 120 120 20
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) parenthese physic column 
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CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) patenthese phare column 120 120 20
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) patenthese phare column 120 120 20
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) patenthese phare column 120 120 20
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) parenthese phie column 
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	To (feet) parenthese phie column 
CORRE- LATION (Tra	NATERIAL neeribe driller's terminology literaily but 1 craphrase m al water-benering, an state and record state level if re d-surface datum unless otherwise indicated. Correlate Pollowing log of materials, list all casings. performing Industrial gravel Casing: 16" from 0° to 1 Surface seal: concrete	From (feet) s noreshary, in justed lave d with stratigr na, breens, etc 0 20 1 grout	to 20

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The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

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Perp. WELL LOG Record by	DEPARTMENT OF CONSI 11197 DIVISION OF WATER RES 10029, Cert. 7131 Driller	TON ERVA JOURC	TION Es	
Source	D ICCOIL	•		
Location: Stat	e of WASHINGTON			
County	Spokane	·		
•	•			
Man	· · ·			
	W.4 sec. 12r 25 N R 44E E A. A. Durand Walla Walla, WA	Di	agram of	Section
Dritting Co	Walla Walla, WA	· · · · <b>· · · · ·</b> · · · ·		
Land surface.	N. 3808 Sullivan Roa datum <u>ft. above</u> 10" Date Sept. 10, 19 1			
CORRE- LATION	MATERIAL		From (feet)	To (feet)
if material water below land-surfac	deiller's terminology (termity but a septhene obsering, so state and record state level if s datum unless otherwise (refeated). Correla vlag log of materials, list al coungs, perfors	reports te with	4. Give d stratig <i>i</i> d	cyths in feet blue column.
	ustrial use			
gra	avel		0	117
	sing: 10" from 0' to	511	7'	
Pur	np: Peerless deep we	1	turb	ine 7
	······································			

Tura up

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ind Copy - Owner's Copy REJ. 1089 STATE OF W	ASHINGTON		Permit	No	
1) OWNER: Name Spokane Industrial Park, Inc.	Address N. 3808	Sulliva	an Road.	Spokane,	Wash
2) LOCATION OF WELL: County Spokane				T25 N. A	
ing and distance from section or subdivision corner 535 ft. SOL	th and 625 ft	. east 1	rom NW	corner of	Sec
		-			
PROPOSED USE: Domestic X Industrial X Municipal	(10) WELL LOG				
Irrigation 🗍 Test Well 🗌 Other 📋	Formation: Describe by show thickness of aqui	fers and the i	cind and natur	te of the materi	ial in eau
i) TYPE OF WORK: Owner's number of well #3	stratum penetrated, un	the second s	ie entry for e		
New well [] Method: Dug [] Bored []		ATERIAL		FROM	то
isting Deepened 🗋 Cable XX Driven 🗆	<u>Spokane</u> val	ley gray	e1		ļ
Reconditioned 🗌 Rotary 🗋 Jetted 🚺	•		· · <del>-</del>		
b) DIMENSIONS: Diameter of well 10 inches.					÷
Drilled 117 ft. Depth of completed well 117 ft.					<u>i</u> – ·
CONSTRUCTION DETAILS:					<b>+</b>
• • • • • • • • • • • • • • • • • • • •					1 · · ·
Casing installed: "Diam. from					
Threeded Diam. from ft. to ft. Welded 20 Diam. from ft. to ft. to ft. to ft.					
					L
Perforations: Yes 2 No D					L
Type of perforator usedUnknown					ļ
size of perforations from					 <del> </del>
ft. to ft.	·····				
					·
Screens: Yes 🗋 No 🕅	*****				
Manufacturer's Name.					<b>i</b>
Type Model No					<u> </u>
Diam,		· · · · · · · · · · · · · · · · · · ·			
Diam					
Gravel packed: Yes No Size of gravel;					r
Gravel placed from ft. to ft.					
Surface seal: Yes 2 No To what depth? 20 n.					
Material used in seal Concrete grout					
Did any strata contain unusable water? Yes 🗋 No 💐		<u>.</u>			ļ
Type of water!					
Method of sealing strate off		······			
) PUMP: Manufacturer's Name Peerless					
type: Deep well turbine Hp 75					
) WATER LEVELS: Land-surface elevation 2008					
tic level 67'10" ft. below top of well Date 9/10/70	·····				··
tesian pressure					
Artesian water is controlled by					
, tintenown		····			
) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started		Completed.		
a a pump test mader Yes No I If yes, by whomt	WELL DRILLER				
ld: gal./min, with ft. drawdown after hrs.					
	This well was dri true to the best of r	lied under	my jurisdict	ion and this r	report i
overy data (time taken as zero when nump turned off) (water level					
covery data (time taken as zero when pump turned off) (water level measured from well top to water level)	NAME A. A.	Durand			
'ine Water Level Time Water Level Time Water Level Unknown		on, firm, or c	orporation)	(Type or pr	lat)
	Address Walla	Walla.	Washingt	con	
	·				
Pate of test	(Street) Out of	busine	ss)		
test gal/min. withft. drawdown afterhrs.	[Signed]		Well Driller)		•••••

S. F. No. 7356-08-(Rev. 8-69)-5-60.

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

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(USE ADDITIONAL SHEETS IF NECESSARY)

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STATE OF WASHINGTON       10215       G 3 2 2 0 2 3         (1) OWNER: Name 5 He Ham 5 Address Fride 10 10 10 10 10 10 10 10 10 10 10 10 10	"le Original and First Copy with he Division of Water Resources econd Copy Owner's Copy hird Copy Driller's Copy	ER WE	ELL REPORT WRC G32		,
************************************	STA	TE OF	FARTINGTON IADIT G32	7 17 2	·····
Add Adda, room section as substations on the CT CT stress of the Construction of the consthe construction of the construction of the construction of the co	1) OWNER: Name It Kan Tudus to.	1113	Permit No.		
Implify 22 diabase room section or substantian control (10 FTC 5, 3210 FTC, WEST 00 Mith Statistical Control (10 FTC) (10 FTC	2) LOCATION OF WELL: Comments of the Art		Address propage Link 99	1km	·····-
To Prove SED Description Determinants of the set of the s	Ting and distance from metion and in the IU IU	Z	TH FF WARE NW & SE 4 s.11 T	25	44 <del>m</del>
To Prove SED Description Determinants of the set of the s	end we will be the subdivision corner ouarte	r of c	ec 11 TWP 25 NE CORNER OF NW C	Juartei	Tor'
Intraction     Test Well     Other       (4) TYPE OF WORK:     University for and the second state of the second state o	) PROPOSED USE: Domestic [] Industrial [] Man			te Mer	idi.
(4)       TYPE OF WORK: Correct number of well         New well       D         New well       D         Second D       Descret of well         Second D       Rever D         Second Second D	Irrigation [] Test Well [] One				
International of well       International of well       International of the one well one one well on one well one of the one well one one we			Formation: Describe by color, character, size of materi	ial and str	ucture.
District     Distrin     District     District     Distri	1) TYPE OF WORK: Owner's number of well		stratum penetrated, with at least one entry for each	the mater	ial in e
Despendence       Cable B       Driver B       Driver B         (6) DIMENSIONS:       Dumeter of well       B       Driver B       B	New well Method: Dur D B	Bored C	MATERIAL		TO
(5) DIMENSIONS:       Dimeter of wall B       Just B       Lift F	Reconditioned D Cable D D	Driven 🗋	Top Soil & Love Cint	+	
Drilled     J.FP     n. Dorph of considered well     J.M.       (6) CONSTRUCTION DETAILS:     Casing installed: JJ2 - Disa. from d.f. n. to J.f.d. n.     The Local J. Casing installed: JJ2 - Disa. from d.f. n. to J.f.d. n.       (7) Functional T. In the J.f.d. n. to J.f.d. n.     The new detail of the Construction of the Distribution of the Distribu		Tetted	- Silt & Isin line		1
Drived J3Y       Supplied of completed well Life in the second seco	) DIMENSIONS: Diameter of wall		Silt & La Marsh		34
(4) CONSTRUCTION DETAILS:       Statistics (192 - Diam. From d.f., ft. to f.f. d. Statistics (192 - Diam. From d.f., ft. to f.f. d. Statistics (192 - Diam. From d.f. et al. (19		· · · · ·	17 mg ( ) if i i i i i i i i i i i i i i i i i	137	560
Caning finatelled: 1/9 · Diam. from d.f. n. to f.f. n.			aush of the		2-9
Walked (g)       Diam. from       f. to       f.         Porforsationas: Yas (f)       No (f)       f. to       f.         Type of perforations from       in. by       f. to       f.         Scroens: Yas (f)       No (f)       f. to       f.         Manufacturer's Name       f. to       f.       f.         Type of perforations from       f. to       f.       f.         Scroens: Yas (f)       No (f)       f. to       f.         Manufacturer's Name       f. to       f.       f.         Type of perforations from       f. to       f.       f.         Type of perforations from       f. to       f.       f.         Manufacturer's Name       f.       f.       f.         Otam       f. to       f.       f.       f.         Otam       f. to       f.       f.       f.         Otam strate for on f.       f.       f.       f.       f.         Data       genetic on f.       f.       f.       f.       f.         Data       genetic on f.       f.       f.       f.       f.       f.         Data       genetic on f.       f.       f.       f.       f.<	CONSTRUCTION DETAILS:		Lisch, 1 5th 1 Jondy Good	12-5	6.8
Walked (g)       Diam. from       f. to       f.         Porforsationas: Yas (f)       No (f)       f. to       f.         Type of perforations from       in. by       f. to       f.         Scroens: Yas (f)       No (f)       f. to       f.         Manufacturer's Name       f. to       f.       f.         Type of perforations from       f. to       f.       f.         Scroens: Yas (f)       No (f)       f. to       f.         Manufacturer's Name       f. to       f.       f.         Type of perforations from       f. to       f.       f.         Type of perforations from       f. to       f.       f.         Manufacturer's Name       f.       f.       f.         Otam       f. to       f.       f.       f.         Otam       f. to       f.       f.       f.         Otam strate for on f.       f.       f.       f.       f.         Data       genetic on f.       f.       f.       f.       f.         Data       genetic on f.       f.       f.       f.       f.       f.         Data       genetic on f.       f.       f.       f.       f.<	Casing installed: 139 " Diam in di	5× 1	asich I di la serie	Ke.K	110
Treader for       "Diam. from	Diam. from		- sace it sond & E-toref	1.20	130
Perforations: Vac d' No d' Nelle Kai fe Tros di perforente used Mille Kai fe surface perforentes rand file in by d'Ite in perforentes from 11 in by d'Ite in Tros of an any strets of the set of gravel Deth of strets of the set of the set of the 11 in bett depth 1 Meterial used in set Id d'Ite in bots in outside wiser the 1 No d'at sets contained by the set of the 11 in bett depth 1 Meterial used in set Id d'Ite in bots in the 10 in file in for strets of the 11 in being set of an any strets of depth 1 Meterial used in set Id d'Ite in the 11 in being set of the 11 in being set of the 11 in being set of the 11 in the 11 in the 11 in file in the 11 in	Welded [ Diam. from		X	<u> </u>	
Type of perforation used       Mills       In. by       Mills		<u> </u>			
SIZE of perforsitions from	Time of particular				
12.       perforsitions from       11.1       R. 10       11.1         perforsitions from       R. 10       41         Screess:       Yes       No (F         Manufacturer's Name       R. 10       R. 10         Dian       Bit size       from       R. 10       R. 10         Gravel packadi: Yes []       No [f]       Rise of gravel:       R. 11         Gravel packadi: Yes []       No [f]       Rise of gravel:       R. 11         Material used in sealing strate off.       R. 10       R. 11       R. 11         Did any strate contain unuable vater       Yes []       No [f]       Rec El VED         Did any starte contain unuable vater       Rec CE I VED       Strate fraction f					
perforations from from from from from from from from		in.	AF-CA		
Servesses       res       r       r       r         Mandacture's Name       Topa       R. to       R.         Dam.       Blot size       from       R. to       R.         Dam.       Blot size       from       R. to       R.         Dam.       Blot size       from       R. to       R.         Gravel packed: yes       No []       Rise of growin:       R.         Gravel packed: res       No []       Rise of growin:       R.         Gravel packed: res       No []       Rise of growin:       R.         Gravel packed: res       No []       Rise of growin:       R.         Gravel packed: res       No []       Rise of growin:       R.         Gravel packed: res       No []       Rise of growin:       R.         Did any ersets contain unusable water?       Yes []       No []       Rec El V ED         Type:       Sub Bandle (S.C.       HP       No []       Rec El V ED         Water law of water       Intermition showed in the step i	Deforations from fit to	/ R.	IN (10		
Serrells: Yes D       No B         Manufacture's Name       Type         Diam.       Blot alse       from       ft. to       ft.         Type       Blot alse       from       ft. to       ft.         Gravel packod: Yes D       No D       ft. to       ft.         Gravel packod: Yes D       No D       ft. to       ft.         Gravel packod: Yes D       No D       ft. to       ft.         Gravel packod: Yes D       No D       ft. to       ft.         Gravel packod: Yes D       No D       ft. to       ft.         Did any erate contain unuable water       Yes D       No D         Type of water!       No D       ft.       ft.         Waterial used in mail & Bol back of and Date       ft.       ft.         Type of water!       Be per square inch. Date       ft.       ft.         Type : Suc D and Bell # Life.       HP       A       Biomed balow matche wire inveil for Back       Biomed balow matche wire inveil for Back         Die Main Weter Is controlled by       In Ord E for shy by board       ft.       Biomed balow matche wire inveil for Back         Die Mather Itage I for the Word I for shy board       ft.       ft.       ft.       ft.         Meter Lovel       f	perforations from	<b>←</b> ¶,			
Manufacturer's Name       Model No.         Diam.       Blot size       from       A. to       A.         Diam.       Blot size       from       A. to       A.         Gravel packed: Yee []       No []       Rite of graval:       R.         Gravel packed: Yee []       No []       Rite of graval:       R.         Gravel paced from       A. to       R.         Gravel packed: Yee []       No []       Rite of graval:       R.         Gravel packed: Yee []       No []       To what depth?       R.         Surface seal: Yee []       No []       To what depth?       R.         Did any strate contain unuable water?       Yee []       No []       Repth of strate.         Did any strate contain unuable water?       Yee []       No []       Repth of strate.         Did any strate contain unuable water?       Yee []       No []       Repth of strate.         Did and sy strate contain unuable water?       Yee []       No []       Repth of strate.         Did and sy strate contain unuable water?       Yee []       No []       Repth of strate.         Did and strate.       Strate.       Repth of strate.       Repth of strate.         Did and strate.       Strate.       Strate.       Strate.					
Type       Model No       A. to       A.         Diam.       Blot size       from       A. to       A.         Gravel packed: Yes       No B' Rise of gravel:       A.       A.         Gravel packed: Yes       No B' Rise of gravel:       A.       A.         Gravel packed: Yes       No B' Rise of gravel:       A.       A.         Gravel packed: Yes       No B' Rise of gravel:       A.       A.         Gravel packed: Yes       No B' Rise of gravel:       A.       A.         Gravel packed: Yes       No B' Rise of gravel:       A.       A.         Moterial used in seal. Rd A.       Depth of strate.       No B'         Type of wster!       Depth of strate.       No B'         Watter LEVELS:       Land-wrifest eleveliation of the grave inch.       Dete.         Attesta preserve:       Depth of wall Dete.       JAN 1.6. 1974         Attesta preserve:       Depth of wall Dete.       JAN 1.6. 1974         Mich and reserve:       Depth of the state invest is controlled by:       No B'         Mich and reserve:       Depth of wall Dete.       JAN 1.6. 1974         Moter and reserve:       Depth of the state invest is controlled by:       RECEIVED         WELL TESTS:       Deserve:       No B' I'''''''''''		/			
Diem. Stot size from 6. 10 m 6					
Diam       Blot size       From       At so       At         Gravel packed: Yes       No [1]       Rise of gravel:       R         Gravel packed: Yes       No [2]       Rise of gravel:       R         Gravel packed: Yes       No [2]       Rise of gravel:       R         Gravel packed: Yes       No [2]       Rise of gravel:       R         Gravel packed: Yes       No [2]       Rise of gravel:       R         Meterial used in east Rd/ref.       Ref.       No [2]       R         Did any strate contain unuable water?       Yes       No [2]       No [2]         Type of water?       Dapth of strate.       No [2]         Type:       Sudface steal:       RECEIVED         Type:       Sudface steal:       Ref.       RECEIVED         WATER LEVELS:       Landowrize alregistion       Atsate       JAN 1.6.1974         Artesian water is controlled by:       (Cap. valve, stein)       SPOKANE (HEGOMAL OFFICE         WELL TESTS:       Drawdown is amount water level       Jon:       SPOKANE (HEGOMAL OFFICE         Masture Tawle:       No [2]       Cap. valve is iso       SPOKANE (HEGOMAL OFFICE       Mort started file.         """"""""""""""""""""""""""""""""""""					
Gravel packed: Yes D No C Bits of graval: Gravel packed: Yes No C Bits of graval: Gravel packed: Yes No C Bits of gravel: Gravel packed: Yes No C Bits of gravel: Restrict used to seal Bits of gravel: Did any strate contain unuable water? Yes D No E Method of sealing strate off. 7) PUNP: Manufacturer's Name RCLA Type: Such Bits of LCL BIP 2 D) WATER LEVELS: Above mash seal level. Attestan pressure Be per square incl Date. Artestan water is controlled by (Cap. valve, sic.) D UPARTMENT OF ECOLOGY WELL TESTS: Drewdown is amount water level is a court from well top is whon the ster level is the elevel True Water Level Time Time Time Time Time Time Time Time	Diam It. to		110	+	
Gravel placed from       fl. to       fl.         Starface seel: Yes []       No []       To what depth?       fl.         Mesterial used in seal. B2-rel?       No []       fl.       fl.         Did any erste contain unuable witer?       Yes []       No []       fl.         Type of writer       Depth of stress       Mesterial used in seal. B2-rel?       No []         Type of writer       Depth of stress       Mesterial used in seal. B2-rel?       No []         Type of writer       Name.       RELA       H.P. depth of stress       Mesterial presence         Type:       Sand Date       fl. blow of a will Date       fl.       Mesterial presence       Mesterial presence         No []       WEIL TESTS:       Dewoorn is amount writer level is lower debade weister level       Mork scarted, Dfl.// J.d., 19.7/. Completed 2007 M/.       Mesterial use of the presence of the prese		<u></u>			<u> </u>
Gravel placed from       ft. to       ft.         Starface seal: Yes []       No []       To what depth?       ft.         Material used to seal. B2-XE //       No []       To what depth?       ft.         Did any strate contain unuable water?       Yes []       No []       No []         Type of water!       Depth of strate.       Depth of strate.       Depth of strate.         Method of sealing strate of!       Depth of strate.       RECEIVED         7) PUMP: Manufacturer's Name.       RCLA       RP 2         8) WATER LEVELS: Land-entrice elevation       Ref. def.       IAN 1, 6, 1974         articlas pressure	Gravel packed: Yes No C Rise of gravel				
Surface seal: Yes [7 No ] To what depth? R Meterial used in seal. Bd relia Did any strate contain unuable water? Yes ] No B Type of water Depth of strate. Type is water and the strate definition of strate. Type: Sue B number of the strate. B) WATER LEVELS: Land-water of wall. Attenden preserve	Crewel pleased the				
Masterial used in seal. Barrell.       No B         Did any strate contain unuable water?       Ye D       No B         Type of water?       Depth of strate         Bighted of easking strate of       Depth of strate         Type:       Stack and and and the strate         B) WATER LEVERS:       Land-surface clevestion         attic lev       Stock and and the strate         Ariseian preserve       Be, per square inch bete         Ariseian water is controlled by       (Cap, valve, etc.)         B) WATER LEVERS:       Devolves inch bete         Ariseian water is controlled by       (Cap, valve, etc.)         Big and the strate in a strate in the strate inveil is known in the strate inveil is known in the strate inveil is anount.       SPOMANE HEGIONAL OFFICE         Work started Mar.       JAN 1, 6 1974       SPOMANE HEGIONAL OFFICE         Work started Mar.       STATEMENT:       SPOMANE HEGIONAL OFFICE         Work started Mar.       State is and the strate is a strate in the strate is and the strate is an	Surface seal:				
Did any strate contain unuable water? Ye I No B Type of water! Depth of strate. Biethod of easing strate of Type: Jud Dr. Manuffeld. Type: Jud Dr. Manuffeld. B) WATER LEVELS: Land-surface eleveston attic ler. JO. A. below top of well Date. Artesian pressure Babyer square inch Date. Artesian water is controlled by (Cap, valve, ste.) D) WELL TESTS: Drewdown is amount water level is bowerd below static level is a pump test mader Yes I No B' if yes, by whoart. edd: gal/min. with A. drawdown after have. test. HR gal/min. with O. A. drawdown after Main te of test. test. HR gal/min. with O. A. drawdown after Main te of test. test. HR gal/min. with O. A. drawdown after Main test. HR gal/min. With O. A. drawdown after Main Addrees Model J. Cat. Babyer Main test. HR gal/min. With O. A. drawdown after Main test. HR gal/min. With O. A. drawdown after Main Addrees Model J. J. J. J. Completed Main (Weed Driller) License No addJ-Ed-RAJO Date F. M. I. J. J. M. J.	Material used in seal Rad and 12	#.   _			_
Type of water!       Depth of strate         Method of sealing strate of       Image: State of         7) PUMP: Menutacoturer's Name.       RECA         Type: State Trace       RECA         B) WATER LEVERS:       Land-surface elsystem         atte ler:       SC         Artesian vester is controlled by       (Cap, valve, ste.)         B) WELL TESTS:       Diswdown is amount weiter level         Index gal/min. with       R. drawdown after         atte end       No (B' If yes, by whom?         (Cap, valve, ste.)       Biowardown after         (Cap, valve, ste.)       SPOMANE #EGIONAL OFFICE         (Cap, valve, ste.)       Biowardown after         (Cap, valve, ste.)       SPOMANE #EGIONAL OFFICE         (Cap, valve, ste.)       Biowardown after         (Cap, valve, steries)       No (B' If yes, by whom?         (Cap, valve, steries)       No (B' If yes, by whom?         (Cap, valve, steries)       No (B' If yes, by whom?         (Cap, valve, steries)       No (B' If yes, by whom?         (Cap, valve, steries)       No (B' If yes, by whom?         (Biomard the states as as on when pump turned off) (weter level       Name weter for any knowledge and bellet.         (Name Elsten as as on when pump turned off) (weter level       NAME Elsten as astro.	Did any strate contain unuschie meters	- 1-			
Implied of sealing strets off         7) PUMP: Manufacturer's Name.         Type: Sad Dange 1812         Type: Sad Dange 1812         Image 1812 </th <th>Type of water? Depth of strate</th> <th>NO M</th> <th></th> <th></th> <th></th>	Type of water? Depth of strate	NO M			
Type: Sul B Ta LALC       RP A         RELEVELS: Land-surface clovestion above mean see level	Method of sealing strets off				
Type:       Sul B Ta ute 1 B1C       BP 2         B)       WATER LEVELS:       Land-surface elevation above mean see leval	PIMP:				
B) WATER LEVELS: Land-miriace elevation above mean ees leval	Type: Su B > A A				
atic lev <u>50</u> above mean see level <u>st</u> tentian pressure <u>Below top of well Date</u> Ariestan water is controlled by <u>(Cap, valve, stc.)</u> <b>DEPARTMENT OF ECOLOGY</b> <b>DEPARTMENT OF ECOLOGY</b> <b>SPOKANE REGIONAL OFFICE</b> <b>Work started.</b> <i>MR.</i> <u>16</u> <u>1974</u> <b>SPOKANE REGIONAL OFFICE</b> <b>Work started.</b> <i>MR.</i> <u>1974</u> <b>STORMOVED</b> <b>SPOKANE REGIONAL OFFICE</b> <b>NAME EFM.</b> <u>1100000000000000000000000000000000000</u>		<u> </u>			
interior	ADOVE THEAT AND LOUGH				
Artesian water is controlled by (Cap, valve, etc.) (Cap, valve,	let 20		IAN 16 1974		
Artadian wester is controlled by (Cap, valve, etc.) (Cap, valve, etc.) WELL TESTS: Drawdown is amount wester level is is a pump test made? Yee No (5' If yes, by whom?	an pressure				
WELL TESTS:       Drawdown is amount water level is kowered below state level is kowered is kowered is kowered below state level is kowered below state level is kowered below state level is kowered is kowered stowered stowered state level is kowered state level is k	Artesian water is controlled by		DEPARTMENT OF ECOLOG	v	
Indexered below static larged         is a pump test made? Yes I No I if yes, by whom?         id:       gal/min. with         iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii				/ <del>/</del>	
Id:       gal/min.with       ft. drawdown after       hrs.         """"""""""""""""""""""""""""""""""""	lowered below statis to the	<b> </b> _	SPURARE REGIURAL UFFICE	·	
Intermediate       ft. drawdown after       hre.         """"""""""""""""""""""""""""""""""""	pump test mader Yes   No I If yes, by whom t	we	ork started Strail 1 2 19.71 Completed made	· ~ _	10 7 /
" This well was drilled under my jurisdiction and this repo measured from well top to water level Time Time Water Level Time Time Water Level Time Time Water Level Time Time Time Water Level Time Time Time Time Water Level Time Time Time Time Time Time Time Time	gal/min. with ft. drawdown after	bre. W	ELL DRULER'S STAMP	2	18
overy delta (dime taken as zero when pump turned off) (writer level         ime Water Level       Time Water Level         Time Water Level       Time Water Level         NAME       E.H. Holman N Dilling Co. (Person, firm, or corporation)         te of test       Address         te of test       Sel (min. with O. ft. drawdown after H. hrs.         tan flow       E.J. M. S. B.J. Stek One. W.M.         parature of water       Was a chemical analysis mader variation No D.         1       1	69 by				
overy delta (time taken as zero when pump turned off) (writer level         imessured from will top is writer level         ime         Water Level         Time         Time         Water Level         Time         Time         Time         Time         Time		tri	This well was drilled under my jurisdiction and	d this rer	ort i
te of test test. ### Water Level Time Water Level NAME E. H. Hol TTDAN (Lifer of or corporation) (Type or print) Address Col 5, Pixes, Pol 5 fek One. Work test. ## gal/min. with 0 ft. drawdown after H. hrs. stan flow	ary data (time taken as zero when pump turned off) (water 1	Jarral 1	in the west of my knowledge and belief.		
te of teri text #2 gal/min. with 0. ft. drawdown after 1 hrs. parature of water. Was a chemical analysis mader Xaxo No D License No at 3-03-8330 Date 54.17. 194	Water Level   Time Water Level		Et Ul- 20011.	R	
te of test test de gal/min. with O ft. drawdown after / hrs. stan flow gal/min. with O ft. drawdown after / hrs. stan flow gal/min. with O ft. drawdown after / hrs. stan flow gal/min. with O ft. drawdown after / hrs. (Wew Driller) (Wew Driller) License No ald 3-03-8330 Data EA 17. 194	I water Let	rpet   IVA	(Person firm or committee)	0	
te of test test <u>HD</u> gal/min. with <u>O</u> ft. drawdown after <u>H</u> hre. [Signed] <u>JSD is fraction ff</u> with <u>Sp.m. Date</u> (Weild Driller) (Weild Driller) (Weild Driller) Date <u>FA 17.</u> , 194			1 1 - D - D - D	e or print)	)
te of test test <u>HD</u> gal/min. with <u>O</u> ft. drawdown after <u>H</u> hre. [Signed] <u>JSD is fraction ff</u> with <u>Sp.m. Date</u> (Weild Driller) (Weild Driller) (Weild Driller) Date <u>FA 17.</u> , 194		Ad	dress Leon 2. TINes Hd Stek an	s. W-	20,
test BC gal/min. with O ft. drawdown after H hrs. stan flow	e of test	//		K	
persture of water	test de gal/min with C the deserver M		med) ISelustimant		
persture of water Was a chemical analysis mader Xerra No D License No. 23-03-8350 Date Fed 17. 194		7	(Well Driller)	••••••	•••••
114 AL	ature of water Was a sheetest and		EDen No 23-02-8120	•	
No. 1354-(Rev. 2.44). 2.44 IN		-	Date A		
TTV. (ANTEL REW JURN), V.M. ALA ANA I /////		AT. 8070-0			
			I I NECLESSARY)		

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<b>[011</b> ]		Appli	. #7171
WELL	LOG No	Permit	L #6784
Date	April 15 1965		
	by Driller		
	Driller's Record		
Locatio	m: State of WASHINGTON		
Co	unty Spokane		
Ar	N 72°27' E,309.2' from SW		
Ma	p Corner Sec.11		
	1 1/4 SW 1/4 sec. 11 T 25 N. R44 E.E.	Diagram of	
	7 Co. Holman Drilling Corporation		
Ad	dress 3410 E. 9th Ave., Spokane,	Washin	rton
	thod of DrillingCable		
Owner.	U.S. Bureau of Reclamation		
	drees DUL 717, DULSE, IGANO		
	dress Box 937, Boise, Idaho		
	urface, datum		
Comp- LATION	urface, datumft above below Matterial	THKKNAM (Int)	Darra (feet)
Comp- LATION	urface, datumft above below	THKKNAM (Int)	Darra (feet)
Comp- LATION	urface, datumft above below Matterial	THERNES (feet) meccessary, in wrted. Give d with stratigre s, screms, ek	Darra (feet)
Comp- LATION	Marmaial Marmaial Marmaial Marmaial Marmaial Marmaial but paraphrase as al water-bearing, so state and record static level if rep id-surface datum unless otherwise indicated. Correlate of B. Fellowing log of materials, list all casiogs, perforation	THERNES (feet) necessary, in wited. Give d with stratigre s, screms, ek	Darra (feet)
Comp-	Marmaran Mar	THERNES (feet) necessary, in wited. Give d with stratigre s, screms, ek	Durrm (fost) parantheses. apthe column,
Comp- LATION	Marmaran Mar	THICKNAME (foot) necressary, in write, Give a s, acroms, ekc al and	Darra (feet)
Comp-	Marmaran Mar	THICKNAME (foot) necressary, in write, Give a s. screms, ekc al and 0	Durrm (fost) parantheses. apthe column,
Comp-	Marmatal Mar	THICKNAME (foot) necreasary, in writed. Give a s. scroms, ekc al and 0 25 46	Durru (fast) parantheses. rethe is feet phie column, 
Comp-	MarmaiaL MarmaiaL MarmaiaL meeribe driller's terminology literally but paraphrase as al water-bearing, so elses and record static level if rep d-surface datum vules otherwise indicated. Correlate u a. Fellowing log of materials, list all casiogs, perforation Domestic, irrigation, industr: <u>municipal well</u> Gravel 1 <sup>1</sup> / <sub>2</sub> " - 2" Gravel 2" - 3 <sup>1</sup> / <sub>2</sub> " Gravel 1 <sup>1</sup> / <sub>2</sub> " 2"	THICKNAME (foot) necessary, in write, Give d al and 0 25 46 50	Darra (fast) parentheses, opthe is feet phie column, 
Comp- LATION	MarmalaL Marmal	THICKNAME (foot) necessary, in writed. Give 4 with stratigre a. scroms, sk al and 0 25 46 50 58	Darra (feet) parenthese phie e column, 
Conn- Lation	Marmatal Marmatal Marmatal meerike driller's terminology literally but paraphrase as al water-bearing, so state and record static level if rep d-surface datum volcas otherwise indicated. Correlate to a Fellowing log of materials, list all casings, performation Domestic, irrigation, industr: Municipal well Gravel 1 <sup>1</sup> / <sub>2</sub> " - 2" Gravel 1 <sup>1</sup> / <sub>2</sub> " - 2" Gravel 1 <sup>1</sup> / <sub>2</sub> " 2" Coarse sand, brown	THICKNAME (fort) necessary, in writed. Give 4 with stratigre a, acrome, etc al and 0 25 46 50 58 87	Darritheea. (feet) parentheea. epths is feet phie column. 
Conn- Lation	Marmatal Mar	THICKNAME (foot) necessary, in writed. Give 4 with stratigre a. scroms, sk al and 0 25 46 50 58	Darra (feet) parenthese phie e column, 
Comp- LATION	Marmatal Marmatal Marmatal macribe driller's terminology literally but paraphrase as al water-bearing, so state and record static level if rep d-surface datum unless otherwise indicated. Correlate u Pellowing key of materials, list all casings, perforation Domestic, irrigation, industr: municipal well Gravel 1½" - 2" Gravel 1½" 2" Gravel 2" - 3½" Gravel 1½" 2" Sand and gravel to 3" Coarse sand, brown Gravel and sand to 2" Casing: 16" from 0 to 116'	THICKNAME (fort) necessary, in writed. Give 4 with stratigre a, acrome, etc al and 0 25 46 50 58 87	Darritheea. (feet) parentheea. epths is feet phie column. 
Conn- Lation	Marmalal Marmalal Marmalal Marmalal meeribe driller's terminology literally but paraphrase as al water-bearing, so state and record static level if rep d-surface datum onless otherwise indicated. Correlate of Pellowing log of materials, list all casings, performation Domestic, irrigation, industr: <u>municipal well</u> Gravel 1 <sup>1</sup> / <sub>2</sub> " - 2" Gravel 1 <sup>1</sup> / <sub>2</sub> " 2" Sand and gravel to 3" Coarse sand, brown Gravel and sand to 2" Casing: 16" from 0 to 116' Screened from 116 to 141'	THICKNAME (foot) mecentary, in writed. Give di a. accorns, etc a. accorns, etc	Darritheea. (feet) parentheea. epths is feet phie column. 
Comp- LATION	Marmatal Marmatal Marmatal matrice, datum	THICKNAME (foot) mecentary, in writed. Give di a. accorns, etc a. accorns, etc	Darritheea. (feet) parentheea. epths is feet phie column. 
Comp- LATION	Marmatal Marmatal Marmatal macribe driller's terminology literally but paraphrase as al water-bearing, so state and record static level if rep d-surface datum unless otherwise indicated. Correlate us a relieving key of materials, list all casings, perforation Domestic, irrigation, industr: municipal well Gravel 1 <sup>1</sup> / <sub>2</sub> " - 2" Gravel 1 <sup>1</sup> / <sub>2</sub> " 2" Gravel 2" - 3 <sup>1</sup> / <sub>2</sub> " Gravel 1 <sup>1</sup> / <sub>2</sub> " 2" Gravel 1 <sup>1</sup> / <sub>2</sub> " 2" Coarse sand, brown Gravel and sand to 2" Casing: 16" from 0 to 116' Screened from 116 to 141' Surface sealed with cement gro	THICKNAME (fort) neccessary, in writed. Give 4 with stratigree a scrome, etc al and 0 25 46 50 58 87 103 20 20 20 20 20 20 20 20 20 20 20 20 20	Derre (feet) parentheses. epths is feet phie column. 
Conn- Lation	Marmatal Marmatal Marmatal matrice, datum	THICKNAME (fort) neccessary, in writed. Give 4 with stratigree a scrome, etc al and 0 25 46 50 58 87 103 put	Derre (feet) parenthese. ethe is feet phie column. 

Tura up

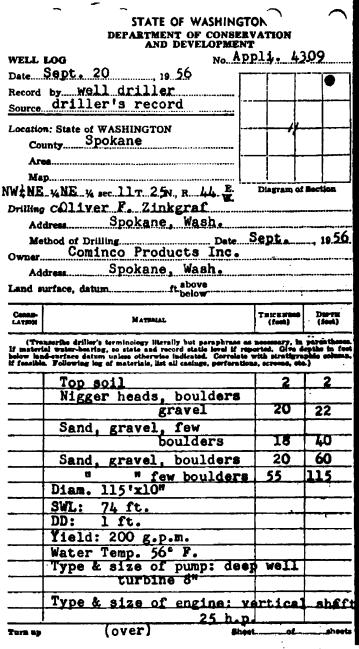
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The Department of Ecology does NOT Warran<sup>4</sup> the Data and/or the Information on this Well Repr

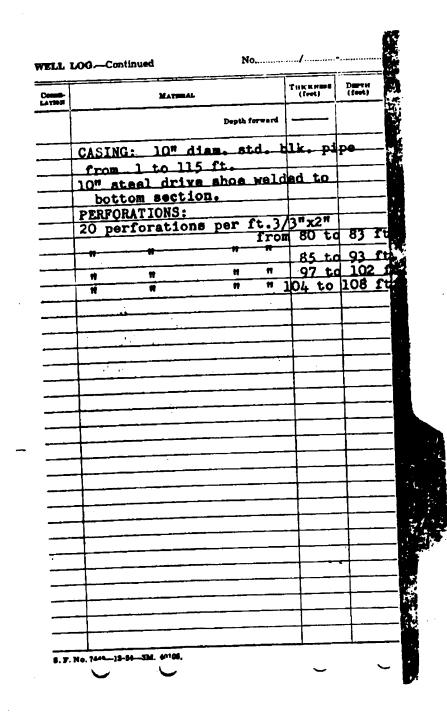
	STATE OF WASHING DEPARTMENT OF CONS DIVISION OF WATER BE	ERVATION		
WELL	LOG	Appli. #	7886	
	by Driller			i l
Source	Driller's Record			
	m: State of WASHINGTON		L	
Co	untySpokane		C.	
Ar	ea			
Ma Gov'	p. t. Lot 8 sec. 11 7 25 N. R 44 E.			
Drilling	Co. Linkgrai Well Urilling		of Section	
₽₩	dress 1606 East Sharp			
Ме	thod of Drilling Cable Date	Jan. 12	19 66	
Owner	The Hillyard Frocessing Compa	ny		
	dress Box 6055, Spokane, Wash		•••••••••••••••••••••••••••••••••••••••	
SWL:	orface, datum	6 Dime 10	)" x 125	
Count-	MATERIAL	From (feet)	To (feet)	
(Tru If materi bolow las if feasible	nacribe deller's terninology literally but 1, araphrasa fal water-baaring, an viste and record satic level if desurface datum unleas otherwise inducated. Correls 5. Pollowing log of materials, list all casings, perfora	as necessary, f reported. Give ite with stratig tions, screens, e	in parantheses depths in fee suphic column Hc.)	
·	Municipal supply			-
	Gravel w/occasional boulder		43	
	Gravel, 3/4" up to 3"	43	52	-
·	Boulders, large	52	56	-
	Rocks, large	56	61	. 📕
	Mixture - pea gravel up to			
	5" round	61	75	
	Sand, coarse	75	82	
	Gravel, 3/4,"	82	86	
	Gravel, 3/4,"	82	86	
	Gravel, 3/4" Sand, coarse, & gravel Gravel, 3/4" up to 3" round	82 56	86 103	
	Gravel, 3/4" Sand, coarse, & gravel Gravel, 3/4" up to 3" round Casing: 10" from 0-125'	82 56	86 103	
	Gravel, 3/4" Sand, coarse, & gravel Gravel, 3/4" up to 3" round Casing: 10" from 0-125' Perforated from 106-115'	82 56	86 103	-
	Gravel, 3/4" Sand, coarse, & gravel Gravel, 3/4" up to 3" round Casing: 10" from 0-125' Perforated from 106-115' Also from 106-120'	82 56	86 103	-
	Gravel, 3/4" Sand, coarse, & gravel Gravel, 3/4" up to 3" round Casing: 10" from 0-125' Perforated from 106-115'	82 56	86 103	

Tura up

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The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.



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File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Thurd Copy — Driller's Copy		ELL REPORT WASHINGTON	Application No. G3=2	
			Permit No. 63-2163	
(1) OWNER: Name COMINCO AMERI	CAN INCORPORATED	Address Building 101, Spo	kane Ind'l Park	Spo
(2) LUCATION OF WELL: County.	<u>Spokane</u>		(m. 11 - 25	44 .
ing and distance from section or subdivisi	on corner 626 Feet Soi	th & 437 Feet West from	NE Cor. Sec 11	
) PROPOSED USE: Domestic Ex	Industrial @ Musicipal O	(10) WELL LOG:		
	Test Well Other			
		Formation: Describe by color, character show thickness of aguiters and the kin	it, size of material and structed and nature of the materi	cture. al in
(4) TYPE OF WORK: Owner's numb	er of well one)		entry for each change of f	orma
New well 🚺 Mer	thod: Dug 📋 Bored 🗋	MATERIAL	PROM	T
Deepened 📋	Cable 👸 Driven 🛛	Sand and Gravel		15
Reconditioned []	Rotary 🗌 Jetted 🔲	Boulder		19
(5) DIMENSIONS: Diameter a	t well	Coarse Gravel 4"+	· 19	27
	pleted well 150	Gravel	27	31
		Sand & Gravel		_14;
(6) CONSTRUCTION DETAILS:		Coarse Sand	143	15
Casing installed: 18_" Diam. from	m n to n			
	n ft. 10 ft.			
Welded Og 18" Diam. from	n0 n. w			
Perforations: Yes 🗆 No 🕵				
Type of perforator used				
SIZE of perforations	. io. by in.			
perforations from		<u> </u>	CE ETA	
perforations from				
perforations from		111	·····	
Screens: Yes No D				
Manufacturer's Name. Edward F.	Johnson, Inc.	TOTH		
Type_Stainless_Steel	. Model No	A		
Diam. 18 H Slot size #200 from Diam. 18 Slot size #130 from	n -120 n. 10 -140 n.			
Gravel packed: Yes I No 2 St	I of gravel:			
Gravel placed from	ft. to ft.			
Surface seal: Yes XX No D To W	has do-the 24 m		<u></u>	
Material used in seal	ан церин <u>Сф</u> п.		<u> </u>	
Did any strate contain unusable w	ater? Yes 🗌 No 🗊			
Type of water?	th of strete			
Method of sealing strats off				
7) PUMP: Manufacturer's Name Auror		l		
Type:Vertical Turbine				
B) WATER LEVELS: Land-surface	Nevation occo	•	i	
above mean a	a level LUUY	-		
atic level	well Date 3/27/74			
Artesian water is controlled by		· · · · · · · · · · · · · · · · · · ·		
	(Cap, valve, etc.)			
) WELL TESTS: Drawdown is an	nount water level to natic level HO Iman			
as a pump test made? Yes 🖄 No 门 🗶 yes, b		Work started	Completed.	, 19
NG: JJII gal/min, with J.L R. draw	vdown atter1/2 hrs.	WELL DRILLER'S STATEM	ENT:	
3511 - 5.3	- 1/2 -	This well was drilled under my		
· 3511 - 5.3	- 2 -	true to the best of my knowledge	and ballef.	port
covery data (time taken as zero when pump measured from well top to water level)	turned off) (water level			
Time Water Level   Time Water Level	Time Water Level	NAME Holman Drilling Con	.poration	
69.5		(Person, firm, or corpo	oration) (Type or prin	R)
sec. 67.8		Address E. 3410 Ninth Ave.	Spokane, Wa. 99	920:
		1.		
Date of test March 27, 1974		[Signed] (Luld E	Theman	
aler test	wdown after	(We	d Driller)	
tesian flowNODEg.p.m. Date mperature of waterWas a chemical ans	iyais made?AYes [] No f	License No. 189	Date August 13	19
1.114	ASTADOTTONAL SHE	TT IF NEGRABUL		
F. No. 7336-OS-(Rev. 4-71), 9/5/77		LIG IF NECESSARY)	•	G

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File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy		ELL REPORT WASHINGTON	Application Permit No.		-
(1) OWNER: Name COMINCO	AMERICAN III	1.5. E15128 F			
LOCATION OF WELL: County	Sonkey and			TANEN	M.L.
ig and distance from section or subdivis	- I TL'C H	4/1771 - 7.F. %	V.E. Sec. II T.	. N., R	<u>44 F</u>
	ion cornery 24 Douth		<u>HE NF. CORNE</u>	A of S	<u>K</u>
(3) PROPOSED USE: Domestic	Industrial 🗮 Municipal 📋	(10) WELL LOG:			
Irrigation []	Test Well Other	Formation: Describe by color, c show thickness of aquifers and stratum penetrated with at les	haracter, size of mater	tal and str	ucture
(4) TYPE OF WORK: Owner's numb	er of well	stratum penetrated, with at lea	st one entry for each	change of	forma
New well Mer	thod: Dug 🔲 Bored 🗌	MATERIA		FROM	Т
Deepened	Cable 🗶 Driven 🛛	GRAVEL, SAND	7, <u>+ 5117</u>	0	8
Reconditioned	Rotary 🗍 Jetted 🗍	ALPERENC	(GRAY)	- 01	-
(5) DIMENSIONS: Diameter of	of weil 10 inches.	MOLDER J FG.	RAVEL	8	-12
Drilled. 1.30 ft. Depth of com	pleted well 130 st.	FRAVEL & SA	(GRAY)	197	17
(6) CONSTRUCTION DETAILS:		SHALLE JA	(GRAY)		4.6
Casing installed: 10 " Diam. troi	+ 14 1154	BOLDER'S & G	RAVEL	100	127
	m ft. to ft.		(GRAY)		
	m ft. to ft.	GRAVEL & Cal	3 B 4 Ks"	67	78
Perforations: Yes 🗆 No 🎽		100000	(GRAY)	+	!
Type of perforator used		GRAVEL, CoBBL	ES + SAND	+ <b>Z&amp;</b> _	÷13
SIZE of perforations		A PILER	(GRAY)	+	<u>+</u>
				+	
perforations from				+	
Screens: Yes X No D				1	1
Manufacturer's Name 600				- <u>·</u>	
TYDE STAINLESS STREL	. Model Na				<b>_</b>
Diam. 10 Slot size 70 from Diam. Slot size from	n 1.14 tt. to 1.30 m.			+	
	n ft. 10 ft.			+	<u> </u>
Gravel packed: Yes D No 🗶 Si	ze of gravel:			·	
Gravel placed from	n. to ft.			†	├ 
Surface seal: Yes 🖌 Ng 🗆 To w	hat depth? 18 n			(	
Material used in seal DENTON		<b>N</b>	EUEN		J_
Did any strats contain unusable w Type of water?					
Method of sealing strata off				87	
(7) PUMP: Manufacturer's Name JAC	VZZI				
Type: SuB 2396X-6	нр.25		POKANE RECIONAL	LOGY	
(8) WATER LEVELS: Land-surface	tlevation		TUNANE REUTUNAL	IFFICE	
Static level 78 ft. below top of	en levelft.				
Artesian pressure					
Artesian water is controlled by					
lowered below i		Work startes AVE 14 19	27. Completed N.	2 2	
Was a pump test made? Yes M No 🛛 If yes, b Yield: 350 gal/min. with 0 ft, dray		WELL DRILLEB'S STA			
**	" " "				
•• ••	14 19	This well was drilled und true to the best of my know	er my jurisdiction a ledge and belief.	and this a	report
Recovery data (time taken as zero when pump measured from well top to water level)	turned off) (water level				
Time Water Level   Time Water Level	Time Water Level	NAME AAA PUHP	ERVICE II	VC,	
		(Person, Srm, g	r corporation) (1	ype or pr	int)
<b>`</b>	· [	Address JI WIL	Low Spok	to EU	4.77
- te of test 11/3/87		0a	VIII	•	
Bailer test. 50 gal/min. with Oft. dri	wdowy after his.	[Signed] James 7	Tlan	Ja	
riesian flow	9/3/87	~ ~ ~ ~ ~ ~ ~ ~ ~		_	
Cemperature of water	ulvala madaz yan 🗆 No 🖌	License No. 0133	Date No V.	-1	X

	WASHINGTON Permit No	·	
(1) OWNER: Name WASHINGTON WATER POWER	"Address P.O. Box 3727, Spokane, W	A 99220	0
LOCATION OF WELL: County SPOKANE	NE 1 SW 1 Sec 2 T	25 N. R. 4	44E.
	Irentwood		
(3) PROPOSED USE: Domestic 🗆 Industrial 🗆 Municipal 🗆	(10) WELL LOG:		
Irrigation [] Test Well [] Other 🐒	Formation . Describe by color, character, size of matery	al and struc	ture,
4) TYPE OF WORK: Owner's number of well	show thickness of aquijers and the kind and nature of stratum penetraied, with at least one entry for each	change of fo	l in e
New well Method: Dug Debred	MATERIAL	FROM	TC
Deepened Cable Driven D Reconditioned Retary 7 Jetted D	Sand & gravel w/boulders		175
	Cemented.gravel		
5) DIMENSIONS: Diameter of well 10 inches. Drilled 295 ft. Depth of completed well 295 ft.		175	220
	Clay, brown w/gravel	220	280
6) CONSTRUCTION DETAILS:			
Casing installed: 10 " Diam. (rom	Clay, white	280	290
Threaded []	Compite salt (	+	
I A A A A A A A A A A A A A A A A A A A	Granite, salt & pepper	290	295
Perforations: Yes D No 🕱		╀────┼-	
Type of perforator used SIZE of perforations			
perforsions from	180' of 6" PWC Liner Installed		
ti. to			
perforations from	10° Drive shoe utilized	┟───┼╸	
Screens: Yes D No 🕱			
Manufacturer's Name		┟╾───┼─	
Diam	NOTE: THIS IS A GROUND BED HOLE		
Diam	NOT INTENDED FOR USE AS A WATER WE	I.I.	
- Gravel packed: Yes I No g Size of gravel:			
Gravel placed from			<b></b>
Surface seal: Yester No D To what depth? 18 1			
Material used in seal Dentonite	DECEIVED		•••
Did any strata contain unusable water? Yes [] No 22 Type of water? Depth of strata			
Method of scaling strate off.		!	
			· —
/) PUMP: Manufacturer's Name	DEPARTMENT US ECULUGY		
) WATER LEVELS: Land-surface elevation	SPOKANE RESIDNAL OFFICE		
tic level N/A			
tesian pressure			
Artesian water is controlled by			
(Cap, valve, etc.)			
) WELL TESTS: Drawdown is smount water level is lowered below static level	Work started	<u> </u>	
a pump test made? Yes No XX If yes, by whom?			19{
id: N/A gal./min. with fl. drawdown after hra.	WELL DRILLER'S STATEMENT:		
10 II	This well was drilled under my jurisdiction at true to the best of my knowledge and belief.	nd this rep	ort
covery data (time taken as zero when pump turned off) (water lavel measured from well top to water level)		•	
ime Water Level   Time Water Level   Time Water Level	NAME PONDEROSA DRILLING & DEVELOPM	ENT INC	
	(Person, firm, or corporation) (T	ype or print)	
	Address E. 6010 Broadyery, Spokage,	WA 992	12
ste of test	1. 1. 14. 1.		
ate of test	[Signed] / Multin	<b>..</b>	
erian flow	W. Joseph Close Jr. (Weil Driller)		
nperature of water	License No. 1040 Date 12/22		986
In Int IST. IXM	· · · ·		

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RESOURCE PROTECTION WELL REPORT Notice of Intent No R 53407 (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission (3.5, m circle) Type of Well ("x in circle)  $m\omega^{\#}I$ The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report. Resource Protection O Decommission Original Construction Notice Geotech Soil Boring 0 of Intent Number Property Owner General Electric Power systems Site Address 39 City AC County Unuque Ecology Well ID Tag No AGS 116 Location NE 1/4 1/4 SE1/4 Sec 2 Consulting Firm URS wwm Driller or Trainee Name Dan Claassen Lat/Long (s t r Lat Deg Lat Min/Sec still REQUIRED) Long Deg \_\_\_\_ Long Min/Sec Driller or Trainee Signatur 182 Tax Parcel No Driller or Trainee License No. Cased or Uncased Diameter \_\_\_\_\_ Static Level. Work/Decommussion Start Date 7-24-02 If trainee licensed driller's Signature and License no Work/Decommission Completed Date 7-24-02 Construction/Design Well Data Formation Description 893 total depth 0-5' sitty sand and Courre gravels 5-90' sandy fine to Courre gravels w/ Sand Pac 89 3 to 67' entonite chips - 1 to 67' large cobbles saturated \$ 80' 30 Page of 1 Scale 1 =ECY 050 12 (Rev 2/01)

O Construction Decommission Original Construct. of Intent Number		Type of Well ("x" in circ O Resource Protection O Geotech Soil Boring
Property Owner General Elect	•	Site Address 3919 N. Sallint Ro City SpokanevAllefCounty: Spokm.
Unique Ecology Well ID Tag No. 4	25 116	Location NE 1/4- 1/4 SE 1/4 Sec 2 Twn 251/ R 44
Consulting Firm Driller or Trainee Name Were	dell HAwley	Lat/Long (s, t, r Lat Dcg Lat Min/Sec
Driller or Trainee Signature	All Auly	still REQUIRED) Long Dcg Long Min/Scc
Driller or Trainee License No	<u></u>	Tax Parcel No Cased or Uncased Diameter Static Level
If trainee, licensed driller's		Work/Decommission Start Date 5-19-09
		Work/Decommission Completed Date $5 - 19 - 0$
Construction/Design	Well Data Concret	Formation Description
RESOURCE PROT (SUBMIT ONE WELL REPORT P. Construction/Decommission ("x" in c O Construction Decommission Original Construct of Intent Number Property Owner <u>G &amp; Nechl Elect</u> Unique Ecology Well ID Tag No. <u>A</u> Consulting Firm Driller or Trainee Name <u>Were</u> Driller or Trainee Signature <u>Were</u> Driller or Trainee License No. <u>17</u> If trainee, licensed driller's Signature and License no. <u>Construction/Design</u>	-2" PUC	

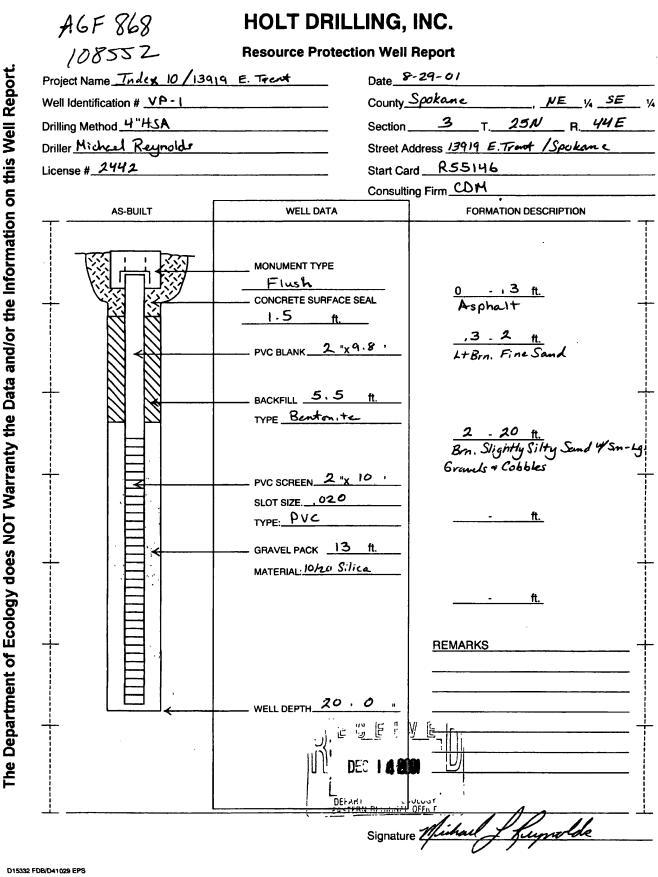
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RESOURCE PROTECTION WELL REPORT Notice of Intent No R 53407 (SUBMIT ONE WEL TALLED) Construction/Decommission  $M\omega^{\#_2}$ Type of Well (x in circle) The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report. Construction Resource Protection O Decommission Original Construction Notice Geotech Soil Boring O of Intent Number Site Address 3919 N. Property Owner Leneral Electric Power. Λ. City \_ \_ County \_ Unique Ecology Well ID Tag No AGS Location 1/4 1/4 SE 1/4 Sec 2 Consulting Firm URS www Driller or Trainee Name Dan Classen Lat/Long (s t r Lat Deg Lat Min/Sec still REQUIRED) Long Deg Driller or Trainee Signature Long Min/Sec 1827 Tax Parcel No Driller or Trainee License No\_ 2" Cased or Uncased Diameter \_\_ Static Level 72 If trainee licensed driller's Work/Decommission Start Date 7-24-02 Signature and License no Work/Decommission Completed Date 7-25-02 Construction/Design Well Data Formation Description silty sand and total depth 0-5 course gravels 90' sandy, find to course gravels w/ large colbles saturated @ 80' Pac 896 to 67' toute chips - 1 to 67 5-90' JL Page ] 30 of 📘 Scale 1"= ECY 050 12 (Rev 2/01)

does NOT Warranty the Data and/or the Information on this Well Report. I Report.	Construction/Decome O Construction Decommission Ori		) [75 Notice	549	Type of Well ("* O Resource Prot O Gcotech Soil ]	ection Boring
Å.	Property Owner Ge	NechElecir	ic Power Syste	ms Silc Ad	dress 3919 N. SullivAm	- Rd
Vel	Unique Ecology Well	ID Tag No. AGS	5 117	City 🏒	OKCOME VALLE/County: Spok	me
lis l	Consulting Firm				NE 1/4- 1/4 SE 1/4 Sec_2 Twn 25L	u
t L	Driller or Trainee Na				g (s, t, r Lat Dcg Lat Min QUIRED)	
0	Driller or Trainee Sign		3 Huly	Tax Par	CCI No Long Dcg Long M	in/Sec
atio	Driller or Trainee Lice				r Uncased Diameter Static Le	evel
Ë-	If traince, licensed drill Signature and License					-05
Info				Work/De	ccommission Completed Date $5-19$	-04
he	Construction	n/Design	Well Da	nta	Formation Descript	ion
<b>ک</b> ر ا	+	-	-Concret			
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<b>°</b> 2 2 3 2 3 2						
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RESOURCE PROTECTION WELL REPORT Notice of Intent No R 53407 (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission ('x, in carde) Type of Well ('x in circle) Mu The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report. Resource Protection O Decommission Original Construction Notice Geotech Soil Boring of Intent Number Site Address 3919 eneral Electric Power Arestins Property Owner City A County Unuque Ecology Well ID Tag No AGS Location NE 1/4 1/4 SE Consulting Firm URS www Driller or Trainee Name Dan Claassen Lat/Long (s t r Lat Deg Lat Min/Sec still REQUIRED) Long Deg Driller or Trainee Signatur Long Min/Sec Driller or Trainee License No.\_\_\_\_\_\_ 2 Tax Parcel No 2" Static Level 78 Cased or Uncased Diameter If trainee licensed driller's Work/Decommission Start Date \_\_\_\_\_\_ Signature and License no Work/Decommussion Completed Date 7-25-02 Construction/Design Well Data Formation Description 89 total depty 0-5' silty sand and Sand Pac 89 6 to 67' Course gravels bentonite chips - 1 to 67' 5-90' sandy, fine to course grands w rge cobbles saturated @ 80 S AL 30 Page 1 of Scale 1"= ECY 050 12 (Rev 2/01)

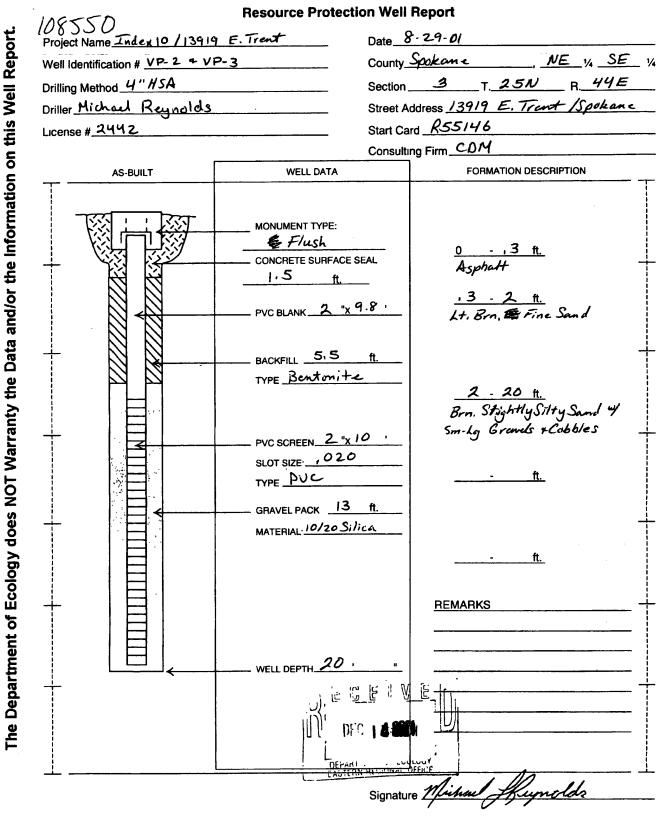
The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report. I Report. م RESOURCE PROTECTION WELL REPOR'I' Notice of Intent No. A 6572/ (SUBMIT ONE WELL REPORT PER WELL INSTALLED) .5550 Construction/Decommission ("x" in circle) Type of Well ("x" in circle) O Construction O Resource Protection **O** Decommission Original Construction Notice O Gcotech Soil Boring of Intent Number Site Address 3919 N. SullivAn Rd Property Owner GENERA ElectRIC POWER SUSTEMS City SpokanevAle/County: Spokm 65 Unique Ecology Well ID Tag No. Location NE 1/4- 1/4 SE 1/4 Sec 2 Twn 25/ R 44 **Consulting** Firm พพพ HAL Lat/Long (s, t, r Lat Dcg\_\_\_ Driller or Trainee Name Jenc Lat Min/Sec still REQUIRED) Long Dcg Long Min/Sec Driller or Trainee Signature Tax Parcel No. Driller or Trainee License No 2 Cased or Uncased Diameter \_ Static Level If traince, licensed driller's :19 -0 Work/Decommission Start-Date Signature and License no. 19-0 Work/Dccommission Completed Date Construction/Design Well Data **Formation Description** CONCRET Bentmite 2"PVC DEPARTMENT OF ECOLOG EASTERN REGIONAL OFFIC 30 Scale I"= \_of\_ Page\_ ECY 050-12 (Rev 2/01)



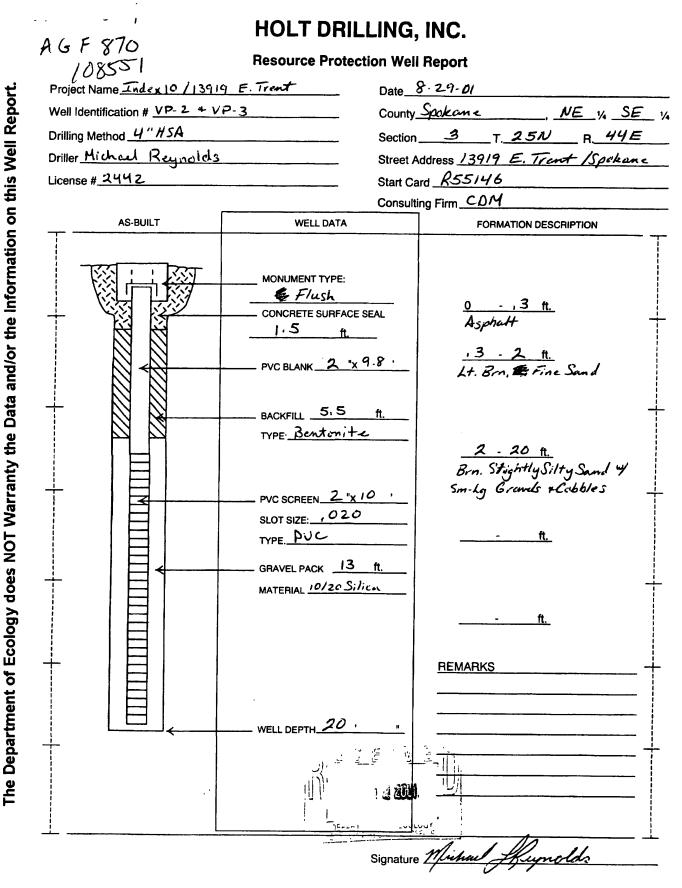
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AGF 869

## HOLT DRILLING, INC.



D15332 FDB/D41029 EPS



D15332 FDB/D41029 EPS

APPENDIX A WELL CONSTRUCTION DATA, WELL LOGS, WELL REPORTS, AND CORE PHOTOGRAPHS

Well Data	CC-MW-01	CL-MW-01	CM-MW-01S	CM-MW-02S	CM-MW-03S	CM-MW-04S	CM-MW-05S	CM-MW-06S
Comment	Lost							
Date Installed		11/27/91	09/22/04	09/24/04	09/23/04	09/27/04	09/27/04	10/11/04
Total Boring Depth in Feet		92	90.7	90.9	90.3	86.5	90.0	85.3
Depth to Top of 1st Screen in Feet		68	64.7	65	64.8	60.7	65.3	59.8
Depth to Bottom of 1st Screen in Feet		88	89.5	90	89.8	85.7	90.3	84.8
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet		1940.6	1943.9	1943.7	1943.8	1948	1943.4	1949
Bottom of 1st Screen Elevation in Feet		1920.6	1918.9	1918.7	1918.8	1923	1918.4	1924
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches		2	2	2	2	2	2	2
Screen Casing Material		PVC	PVC	PVC	PVC	PVC	PVC	PVC
Screen Slot Size in Inches		0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet		2008.6	2008.6	2008.7	2008.6	2008.7	2008.7	2008.8
TOC Elevation in Feet		2008.54	2011.09	2008.24	2008.14	2007.96	2008.28	2008.18
Stickup in Feet		-0.02	2.5	-0.5	-0.5	-0.75	-0.41	-0.6
Northing		270521.86	270970.07	271105.96	271182.6	271087.04	271157.98	271009.83
Easting		2532439.1	2533106.03	2533021.87	2533018.15	2532478.69	2532475.39	2532578.12

Sheet 1 of 22

Well Data	CM-MW-07S	CM-MW-08S	DW-MW-01	FO-MW-01S	HL-MW-01	HL-MW-02	HL-MW-03	HL-MW-04
Comment								
Date Installed	10/12/04	10/13/04	2/29/91	2/22/06	12/14/90	12/16/90	6/9/91	6/7/91
Total Boring Depth in Feet	85.5	85.0	74	90.9	84	86	84	84
Depth to Top of 1st Screen in Feet	60	58.9	58.2	64.5	68.5	69	65.4	66.3
Depth to Bottom of 1st Screen in Feet	85	83.9	73.2	89.5	83.5	84	80.4	81.3
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1948.7	1952.3	1945.6	1943.4	1938.0	1939.1	1941.6	1940.9
Bottom of 1st Screen Elevation in Feet	1924.7	1927.3	1930.6	1918.4	1913.0	1914.1	1926.6	1925.9
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet	0	0	0	0	0	0	0	0
Screen Diameter Casing Size in Inches Screen Casing Material	2 PVC							
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2008.7	2011.2	2003.8	2007.9	2006.5	2008.1	2007	2007.2
TOC Elevation in Feet	2008.7	2011.2	2003.42	2007.9	2008.14	2008.1	2007	2007.2
Stickup in Feet	-0.7	-0.6	-0.38	2.9	1.68	1.64	2.98	2.6
Northing	271190.81	271218.95	270298.05	271151.6	271286.86	271871.2	271551.82	272172.07
Easting	2533095.07	2533159.41	2533112.66	2531056.88	2531166.37	2530947.69	2530962.64	2530782.43

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Well Data	HL-MW-05	HL-MW-06	HL-MW-06A	HL-MW-07S	HL-MW-08D	HL-MW-09D	HL-MW-10S	HL-MW-11D
			Replaced					
Comment		Abandoned	HL-MW-06					
Date Installed	8/23/95	11/26/96	2/26/99	7/19/01	7/18/01	7/21/01	7/20/01	7/20/01
Total Boring Depth in Feet	96	78	88	85	105	120	78	98
Depth to Top of 1st Screen in Feet	93	63	63	59	83	99.4	52.8	77.2
Depth to Bottom of 1st Screen in Feet	95	78	88	84	103	119.4	77.8	97.2
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1914.3	1940.2	1939.9	1946.1	1922.3	1903.5	1945.9	1921.5
Bottom of 1st Screen Elevation in Feet	1912.3	1925.2	1914.9	1921.1	1902.3	1883.5	1920.9	1901.5
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	2	2	2	2	2	2	2	2
Screen Casing Material	PVC							
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2007.3	2003.2	2002.9	2005.1	2005.3	2002.9	1998.7	1998.7
TOC Elevation in Feet	2009.69	2003.04	2005.68	2007.32	2007.2	2004.8	2000.55	2000.49
Stickup in Feet	2.39	-0.16	2.78	2.22	1.9	1.9	1.85	1.79
Northing	272169.66	271941.35	271932.14	272262.35	272246.49	271932.54	271670.92	271677.45
Easting	2530750.38	2530515.93	2530519.46	2530498.27	2530502.26	2530510.45	2530539.55	2530538.16

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Well Data	HL-MW-12S	HL-MW-13DD	HL-MW-14S	HL-MW-15DD	HL-MW-16S	HL-MW-17S	HL-MW-18S	HL-MW-19S
Comment								
Date Installed	10/7/03	9/28/03	10/7/03	10/3/03	10/8/03	9/26/03	1/4/05	1/3/05
Total Boring Depth in Feet	90	150.5	90	151	90.5	91.7	89	90
Depth to Top of 1st Screen in Feet	65	140	63	140	65.0	65	63.4	64
Depth to Bottom of 1st Screen in Feet	90	150	88	150	90.0	90	88.4	89
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1943	1865.4	1940.8	1867.8	1941.4	1943.5	1944.4	1944.3
Bottom of 1st Screen Elevation in Feet	1918	1855.4	1915.8	1857.8	1916.4	1918.5	1919.4	1919.3
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	2	2	2	2	2	2	2	2
Screen Casing Material	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet TOC Elevation in Feet	2008 2010.23	2005.4 2007.91	2003.8 2006.01	2007.8 2009.9	2006.4 2008.58	2008.5 2011.35	2007.8 2007.4	2008.3 2011.26
Stickup in Feet	2.23	2.51	2.21	2009.9	2008.58	2.85	-0.4	2.96
Northing	2.23	272253.37	272027.87	272172.31	271976.29	2.85 272291.98	-0.4 272140.72	271910.96
Easting	2530536.44	2530513.01	2530280.67	2530766.88	2530834.17	2531186.98	2531177.59	2531222.18

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Well Data	HL-MW-20S	HL-MW-21S	HL-MW-22S	HL-MW-23S	HL-MW-24DD	HL-MW-25S	HL-MW-26S	HL-MW-27D
Comment								
Date Installed	1/5/05	1/28/05	1/4/05	2/13/06	2/9/06	2/15/06	2/16/06	2/21/06
Total Boring Depth in Feet	91	81	90	94	150	91.5	91	130.9
Depth to Top of 1st Screen in Feet	65	53.5	64.9	68.5	144	63.9	64.3	123.3
Depth to Bottom of 1st Screen in Feet	90	78.5	89.9	93.5	149	88.9	89.3	128.3
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1944.1	1954.2	1943.4	1935.5	1859.3	1940.8	1944	1885.3
Bottom of 1st Screen Elevation in Feet	1919.1	1929.2	1918.4	1910.5	1854.3	1915.8	1919	1880.3
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet	0	0	0		0	0	0	
Screen Diameter Casing Size in Inches	2	2	2	2	2	2	2	2
Screen Casing Material Screen Slot Size in Inches	PVC	PVC	PVC 0.02	PVC 0.02	PVC 0.02	PVC 0.02	PVC	PVC
	0.02 2009.1	0.02 2007.7	••••	2004.0	••••=	2004.7	0.02	0.02
Ground Surface Elevation in Feet TOC Elevation in Feet	2009.1 2011.93	2007.7 2011.19	2008.3 2010.77	2004.0 2006.82	2003.3 2006.11	2004.7 2004.27	2008.3 2007.64	2008.6 2008.05
Stickup in Feet	2.83	3.49	2.49	2.82	2.81	-0.43	-0.66	-0.55
Northing	2.85 271827.31	271760.05	271522.2	271481.85	272014.54	272121.69	272323.27	272336.45
Easting	2531096.87	2530951.39	2531325.39	2529685.21	2530270.92	2530392.95	2530698.15	2530697.91

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Well Data	HL-MW-28DD	HL-MW-29S	HL-MW-30S	MW-01	MW-02	MW-03	MW-04	MW-05
Comment				Abandoned				
Date Installed	9/6/06	6/7/07	6/8/07	9/24/79	9/28/79	10/5/79	10/10/79	10/13/79
Total Boring Depth in Feet	150	92	90	115	90	120	120	120
Depth to Top of 1st Screen in Feet	140.9	65	60	75	38	75	75	75
Depth to Bottom of 1st Screen in Feet	149.9	90	90	85	48	85	85	85
Depth to Top of 2nd Screen in Feet				90	58	94	95	95
Depth to Bottom of 2nd Screen in Feet				115	68	104	105	105
Depth to Top of 3rd Screen in Feet					75	114	115	115
Depth to Bottom of 3rd Screen in Feet					85	120	120	120
Top of 1st Screen Elevation in Feet	1864.8	1942.8	1942.7	1902.8	1926.8	1919.8	1943.2	1936.9
Bottom of 1st Screen Elevation in Feet	1873.8	1917.8	1912.7	1892.8	1916.8	1909.8	1933.2	1926.9
Top of 2nd Screen Elevation in Feet				1887.8	1906.8	1900.8	1923.2	1916.9
Bottom of 2nd Screen Elevation in Feet				1862.8	1896.8	1890.8	1913.2	1906.9
Top of 3rd Screen Elevation in Feet					1889.8	1880.8	1903.2	1896.9
Bottom of 3rd Screen Elevation in Feet					1879.8	1874.8	1898.2	1891.9
Screen Diameter Casing Size in Inches	2	2	2	2	6	6	6	6
Screen Casing Material	PVC	PVC	PVC	PVC	Steel	Steel	Steel	Steel
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	Perf	Perf	Perf	Perf
Ground Surface Elevation in Feet	2005.7	2007.8	2002.7	1977.8	1964.8	1994.8	2018.2	2011.9
TOC Elevation in Feet	2008.22	2010.18	2005	1978.68	1966.17	1996.96	2020.08	2013.48
Stickup in Feet	2.5	2.43	2.3	0.88	1.37	2.16	1.92	1.55
Northing	272250.37	272237.4	271728.3	270963.54	271528.91	272089.72	272536.06	269653.11
Easting	2530530.47	2530733	2529894	2529644.47	2529169.75	2529152.49	2534448.53	2534267.92

Well Data	MW-06	MW-07	MW-08	MW-09	MW-10	MW-11	MW-12	MW-12A
Comment							Abandoned	Replaced MW-12
Date Installed	2/2/81		6/21/90	6/21/90	6/14/90	6/6/91	9/25/95	2/25/99
Total Boring Depth in Feet	112		64	64	84	80.5	52	60.5
Depth to Top of 1st Screen in Feet	70		40.5	44.0	64	63.4	32	30
Depth to Bottom of 1st Screen in Feet	90		55.5	59.0	79	78.4	52	60
Depth to Top of 2nd Screen in Feet	99		00.0	00.0	10	70.4	52	00
Depth to Bottom of 2nd Screen in Feet	101							
Depth to Top of 3rd Screen in Feet	109							
Depth to Bottom of 3rd Screen in Feet	111							
Top of 1st Screen Elevation in Feet	1951.8		1937.3	1935	1949.5	1941.9	1937.4	1938.4
Bottom of 1st Screen Elevation in Feet	1931.8		1922.3	1920	1934.5	1926.9	1917.4	1908.4
Top of 2nd Screen Elevation in Feet	1922.8							
Bottom of 2nd Screen Elevation in Feet	1920.8							
Top of 3rd Screen Elevation in Feet	1912.8							
Bottom of 3rd Screen Elevation in Feet	1910.8							
Screen Diameter Casing Size in Inches	6	6	2	2	2	2	2	2
Screen Casing Material	Steel	Steel	PVC	PVC	PVC	PVC	PVC	PVC
Screen Slot Size in Inches	Perf	Perf	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2021.8	2007.8	1977.8	1979.2	2013.5	2005.3	1969.4	1968.4
TOC Elevation in Feet	2023.46	2008.7	1980.03	1981.14	2013.27	2005.01	1972.28	1970.76
Stickup in Feet	1.66	0.9	2.25	1.98	-0.23	-0.29	2.88	2.33
Northing	272498.78	272463.92	269988.72	270234.31	270877.63	271566.4	271430.39	271405.43
Easting	2534786.52	2530494.45	2530510.76	2530182.68	2534458.02	2534372.7	2529302.01	2529298.76

Well Data	MW-13	MW-14	MW-15	MW-16	MW-17S	MW-18D	MW-19S	MW-20D
Comment								
Date Installed	1/24/98	1/24/98	1/28/98	1/28/98	6/26/01	6/27/01	7/11/01	7/12/01
Total Boring Depth in Feet	56.5	49	51.5	83	90	100	58	78
Depth to Top of 1st Screen in Feet	26	18	22	53	51	78.5	32	57
Depth to Bottom of 1st Screen in Feet	56	48	51.5	83	76	98.5	57	77
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1944.5	1935.5	1938.6	1942.4	1943.7	1916.1	1941.8	1917.6
Bottom of 1st Screen Elevation in Feet	1914.5	1905.5	1909.1	1912.4	1918.7	1896.1	1916.8	1897.6
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	2	2	2	2	2	2	2	2
Screen Casing Material	PVC							
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	1970.5	1953.5	1960.6	1995.4	1994.7	1994.6	1973.8	1974.6
TOC Elevation in Feet	1973.3	1956.14	1962.75	1997.85	1996.61	1996.53	1975.93	1976.15
Stickup in Feet	2.8	2.64	2.15	2.43	1.91	1.93	2.12	1.55
Northing	270399.61	270812.62	271138.45	272087.99	271617.86	271614.68	270548.68	270542.49
Easting	2530023.58	2529551.33	2529350.44	2529149.71	2529478.73	2529487.79	2529895.75	2529901.11

Well Data	MW-21S	MW-22D	MW-23S	MW-24D	MW-25S	MW-26D	OH-EW-01	OH-EW-02
Comment								
Date Installed	7/3/01	7/9/01	7/13/01	7/13/01	6/28/01	7/2/01	11/14/93	11/3/95
Total Boring Depth in Feet	44	63.4	47	67	70	90	133	195
Depth to Top of 1st Screen in Feet	18	43	20	46.0	43	69.5	98.5	108
Depth to Bottom of 1st Screen in Feet	43	63	45	66.0	68	89.5	129.0	140
Depth to Top of 2nd Screen in Feet								166
Depth to Bottom of 2nd Screen in Feet								186
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1940.3	1915.1	1941.7	1915.9	1942.8	1916.7	1910.1	1901.1
Bottom of 1st Screen Elevation in Feet	1915.3	1895.1	1916.7	1895.9	1917.8	1896.7	1879.6	1869.1
Top of 2nd Screen Elevation in Feet								1843.1
Bottom of 2nd Screen Elevation in Feet								1823.1
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet	0	0	0	0	0	0	00	04
Screen Diameter Casing Size in Inches	2 PVC	2 PVC	2 PVC	2 PVC	2 PVC	2 PVC	20 Chaol	24 Ctaal
Screen Casing Material Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	Steel Various	Steel Various
Ground Surface Elevation in Feet	1958.3	1958.1	1961.7	0.02 1961.9	1985.8	1986.2	2008.6	2009.1
TOC Elevation in Feet	1959.89	1960.15	1963.46	1963.84	1985.8	1988.14	2008.8	2009.1
Stickup in Feet	1.59	2.05	1.76	1.94	2.1	1.94	3.15	-4.54
Northing	270973.63	270967.44	271392.11	271391.41	271789.27	271796.03	271652.55	271508.66
Easting	2529460.28	2529464.3	2529187.1	2529193.79	2529192.47	2529189.12	2532000.49	2531793.57

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Well Data	OH-EW-02-US	OH-MW-01	OH-MW-02	OH-MW-03	OH-MW-04	OH-MW-05	OH-MW-06	OH-MW-07
Comment		Abandoned	Abandoned					
Date Installed	4/18/00	10/28/89	10/27/89	11/1/89	11/10/89	11/17/89	11/19/89	12/5/90
Total Boring Depth in Feet	60	82.5	82.5	83.5	88	88.5	83.5	83.5
Depth to Top of 1st Screen in Feet	23	70.7	70	70.5	71	67	67	67.5
Depth to Bottom of 1st Screen in Feet	59	80.7	80	80.5	81	82	82	82.5
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1985	1937.8	1938.5	1938.1	1937.5	1941.8	1941.6	1940.8
Bottom of 1st Screen Elevation in Feet	1949	1927.8	1928.5	1928.1	1927.5	1926.8	1926.6	1925.8
Top of 2nd Screen Elevation in Feet Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	7	2	2	4	4	4	4	2
Screen Casing Material	Steel	PVC						
Screen Slot Size in Inches	0.10	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2008	2008.5	2008.5	2008.6	2008.5	2008.8	2008.6	2008.3
TOC Elevation in Feet	2010.88	2010.4	2008.3	2008.01	2010.81	2008.31	2010.76	2010.93
Stickup in Feet	2.88	1.9	-0.2	-0.61	2.31	-0.49	2.16	2.63
Northing	271498.2	271683.28	271703.54	271713.72	271620.04	271714.8	271672.41	271432.59
Easting	2531784.05	2532016.65	2532085.78	2532055.97	2531975.47	2531984.14	2531998.14	2531987.58

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Well Data	OH-MW-08	OH-MW-09	OH-MW-10	OH-MW-11	OH-MW-12	OH-MW-13	OH-MW-14	OH-MW-15
Comment				Lost			Abandoned	
Date Installed	12/8/90	12/10/90	12/6/90	12/9/90	12/16/90	12/18/90	1/4/91	6/8/91
Total Boring Depth in Feet	83	84	84	86	83	84	130	80
Depth to Top of 1st Screen in Feet	67	67.5	67	69	67	68	124	64
Depth to Bottom of 1st Screen in Feet	82	82.5	82	84	82	83	129	79
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1940.3	1940.7	1941.6	1939.4	1940.8	1940.1	1886	1944.4
Bottom of 1st Screen Elevation in Feet	1925.3	1925.7	1926.6	1924.4	1925.8	1925.1	1881	1929.4
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	2	2	2	2	2	2	2	2
Screen Casing Material	PVC							
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2007.3	2008.2	2008.6	2008.4	2007.8	2008.1	2010	2008.4
TOC Elevation in Feet	2009.75	2007.85	2010.36	2008.14	2007.56	2010.29	2010.89	2008.17
Stickup in Feet	2.45	-0.35	1.76	-0.26	-0.24	2.19	0.89	-0.23
Northing	271862.01	271950.33	271838.77	271810.2	272113.76	271292.46	271650.01	271349.48
Easting	2532412.72	2532054.19	2531959.31	2531691.35	2532059.55	2532050.97	2531990.18	2532562.86

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Well Data	OH-MW-16	OH-MW-17	OH-MW-18	OH-MW-19	OH-MW-20	OH-MW-21	OH-MW-22	OH-MW-23
Comment						Lost	Lost	
Date Installed	10/29/91	11/7/91	11/8/91	11/4/91	11/5/91	11/20/91	11/21/91	11/24/91
Total Boring Depth in Feet	85	86	90	86	89	85.4	90	90
Depth to Top of 1st Screen in Feet	64	64	65	64	64	64	67	68.6
Depth to Bottom of 1st Screen in Feet	84	84	85	84	84	84	87	88.6
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet		1011				1011		1000.0
Top of 1st Screen Elevation in Feet	1943.4	1944	1943.6	1944.4	1944.4	1944	1941.9	1939.9
Bottom of 1st Screen Elevation in Feet	1923.4	1924	1923.6	1924.4	1924.4	1924	1921.9	1919.9
Top of 2nd Screen Elevation in Feet Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	2	2	2	2	4	4	4	4
Screen Casing Material	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2007.4	2008	2008.7	2008.4	2008.4	2008	2008.9	2008.5
TOC Elevation in Feet	2007.37	2007.96	2008.41	2008.13	2008.01	2007.86	2008.37	2008.18
Stickup in Feet	-0.03	-0.04	-0.27	-0.27	-0.39	-0.14	-0.53	-0.32
Northing	271512.91	271528.58	271636.65	271508.27	271615.09	271620.05	271635.72	271298.34
Easting	2531785.6	2532197.99	2531664.79	2531977.79	2532056.88	2532290.91	2532134	2532326

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Well Data	OH-MW-24	OH-MW-25	OH-MW-26	OH-MW-27	OH-MW-28	OH-MW-29	OH-SK-01	OH-SK-02
Comment						Abandoned		
Date Installed	11/25/91	12/3/91	11/5/93	8/23/95	9/10/95	11/3/95	11/3/93	1/6/95
Total Boring Depth in Feet	90	90	98	97.5	97	105	88	95
Depth to Top of 1st Screen in Feet	69	69	94	74.7	75	100	68	65
Depth to Bottom of 1st Screen in Feet	89	89	96	94.7	95	105	88	90
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet	1000.0	1000 5		1000.0	1000.4	1007.0	1010.0	1010 5
Top of 1st Screen Elevation in Feet	1939.8	1939.5	1914.6	1929.8	1933.4	1907.8	1940.6	1943.5
Bottom of 1st Screen Elevation in Feet Top of 2nd Screen Elevation in Feet	1919.8	1919.5	1912.6	1909.8	1913.4	1902.8	1920.6	1918.5
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	4	4	2	4	4	2	4	12
Screen Casing Material	PVC	PVC	PVC	Steel	Steel	PVC	Steel	Steel
Screen Slot Size in Inches	0.02	0.02	0.02	0.08	0.08	0.02	0.08	0.08
Ground Surface Elevation in Feet	2008.8	2008.5	2008.6	2004.5	2008.4	2007.8	2008.6	2008.5
TOC Elevation in Feet	2008.43	2008.13	2008.3	2004.28	2007.9	2008.75	2006.81	2011.72
Stickup in Feet	-0.38	-0.33	-0.3	-0.22	-0.5	0.95	-1.79	3.22
Northing	271724.03	271795.01	271656.8	271378.52	271523.38	271517.22	271644.74	271667.92
Easting	2531900.72	2531901.29	2532010.25	2531746.36	2531856.8	2531784.16	2532008.6	2532001.81

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Well Data	OH-SK-02	OH-SK-03	OH-SK-04	RM-MW-01S	RM-MW-02D	RM-MW-03S	RM-MW-04D	RM-MW-05S
Comment	Modified 9/96							
Date Installed		11/3/95	6/30/01	10/6/03	10/5/03	9/27/03	10/5/03	10/14/03
Total Boring Depth in Feet	95	95	91	90	155	91.5	151	91
Depth to Top of 1st Screen in Feet		70	71.0	63.5	141.2	65.7	140	66
Depth to Bottom of 1st Screen in Feet		95	91.0	88.5	151.2	90.7	150	91
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet		1936.6	1937.7	1944.9	1867.2	1940.9	1867.7	1938.8
Bottom of 1st Screen Elevation in Feet		1911.6	1917.7	1919.9	1857.2	1915.9	1857.7	1913.8
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	4.5	12	8	2	2	2	2	2
Screen Casing Material	PVC	Steel	Steel	PVC	PVC	PVC	PVC	PVC
Screen Slot Size in Inches		0.08	0.08	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2008.5	2006.6	2008.7	2008.4	2008.4	2006.6	2007.7	2004.8
TOC Elevation in Feet	2011.72	2009.32	2011.18	2008.19	2008.23	2006.05	2007.11	2006.94
Stickup in Feet	3.22	2.72	2.48	-0.21	-0.17	-0.55	-0.59	2.14
Northing	271667.92	271508.28	271615.26	272397.11	272409.87	272512.57	272501.48	272648.04
Easting	2532001.81	2531785.58	2531976.57	2530946.48	2530946.21	2531368.53	2531369.6	2531844.04

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Well Data	RM-MW-08S	RM-MW-09S	RM-MW-10S	RMSW-MW-11S	RM-MW-12S	RM-MW-13S	RM-MW-14S	RM-MW-15S
Comment								
Date Installed	03/01/05	03/03/05	09/20/04	04/23/05	04/26/05	04/28/05	09/20/06	02/19/06
Total Boring Depth in Feet	90	90.6	09/20/04 90	04/23/05 91	85.9	90.9	91.5	91.5
<b>a</b>	90 64	90.8 65	90 63.8	63.0	65.9 58.4	90.9 65.4	62.9	62.8
Depth to Top of 1st Screen in Feet	64 89	90				90.4		
Depth to Bottom of 1st Screen in Feet Depth to Top of 2nd Screen in Feet	09	90	88.8	90.0	83.4	90.4	87.9	87.8
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1941.4	1941.8	1943.1	*	1948.2	1943.2	1945.7	1945.9
Bottom of 1st Screen Elevation in Feet	1941.4	1941.8	1943.1	*	1948.2	1943.2	1943.7	1943.9
Top of 2nd Screen Elevation in Feet	1910.4	1910.0	1910.1		1920.2	1910.2	1920.7	1920.9
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	2	2	2	2	2	2	2	2
Screen Casing Material	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2005.4	2006.8	2006.9	2005.6	2006.6	2008.6	2008.6	2008.7
TOC Elevation in Feet	2005.01	2008.2	2006.67	2004.39	2005.93	2008.07	2008.02	2008.11
Stickup in Feet	-0.4	1.42	-0.2	-1.25	-0.7	-0.5	-0.57	-0.57
Northing	272507.5	272594.88	272501.69	272513.23	272521.07	272483.1	272293.32	272448.57
Easting	2531645.36	2532167.07	2531448.43	2531641.02	2531686.97	2531515.66	2531466.25	2531337.97

\*Measured along slope of well, actual elevations not determined.

Well Data	RM-MW-16S	RM-MW-17S	TF-EW-01	TF-EW-01	TF-EW-01-US	TF-MW-01	TF-MW-02	TF-MW-03
Comment								
Date Installed	09/18/06	09/14/06	4/29/91	4/29/00	4/19/00	2/22/91	2/23/91	2/25/91
Total Boring Depth in Feet	91.5	91.5	98	178	50	81	79.5	79.5
Depth to Top of 1st Screen in Feet	63	63.3	60	60	19	63.1	62.5	62.6
Depth to Bottom of 1st Screen in Feet	88	88.3	95	95	49	78.1	77.5	77.6
Depth to Top of 2nd Screen in Feet				123				
Depth to Bottom of 2nd Screen in Feet				171				
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1945.7	1945.3	1948.4	1948.4	1988.9	1944.2	1945	1945.7
Bottom of 1st Screen Elevation in Feet	1920.7	1920.3	1913.4	1913.4	1958.9	1929.2	1930	1930.7
Top of 2nd Screen Elevation in Feet				1885.4				
Bottom of 2nd Screen Elevation in Feet				1837.4				
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet			10	10	10			
Screen Diameter Casing Size in Inches			16	10 Otasi	10	4	4	4
Screen Casing Material			Steel	Steel 0.10	Steel	PVC	PVC	PVC
Screen Slot Size in Inches	0000 7	0000 0	0.07		0.10	0.02	0.02	0.02
Ground Surface Elevation in Feet TOC Elevation in Feet	2008.7 2008.23	2008.6 2007.89	2008.4 2007.35	2008.4 2007.35	2007.9 2010.34	2007.3 2009.21	2007.5 2009.4	2008.3 2009.2
Stickup in Feet	-0.48	-0.66	-1.05	-1.05	2010.34	1.91	2009.4	2009.2
Northing	-0.48 272466.78	-0.00 272461.78	271805.29	271805.29	2.44 271841.57	271841.72	271804.47	271860
Easting	2531224.65	2531133.92	2532281.57	2532281.57	2532318.3	2532321.57	2532274.26	2532305.7

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Well Data	TF-MW-04	TF-MW-05	TL-MW-01	TL-MW-01A	TL-MW-02	TL-MW-03	TL-MW-04	TS-MW-01S
				Replaced				
Comment			Abandoned	TL-MW-01		Destroyed		
Date Installed	2/26/91	2/27/91	6/18/90	9/27/95	6/19/90	6/22/90	6/20/90	5/19/05
Total Boring Depth in Feet	79.5	79.5	79	83	79.5	84	88	85.8
Depth to Top of 1st Screen in Feet	63.1	63	63.5	60	64	67.5	66.5	60
Depth to Bottom of 1st Screen in Feet	78.1	78	78.5	83	79	82.5	81.5	85
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1945.3	1944.4	1944.4	1948.2	1943.7	1938.2	1937.6	1948.5
Bottom of 1st Screen Elevation in Feet	1930.3	1929.4	1929.4	1925.2	1928.7	1923.2	1922.6	1923.5
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet								
Screen Diameter Casing Size in Inches	4	4	2	2	2	2	2	2
Screen Casing Material	PVC							
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2008.4	2007.4	2007.9	2008.2	2007.7	2005.7	2004.1	2008.5
TOC Elevation in Feet	2010.19	2008.59	2009.89	2010.21	2009.74	2007.39	2006.04	2010.25
Stickup in Feet	1.77	1.19	1.99	2.01	2.04	1.69	1.94	1.8
Northing	271743.22	271812.59	270783.92	270783.92	270854.25	270836.34	270759.32	271965.09
Easting	2532216.49	2532297.91	2531837.53	2531837.53	2531864.27	2531211.34	2530372.08	2531537.03

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Well Data	TS-MW-02S	WW-EW-01	WW-EW-02	WW-EW-03	WW-EW-03	WW-MW-01	WW-MW-02	WW-MW-03
Comment					Modified	Abandoned	Abandoned	
Date Installed	5/20/05	12/19/94	12/3/96	11/26/98	04/00	11/13/89	11/9/89	11/6/89
Total Boring Depth in Feet	85.8	190	198	196	196	58	57.5	63
Depth to Top of 1st Screen in Feet	59.9	115	120	95.0	10	44.8	44.5	49.8
Depth to Bottom of 1st Screen in Feet	84.9	180	177	145.0	30	54.8	54.5	59.8
Depth to Top of 2nd Screen in Feet				152	95			
Depth to Bottom of 2nd Screen in Feet				186	145			
Depth to Top of 3rd Screen in Feet					152			
Depth to Bottom of 3rd Screen in Feet					186			
Top of 1st Screen Elevation in Feet	1948.7	1860.5	1864.2	1881	1966	1929.9	1930	1930.8
Bottom of 1st Screen Elevation in Feet	1923.7	1795.5	1807.2	1831	1946	1919.9	1920	1920.8
Top of 2nd Screen Elevation in Feet				1824	1881			
Bottom of 2nd Screen Elevation in Feet				1790	1831			
Top of 3rd Screen Elevation in Feet					1824			
Bottom of 3rd Screen Elevation in Feet					1790			
Screen Diameter Casing Size in Inches	2	24	24	20	20	2	2	2
Screen Casing Material	PVC	Steel	Steel	Steel	Steel	PVC	PVC	PVC
Screen Slot Size in Inches	0.02	Various	Various	Various	Various	0.02	0.02	0.02
Ground Surface Elevation in Feet	2008.6	1975.5	1984.2	1976	1976	1974.7	1974.5	1980.6
TOC Elevation in Feet	2008.22	1975.91	1985.57	1970.55	1970.55	1974.27	1973.81	1983.14
Stickup in Feet	-0.38	0.41	1.37	2.05	-5.45	-0.43	-0.69	2.54
Northing	271962.06	270925.04	270930.8	271162.28	271162.28	270768.85	270723.9	270746.66
Easting	2531489.93	2530019.16	2530057.71	2529720.51	2529720.51	2530038.88	2530043.38	2530144.42

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Well Data	WW-MW-04	WW-MW-05	WW-MW-06	WW-MW-07	WW-MW-08	WW-MW-09	WW-MW-10	WW-MW-11
Comment	Abandoned	Abandoned						
Date Installed	11/14/89	11/8/89	11/7/89	11/3/89	12/11/90	12/12/90	12/13/90	10/31/91
Total Boring Depth in Feet	93.5	73.5	73.5	84	84	74	84	66
Depth to Top of 1st Screen in Feet	76	56.8	62	68	68	58	69.0	40
Depth to Bottom of 1st Screen in Feet	86	66.8	72	78	83	73	84.0	60
Depth to Top of 2nd Screen in Feet								
Depth to Bottom of 2nd Screen in Feet								
Depth to Top of 3rd Screen in Feet								
Depth to Bottom of 3rd Screen in Feet								
Top of 1st Screen Elevation in Feet	1932.7	1931.4	1931.9	1933.3	1934.5	1936.2	1937.5	1935.1
Bottom of 1st Screen Elevation in Feet	1922.7	1921.4	1921.9	1923.3	1919.5	1921.2	1922.5	1915.1
Top of 2nd Screen Elevation in Feet								
Bottom of 2nd Screen Elevation in Feet								
Top of 3rd Screen Elevation in Feet								
Bottom of 3rd Screen Elevation in Feet	2	2	4	4	2	2	0	4
Screen Diameter Casing Size in Inches Screen Casing Material	PVC	PVC	4 PVC	4 PVC	PVC	PVC	PVC	4 PVC
Screen Slot Size in Inches	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ground Surface Elevation in Feet	2008.7	1988.2	1993.9	2001.3	2002.5	1994.2	2006.5	1974.5
TOC Elevation in Feet	2008.7	1988.2	1995.9	2001.3	2002.5	1994.2	2000.3	1974.5
Stickup in Feet	2.32	2.27	2.66	1.85	2.13	2.24	1.33	2.49
Northing	270898.27	271153.21	271210.11	271413.66	271196.77	271404.98	271231.47	271127.42
Easting	2530303.5	2530061.31	2530292.9	2530449.55	2530445.91	2530242.73	2530599.24	2529727.03

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11/2/91					WW-MW-17	WW-MW-18	WW-MW-19
		Abandoned					
	11/14/91	11/19/91	11/13/91	4/15/94	1/4/95	8/17/95	9/20/95
73.5	70	70	70	192	104	62.5	75
46	48.0	44	47.5	177	100	42	54
66	68.0	64	67.5	187	102	57	74
							l
							l
							l
							l
1938.8	1937.1	1929.8	1930.3	1797.3	1875.3	1933.7	1932.7
1918.8	1917.1	1909.8	1910.3	1787.3	1873.3	1918.7	1912.7
							l
							l
							l
_		—	—	-	—	—	4
							Steel
		•••					0.08
							1986.7
							1986.26 -0.44
		• • • •					-0.44 271042.15
							2530128.78
19 19 71	2 PVC 0.02 984.8 987.29 2.49 1262.62 9874.98	PVC         PVC           0.02         0.02           984.8         1985.1           987.29         1984.11           2.49         -0.99           1262.62         271120.78	PVC         PVC         PVC           0.02         0.02         0.02           984.8         1985.1         1973.8           987.29         1984.11         1973.33           2.49         -0.99         -0.47           1262.62         271120.78         270758.08	PVC         PVC         PVC         PVC         PVC           0.02         0.02         0.02         0.02         0.02           984.8         1985.1         1973.8         1977.8           987.29         1984.11         1973.33         1979.23           2.49         -0.99         -0.47         1.43           1262.62         271120.78         270758.08         271021.58	PVC         PVC <td>PVC         PVC         0.02         <t< td=""><td>PVC         PVC         PVC</td></t<></td>	PVC         0.02 <t< td=""><td>PVC         PVC         PVC</td></t<>	PVC         PVC

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Well Data	WW-SK-01	WW-SK-02	WW-SK-03	WW-SK-04	WW-TL-MW-1	WW-UVB-01	E Supply
Comment					Abandoned		
Date Installed	10/14/94	6/26/01	6/28/01	6/27/01	1/13/99	11/4/98	
Total Boring Depth in Feet	70	68	69	69	91.5	151	120
Depth to Top of 1st Screen in Feet	40	48	49.0	49	60	20.0	-
Depth to Bottom of 1st Screen in Feet	70	68	69.0	69	90	55.0	
Depth to Top of 2nd Screen in Feet						105	
Depth to Bottom of 2nd Screen in Feet						140	
Depth to Top of 3rd Screen in Feet							
Depth to Bottom of 3rd Screen in Feet							
Top of 1st Screen Elevation in Feet	1935.2	1933	1933.6	1933.7	1946.8	1953.8	
Bottom of 1st Screen Elevation in Feet	1905.2	1913	1913.6	1913.7	1916.8	1918.8	
Top of 2nd Screen Elevation in Feet						1868.8	
Bottom of 2nd Screen Elevation in Feet						1833.8	
Top of 3rd Screen Elevation in Feet							
Bottom of 3rd Screen Elevation in Feet							
Screen Diameter Casing Size in Inches	12	8	8	8	2	14	
Screen Casing Material	Steel	Steel	Steel	Steel	PVC	Steel	
Screen Slot Size in Inches	0.08	0.08	0.08	0.08	0.02	Various	
Ground Surface Elevation in Feet	1975.2	1981	1982.6	1982.7	2006.8	1973.8	
TOC Elevation in Feet	1978.17	1983.47	1985.14	1985.09	2008.8	1975.78	
Stickup in Feet	2.97	2.47	2.54	2.39	2	1.98	
Northing	270932.85	270755.42	271039.43	271128.62	271012.9	270744.86	272300.22
Easting	2530018.17	2530142.93	2529997.88	2529989.96	2530840.87	2529764.09	2533390.89

Well Data	N Supply	W Supply	River Staff Gage
Comment	11.7		5
Date Installed	11/21/95		
Total Boring Depth in Feet	222	120	
Depth to Top of 1st Screen in Feet	188	120	
Depth to Bottom of 1st Screen in Feet	203		
Depth to Top of 2nd Screen in Feet	200		
Depth to Bottom of 2nd Screen in Feet			
Depth to Top of 3rd Screen in Feet			
Depth to Bottom of 3rd Screen in Feet			
Top of 1st Screen Elevation in Feet			
Bottom of 1st Screen Elevation in Feet			
Top of 2nd Screen Elevation in Feet			
Bottom of 2nd Screen Elevation in Feet			
Top of 3rd Screen Elevation in Feet			
Bottom of 3rd Screen Elevation in Feet			
Screen Diameter Casing Size in Inches			
Screen Casing Material	Steel		
Screen Slot Size in Inches	Various		
Ground Surface Elevation in Feet			1938.97 (a)
TOC Elevation in Feet			· · ·
Stickup in Feet			
Northing	272342.04	272297.09	270179.81
Easting	2533395.57	2533368.2	2529927.16

Elevations are in NAVD88 datum.

Horizontal XY coordinates are in NAD83 datum

(a) Represents +15.00 feet on the staff gage.

Note: Some of the elevations shown on the monitoring well logs were surveyed to a different datum and may be different than the post-2008 survey elevations shown in this table. Refer to Table A-1 of the 2003 Groundwater RI/FS (see enclosed CD) for monitoring well elevations based on the old survey datum.

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#### Table A-2 - Construction Details for Surrounding Area Wells

Well ID	Well Owner Name	Section	Drilling Method	Well Depth in Feet	Well Diameter in Inches	Depth to Top of Screen in Feet	Depth to Bottom of Screen in Feet	Depth to Water Level in Feet	Completion Date	Comments
Water Supply		Section	Method	mreet	III IIICIIES	mreet	mreet	mreet	Date	Comments
Well #4 Well #5 Well #1 Well #2 Well #3 WRC 10215 	Trentwood Irrigation District #3 Trentwood Irrigation District #3 Spokane Industrial Park Spokane Industrial Park Spokane Industrial Park	2 1 1 12 11 11 11 11	Cable Cable Cable Cable Cable Cable Cable  Cable	174 159 160 120 98 138 125 115 150	18 16 12 16 10 8 10 10 18	128 110   131 106 80 120	154 145   137 115 108 150	103 104 76  68 50 60 74 68	9/10/1970 9/10/1970 9/10/1970 4/22/1971 1/12/1966	Perforated Screen Perforated Screen Perforated Screen Perforated Screen Perforated Screen
Well #2	Comico Products Inc.	11	Cable	130	10	114	130	78	11/3/1987	
Resource Pro		-	-							
 AGS 116 AGS 117 AGS 118	Washington Water Power General Electric Power Systems General Electric Power Systems General Electric Power Systems	2 2 2 2	Rotary  	295 90 90 90	6 2 2 2	 70 70 70	 90 90 90	 80 80 80	12/9/1986 7/24/2002 7/25/2002 7/25/2002	Not intended as a water well Abandoned Abandoned Abandoned
AGF 868 AGF 869 AGF 870		3 3 3	4" HSA 4" HSA 4" HSA	20 20 20	2 2 2	10 10 10	20 20 20	  	8/29/2001 8/29/2001	Consultant is CDM Consultant is CDM Consultant is CDM

Notes:

-- = Not reported on Driller's Well Log.

Township and Range are 25N and 44E, respectively. Reference: Washington State Department of Ecology - http://apps.ecy.wa.gov/welllog/

### Key to Exploration Logs

#### **Sample Description**

(HC Standards\SRF\ A-1.dwg)

12/05

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Native Material

Groundwater Seepage (Test Pits)

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

	sed on visual observat	ion and is presented	parentnetically of	on the test pit logs	5.
SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Per Res	ndard netration sistance(N) Blows/Foot	Approximate Shear Strength in TSF
Very loose	0 - 4	Very soft	C	0 - 2	<0.125
Loose	4 - 10	Soft	2	2 - 4	0.125 - 0.25
Medium dense	10 - 30	Medium stiff		4 - 8	0.25 - 0.5
Dense	30 - 50	Stiff	8	8 - 15	0.5 - 1.0
Very dense	>50	Very stiff	15	5 - 30	1.0 - 2.0
		Hard		>30	>2.0
Moisture			Minor Cons	tituents	Estimated Percentage
Dry Little perce	eptible moisture		Not identified	in description	0 - 5
Damp Some per	eptible moisture, proba	ably below optimum	Slightly (claye	ey, silty, etc.)	5 - 12
Moist Probably r	ear optimum moisture	content	Clayey, silty, s	sandy, gravelly	12 - 30
Wet Much perc	eptible moisture, proba	bly above optimum	Very (clayey,	silty, etc.)	30 - 50
Legends		,			
	hand a la			ymbols	
Sampling Test S	ymbols		GS	Grain Size Cla	ssification
Boring Samples	Test	Pit Samples	CN	Consolidation	
Split Spoc		Grab (Jar)	UU UU	Unconsolidated	d Undrained Triaxial
<u> </u>			CU	Consolidated L	Indrained Triaxial
Shelby Tu	be 🗌	Bag	CD	Consolidated E	Drained Triaxial
Cuttings	$\Box$	Shelby Tube	QU	Unconfined Co	mpression
Core Run			DS	Direct Shear	
	e Recovery		к	Pe <b>r</b> meability	
•	ned, Not Driven		PP	Pocket Penetro Approximate	ometer Compressive Strength in TSF
			ΤV	Torvane Approximate	Shear Strength in TSF
Groundwater Ol	oservation Wells		CBR	California Bear	•
	<ul> <li>Monument</li> </ul>		MD	Moisture Dens	ity Relationship
	- Surface Seal		AL	Atterberg Limit	
	<ul> <li>Gravel Backfill</li> <li>Riser Pipe</li> <li>Bentonite</li> <li>Groundwater Level</li> </ul>				Water Content in Percent Liquid Limit Natural Plastic Limit
	at Time of Drilling	(ATD)	PID		Detector Reading
	<ul> <li>Well Screen</li> </ul>		CA	Chemical Analy	vsis
	<ul> <li>Sand Pack</li> </ul>		DT	In Situ Density	Test



### Key to Exploration Logs

#### Sample Description

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

Density/Consiste	ency			
Soil density/consistency in t	porings is related primarily to the	ne Standard Penetration Resistan	ce.	
Soil density/consistency in t		visual observation and is present		
SAND or GRAVEL	Standard Penetration	SILT or CLAY	Standard Penetration	Approximate Shear
Density	Resistance (N) in Blows/Foot	Consistency	Resistance (N) in Blows/Foot	Strength in TSF
Very loose	0 - 4	Very soft	0 - 2	<0.125
Loose	4 - 10	Soft	2 - 4	0.125 - 0.25
Medium dense	10 - 30	Medium stiff	4 - 8	0.25 - 0.5
Dense	30 - 50	Stiff	8 - 15	0.5 - 1.0
Very dense	>50	Very stiff	15 - 30	1.0 - 2.0
		Hard	>30	>2.0

#### Moisture

Little perceptible moisture
Some perceptible moisture, probably below optimum
Probably near optimum moisture content
Much perceptible moisture, probably above optimum

### Legends

Sam	pling Test Symbol	s	
BORI	NG SAMPLES	TEST	PIT SAMPLES
$\boxtimes$	Split Spoon	$\boxtimes$	Grab (Jar)
	Shelby Tube	$\square$	Bag
	Cuttings	$\Box$	Shelby Tube
	Core Run		
*	No Sample Recovery		
Р	Tube Pushed, Not Drive	en	
Exem	lengtion and Comm	lation	Detaile
схр	loration and Comp	netion	Detalis
	Surface Seal		
⊻	Groundwater Lev (ATD) At Time o		I

# Observation Well Tip or Slotted Section

Groundwater Seepage (Test Pits)

ş

### Minor Constituents

Not identified in description	0 - 5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

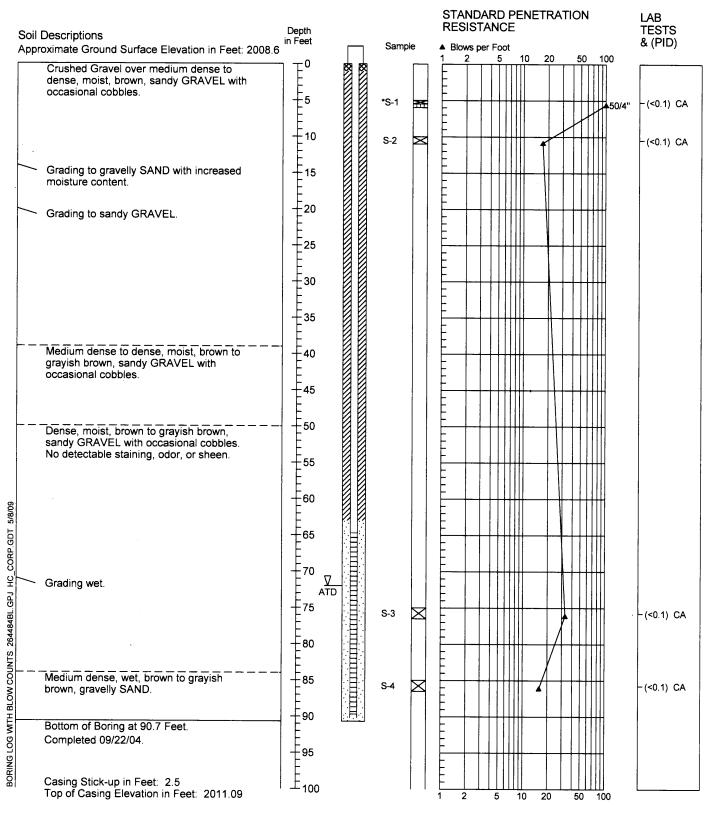
Estimated Percentage

### **Test Symbols**

	•
NS	No Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
TCD	Triaxial Consolidated Drained
QU	Unconfined Compression
DS	Direct Shear
к	Permeability
PP	Pocket Penetrometer Approximate Compressive Strength in TSF
τv	Torvane Approximate Shear Strength in TSF
CBR	California Bearing Ratio
MD	Moisture Density Relationship
AL	Atterberg Limits
	Water Content in Percent
	Liquid Limit Natural Plastic Limit
PID	Photoionization Detector Reading
CA	Chemical Analysis
DT	In Situ Density Test



## Boring Log & Construction Data for Monitoring Well CM-MW-1S





- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

2644-84 Figure A-2

<sup>1.</sup> Refer to Figure A-1 for explanation of descriptions and symbols.

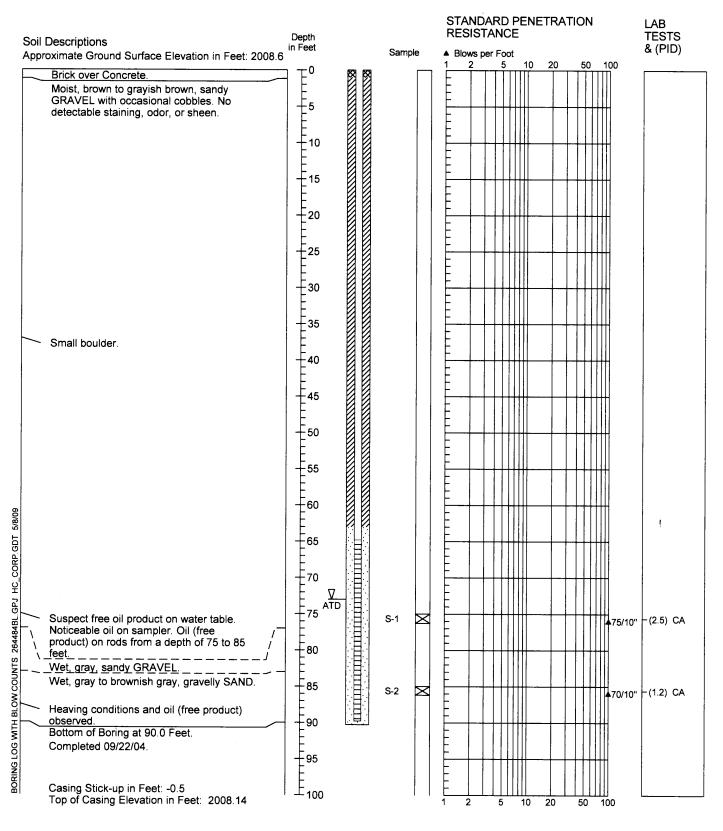
# Boring Log & Construction Data for Monitoring Well CM-MW-2S

coil Deseriations	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
oil Descriptions pproximate Ground Surface Elevation in Feet: 20	in Feet	Sample	▲ Blows per Foot	& (PID)
Brick over Concrete.	0			<b></b>
Brown, sandy GRAVEL. No detectable	$+25+30+40+45+55+60$			
staining, odor, or sheen.	<del>[</del> 5			
			<u>F</u>	
	<del>[</del> 10			
	15			
	-20		$E \rightarrow + + + + + + + + + + + + + + + + + + $	
				·
Moist, brown, gravelly SAND.			E++++++++++++++++++++++++++++++++++	
			F	
Moist, brown and grayish brown, sandy			F	
GRAVEL.	-35			
			F	
	<u>+</u> 40			
	45			
			E	
	-50			
			E	
<ul> <li>Zones of gravelly SAND.</li> </ul>	- 55			
			E	
	-60			
			E	
			E	
	+ 70   目			
<ul> <li>Oil-like odor detected.</li> </ul>		III	E	- (1.6)
Dense to very dense, wet, brownish gray,	+75   目:	S-1 🗙		-(2.1) CA
sandy GRAVEL with visible product and odor.				
	<del>+</del> 80   目			
			E	
		S-2 🗙		- (0.75) CA
			E	
Bottom of Boring at 90.9 Feet.	90 [注月:]			
Completed 09/23/04.	E		E	
	95			
Casing Stick-up in Feet: -0.5	I E		$E \mid                                     $	
Top of Casing Elevation in Feet: 2008.24	「上 <sub>100</sub>	1.1	1 2 5 10 20 50 100	L



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes
- Boold and a statistic marked and actual changes may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

### Boring Log & Construction Data for Monitoring Well CM-MW-3S





1. Refer to Figure A-1 for explanation of descriptions and symbols.

 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. 2644-84 Figure A-4

# **Boring Log & Construction Data for Monitoring Well CM-MW-4S**

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions	in Feet	Sample	Blows per Foot	& (PID)
Approximate Ground Surface Elevation in Feet: 200	0		1 2 5 10 20 50 100	
3-inch Wood Block Floor over 13 inches of Concrete.				
Moist, brown, slightly sandy to sandy				
GRAVEL. No detectable staining, odor, or sheen.				
Sheen.	<u>–</u> 10			
	<u>+</u> 15		F	
	F <sub>20</sub>			
	- - 25		$F \downarrow	
			E	
Moist, gray to brown, sandy to very sandy				
GRAVEL. No detectable staining, odor, or			E	
sheen.	-35		E	
	40			
			$\mathbf{E}$	
	45			
Dry to damp, brown GRAVEL with trace of sand and scattered cobbles.				
Sand and Scattered Cobbles.	-55		F	
Grading slightly sandy.			$F \rightarrow F \rightarrow$	
6018/4			E	
_	<u>–</u> 65 <u>–</u> 65			
			F = [ + [ + [ + [ + [ + [ + [ + [ + [ + [	
			E	
		S-1 🛛		-(<0.1) CA
님 Very dense, wet, brown, sandy GRAVEL with cobbles. No detectable staining, odor, or sheen.			E                 /       /	
		S-2 🛛	F	-(<0.1) CA
	<u></u> <u>−</u> 90		$F \rightarrow f \rightarrow $	
Bottom of Boring at 91.0 Feet. Completed 09/27/04.			E	
Completed 09/27/04.	- 95		╞╌╼┶╼┥┶┼┼┼╢╢	
	I E		E	
Casing Stick-up in Feet: -0.75 Top of Casing Elevation in Feet: 2007.96	丨上 <sub>100</sub>			

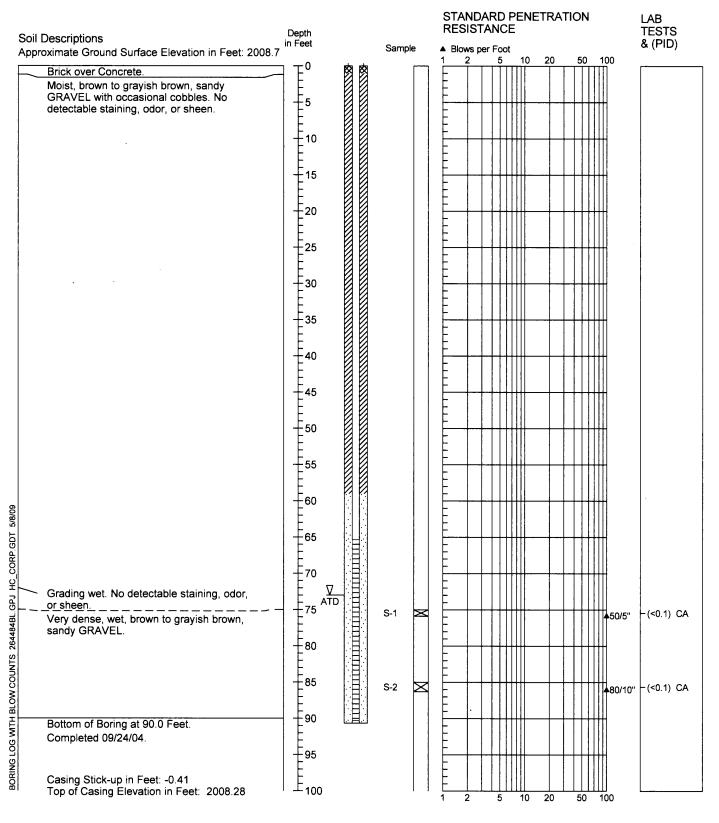


1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

### Boring Log & Construction Data for Monitoring Well CM-MW-5S

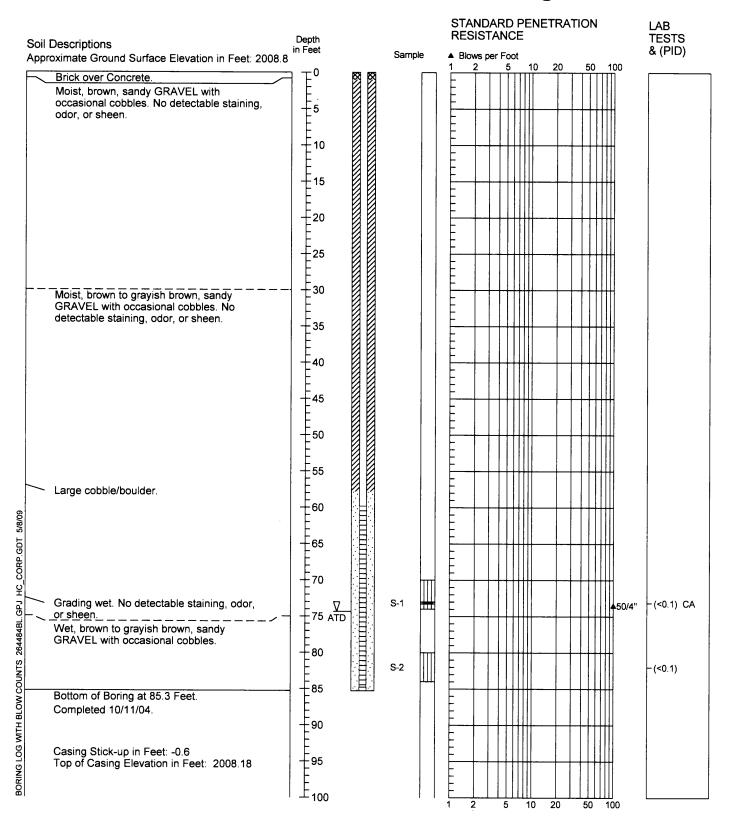




1. Refer to Figure A-1 for explanation of descriptions and symbols.

- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

### Boring Log & Construction Data for Monitoring Well CM-MW-6S





1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log & Construction Data for Monitoring Well CM-MW-7S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions	in Feet	Sample	<ul> <li>Blows per Foot</li> </ul>	& (PID)
Approximate Ground Surface Elevation in Feet: 2008.7	0 xa xa		1 2 5 10 20 50 100	
Concrete. Moist, brown to grayish brown, sandy				
GRAVEL. No detectable staining, odor, or sheen.	-0 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	÷10			
(Very loose).	10			
Detectable odor to water table.	20	S-1		- (<0.1) CA
	-25			
	+30 E			
	-35			
Moist, brown to grayish brown, sandy	40			
GRAVEL with occasional cobbles.	45			
	+30 +35 +40 +45 +50	*S-2 🎹	E 50/4"	-(<0.1) CA
	55			
	E			
	-65 -70 -70 -75 ATD			
2	- 70 F ∇ E	S-3		-(<0.1) CA
Grading wet with detectable odor.				
GRAVEL.	- 80			
		S-4		- (<0.1)
Bottom of Boring at 85.5 Feet. Completed 10/12/04. Casing Stick-up in Feet: -0.7 Top of Casing Elevation in Feet: 2007.97	+85 LE			
Casing Stick-up in Feet: -0.7 Top of Casing Elevation in Feet: 2007.97	- 			
	L 100			
	100		1 2 5 10 20 50 100	



1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log & Construction Data for Monitoring Well CM-MW-8S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions Approximate Ground Surface Elevation in Feet: 2011.2	in Feet	Sample	Blows per Foot	& (PID)
Imported Gravel Fill surface over Brick over PVC Conduit.				
Moist, brown to grayish brown, sandy GRAVEL with occasional cobbles. No detectable staining, odor, or sheen.	+0 +5 +10 +15 +20 +25 +30 +35 +40 +45 +55			
Moist, brown, sandy GRAVEL with	- 20	S-1	E	(<0.1) CA
occasional cobbles.	-25			
Moist, brown to grayish brown, sandy	30			
GRAVEL with occasional cobbles. No detectable staining, odor, or sheen.	-35			
	40			
	45			
	50	*S-2	E ▲50/4'	- (<0.1) CA
	55			
Brown, sandy GRAVEL. No detectable	-60 -65 -70	S-3		- (<0.1)
	-75 -80 	S-4		
Brown, sandy GRAVEL. No detectable staining, odor, or sheen. Bottom of Boring at 85.0 Feet. Completed 10/13/04. Casing Stick-up in Feet: -0.6 Top of Casing Elevation in Feet: 2010.56	85 90			<b>-</b> (<0.1)
Casing Stick-up in Feet: -0.6 Top of Casing Elevation in Feet: 2010.56				
	上 <sub>100</sub>		1         2         5         10         20         50         100	



- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well FO-MW-1S

Soil Descriptions	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Approximate Ground Surface Elevation in Feet: 2007.9	in Feet	Sample	▲ Blows per Foot	& (PID)
Dry to moist, dark brown FILL soil.	+0 +5 +10			
Moist, brown to grayish brown, sandy GRAVEL with open work zones and scattered cobbles.	-10 -15	S-1		-(4.1) CA
Rapid penetration.	-20	S-2	50/5 <sup>1</sup>	- (13.4) CA
Circulation loss indicates open work Gravel with scattered cobbles.	$\begin{array}{c} 0 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	*S-3	▲50/6	- (2.8) CA
	40	S-4	- - - - - - - - - - - - - - - - - - -	' – (6.8) CA
Moist, brown, sandy GRAVEL.	- 	*S-5	▲50/3	' - (1.2) CA
Increased cuttings return.	- 60 - 65	S-6	▲50/3	- (1.0) CA
Increasing moisture with depth.	-70	*S-7	<b>–</b> – – – – – – – – – – – – – – – – – – –	- (4.5) CA
Wet, gray to dark gray, slightly sandy to sandy GRAVEL. Very strong petroleum-like odor.	- 75 ATD	S-8		- (5.6) CA
Visible product sheen with odor. Bottom of Boring at 90.9 Feet. Completed 02/22/06. Casing Stick-up in Feet: 2.9	- 75 ATD - 80 - 85 - 90	s-9 🗮	50/5	' - (3.7) CA
Completed 02/22/06. Casing Stick-up in Feet: 2.9 Top of Casing Elevation in Feet: 2009.39	- 95 - 100			



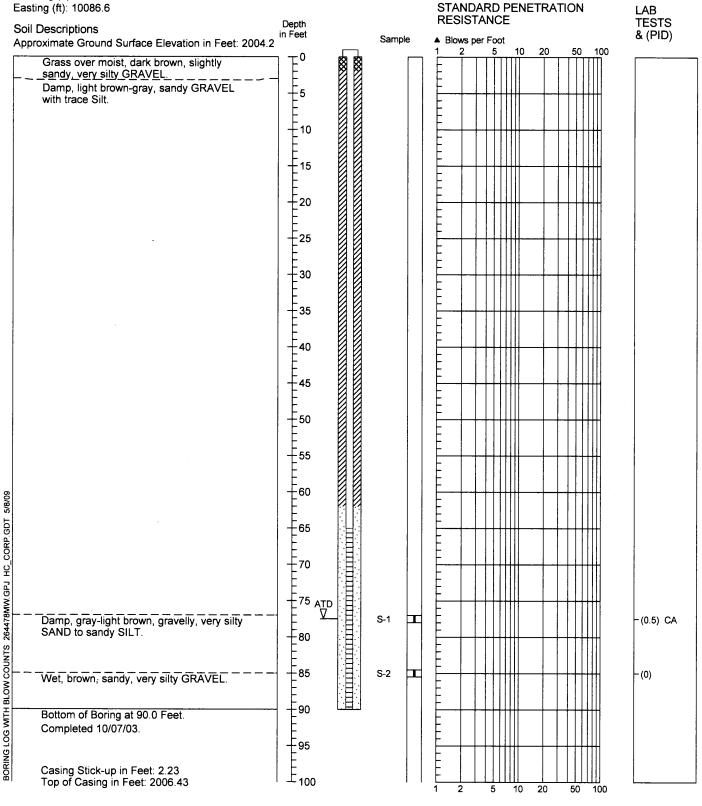
Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

may be gradual.

<sup>3.</sup> Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Monitoring Well Log HL-MW-12S

Northing (ft): 11199.4 Easting (ft): 10086.6





1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

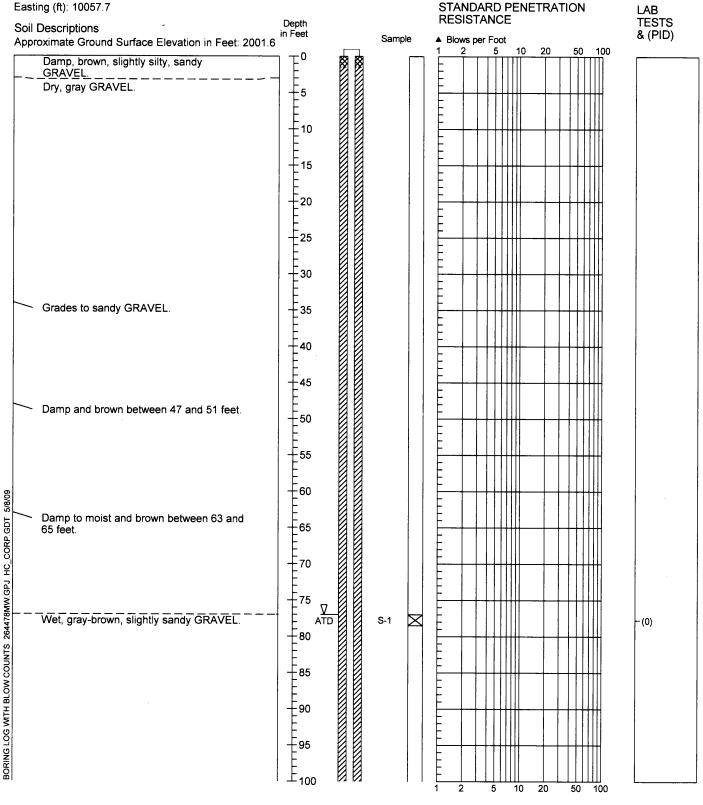
3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time

Figure A-11

<sup>10/03</sup> 

# Monitoring Well Log HL-MW-13DD

Northing (ft): 11082.8 Easting (ft): 10057.7





 <sup>2644-78
 9/03</sup> Figure A-12
 1/2

1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Monitoring Well Log HL-MW-13DD

Northing (ft): 11082.8 Easting (ft): 10057.7

Easting (ft): 10057.7 Soil Descriptions	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Approximate Ground Surface Elevation in Feet: 200	in Feet 1.6	Sample	▲ Blows per Foot	& (PID)
Wet, gray-brown, slightly sandy GRAVEL. Grades to brown, non-silty to slightly silty, sandy GRAVEL and gravelly SAND. Bottom of Boring at 150.5 Feet. Completed 09/28/03. Casing Stick-up in Feet: 2.51 Top of Casing in Feet: 2004.11	$     \begin{array}{c}       100 \\       1105 \\       110 \\       1115 \\       1120 \\       1125 \\       1130 \\       1135 \\       1140 \\       145 \\       1150 \\       1155 \\       1160 \\       1155 \\       1160 \\       1155 \\       1160 \\       1155 \\       1160 \\       1155 \\       1160 \\       1155 \\       1160 \\       1155 \\       1160 \\       1155 \\       1190 \\       1195 \\       200 \\       200 \\       $	5-2		-(0)



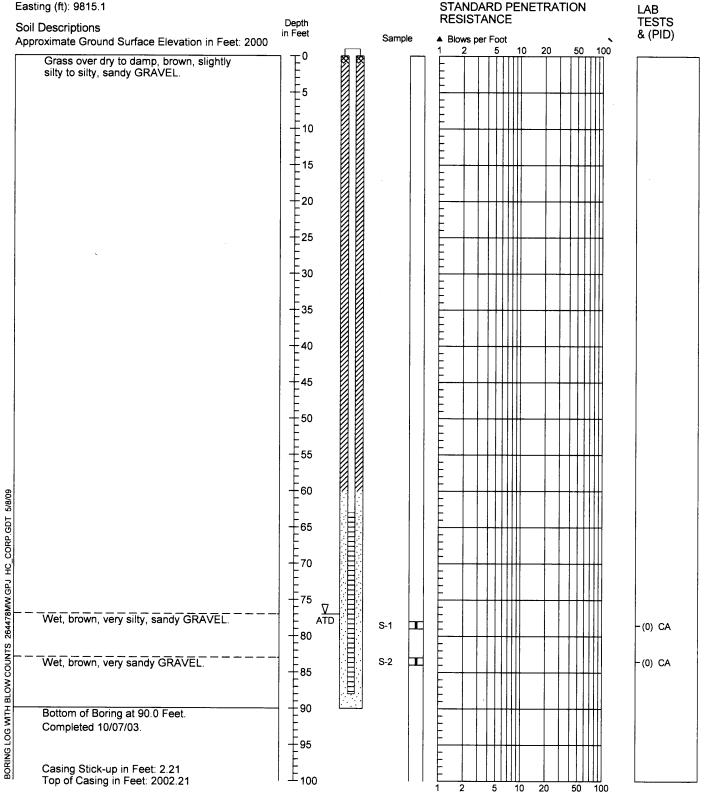
2/2

Figure A-12

- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Monitoring Well Log HL-MW-14S

Northing (ft): 10868.4 Easting (ft): 9815.1





1. Refer to Figure A-1 for explanation of descriptions and symbols.

 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. 2644-78 Figure A-13

### Monitoring Well Log HL-MW-15DD

Northing (ft): 10990 Easting (ft): 10307.5

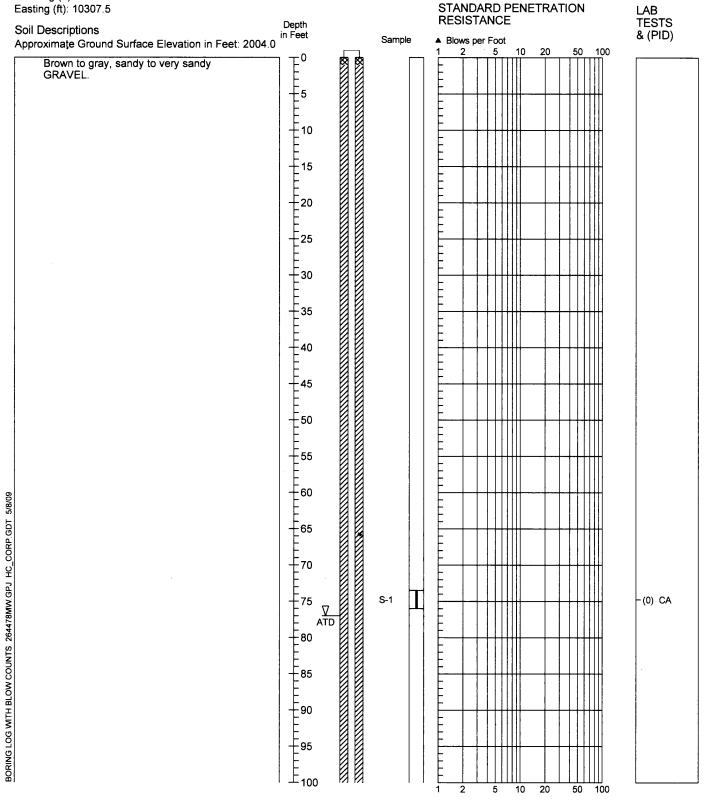




Figure A-14

1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

1/2

# Monitoring Well Log HL-MW-15DD

Northing (ft): 10990 Easting (ft): 10307.5

Northing (ft): 10990 Easting (ft): 10307.5 Soil Descriptions	Depth in Feet	Sample	STANDARD PENETRATION RESISTANCE	LAB TESTS & (PID)
Approximate Ground Surface Elevation in Feet: 2004.0 Brown to gray, sandy to very sandy GRAVEL.	-100 -105 -110 -1110 -1110 -1120 -125 -130 -135		Blows per Foot      2 5 10 20 50 100	
Wet, brown to gray, very silty, non-sandy to sandy GRAVEL.	+125 +130 +135			
Wet, brownish gray SAND with scattered Gravel.	- 140 - 145 - 150	S-2 I		- (0)
Bottom of Boring at 151.0 Feet. Completed 10/03/03.	- 155			
Casing Stick-up in Feet: 2.1 Top of Casing in Feet: 2006.10	- 160 - 165 - 170 - 175 - 180 - 185 - 190 - 195 - 200			



.

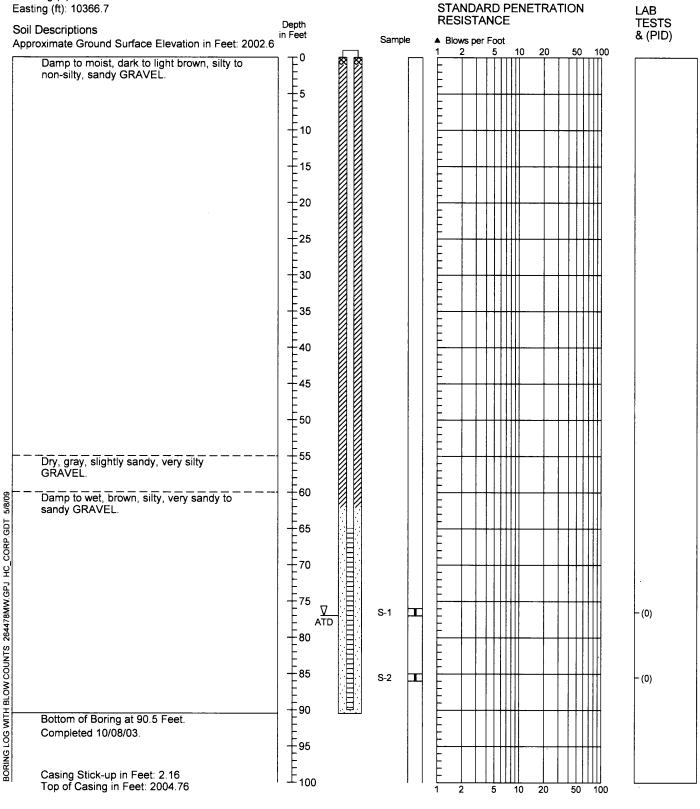
Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

- Boo descriptions and addition integration and prevention actual change may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

CORP.GDT 5/8/09 264478MW.GPJ HC BORING LOG WITH BLOW COUNTS

#### Monitoring Well Log HL-MW-16S

Northing (ft): 10800.7 Easting (ft): 10366.7





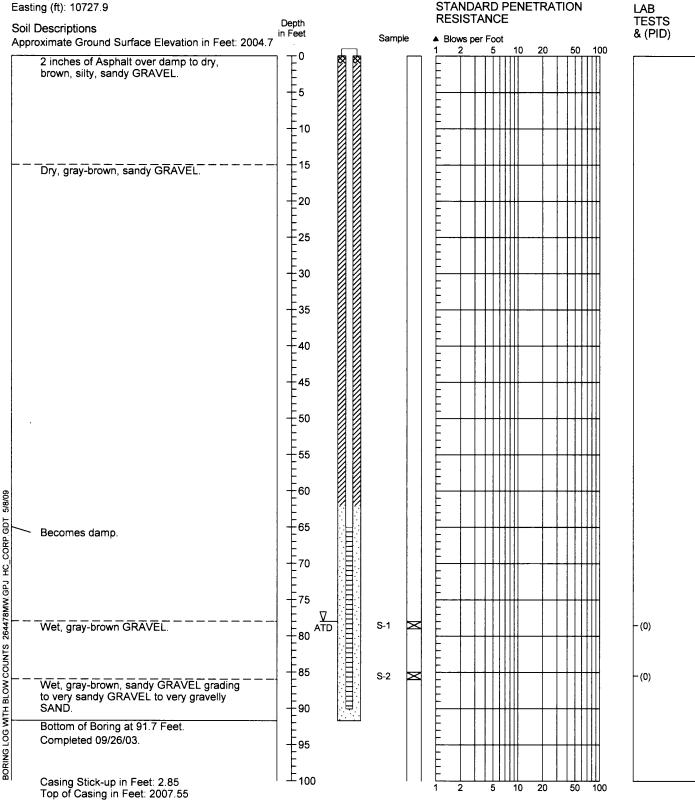
1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Figure A-15

#### Monitoring Well Log HL-MW-17S

Northing (ft): 11084.4 Easting (ft): 10727.9



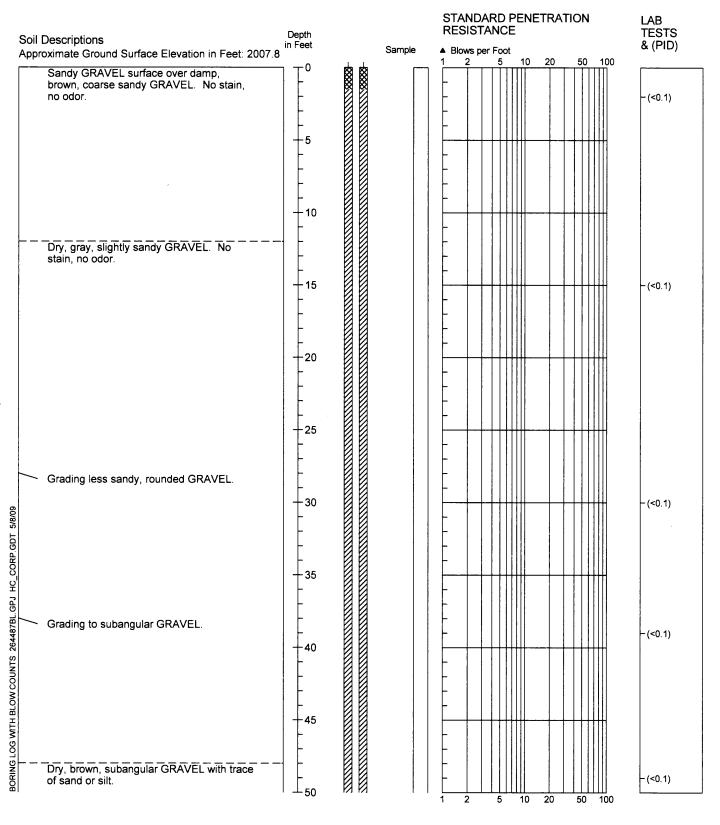


1. Refer to Figure A-1 for explanation of descriptions and symbols.

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

2644-78 Figure A-16

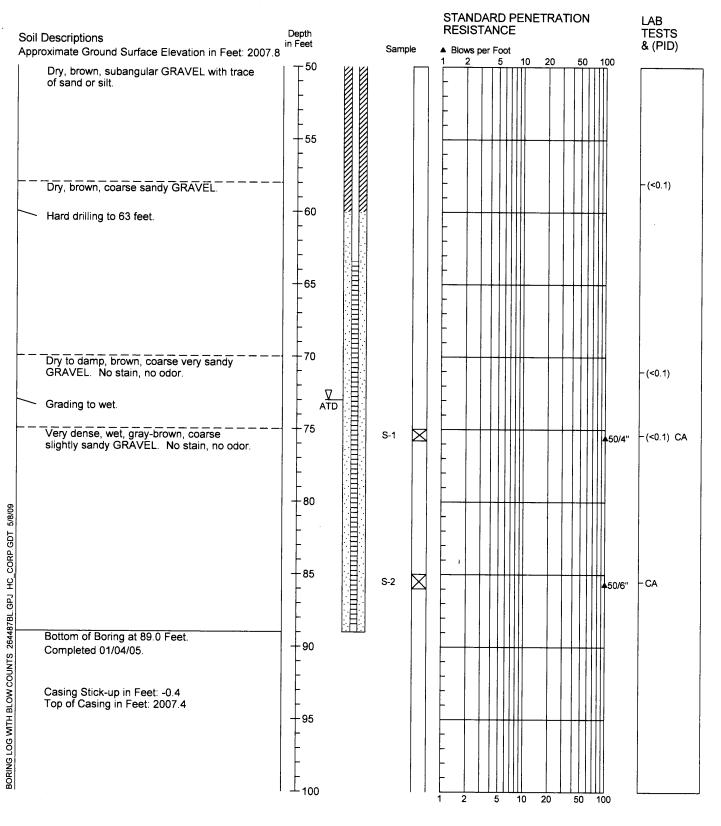
#### Boring Log/Construction Data for Monitoring Well HL-MW-18S





- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

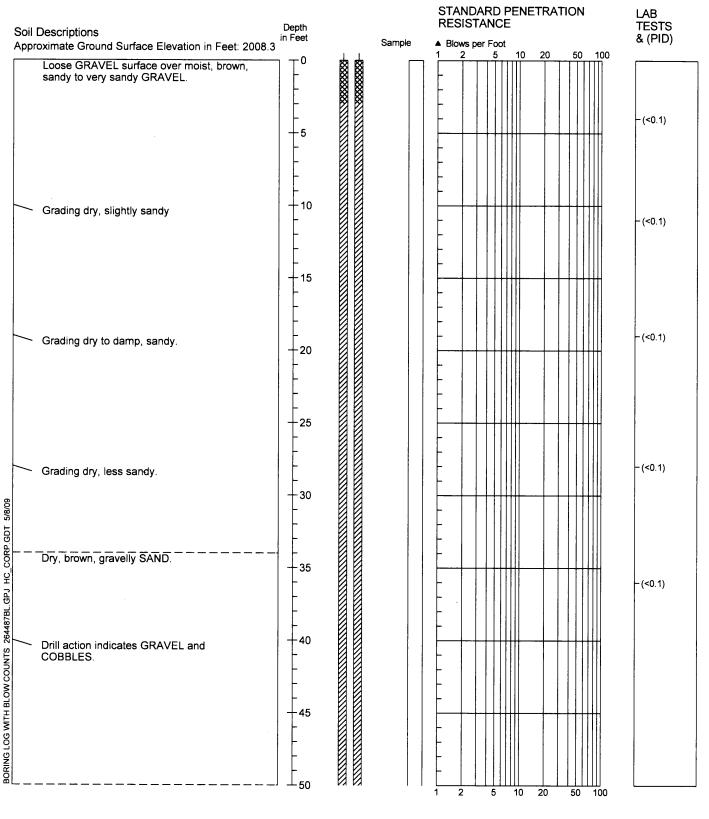
# Boring Log/Construction Data for Monitoring Well HL-MW-18S





- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

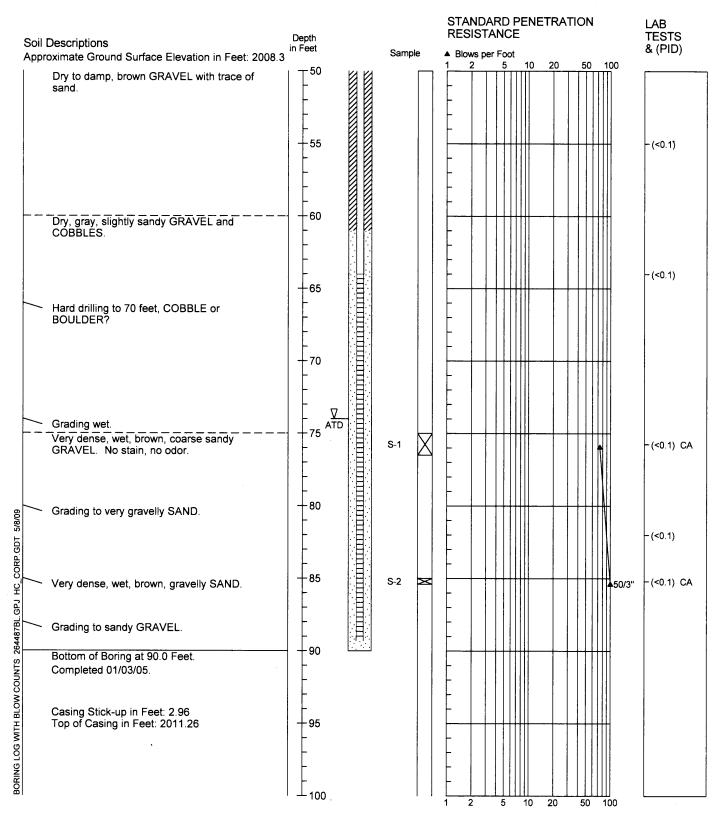
#### Boring Log/Construction Data for Monitoring Well HL-MW-19S





- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

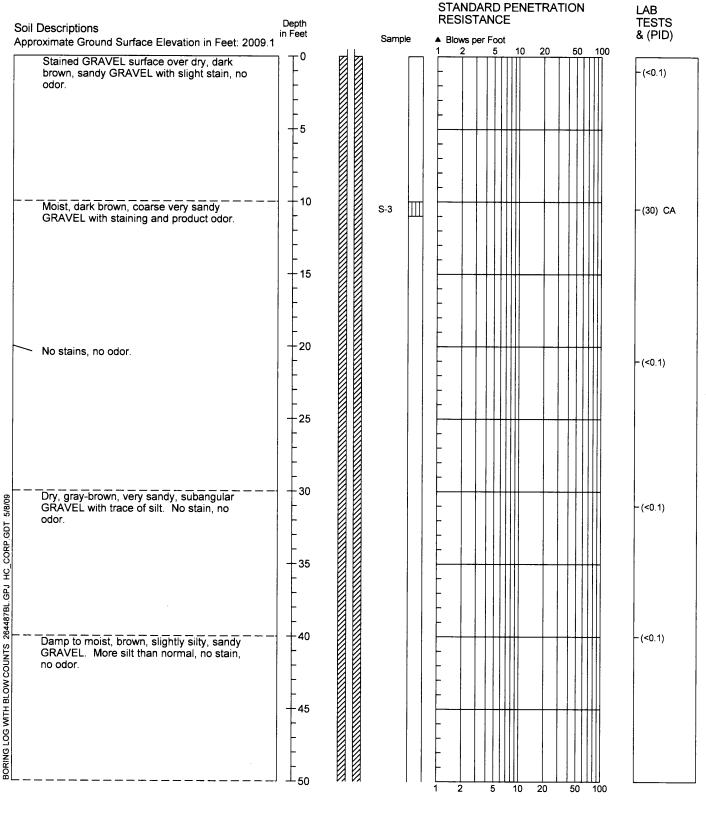
### Boring Log/Construction Data for Monitoring Well HL-MW-19S





- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

### Boring Log/Construction Data for Monitoring Well HL-MW-20S



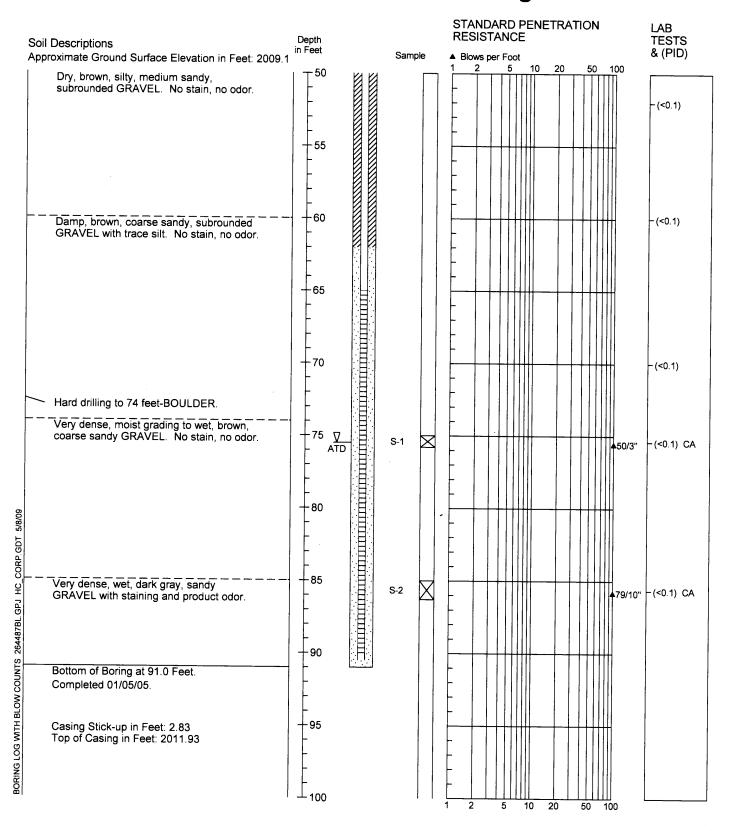


1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well HL-MW-20S





2644-87

Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

may be gradual.3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

 2644-87
 1/05

 Figure A-19
 2/2

## Boring Log/Construction Data for Monitoring Well HL-MW-21S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
oil Descriptions pproximate Ground Surface Elevation in Feet: 2007.	in Feet 7	Sample	▲ Blows per Foot	& (PID)
(Loose), moist, brownish gray, slightly sandy GRAVEL/COBBLE.		S-1		- (<0.1) CA
(Loose), moist, brownish gray, slightly sandy GRAVEL with scattered Cobbles.		S-2		-(0.4) CA
(Medium dense), moist, brownish gray, sandy GRAVEL.	-1 - 10 -1 - 10 -1 - 10 -1 - 15 -1 - 20 -1 - 25 -1 - 25 -1 - 25 -1 - 25 -1 - 30 -1 - 30 -1 - 35 -1 - 35	*5-3	- - - - - - -	" -(0.1) CA
➤ Grading to brown.				



Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

Bool descriptions and addition integrate the prevention actual change may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

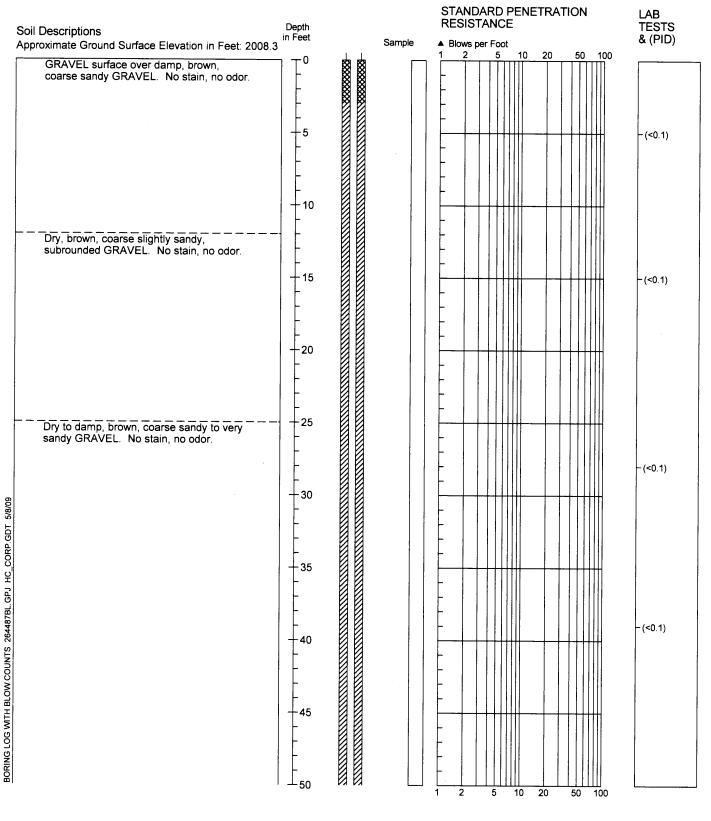
# Boring Log/Construction Data for Monitoring Well HL-MW-21S

Soil Descriptions	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Approximate Ground Surface Elevation in Feet: 2007.7	in Feet	Sample	▲ Blows per Foot	& (PID)
(Medium dense), moist, brown, sandy GRAVEL with possible scattered Cobbles.		*5-4	1 2 5 10 20 50 100 	
COBBLE/BOULDER.	55 			
Cuttings indicate increased moisture content.				
(Very dense), wet, gray, sandy GRAVEL.		s-5 🗙	  	(<0.1) CA
(Very dense), wet, brownish gray, sandy GRAVEL.	+75 - - - - - - - - - - - - - - - - - - -	*\$6	- - - -	(<0.1) CA
Bottom of Boring at 81.0 Feet. Completed 01/28/05.				
Casing Stick-up in Feet: 3.49 Top of Casing in Feet: 2011.19	- 85 90 90 			



- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes
- Boond designed and a strattern mines are interpretive and actual change may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well HL-MW-22S



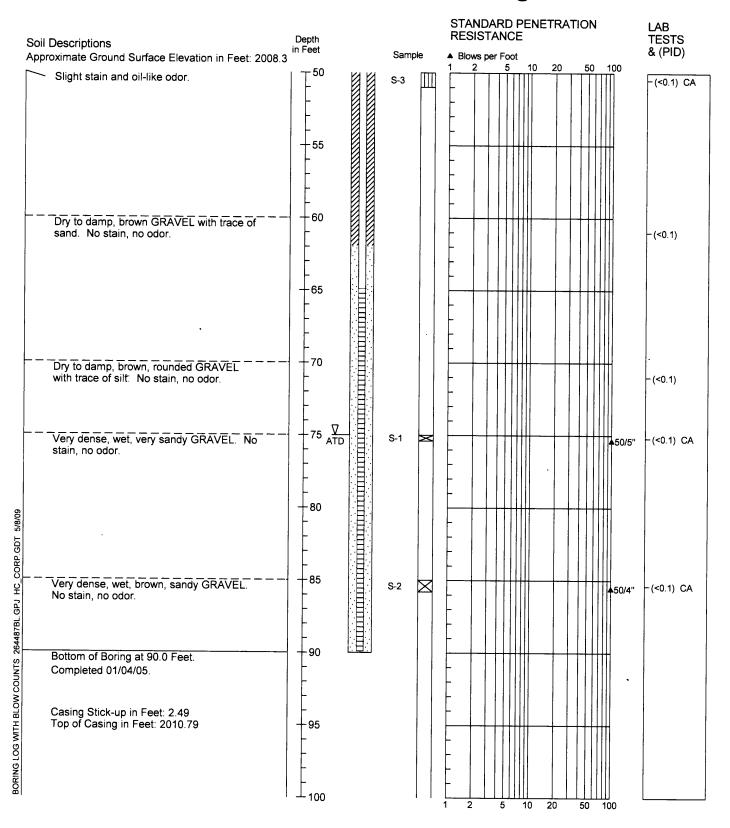


1/2

Figure A-21

- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well HL-MW-22S





2644-87 Figure A-21

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

1/05 2/2

<sup>1.</sup> Refer to Figure A-1 for explanation of descriptions and symbols.

# Boring Log/Construction Data for Monitoring Well HL-MW-23S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
oil Descriptions	in Feet	Sample	<ul> <li>Blows per Foot</li> </ul>	& (PID)
oproximate Ground Surface Elevation in Feet: 2004		Campio	1 2 5 10 20 50 100	
Moist, dark brown, slightly silty, sandy GRAVEL (Recent FILL).				
	+5			
	10	S-1 🗙		-(0.4) CA
Moist, brownish gray to grayish brown,				
sandy GRAVEL with scattered open work Gravel zones.	20	S-2	= <b>5</b> 0/4"	-(0.4) CA
<ul> <li>Circulation loss, open work zones.</li> </ul>	-25			
· · ·		S-3		- (0.6) CA
	-100 + 150 + 100			
	40	S-4		- (0.9) CA
	-45	34		- (0.9) CA
Moist, grayish brown to brownish gray, sandy GRAVEL.	- + 50	*S-5 😾	<b>_</b>	-(0.4) CA
<ul> <li>Increased cuttings return.</li> </ul>	+55			
	60	S-6 🔀	<u>−</u> − −	- (0.8) CA
	-65			
		S-7 🔀	<b>-</b> 	-(0.3) CA
<ul> <li>Grading wet.</li> </ul>		•		
<ul> <li>Heaving conditions.</li> </ul>	80	S-8		-(0.2) CA
<ul> <li>Heaving conditions, no drive sample</li> </ul>		s-9		-CA
attempt. Bottom of Boring at 94.0 Feet.	<u>+</u> 95			
Completed 02/13/06.				

Top of Casing Elevation in Feet: 2006.82

1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



# Boring Log/Construction Data for Monitoring Well HL-MW-24DD

	Deeth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions	Depth in Feet	Sample	▲ Blows per Foot	& (PID)
Approximate Ground Surface Elevation in Feet: 2003.3		Sample	1 2 5 10 20 50 100	
SOD over dark brown, slightly silty, sandy GRAVEL over moist, grayish brown, slightly silty, sandy GRAVEL with slightly sandy, open work Gravel zones. Circulation loss, open work zones.				
		S-1 🛣	<b>− − − − − − − − − −</b>	-(0.7) CA
	-20	S-2	52/2"	-(0.7) CA
	+25 +30	s-3		-(<0.1) CA
Moist, brownish gray, sandy GRAVEL.		S-4	50/4"	-(0.7) CA
	+45 +50	*S-5	<b>−</b> − − − −	-(0.2) CA
60/LLG	+ 5 + 10 + 15 + 20 + 25 + 30 + 40 + 45 + 50 + 55 + 60 + 65	*S-6 III	50/0"	-(0.4) CA
Grading wet. Wet, gray to grayish brown, slightly sandy to sandy GRAVEL.	- 70 <u>↓</u> ATD	s-7		-(1.3) CA
UN IS 204489-1-0	+80	*S-8	50/2"	-(1.3) CA
Heaving conditions with increased Sand content. Wet, grayish brown, well-graded, very sandy GRAVEL.	+80 +85 +90 +95	s-9		- (0.7) CA
	+95 			



Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

Solidescriptions and stratum mes are interpretive and actual ordinger may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Boring Log/Construction Data for Monitoring Well HL-MW-24DD

Approximate Ground Surface Elevation in Feet 2003.3         Sample         Bowe per Fot         Current Surface           Wet, grayeh brown, weil-graded, very sandy GRAVEL         100         105         12         10         12         10         100	Soil Descriptions	Depth		STANDARD PENETRAT	FION	LAB TESTS
Wet: gravish brown, well-graded, very sandy GRAVEL.       100       2       5       0       20       50       00         Wet: gravish brown to brownish gray, well-graded, very sandy GRAVEL.       110       510       2       5       0       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       00       20       50       20       50       20       50       20       50       20		in Feet	Sample			& (PID)
Heaving conditions.		100			50 100	[]
Heaving conditions.	sandy GRAVEL.			E		
Heaving conditions.		+105				
Heaving conditions.				F		
Heaving conditions.		E110	S 10			
Heaving conditions.	Wet, gravish brown to brownish gray,		3-10 <b>A</b>		<b>↓</b> 50/3"	<b>(</b> 2.7)
Heaving conditions.	wen gladed, very sandy envire .					
Heaving conditions.						
Heaving conditions.						
Heaving conditions.	Increased Sand content with depth.					
Heaving conditions.	Heaving conditions.					
Heaving conditions.		+125			-+++++++	
Heaving conditions.						
Heaving conditions.			S-11 🖂		74/8"	- (3.0)
Heaving conditions.				F		
Heaving conditions.		-135				
Heaving conditions.				E		
Heaving conditions.		140				
Bottom of Boring at 150.0 Feet. Completed 02/09/06.       150       150         Casing Stick-up in Feet: 2.81 Top of Casing Elevation in Feet: 2006.11       160         165       180         175       180         186       190         185       190         186       190         195       195	Wet, grayish brown, very sandy GRAVEL.			E		
Bottom of Boring at 150.0 Feet. Completed 02/09/06.       150       150         Casing Stick-up in Feet: 2.81 Top of Casing Elevation in Feet: 2006.11       160         165       180         175       180         186       190         195       190		- 145 E				
Bottom of Boring at 150.0 Feet. Completed 02/09/06.       150       150         Casing Stick-up in Feet: 2.81 Top of Casing Elevation in Feet: 2006.11       160         165       180         175       180         186       190         185       190         186       190         195       195						
Bottom of Borling at 150.0 Feet.       155         Casing Stick-up in Feet: 2.81       160         Top of Casing Elevation in Feet: 2006.11       165         170       175         180       185         180       185         190       195         190       195	to very gravelly SAND.		S-12			- GS
Casing Stick-up in Feet: 2.81 Top of Casing Elevation in Feet: 2006.11						
Casing Stick-up in Feet: 2.81 Top of Casing Elevation in Feet: 2006.11	Completed 02/09/06.	155				
Top of Casing Elevation in Feet: 2006.11       160         165       170         170       175         180       185         190       195         195       190						
	Casing Stick-up in Feet: 2.81	E F A B B				
	Top of Casing Elevation in Feet: 2006.11	160 E				
	6					
		+ <sup>165</sup>				
				EIIIII		
		+170				
		- 185				
		E		E		
		190				
		E		E		
		+ 195				
		L E200		E		
		200		1 2 5 10 20	50 100	

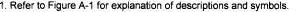


Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

- may be gradual. 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Boring Log/Construction Data for Monitoring Well HL-MW-25S

-il Deservictions	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
bil Descriptions oproximate Ground Surface Elevation in Feet: 2004.7	in Feet	Sample	▲ Blows per Foot	& (PID)
4 inches of Asphalt over brown, sandy GRAVEL.	Ē			
Moist, brown to brownish gray, slightly silty, sandy GRAVEL with scattered open work Gravel zones.	-5 +5 +10 +15 +25 +30 +35 +40 +45 +55 +55 +60	S-1	     	- (0.2) CA
	-20	•S-2	E	- CA
	-25	S-3	<b>▲</b> 50/3"	-(<0.1) C/
Circulation loss, open work zone.	- 35 - 40	*S-4	<b></b>	- (0.5) CA
	+45	S-5	E E E E E E E E € E E E € E € E E E E E	-(0.4) CA
Moist, brownish gray to grayish brown, sandy GRAVEL.		*S-6	E E E E E E E E € E E E E E E E E E_E E_E E_E EE E_E E E_E E_E E E_E E E_E E E E_E E E E E E E E E E E E E E E E E E E E	- (0.4) CA
<ul> <li>&gt; Grading wet.</li> <li>─ Wet, grayish brown, sandy GRAVEL.</li> </ul>	-65 -70 ATD -11	*S-7		- (0.1) CA
	- 75 80 85 85 85	S-8		-(<0.1) C/
<ul> <li>Decreasing sand content.</li> </ul>	+85 90	S-9		- (0.8) CA
Bottom of Boring at 91.5 Feet. Completed 02/15/06.				
Casing Stick-up in Feet: -0.43 Top of Casing Elevation in Feet: 2004.27	L 上 <sub>100</sub>		L	L



 Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

HARTCROWSER 2644-99 2/06 Figure A-24

## Boring Log/Construction Data for Monitoring Well HL-MW-26S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions Approximate Ground Surface Elevation in Feet: 2008.	in Feet	Sample	▲ Blows per Foot	& (PID)
			1 2 5 10 20 50 100	·
Moist, dark brown (to 5 feet) over brown (to 10 feet) over brownish gray, sandy	- $        -$		F	
GRAVEL.	<b>F</b> 5			
	IE II			
		htt		
	+10	S-1 🔀		- (0.1) CA
<ul> <li>Rapid penetration.</li> </ul>	-15			
	E Fao E		$ \begin{bmatrix} F & F \\ F & F \end{bmatrix} = \begin{bmatrix} F$	
		S-2 🐱	<b>__</b> 50/6"	-(1.4) CA
	25			
Moist, brown, sandy to slightly sandy GRAVEL with open work zones.				
Circulation loss indicates open work	-30	*S-3 🔫		-CA
Gravel			<b>_▲</b> 50/6"	
	Far BB			
	+35			
		htt		
	-40	S-4	E	-(1.3) CA
		H		
	45			
	F 88			
	+50	S-5 📈		-(2.6) CA
	IF ØØ		F	
Moist, brownish gray to grayish brown,	55			
sandy GRAVEL.				
Increased cuttings return.		*S-6 💻		- (1.3) CA
> !=====:=:=:::::::::::::::::::::::::::				
<ul> <li>Increasing moisture with depth.</li> </ul>	<b>+</b> 65 ⊟			
		htte	F	
	70 <u>[]</u> []	S-7 😾	E	-(3.2) CA
	-65 -70 -70			
Wet, brownish gray, slightly sandy to sandy				
GRAVEL.				
		httl		
	+80 目	S-8 🔀		-(2.4) CA
			F	
	<b></b>		<u> </u>	
	<b>二</b> 90	S-9		-(2.8) CA
Bottom of Boring at 91.0 Feet.			F	
Completed 02/16/06.	Far		F	
	+95			
	F		F	
Casing Stick-up in Feet: -0.66	「上100			L
Casing Stick-up in Feet: -0.66 Top of Casing Elevation in Feet: 2007.64	<u>+</u> 100			



Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Group descriptions in the strategies of the strategies

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well HL-MW-27D

Deil Deserintions	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions Approximate Ground Surface Elevation in Feet: 2008.6	in Feet	Sample	▲ Blows per Foot	& (PID)
Moist, dark brown (to 10 feet) over brownish gray, sandy to slightly sandy GRAVEL.				
Rapid penetration.	-10 -15	S-1	   50/5"	- (0.9) CA
	-20	S-2	► 	-(0.9) CA
Moist, brownish gray, slightly sandy GRAVEL with open work zones. Circulation loss indicates open work	-25	S-3	   	-(3.8) CA
Gravel.	+ 35 + 40	S-4		-(1.0) CA
	-10 +5 +10 +15 +20 +25 +30 +40 +45 +45 +55 +60 +65 +70	S-5		-(0.8) CA
Moist, grayish brown, very sandy GRAVEL.	-60	*S-6	50/3"	-(1.0) CA
	-65 -70	*S-7	<b>-</b> 	~(0.9) CA
Increasing moisture and cobbles	-75 <u>∇</u> ATD -80	*S-8	50/0"	-(0.3) CA
	-75 ATD -80 -85 -90 -95 -95	S-9		- (0.4) CA
	+95 			



Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

- Soli descriptions and stratum lines are interpretive and actual chan may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Boring Log/Construction Data for Monitoring Well HL-MW-27D

STANDARD PENETRATION RESISTANCE	LAB TESTS
e ▲ Blows per Foot 1 2 5 10 20 50 10	& (PID)
	70/8" - (5.2)
	<b>5</b> 50/5" - (3.2)



- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

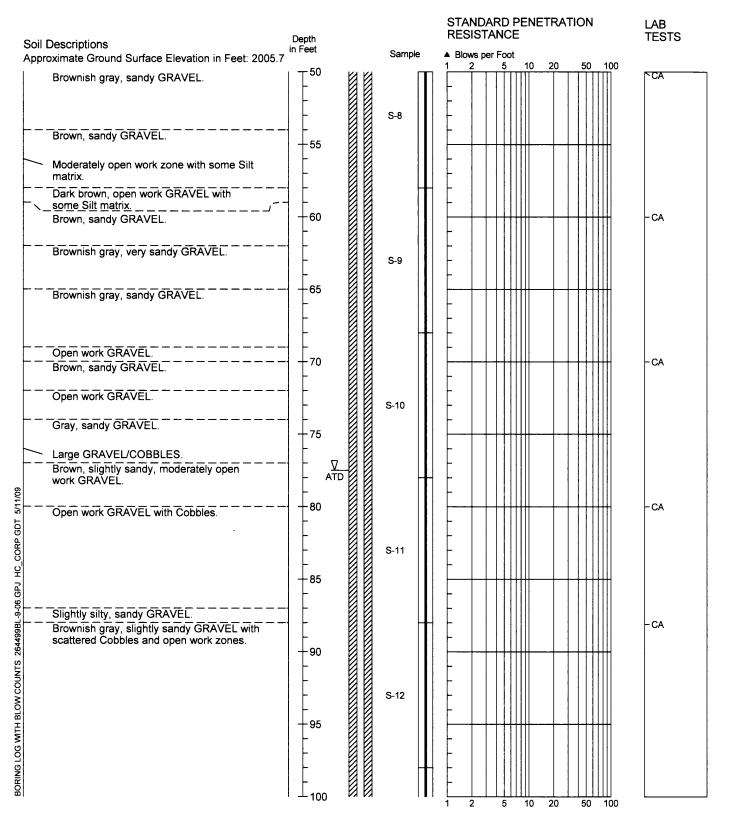
## Boring Log/Construction Data for Monitoring Well HL-MW-28DD

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions Approximate Ground Surface Elevation in Feet: 2005.7	in Feet	Sample	Blows per Foot	
Brown to dark brown, sandy GRAVEL,		Π		
Brownish gray, sandy GRAVEL.		S-1		-CA
Brownish gray, sandy GRAVEL.		S-2		-CA
Large GRAVEL based on drill action.	5	3-2		-CA
Brown to dark brown, sandy GRAVEL. Brownish gray, slightly sandy GRAVEL with		S-3		
scattered slightly to moderately open work zones.				
				- CA
			-	
		S-4		
	-15			
			-	
	-20			-CA
Open work with Silt matrix.		S-5		
		5-5	$\begin{bmatrix} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	
	-10 -1		}	
Sandy GRAVEL.				
Open work GRAVEL.				-CA
			<u>⊢</u>	
		S-6		
은 Large COBBLES based on drill action. 앞				
Sandy GRAVEL.	- +35			
ଞ୍ଚା ବ୍Brownish gray, sandy GRAVEL with				
scattered Cobbles.				
284	+40			-CA
8		S-7		
	45			
E □ g Slightly sandy GRAVEL				
Brownish gray, sandy GRAVEL with scattered Cobbles.	40 40 			
ž Brownish gray, sandy GRAVEL				
	I⊥ <sub>50</sub> ⊠⊠	1 🛛		L

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
   Note: Boring by Sonic Rig.



### Boring Log/Construction Data for Monitoring Well HL-MW-28DD





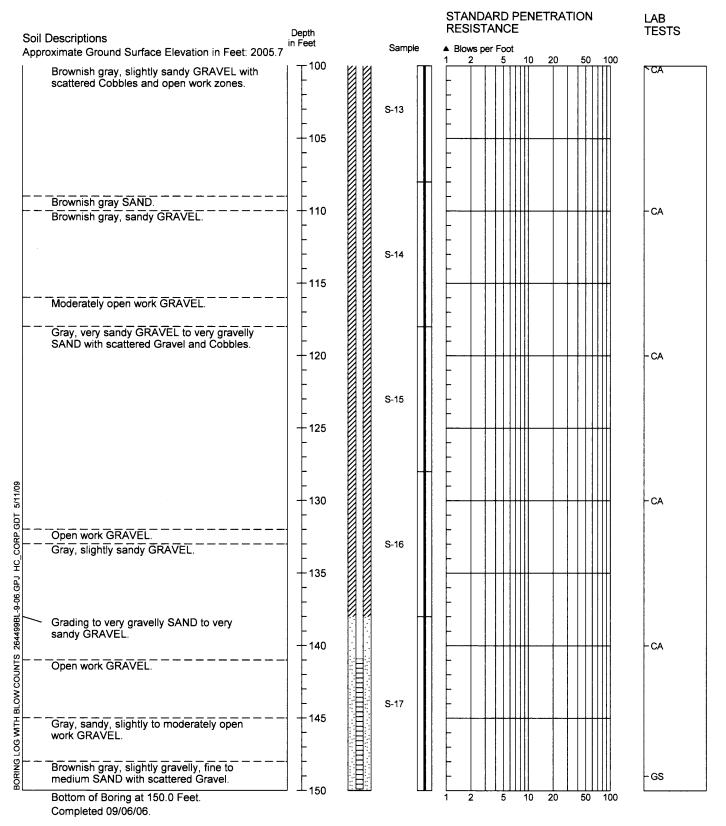
1. Refer to Figure A-1 for explanation of descriptions and symbols.

Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

4. Note: Boring by Sonic Rig.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

#### Boring Log/Construction Data for Monitoring Well HL-MW-28DD



Casing Stick-up in Feet: 2.5

Top of Casing Elevation in Feet: 2008.22

1. Refer to Figure A-1 for explanation of descriptions and symbols.

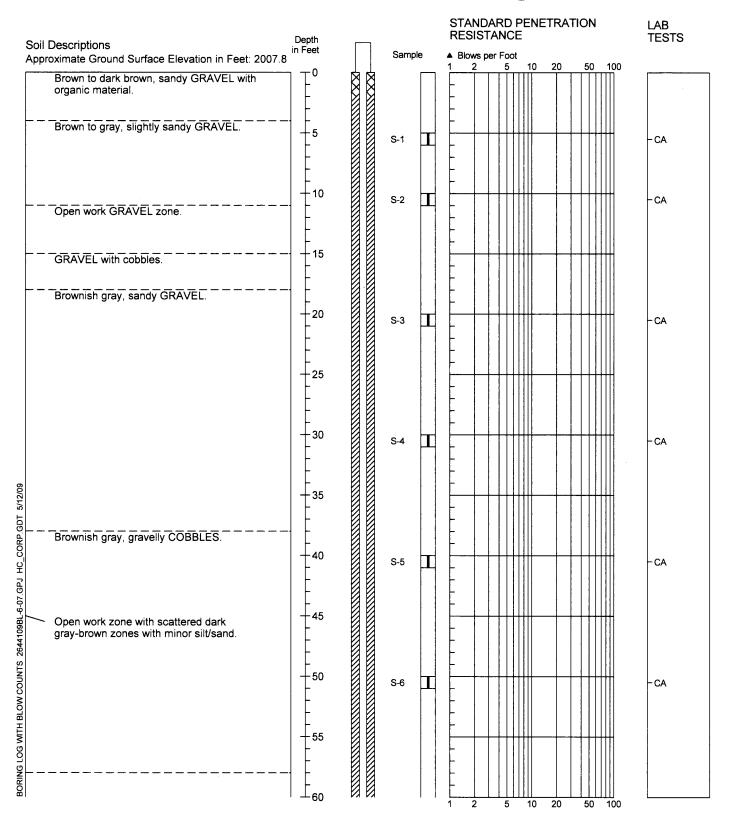
Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

4. Note: Boring by Sonic Rig.



#### Boring Log/Construction Data for Monitoring Well HL-MW-29S



1. Refer to Figure A-1 for explanation of descriptions and symbols.

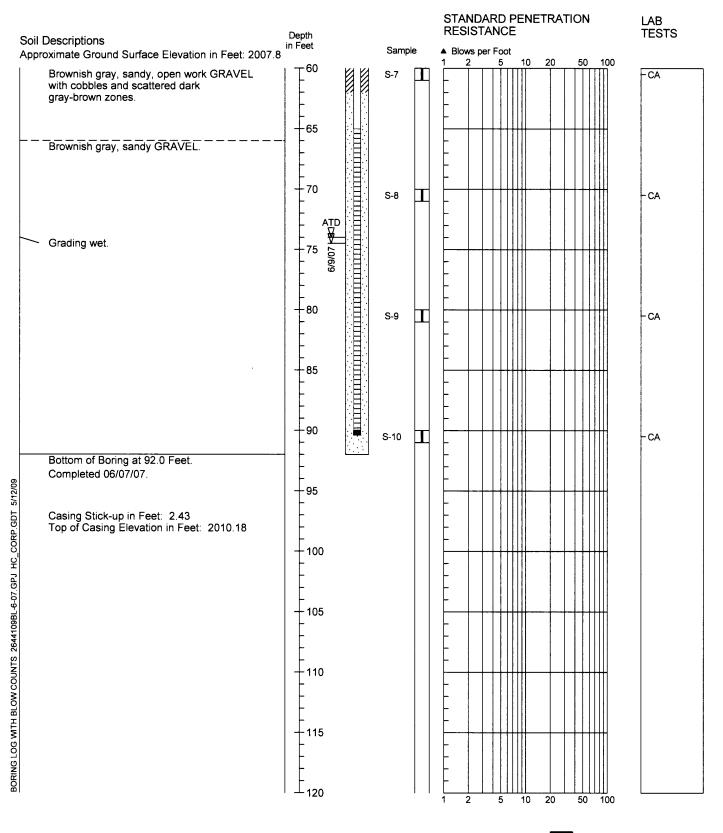
Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

 Note: Boring continuously cored by Sonic Rig with composite samples collected as indicated.



#### Boring Log/Construction Data for Monitoring Well HL-MW-29S





- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- 4. Note: Boring continuously cored by Sonic Rig with composite samples collected as indicated.

## Boring Log/Construction Data for Monitoring Well HL-MW-30S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
oil Descriptions pproximate Ground Surface Elevation in Feet: 2002.7	in Feet	Sample	▲ Blows per Foot	
Brown and gray, sandy GRAVEL with scattered concrete fragments and wire. (FILL)			1 2 5 10 20 50 100	
Dark gray, reworked organic material     (Topsoil).		S-1 <b>I</b>		- CA
Brownish gray, sandy GRAVEL.	+10	S-2 <b>T</b>		- CA
	- - - -	S-3 I		- CA
Grades to slightly sandy, open work GRAVEL with cobbles and some silt infilling.	-20	S-4 I		-CA
	-25	S-5 I		- CA
<ul> <li>Grades to brownish gray, gravelly COBBLES.</li> </ul>				
Brownish gray, slightly sandy, open work GRAVEL with scattered cobbles and some silt infilling.				
J	-40	s-6 <b>T</b>		-CA
Large cobble	- +45 -			
Dark brown, sandy GRAVEL.	+45 	s-7 T		- CA
Gray, slightly silty, sandy GRAVEL.	-55			

- 2. Soil descriptions and stratum lines are interpretive and actual changes
- as a second as a second and a stratter mines are time preview and actual change may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- 4. Note: Boring continuously cored by Sonic Rig with composite samples collected as indicated.



## Boring Log/Construction Data for Monitoring Well HL-MW-30S

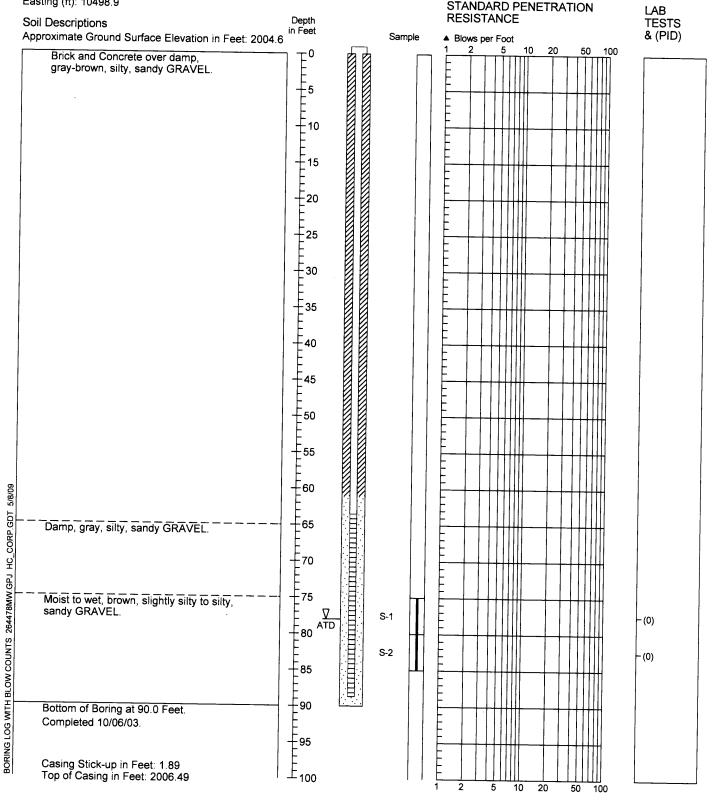
	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions Approximate Ground Surface Elevation in Feet: 2002.7	in Feet	Sample	▲ Blows per Foot	
Gray, slightly silty, sandy GRAVEL.		S-8 II	1 2 5 10 20 50 100 	- CA
Brownish gray to gray, sandy GRAVEL with scattered cobbles and open work zones. Boulder from 67 to 70 feet Grading wet		S-9 <b>T</b>		- CA
	- 75	S-10 <b>T</b>		- CA
Open work zone with no sand matrix.				
Bottom of Boring at 90.0 Feet. Completed 06/08/07.				
Casing Stick-up in Feet: 2.3 Top of Casing Elevation in Feet: 2005	- 95 - 100 - 105 - 110 - 1110 - 1115 - 120			



- 2. Soil descriptions and stratum lines are interpretive and actual changes
- Son descriptions and strattern miles are interpretive and actual change may be gradual.
   Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
- 4. Note: Boring continuously cored by Sonic Rig with composite samples collected as indicated.

# Monitoring Well Log RM-MW-1S

Northing (ft): 11216 Easting (ft): 10498.9



**HARTCROWSER** 2644-78 10/03 Figure A-30

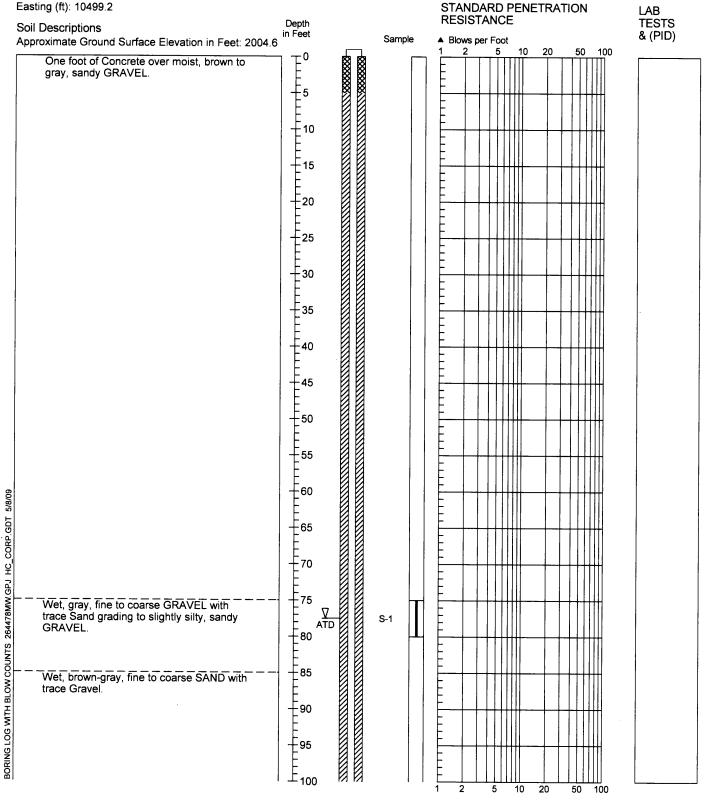
1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Monitoring Well Log RM-MW-2D

Northing (ft): 11228.8 Easting (ft): 10499.2





- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Monitoring Well Log RM-MW-2D

Northing (ft): 11228.8 Easting (ft): 10499.2

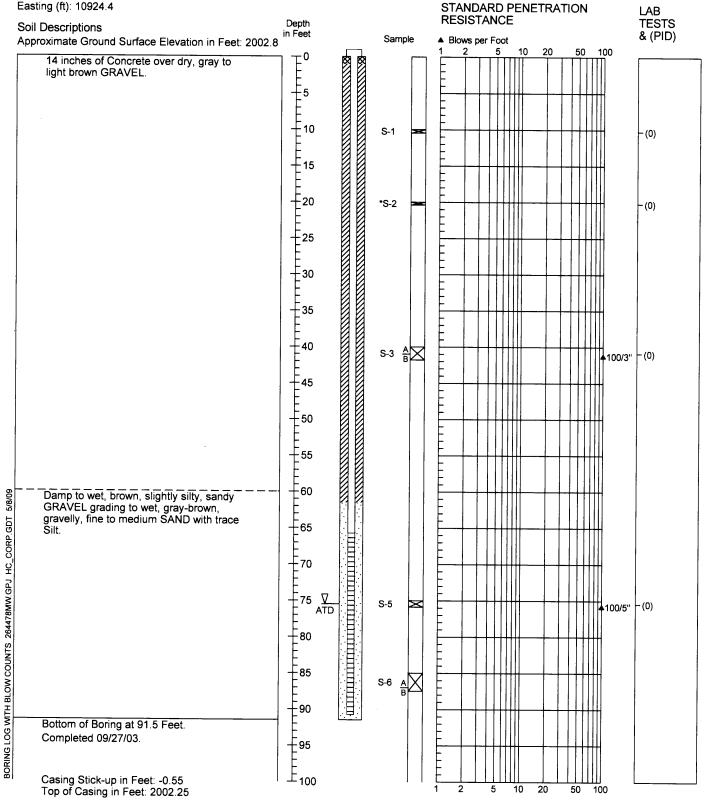
oll Descriptions proximate Ground Surface Elevation in Feet: 2004.6	Depth in Feet	Sample	RESISTANCE  Blows per Foot	TESTS & (PID)
Wet, brown-gray, fine to coarse SAND with trace Gravel. Wet, brown-gray, fine to coarse SAND with silty SAND lenses. Bottom of Boring at 155.0 Feet. Completed 10/04/03. Casing Stick-up in Feet: 1.91 Top of Casing in Feet: 2006.51	-100 -105 -110 -115 -120 -125 -130 -135 -140 -145 -155 -160 -165 -170 -175 -180 -195 -200	s-2 I		- (0)



- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Monitoring Well Log RM-MW-3S

Northing (ft): 11301.7 Easting (ft): 10924.4





1. Refer to Figure A-1 for explanation of descriptions and symbols.

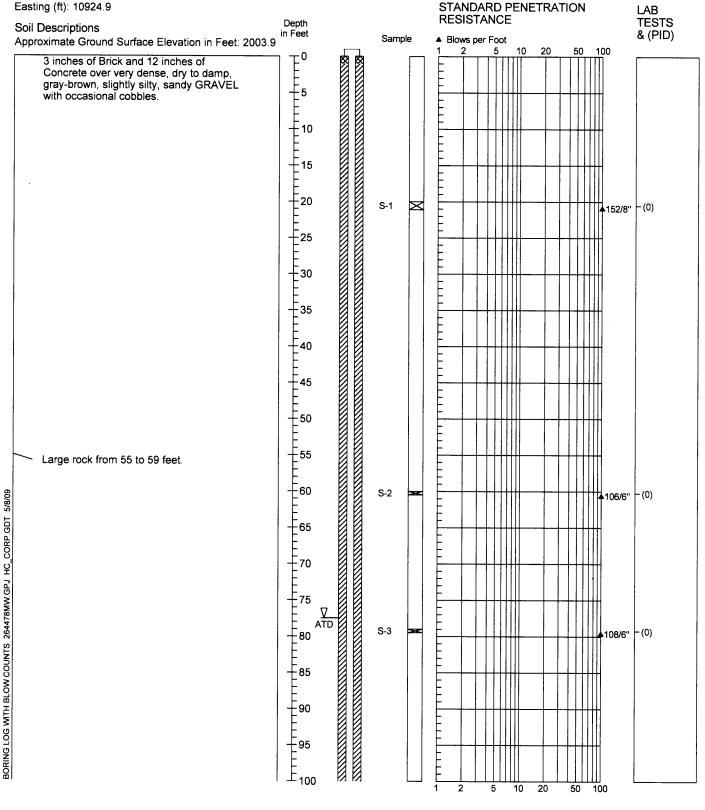
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

Figure A-32

#### Monitoring Well Log RM-MW-4D

Northing (ft): 11290.6 Easting (ft): 10924.9





<sup>2644-78 10/03</sup> Figure A-33 1/2

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

### Monitoring Well Log RM-MW-4D

Northing (ft): 11290.6 Easting (ft): 10924.9

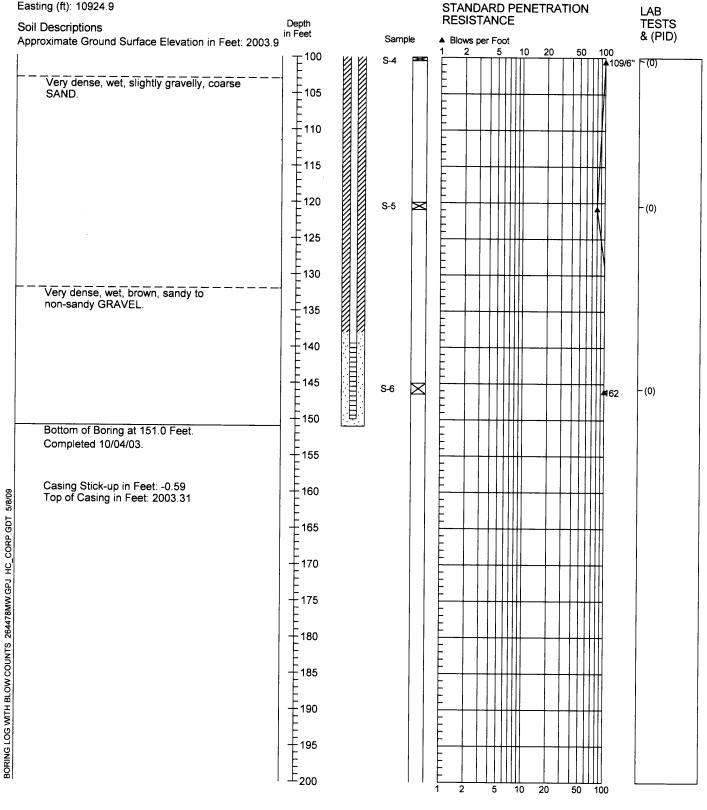
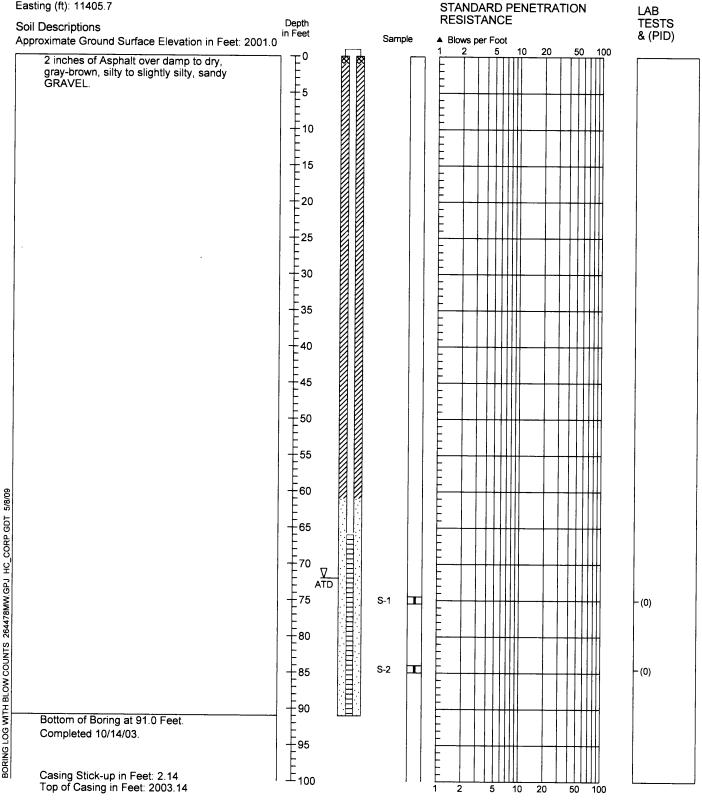


Figure A-33

- Refer to Figure A-1 for explanation of descriptions and symbols.
   Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Monitoring Well Log RM-MW-5S

Northing (ft): 11414.8 Easting (ft): 11405.7





1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time. 2644-78 Figure A-34

### Boring Log/Construction Data for Monitoring Well RM-MW-8S

		Depth			STANDARD PENETRATION RESISTANCE	LAB TESTS
	Descriptions eximate Ground Surface Elevation in Feet: 2005.4	in Feet	Sample	•	▲ Blows per Foot	& (PID)
	Concrete Floor Slab over medium dense to	1 – 0 <b>10 – 1</b> 0	ſ			ſ <u></u>
	very dense, moist, brown to brownish gray,	-0 +5 +10 +15 +20 +25 +30 +40 +45 +50 +55 +60			$\begin{bmatrix} -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 $	
	slightly sandy to sandy GRAVEL.	F_			F + F +	
		+5	S-1	$\mathbf{X}$		- CA
		<b>- - 10</b>				(10.4) 0
			S-2	4	F	-(<0.1) C/
-	Slight moisture increase.	-15	S-3	$\mathbf{X}$	-	" - (<0.1) C
	0					
		-20	*S-4			
			3-4	T		
		1 E 🛛 🖗				
		+25	S-5	X		- (0.1) CA
		IE 88			E	(0.1) 0.1
		-30	+0.0		-	(10.0) 0
			*S-6	ш	E 50/4	" - (<0.1) C
		IE 1919				
		-35	S-7	$\mathbf{x}$		" - (<0.1) C
		IE 88				
					F	
-	Grading gray to brownish gray.	<b>†</b> <sup>40</sup>	S-8			" - (<0.1) C
		IF 88			F	
		-45 00				
					$F = \{ \{ \{ \} \} \mid \{   \{   \{   \{   \{   \{   \{   \{   \{   \{$	
		F., 88				
<b>`</b>	Grading dry, open works GRAVEL with	+50	S-9	_		" - (<0.1) C/
	dusty air discharge. Possible cobbles.					
		-55				
~	Increasing moisture content.	+60	*S-10	TTT.		" - (<0.1) C
	Ū					
		-65				
		70 ▼			╞╼╍┼╴┾╶┼┼┼┼╫	
	Very dense, wet, gray, sandy GRAVEL	+65 -70 -70 -70 -70 -70				· ·
			*0 44			1.000
		上'   日:	*S-11	X	E 50/5	" - (<0.1) C
					┢╾╌┼╶┼╶┽┼┼┼┼┼	
			S-12	×	<b>_</b> 50/5	" - (<0.1) C
					$E = \{E \mid E \mid$	
-	Bottom of Boring at 90.0 Feet.	-{			$ \begin{bmatrix} & & & & \\ & & & & \\ & & & & \\ & & & &$	
	Completed 03/01/05.	I F			F	
		For			$F = \{ \{ \{ \{ \{ \} \} \} \mid \{ \{ \{ \} \} \} \mid \{ \{ \{ \} \} \} \}$	
		+95				
	Casing Stick-up in Feet: -0.4	F			F	
		上100				

 Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



# Boring Log/Construction Data for Monitoring Well RM-MW-9S

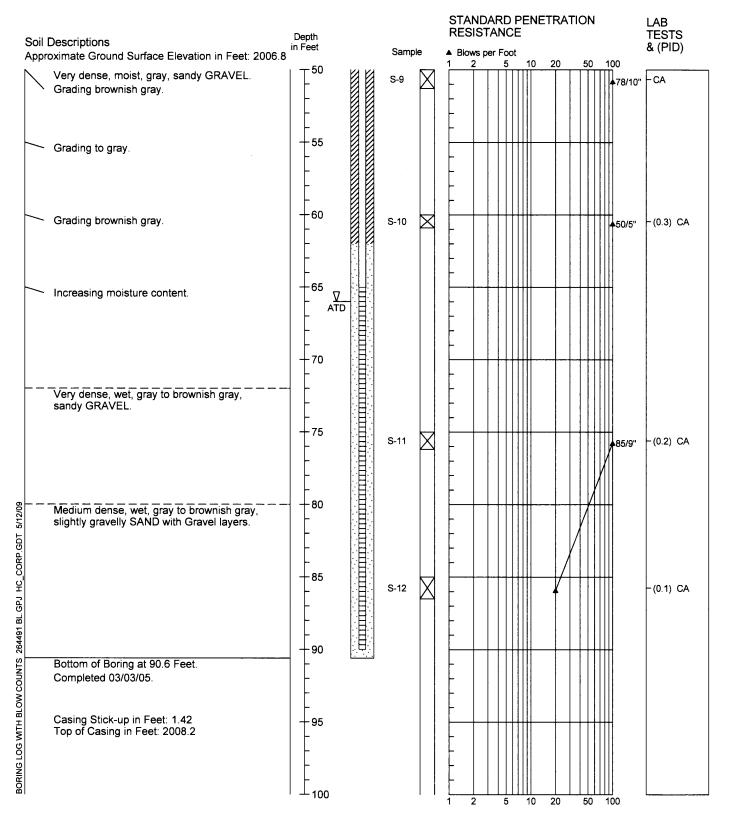
Sample *S-1 S-2 S-3	Blows per Foot     2 5 10 20 50 100	& (PID) - (1.0) CA - (0.5) CA
S-2		
		-(0.5) CA
s-3		
		-(0.3) CA
S-4		-(0.4) CA
S-5 🗙	- - - -	-(0.7) CA
S-6 🗙		- (0.5) CA
s-7 🗙	- - - -	-(0.2) CA
*S-8		-(0.2) CA



1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Boring Log/Construction Data for Monitoring Well RM-MW-9S



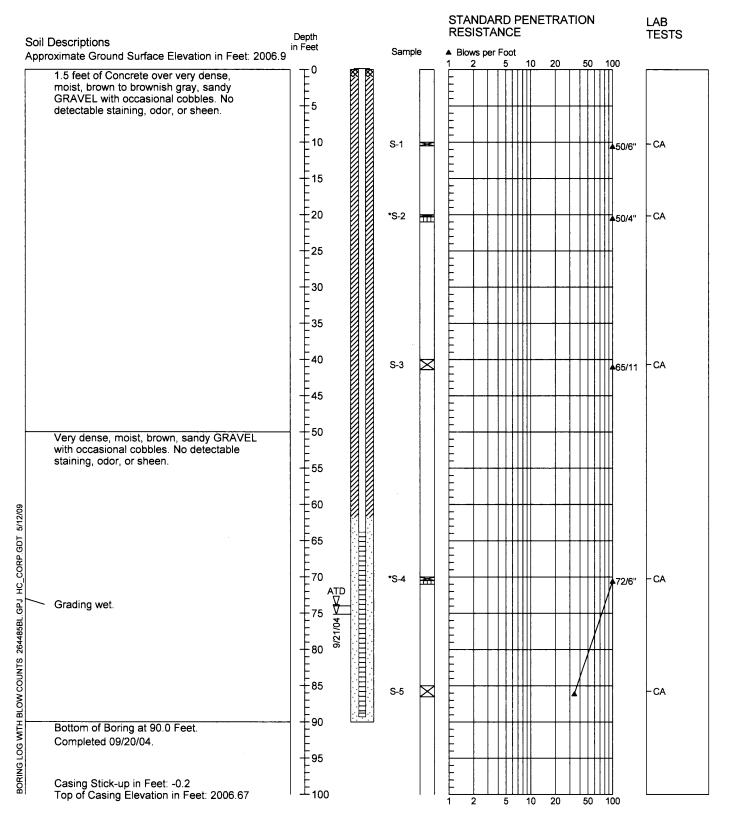


1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

#### Boring Log /Construction Data for Monitoring Well RM-MW-10S





1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

#### Boring Log/Construction Data Monitoring Well RMSW-MW-11S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Soil Descriptions Approximate Ground Surface Elevation in Feet: 2005.6	in Feet	Sample	▲ Blows per Foot	& (PID)
Concrete Floor Slab.				[]
Very dense, moist, brown, sandy GRAVEL.	+5 +10 +15 +20 +25 +30 +35 +40 +45 +55 +50 +55 +60	S-1	F	
Very dense, moist, brown, slightly sandy GRAVEL with possible cobbles (based on drill action). (Open Work Gravel)	20	*S-2 ===		- (<0.1)
	-25	S-3		- (<0.1)
	-30	S-4	- 	- (<0.1)
	-35	S-5 🛥		- (<0.1)
	40	S-6 🛛		- (<0.1)
	-45	S-7 🗙		- (<0.1)
	+50 +55	S-8 ===	▲75/5"	- (<0.1)
CORP.GDT 5/12/09		S-9 🔀		- (<0.1)
오 Grading wet and sandy.	-70 <u>V</u> ATD -75	S-10 🔀	►	- (<0.1)
Grading with silty zones and rapid advance of auger.	+75 +80 +85 -90	S-11 🛣	► ► ►	·                                (<0.1)
Bottom of Boring at 91.0 Feet. Completed 04/23/05.	90	S-12	E   	(<0.1)
Casing Stick-up in Feet: -1.25 Top of Casing Elevation in Feet: 2004.39				

- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date

specified. Level may vary with time. 4. Boring drilled on 73° slant relative to horizontal. Depths indicated are dimensions along slope, not vertical depths. Prepacked well screen installed and casing withdrawn allowing native material to collapse around screen below depth of 65 feet.



Figure A-38

# Boring Log/Construction Data for Monitoring Well RM-MW-12S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
oil Descriptions oproximate Ground Surface Elevation in Feet: 2006	in Feet	Sample	▲ Blows per Foot	& (PID)
Concrete Floor Slab. Very dense, moist, brown, sandy GRAVEL.		S-1 🗙	E 65/5"	- (<0.1)
	$ \begin{array}{c} - & -5 \\ - & -5 \\ - & -25 \\ - & -25 \\ - & -25 \\ - & -30 \\ - & -40 \\ - & -45 \\ - & -50 \\ - & -55 \\ \end{array} $	*S-2 📻	E 75/5"	- (<0.1)
	15	S-3 🎹	–	- (<0.1)
Very dense, moist, brown, gravelly SAND.		S-4 📅	E	- (<0.1)
Very dense, moist, brown, slightly sandy GRAVEL. (Open Work Gravel)		S-5	E	- (<0.1)
	-30	S-6 ===	<b>--</b> 50/4"	
	-35	S-7 🗙	E E€50/3"	- (<0.1)
	40	-	<u>−</u>	
Very dense, moist, gravelly SAND.	45	S-8 III		- (<0.1)
Very dense, moist, brown, slightly sandy	- 50	S-9 🛥	E 50/5"	- (0.2)
GRAVEL with cobble zones.	-55			
<ul> <li>Cobbles based on drill action.</li> </ul>		S-10 🚠	50/3"	- (<0.1)
<ul> <li>Grading wet with scattered cobbles.</li> </ul>				
<ul> <li>Heave in auger</li> </ul>				
Very dense, wet, brown, sandy GRAVEL.		S-11		- (<0.1)
Very dense, wet, brownish gray, sandy GRAVEL.				
Bottom of Boring at 85.9 Feet. Completed 04/26/05.		S-12 🗙	<b>_↓</b> ↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓	
Casing Stick-up in Feet: -0.7 Top of Casing Elevation in Feet: 2005.93	95			

1. Refer to Figure A-1 for explanation of descriptions and symbols.

2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.



# Boring Log/Construction Data for Monitoring Well RM-MW-13S

Soil Descriptions	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
Approximate Ground Surface Elevation in Feet: 2008.6	in Feet	Sample	▲ Blows per Foot	& (PID)
Concrete Floor Slab.			1 2 5 10 20 50 100 -	[
Very dense, moist, brown, sandy GRAVEL.		S-1 🚠	E 67/6"	- (<0.1)
	-10	S-2	E E E E	- (<0.1)
Very dense, moist, brown, slightly sandy GRAVEL with open work zones.	-15	S-3	<b>▲</b> 50/4"	- (<0.1)
	-20	S-4	E 60/5″	- (<0.1)
	-25	*S-5 ===	<u>−</u> − −	- (<0.1)
	-30	*S-6 ==	<u>−</u> <u>−</u> <u>−</u> <u>−</u> <u>−</u> <u>−</u> <u>−</u> <u>−</u> <u>−</u> <u>−</u>	- (<0.1)
	-35	*S-7	50/5"	- (<0.1)
	+40 +45	*S-8	<u>−</u> − − − −	- (<0.1)
	-5 +5 +10 +15 +20 -25 +30 +35 +40 +45 +50 -55 -55 -60	*S-9 🎹	E 	- (<0.1)
Scattered cobbles and cobble zones.	+55			
		*S-10 =	<b>4</b> 50/3"	- (<0.1)
Grading wet with increasing fines.				
Very dense, wet, brown, sandy GRAVEL.		S-11 🗙		- (<0.1)
	- 75 ···· - 80 ···· - 85 ···· - 90 ···· - 90	S-12 📅		- (<0.1)
Bottom of Boring at 90.9 Feet. Completed 04/28/05.				
Very dense, wet, brown, sandy GRAVEL. Bottom of Boring at 90.9 Feet. Completed 04/28/05. Casing Stick-up in Feet: -0.5 Top of Casing Elevation in Feet: 2008.07	L 100			

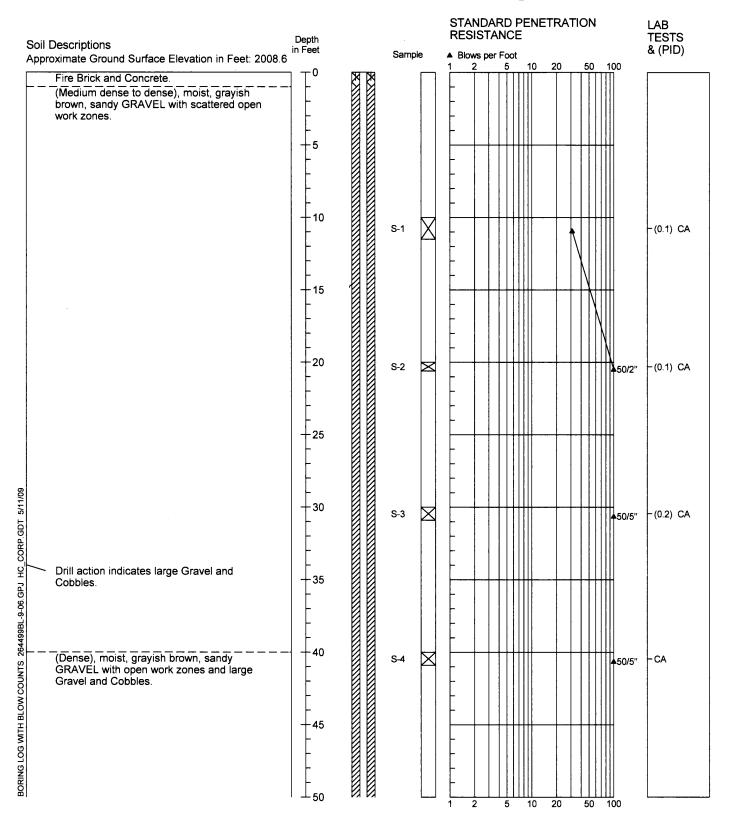


Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

may be gradual.

3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

#### Boring Log/Construction Data for Monitoring Well RM-MW-14S



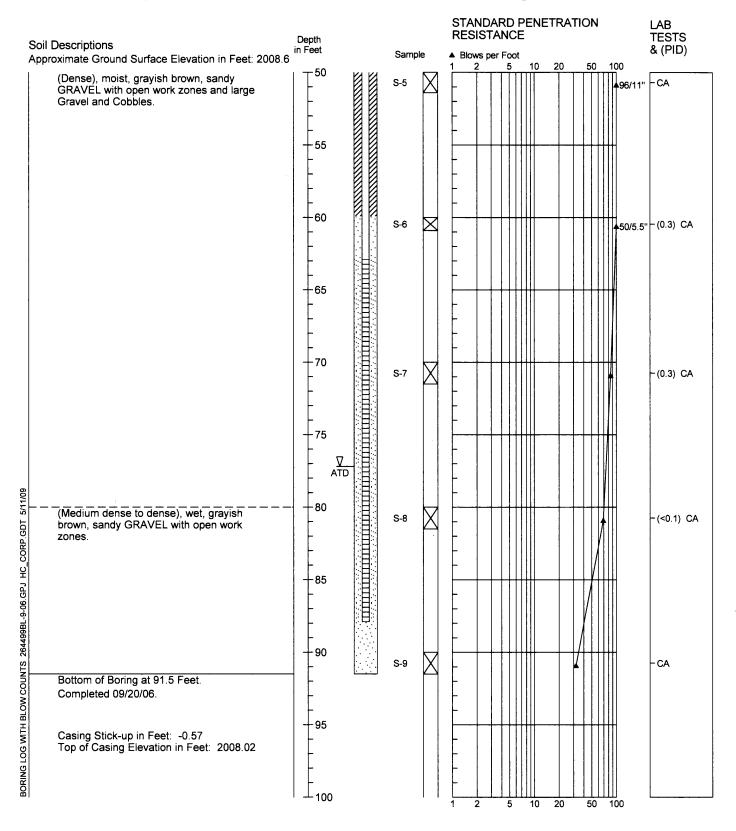


1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

#### Boring Log/Construction Data for Monitoring Well RM-MW-14S



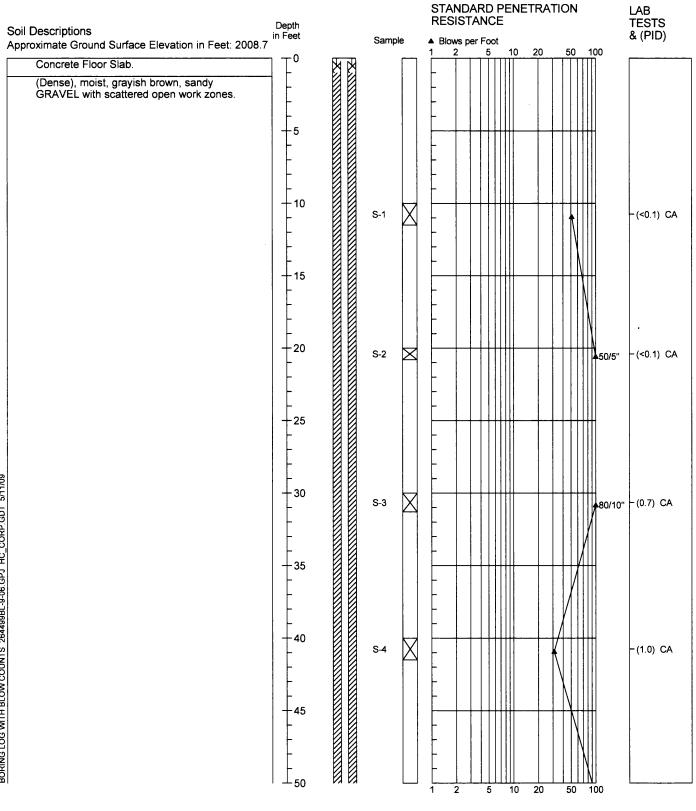


1. Refer to Figure A-1 for explanation of descriptions and symbols.

Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

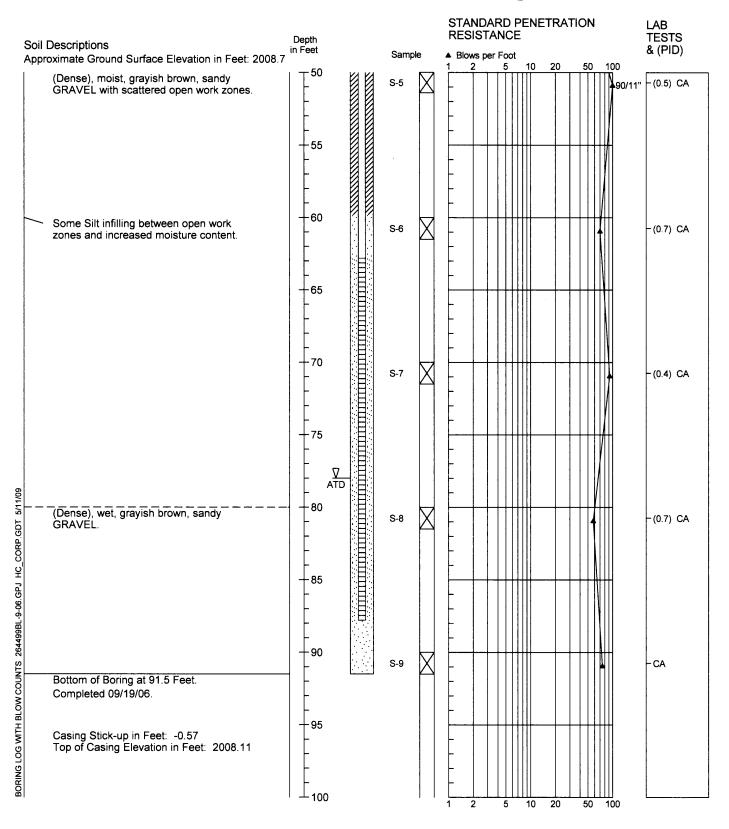
# Boring Log/Construction Data for Monitoring Well RM-MW-15S





- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

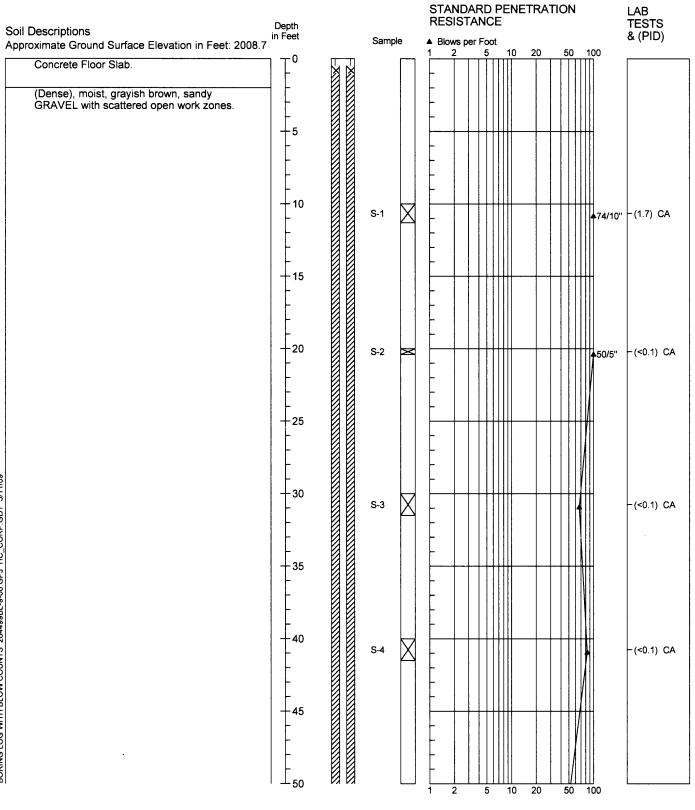
## Boring Log/Construction Data for Monitoring Well RM-MW-15S





- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Boring Log/Construction Data for Monitoring Well RM-MW-16S



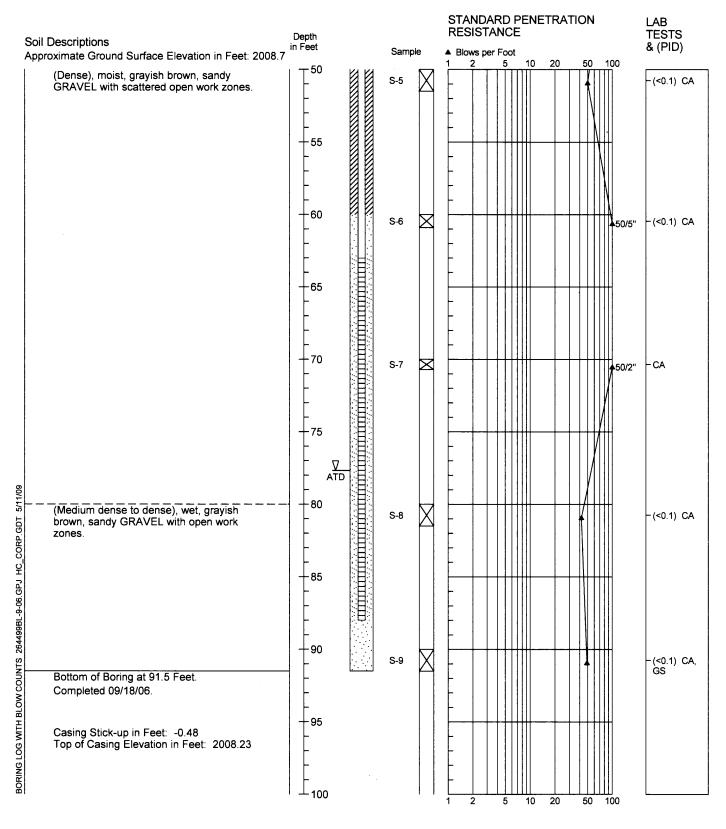


Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

- may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

5/11/09 BORING LOG WITH BLOW COUNTS 264499BL-9-06.GPJ HC\_CORP.GDT

## Boring Log/Construction Data for Monitoring Well RM-MW-16S





- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well RM-MW-17S

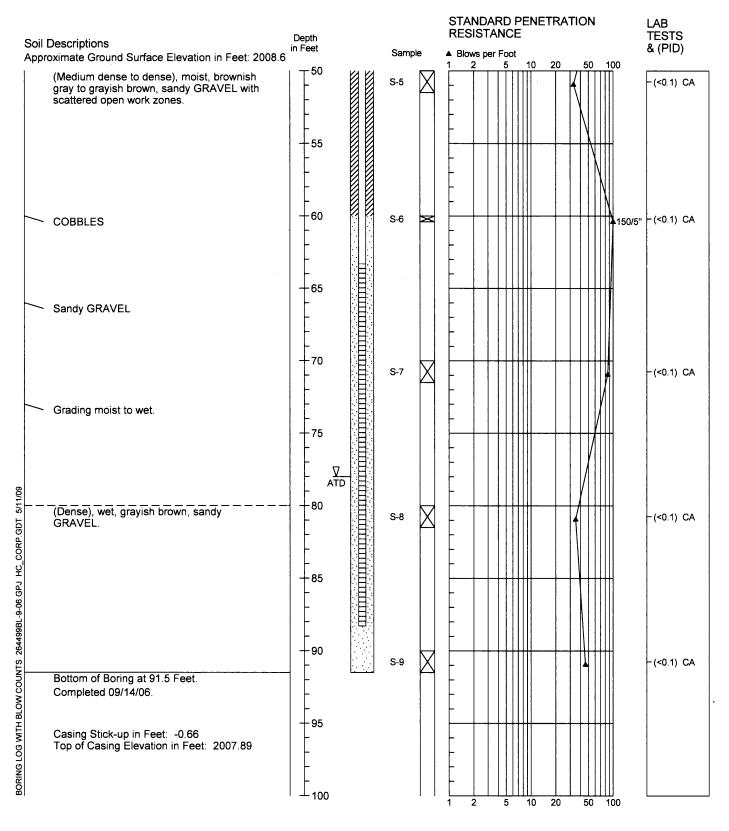
Soil Descriptions	Depth		STANDARD PENETRATION RESISTANCE	
Approximate Ground Surface Elevation in Feet: 2008.		Sample	▲ Blows per Foot 1 2 5 10 20 50 100	& (PID)
Concrete Floor Slab with 0.2 foot of Fire Brick. (Medium dense to dense), moist, brownish gray to grayish brown, sandy GRAVEL with scattered open work zones.				
	$ \begin{array}{c} - & - & - & - & - & - & - & - & - & - &$	s-1		-(<0.1) CA
	- - 20 - - - -	s-2		-(<0.1) CA
P. GDT 5/11/09	+25 - - - - - - - - - - - - - - - - - - -	s-3	- - - - - - - - - - - - - - - - - - -	1" -(<0.1) CA
4998L-9-06.GPJ_HC_COR	- 35			
BORING LOG WITH BLOW COUNTS 264499BL-9-06.GPJ HC_CORP GDT		S-4 🗙		" -(<0.1) CA
BORING			1         2         5         10         20         50         100	



Refer to Figure A-1 for explanation of descriptions and symbols.
 Soil descriptions and stratum lines are interpretive and actual changes

- may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

## Boring Log/Construction Data for Monitoring Well RM-MW-17S





- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.

# Boring Log/Construction Data for Monitoring Well TS-MW-1S

Soil Descriptions Approximate Ground Surface Elevation in Feet: 2008.5		Sample	STANDARD PENETRATION RESISTANCE ▲ Blows per Foot 1 2 5 10 20 50 100	LAB TESTS & (PID)
Loose, crushed, minus 3/4-inch, import GRAVEL.		S-1		- (<0.1)
Medium dense, moist, dark gray, silty, sandy GRAVEL with TPH-like odor.		S-2 X	<b>5</b> 0/5"	- (1.6) - (6.0)
Medium dense, moist, grayish brown, sandy_GRAVEL Very dense, moist, grayish brown, sandy		S-4	50/5"	- (46.2)
GRAVEL with open work zones.	-25	S-5		- (62.6)
		*S-6		- (42.3) - (19.5)
Very dense, moist, gray-brown to brownish gray, slightly sandy GRAVEL with	40	S-8	 	
scattered cobbles and cobble zones.	-5 -10 -10 -115 -220 -25 -30 -35 -40 -455 -60	S-9 ====	50/3" 	
Grading wet	-65 -70			
Very dense, wet, gray, slightly sandy to sandy GRAVEL.	- 75 - 75 - 80 - 80 - 85	S-11 ===	E	- (<0.1)
Bottom of Boring at 85.8 Feet. Completed 05/19/05. Casing Stick-up in Feet: 1.8 Top of Casing Elevation in Feet: 2010.25	85	S-12 🕱	E  	- (3.5)
Casing Stick-up in Feet: 1.8 Top of Casing Elevation in Feet: 2010.25	<del>-</del> 95   - 100			

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date
- Stouridwater rever, in indicated, is at time of drining (ATD) of of date specified. Level may vary with time.
   Boring drilled to depth of 17 feet and abandoned with second boring drilled 4.5 feet to the south. Second boring drilled unsampled to depth of 15 feet with no recovery at that depth. Samples S-4 on are from second boring.



Figure A-45

# Boring Log/Construction Data for Monitoring Well TS-MW-2S

	Depth		STANDARD PENETRATION RESISTANCE	LAB TESTS
oil Descriptions pproximate Ground Surface Elevation in Feet: 2008.6	in Feet	Sample	▲ Blows per Foot	& (PID)
3 inches of Asphalt over 12 inches of crushed, minus 3/4 inch, import GRAVEL. / Very dense, moist, brown, slightly silty,				
sandy GRAVEL.		*S-1	E	- (<0.1) - (80)
Very dense, moist, brown, sandy GRAVEL.	15	*S-3 ===		- (750)
	20	*S-4	<b>− − − − − − − − − −</b>	- (150)
Very dense, moist, brown GRAVEL. (Open	25	*S-5 📻	►	- (500)
Work Gravel)		S-6	► 	- (300)
	+35	S-7	<b>▲</b> 50/5"	- (1200)
	45	S-8		- (300)
Very dense, moist, grayish brown, sandy GRAVEL.	+5 +10 +15 +20 +25 +30 +40 +45 +50 +55	*S-9	50/3"	- (<0.1)
	E E	*S-10 ===		- (1.0)
<ul> <li>Possible scattered large cobbles based on drill action.</li> </ul>	-65 -70 -70			
C Grading wet Very dense, wet, grayish brown, slightly sandy to sandy GRAVEL.		S-11	E	- (600)
	75 80 85	S-12		- (300)
Bottom of Boring at 85.8 Feet. Completed 05/20/05.	90		<u>-</u> 	
Casing Stick-up in Feet: -0.38 Top of Casing Elevation in Feet: 2008.22	- 			

1. Refer to Figure B-1 for explanation of descriptions and symbols.

`,

- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Groundwater level, if indicated, is at time of drilling (ATD) or for date Specified. Level may vary with time.
   PID readings not consistent with field observations and laboratory data.

