

	<b>PROJECT NUMBER</b> <b>161844.A0.ZZ</b>	<b>BORING NUMBER</b> <b>GP-1 (9/01)</b>	SHEET 1 OF 1
<b>SOIL BORING LOG</b>			

<b>PROJECT :</b> Northwest Pipe Company	<b>LOCATION :</b> Portland, Oregon
<b>ELEVATION :</b> _____	<b>DRILLING CONTRACTOR :</b> Cascade Drilling
<b>DRILLING METHOD AND EQUIPMENT USED</b> Geoprobe	
<b>WATER LEVELS</b> 15'	<b>START :</b> 9/7/01 <b>END :</b> 9/7/01 <b>LOGGER :</b> Patrick Heins

DEPTH BELOW SURFACE (FT)		STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	CORE DESCRIPTION
INTERVAL (FT)	RECOVERY (IN)		
Headspace PID (ppm)			
0-0.5' 0.5'-16'  5  10  15 16'-20'  20	   1.3  1.1   1.1  1.0  0.9	          Water level     	Asphalt (3") and Poorly graded coarse gravel ( <b>GM</b> ) brown, dry Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist  Soil sample collected at 6 feet          Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, saturated  Water sample collected at 19 feet <b>BORING TERMINATED AT DEPTH OF 20 FEET</b>
25  30  35  40			Soil sampled continuously for logging purposes Abandoned by backfill with bentonite chips

	<b>PROJECT NUMBER</b> <b>161844.A0.ZZ</b>	<b>BORING NUMBER</b> <b>GP-2 (9/01)</b>	SHEET 1 OF 1
<b>SOIL BORING LOG</b>			

<b>PROJECT :</b> Northwest Pipe Company	<b>LOCATION :</b> Portland, Oregon
<b>ELEVATION :</b> _____	<b>DRILLING CONTRACTOR :</b> Cascade Drilling
<b>DRILLING METHOD AND EQUIPMENT USED</b> Geoprobe	
<b>WATER LEVELS</b> 15'	<b>START :</b> 9/10/01 <b>END :</b> 9/10/01 <b>LOGGER :</b> Patrick Heins

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	RECOVERY (IN)	STANDARD PENETRATION TEST RESULTS	CORE DESCRIPTION
		Headspace PID (ppm)	6"-6"-6" (N)	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.
5	0-0.75' 0.75'-16'	0.3		Asphalt (3") & Poorly graded coarse gravel ( <b>GM</b> ) brown, dry Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist
10		0.3		
15		0.4		
16		0.6		
17	16'-20'		Water level	Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, saturated
18		28.0		Soil sample collected at 18 feet
19				Water sample collected at 19 feet
20				<b>BORING TERMINATED AT DEPTH OF 20 FEET</b>
25				Soil sampled continuously for logging purposes
30				Abandoned by backfill with bentonite chips
35				
40				

	<b>PROJECT NUMBER</b> <b>161844.A0.ZZ</b>	<b>BORING NUMBER</b> <b>GP-3 (9/01)</b>	SHEET 1 OF 1
<b>SOIL BORING LOG</b>			

<b>PROJECT :</b> Northwest Pipe Company	<b>LOCATION :</b> Portland, Oregon
<b>ELEVATION :</b> _____	<b>DRILLING CONTRACTOR :</b> Cascade Drilling
<b>DRILLING METHOD AND EQUIPMENT USED</b> Geoprobe	
<b>WATER LEVELS 15'</b>	<b>START :</b> 9/7/01 <b>END :</b> 9/7/01 <b>LOGGER :</b> Patrick Heins

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	RECOVERY (IN)	STANDARD PENETRATION TEST RESULTS	CORE DESCRIPTION
		Headspace PID (ppm)	6"-6"-6" (N)	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.
5	0-0.75' 0.75'-3' 3'-3.5' 3.5'-16'	1.3    1.4		Poorly graded coarse gravel ( <b>GM</b> ) black, dry Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist Silty sand layer ( <b>SM</b> ) with small fragments of charred wood, moist, black Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist
10		0.8		
15	16'-20'	0.8	Water level	Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, gray, saturated
20		0.5		Water sample collected at 19 feet <b>BORING TERMINATED AT DEPTH OF 20 FEET</b>
25				Soil sampled continuously for logging purposes Abandoned by backfill with bentonite chips
30				
35				
40				

	<b>PROJECT NUMBER</b> <b>161844.A0.ZZ</b>	<b>BORING NUMBER</b> <b>GP-4 (9/01)</b>	SHEET 1 OF 1
<b>SOIL BORING LOG</b>			

<b>PROJECT :</b> Northwest Pipe Company	<b>LOCATION :</b> Portland, Oregon
<b>ELEVATION :</b> _____	<b>DRILLING CONTRACTOR :</b> Cascade Drilling
<b>DRILLING METHOD AND EQUIPMENT USED</b> Geoprobe	
<b>WATER LEVELS</b> 12'	<b>START :</b> 9/7/01 <b>END :</b> 9/7/01 <b>LOGGER :</b> Patrick Heins

	DEPTH BELOW SURFACE (FT)	INTERVAL (FT)	RECOVERY (IN)	STANDARD PENETRATION TEST RESULTS	CORE DESCRIPTION
			Headspace PID (ppm)	6"-6"-6" (N)	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.
5	0-0.25' 0.25'-14'		1.1		Concrete
10			1.0		Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist
15			1.2	Water level	
	14'-16'		2.4		Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, gray, saturated Water sample collected at 15 feet <b>BORING TERMINATED AT DEPTH OF 16 FEET</b>
20					Soil sampled continuously for logging purposes Abandoned by backfill with bentonite chips
25					
30					
35					
40					

	<b>PROJECT NUMBER</b> <b>161844.A0.ZZ</b>	<b>BORING NUMBER</b> <b>GP-5 (9/01)</b>
SHEET 1 OF 1		
SOIL BORING LOG		

PROJECT : Northwest Pipe Company	LOCATION : Portland, Oregon
ELEVATION :	DRILLING CONTRACTOR : Cascade Drilling
DRILLING METHOD AND EQUIPMENT USED Geoprobe	
WATER LEVELS 12'	START : 9/10/01    END :9/10/01    LOGGER : Patrick Heins

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)		RECOVERY (IN)	STANDARD PENETRATION TEST RESULTS	CORE DESCRIPTION			
						Headspace	6"-6"-6" (N)	
						PID (ppm)		TEST RESULTS
5	0-0.75' 0.75'-2.5'	7.1		Asphalt Poorly graded coarse gravel ( <b>GM</b> ) brown, dry Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist				
10	2.5'-11'	0.1						
15	11'-12' 12'-16'	0.1	Water level	Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, gray, moist with wood fib Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, gray, saturated  Water sample collected at 15 feet <b>BORING TERMINATED AT DEPTH OF 16 FEET</b>				
20				Soil sampled continuously for logging purposes Abandoned by backfill with bentonite chips				
25								
30								
35								
40								

	<b>PROJECT NUMBER</b> <b>161844.A0.ZZ</b>	<b>BORING NUMBER</b> <b>GP-6 (9/01)</b>	SHEET 1 OF 1
<b>SOIL BORING LOG</b>			

<b>PROJECT :</b> Northwest Pipe Company	<b>LOCATION :</b> Portland, Oregon
<b>ELEVATION :</b> _____	<b>DRILLING CONTRACTOR :</b> Cascade Drilling
<b>DRILLING METHOD AND EQUIPMENT USED</b> Geoprobe	
<b>WATER LEVELS 15'</b>	<b>START :</b> 9/10/01 <b>END :</b> 9/10/01 <b>LOGGER :</b> Patrick Heins

DEPTH BELOW SURFACE (FT)	INTERVAL (FT)			STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	CORE DESCRIPTION  SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY, OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY.
	RECOVERY (IN)	HEADSPACE			
		PID (ppm)	RECOVERY (IN)		
			HEADSPACE		
0-4'	8"	1.5			Poorly graded coarse gravel ( <b>GM</b> ) brown, dry
4'-5'					Silty sand ( <b>SM</b> ) perdominatly fine grained, brown, moist Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, moist
5'-19'		0.8			
10		1.1			Well graded sand ( <b>SW</b> ) ranging from medium to fine grained, brown, saturated
15		0.7	Water level		
19'-20'		1.7			
20					Silty sand ( <b>SM</b> ) perdominatly fine grained, brown, moist Water sample collected at 19' <b>BORING TERMINATED AT DEPTH OF 20 FEET</b>
25					Soil sampled continuously for logging purposes Abandoned by backfill with bentonite chips
30					
35					
40					

