

## **APPENDIX C-2 DELINEATION INVESTIGATION**

# FIELD BORING LOG SHEET

BORING LOG SHEET

**BORING NUMBER:**

PROJECT: PPG

DATE STARTED: 12/18/12

PROJECT NO.: 194-8214

DATE COMPLETED: 12/18/12

LOCATION (well or boring ID): 063-Box6A

GROUNDWATER DEPTH (FT):

TOTAL DEPTH (FT): 35' bgs

GROUND ELEVATION (FT):



TETRA TECH EC, INC.

GEOLOGIST: TK

X COORDINATE:

DRILLER: Epi

Y COORDINATE:

DRILLING/SAMPLING METHOD: Geoprobe

DATUM:

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
0-5	0	3		48"		SM		10YR 5/2	Fine silty sand and gravel, wood (Fill). [HDPE Liner found at 0" bgs]					00	ccomr observed at 10' bgs. - 15' bgs	
	3	5				SM			Block med-fine silty sand and gravel. Stained, wet, petrol odor.					0		
5-10'	5	6.5		34"		SM		2.5YR 3/4	Fine sandy silt w/ some gravel, moist. no odor.					01		
	6.5	10				SM		2.5YR 4/4	Fine sandy silt, <del>low</del> some gravel, low moisture and clay.					0		
10-15	10	13		56"		Pt			Peat layer High veg.					0		

# FIELD BORING LOG SHEET

**BORING LOG SHEET**

**BORING NUMBER:**

PROJECT: *PPG*

DATE STARTED: *12/18*

PROJECT NO.: *PA-8214*

DATE COMPLETED: *12/18*

LOCATION (well or boring ID): *063-B006A*

GROUNDWATER DEPTH (FT):

TOTAL DEPTH (FT): *35'*

GROUND ELEVATION (FT):

GEOLOGIST: *TK64*

X COORDINATE:

DRILLER: *Epi*

Y COORDINATE:

DRILLING/SAMPLING METHOD: *Geoprobe*


DATUM:



TETRA TECH EC, INC.

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated ? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
10-15	13	<del>13</del> 13.5				SM		7.5/1 3/1	Fine sandy silt w/ red rock frags. moist, loose		12/18			0		
										0						
										0						
										0						
	13.5	15				SM		5/2 3/2	Fine silty sand trace gravel. no order. moist.					0		
										0						
										0						
										0						
15-20	15	16		48"		Siw		2.5/1 4/3	Fine sand, trace silt wet, loose.					0		
											0					
											0					
											0					
	16	17.5				SM		"	Fine sandy silt dense, moist, trace gravel					0		
										0						
										0						
										0						
	17.5	20				CL		"	Fine <del>clayey</del> silt Dense, low moisture clay, trace silt.					0		
										0						
										0						
										0						

# FIELD BORING LOG SHEET

BORING LOG SHEET														
<b>BORING NUMBER:</b>	PROJECT: <u>PPG</u>					DATE STARTED: <u>12/18</u>								
	PROJECT NO.: <u>194-<del>848214</del></u>					DATE COMPLETED: <u>12/18</u>								
	LOCATION (well or boring ID): <u>063-<del>BCC0A</del></u>					GROUNDWATER DEPTH (FT):								
 <b>TETRA TECH</b> EC, INC.	TOTAL DEPTH (FT): <u>35'</u>					GROUND ELEVATION (FT):								
	GEOLOGIST: <u>TK</u>					X COORDINATE:								
	DRILLER: <u>EP1</u>					Y COORDINATE:								
	DRILLING/SAMPLING METHOD: <u>Geoprobe</u>					DATUM: <span style="background-color: gray; color: gray;">[REDACTED]</span>								

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated ? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)	
20-25'	20	<del>21</del> 21		53"		CL			SAA					0			
	21	22				SM		5/8 4/4	Fine silty sand trace clay and gravel, dense moist.					0			
	22	<del>23</del> 24				SM		5/8 4/4	Fine silty sand and gravel, dense moist.					0			
	24	25				SM		"	SAA, but loose/soft		12/18			0			
25-30	25	30		54"		SM		7.5/8 4/6	Fine silty sand, some gravel, very moist and med. dense, w/ 10% 2.5/8 4/6 at <del>29.5-30'</del>					0			

29.5-30'

# FIELD BORING LOG SHEET

**BORING LOG SHEET**

**BORING NUMBER:**

PROJECT: PPG

DATE STARTED: 12/18/12

PROJECT NO.: PH-8214

DATE COMPLETED: 12/18

LOCATION (well or boring ID): 063-BO06A

GROUNDWATER DEPTH (FT):

GROUND ELEVATION (FT):



TETRA TECH EC INC

TOTAL DEPTH (FT): 35'

GEOLOGIST: TK

DRILLER: EPI

DRILLING/SAMPLING METHOD: Geoprobe

X COORDINATE:

Y COORDINATE:

DATUM:

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated ? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
30-35	30	32		38"		SM		7.5/6 4/6	Fine silty sand and fine gravel v. moist, loose					0		
													0			
													0			
													0			
	32	33				SM			Fine sandy silt and large gravel (1-1.5"), loose saturated.					0		
													0			
													0			
													0			
	33	35				SM			Fine silty sand trace clay and gravel. low moisture.					0		
													0			
													0			
													0			
									End of boring at 35.					0		
													0			
													0			
													0			
									MWB8 screened from 14-19' logs (2" PVC) Riser PVC from 14'-grade Bentonite plug 14'-12'      Stickup mount Sand pack from 14-19'					0		
													0			
													0			
													0			

# FIELD BORING LOG SHEET

BORING LOG SHEET

**BORING NUMBER:**

PROJECT: PRG

DATE STARTED: 12/17

PROJECT NO.: 141-8214

DATE COMPLETED: 12/17

LOCATION (well or boring ID): 003\_CO13

GROUNDWATER DEPTH (FT):

GROUND ELEVATION (FT):



TETRA TECH EC, INC.

TOTAL DEPTH (FT): 25'

GEOLOGIST: TK

DRILLER: EP

X COORDINATE:

Y COORDINATE:

DRILLING/SAMPLING METHOD: Geoprobe

DATUM:

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated ? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
0-5	0	2		39"		Sm		10YR 2/2	Fine silty sand w/ gravel, brick wood throughout Fill		12/17			0.0	CPM found at 0-0.5 bgs (10%)	
	2	5				Sm		10YR 3/6	Med-fine silty sand, loose, wet. Throughout.							
5-10	5	6.5		27"		Sm		7.5YR 3/3	Fine silty sand, trace gravel, fill material							
	6.5	10				SM		10YR 3/2	SAA w/ <del>brick</del> red gravel at 7-8'							
10-15'	10	12		44"		Sm		2.5YR 3/3	Fine silty sand and clay, loose very moist no odor							

# FIELD BORING LOG SHEET

BORING LOG SHEET

**BORING NUMBER:**

**PROJECT:** PPG

**DATE STARTED:** 12/17/12

**PROJECT NO.:** 194-8214

**DATE COMPLETED:** 12/17/12

**LOCATION (well or boring ID):** 063-0013

**GROUNDWATER DEPTH (FT):**



**TETRA TECH EC, INC.**

**TOTAL DEPTH (FT):** 25'

**GROUND ELEVATION (FT):**

**GEOLOGIST:** TK

**X COORDINATE:**

**DRILLER:** Epi

**Y COORDINATE:**

**DRILLING/SAMPLING METHOD:** Gyroprobe

**DATUM:**

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
10-15	12	15				Pt		10yr 2/1	Fine silt w/ veg throughout Meadow mat (peat)		12/17			0.0		
15-20	15	16.5		40"		Pt			SAA (peat)							
	16.5	18				SM		10yr 4 1/2	Fine <del>silt</del> silty sand loose, very moist		12/17					
	18	20				SM		5/2 3/4	Fine silty sand moist, dense no odor							
20-25	20	25		49"		SM		5 1/2 3/4	Fine silty sand loose, very moist. <del>some</del> some clay at		12/17				EOS @ 25' bgs	

24'

# FIELD BORING LOG SHEET

BORING LOG SHEET

**BORING NUMBER:**

PROJECT: PPG

DATE STARTED: 12/17/12

PROJECT NO.: 194-8214

DATE COMPLETED: 12/17/12

LOCATION (well or boring ID): 063-C014

GROUNDWATER DEPTH (FT):

GROUND ELEVATION (FT):



TETRA TECH EC, INC.

TOTAL DEPTH (FT): 25'

GEOLOGIST: Kot

DRILLER: EP1

X COORDINATE:

Y COORDINATE:

DRILLING/SAMPLING METHOD: Geoprobe

DATUM:

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
0-5	0	5		36"		Sm		10YR 2/2	Med-fine silty sand w/ slag wood debris Fill		12/17			0.0	cepm found at 0.5-1.5' 1.5-2' bgs	
5-10	5	6		39"		Sm		10YR 5/8	M-F silty sand w/ some med gravel wet, loose - odor							
	6	7.5				Sm		10YR 2/1	M-F silty sand very loose, wet odor (Fill)							
	7.5	10				Sm		10YR 2/1	Fine silty sand w/ veg/wood very loose/wet (Fill)							
10-15	10	12.5		39"		SM-SW			(Fill) black silty sand and gravel, loose saturated						Interface at 12.5' bgs	



# FIELD BORING LOG SHEET

BORING LOG SHEET														
<b>BORING NUMBER:</b>		PROJECT: <u>PPG</u>					DATE STARTED: <u>12/17/12</u>							
		PROJECT NO.: <u>144-B214</u>					DATE COMPLETED: <u>12/17/12</u>							
		LOCATION (well or boring ID): <u>003-C014</u>					GROUNDWATER DEPTH (FT):							
		TOTAL DEPTH (FT): <u>25'</u>					GROUND ELEVATION (FT):							
		GEOLOGIST: <u>TK</u>					X COORDINATE:							
		DRILLER: <u>Epi</u>					Y COORDINATE:							
		DRILLING/SAMPLING METHOD: <u>Geoprobe</u>					DATUM: <span style="background-color: gray; color: gray;">XXXXXXXXXX</span>							

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
<del>15-20</del> 10-15	12.5	15				Pt		10YR 2/1	Red layer Abundant veg.		12/17			00		
<del>15-20</del> 15-20	15	18.5		50"		Pt		10YR 2/1	SAA		12/17					
	18.5	20				Sm		10YR 3/1	Fine silty sand Loose wet str. odor							
20-25	20	22		43"		Sm		10YR 3/1	Fine silty sand Loose wet at 20' bgs							
	22	25				Sm		7.5YR 3/3	SAA		12/17				E03 @ 25' bgs	

# FIELD BORING LOG SHEET

<b>BORING NUMBER:</b>		PROJECT: <u>PPG</u>				DATE STARTED: <u>12/18</u>			
		PROJECT NO.: <u>194 8214</u>				DATE COMPLETED: <u>12/18</u>			
		LOCATION (well or boring ID): <u>063_D002</u>				GROUNDWATER DEPTH (FT):			
		TOTAL DEPTH (FT): <u>2</u>				GROUND ELEVATION (FT):			
		GEOLOGIST: <u>Tkot</u>				X COORDINATE:			
		DRILLER: <u>EPI</u>				Y COORDINATE:			
		DRILLING/SAMPLING METHOD: <u>Geoprobe</u>				DATUM: <span style="background-color: gray; color: gray;">XXXXXXXXXX</span>			




TETRA TECH EC, INC.

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated ? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
0-5	0	1.5		34"		SW			Black fine sand and gravel, slag (Fill)	1345	12/18			0		
	1.5	5				ML-CL		54R 4/1	Fine silty clay Loose, moist, malleable							
5-10	5	7		40"		ML-CL		7.54R 3/1	Fine silty clay Loose, moist, malleable							
	7	8				PT			Black-debriou peat w/ veg.							
	8	10				CL-ML			Black clay tier silt loose, malleable moist, odor							


# FIELD BORING LOG SHEET

BORING LOG SHEET

<b>BORING NUMBER:</b>	PROJECT: <u>PRG</u>	DATE STARTED: <u>12/18</u>
	PROJECT NO.: <u>1911-8214</u>	DATE COMPLETED: <u>12/18</u>
	LOCATION (well or boring ID): <u>063-D002</u>	GROUNDWATER DEPTH (FT):
 TETRA TECH EC INC.	TOTAL DEPTH (FT): <u>25</u>	GROUND ELEVATION (FT):
	GEOLOGIST: <u>TL</u>	X COORDINATE:
	DRILLER: <u>EP1</u>	Y COORDINATE:
DRILLING/SAMPLING METHOD: <u>Geoprobe</u>		DATUM: <span style="background-color: gray; color: gray;">XXXXXXXXXX</span>


Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
10-15'	10	10.5		24"		ML-CL		10YR 4/1	Fine clayey silt malleable, moist med density.					0		
	10.5	11.5				SM		7.5YR 3/3	Fine silty sand and gravel loose, moist, odor							
	11.5	15				SW-SM		10YR 4/1	Fine sand <del>base</del> and gravel trace silt, loose moist - strong odor							
<del>15-20'</del>									rock fragments in shoe green-gray.							
15-20'	15	16		32"		SM		10YR 3/2	Fine silty sand and gravel, moist, loose.							

# FIELD BORING LOG SHEET

BORING LOG SHEET														
<b>BORING NUMBER:</b>	PROJECT: <u>PPL</u>	DATE STARTED: <u>12/18</u>												
	PROJECT NO.: <u>194-8214</u>	DATE COMPLETED: <u>12/18</u>												
	LOCATION (well or boring ID): <u>003 D002</u>	GROUNDWATER DEPTH (FT):												
	TOTAL DEPTH (FT): <u>20</u>	GROUND ELEVATION (FT):												
 <b>TETRA TECH EC, INC.</b>	GEOLOGIST: <u>TK</u>	X COORDINATE:												
	DRILLER: <u>EP1</u>	Y COORDINATE:												
	DRILLING/SAMPLING METHOD: <u>Geoprobe</u>	DATUM: <span style="background-color: gray; color: gray;">[REDACTED]</span>												


Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
<u>15-20</u>	<u>16</u>	<u>20</u>		<u>8</u>		<u>SM-GM</u>		<u>10YR 4/2</u>	<u>Fine silty sand and gravel (~1") wet, loose, odor</u>					<u>0</u>		
											<u>0</u>					
											<u>0</u>					
											<u>0</u>					
															<u>EGB = 20'</u>	


# FIELD BORING LOG SHEET

BORING LOG SHEET											
<b>BORING NUMBER:</b>	PROJECT: <u>PPG</u>				DATE STARTED: <u>12/17/12</u>						
 <p style="font-size: small; margin: 0;">TETRA TECH EC, INC.</p>	PROJECT NO.: <u>106-8214.003</u>				DATE COMPLETED: <u>12/17/12</u>						
	LOCATION (well or boring ID): <u>063_F10</u>				GROUNDWATER DEPTH (FT):						
	TOTAL DEPTH (FT): <u>25'</u>				GROUND ELEVATION (FT):						
	GEOLOGIST: <u>TKot</u>				X COORDINATE:						
	DRILLER: <u>EPI (Rob + Jaremy)</u>				Y COORDINATE:						
DRILLING/SAMPLING METHOD: <u>Direct push.</u>				DATUM: <span style="background-color: gray; color: gray;">XXXXXXXXXX</span>							

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated ? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
0-5'	0	5		3 44"		SM-GM		10y2 <sup>3/4</sup>	0-12" - DK brown m silty sand and gravel, fill.	11:10	12/17/12			0-0 0-0		
						SM-ML		5y <sup>25/1</sup>	10-30" - fine silty sand, some clay very moist slight color							
						SW-ML		5y <sup>4/4</sup>	36-44" fine sand trace silt, moist, no color							
5-10'	5	6		48"		SW-ML		5y <sup>4/3</sup>	SAB							
	6	7				SM		10y2 <sup>4/1</sup>	Fine silty sand very loose, very moist, no color		12/17/12					

# FIELD BORING LOG SHEET

BORING LOG SHEET											
<b>BORING NUMBER:</b>	PROJECT: <u>PPG</u>					DATE STARTED: <u>12/17/12</u>					
	PROJECT NO.: <u>194-8214</u>					DATE COMPLETED: <u>12/17/12</u>					
	LOCATION (well or boring ID): <u>003 - F010</u>					GROUNDWATER DEPTH (FT):					
	TOTAL DEPTH (FT): <u>25'</u>					GROUND ELEVATION (FT):					
	GEOLOGIST: <u>TK</u>					X COORDINATE:					
	DRILLER: <u>EP</u>					Y COORDINATE:					
	DRILLING/SAMPLING METHOD: <u>Geoprobe</u>					DATUM: <span style="background-color: gray; display: inline-block; width: 150px; height: 15px;"></span>					

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)
5-10	<del>7</del> 7	<del>10</del> 8				SM-CL		10YR 3/3	Fine silty sand trace clay, loose very moist, no odor					0		
	<del>8</del> 8	<del>10</del> 10				SM		10YR 3/6	Fine silty sand light moisture. no odor		12/17					
10-15	10	14		52"		SM		10YR 3/6	Fine silty sand. Orange mottling at 13' bgs.							
	14	15				SM-ML		10YR 3/6	Med <del>silty</del> sand trace silt. moist loose, some gravel no odor.							
15-20				50"												

# FIELD BORING LOG SHEET

BORING LOG SHEET

**BORING NUMBER:**

PROJECT: PRG

DATE STARTED: 12/17/12

PROJECT NO.: FA-8214

DATE COMPLETED: 12/17/12

LOCATION (well or boring ID): C03-F010

GROUNDWATER DEPTH (FT):

GROUND ELEVATION (FT):



TETRA TECH EC, INC.

TOTAL DEPTH (FT): 25

GEOLOGIST: TK

DRILLER: Epi

DRILLING/SAMPLING METHOD: Geoprobe


X COORDINATE:

Y COORDINATE:

DATUM:

Sample ID	Start Depth (feet)	End Depth (feet)	BLOWS per 6"	Recovery (ft)	Consolidated? Y or N	USCS Soil Classification or Material	Geologic Unit Code	Color	Description	TIME	DATE	Depth of PID/FID (ft)	FID (ppm)	PID (ppm)	Comments	Contact (A, H, U)	
15-20	15	20				SM-CL		10YR 4/4	Fine silty sand trace clay and gravel, loose, very moist. to saturated					0.0			
					0												
					0												
					0												
<del>15-20</del> 20-25	20	25		3'		SM-CL		10YR 4/4	SAA					0.0	25' EOB		
												0					
												0					
												0					


# SOIL BORING LOG

 <b>TETRA TECH GEO</b>		PROJECT NO: 19L-8214	Boring No: 063-2002
		PROJECT NAME: PPG SITE 03	LOCATION SKETCH
COMPLETION DATE 12-19-12	TOTAL DEPTH OF BOREHOLE: 20' bgs	MONITORING DEVICE PID	GEOLOGIST / OFFICE TRAVIS KOT
DRILLING CONTRACTOR / DRILLER: Epi / Bob	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Direct push	
SAMPLING METHOD: S' slower	DEPTH TO GROUNDWATER	GROUND SURFACE ELEVATION	WELL INSTALLED? MVV-10
MEMO			

DEPTH (feet)	RECOVERY (feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION	FIELD NOTES & SAMPLE SUMMARY
1		0	0-4 Black m-c SAND, some silt, m-f angular gravel and slag, moist, no odor	
2	3.06			
3	5.0		4-5 DK gray m-f silty SAND and gravel, med-dense, moist-wet, hydrocarbon odor, 2" white subangular gravel at 1.5-3' bgs	
4				
5				
6		0	5-9 Reddish-brown fine silty CLAY, firm dense, moist, no odor (7.54R 3/2).	
7	2.0			
8	5.0	0-1	9-10 PEAT, abundant vegetation, sulfur odor. Native / fill interface at 9' bgs.	
9				
10				
11		0	10-11.5 PEAT, abundant vegetation, moist, soft.	
12	3.0			
13	5.0	0	11.5-12.5 Gray-brown CLAY w/ silt and little vegetation throughout.	063-2002-13.0
14		0	12.5-15 Orange-brown fine CLAY w/ little silt, m-c gravel, firm, dry-moist	
15				
16		0	15-16 Orange-brown CLAY, little silt and subangular med gravel, very loose, wet from 15.5-15.8' bgs, no odor.	
17	3.0			
18	5.0		16-20' Orange-brown f-m SAND, some silt and m-c subangular gravel throughout, dense firm, moist-wet, no odor	
19				
20				
21			EOB @ 20' bgs	
22			MW-10:	
23			2" PVC riser 0-2' bgs.	
24			2" PVC screen 2-7' bgs	
25			Flushmount	




# SOIL BORING LOG

 <b>TETRA TECH GEO</b>		PROJECT NO: 194-8214	Boring No: 063-2005
		PROJECT NAME: PGG SITE 03	LOCATION SKETCH
COMPLETION DATE: 12-21-12	TOTAL DEPTH OF BOREHOLE: 25' bgs	MONITORING DEVICE:	GEOLOGIST / OFFICE:
DRILLING CONTRACTOR / DRILLER: Epi / Bob	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Direct push	
SAMPLING METHOD: 5' sleeves	DEPTH TO GROUNDWATER:	GROUND SURFACE ELEVATION:	WELL INSTALLED?:
MEMO:			


DEPTH (feet)	RECOVERY (feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION	FIELD NOTES & SAMPLE SUMMARY
-1		0	0-0.66 Brown med SAND, trace silt, soft, loose, moist, no odor.	063-2005-0.5'
-2	2.25			
-3	5.0	0	0.66-5 Black m-f SAND, little silt, abundant, med-coarse slag from 1-2' bgs. 2" of red rock frags, moist-wet at 4' bgs (FILL)	
-4				
-5				
-6	2.3	0	5-9 Black sandy SILT and med-coarse subangular gravel, saturated, m-dense strong hydrocarbon odor.	063-2005-5.0
-7	5.0		9-10 Black fine sandy SILT and gravel, saturated. Sheen observed at 9-9.5', dense, strong hydrocarbon odor	
-8				
-9				
-10				
-11	0.66	0	10-15' Black-dk brown PEAT, trace sand, med-vegetation, soft, strong hydrocarbon odor, moist. staining from previous sleeve.	
-12	5.0			
-13				
-14				
-15				
-16	2.0	0	15-16 Green-gray rock fragments (SS), dry	
-17	5.0	0	16-20 Red-brown fine sandy SILT, little coarse-med gravel, firm, moist, no odor.	
-18				
-19				
-20				
-21	2.0	0	20-22 Red brown SILT w/ fine sand and subangular gravel, very loose, wet no odor.	063-2005-20.0'
-22	5.0		22-25 Red-brown SILT w/ fine sand, dense, moist-wet	
-23				
-24				
-25			EOB @ 25' bgs	

# SOIL BORING LOG

 <b>TETRA TECH GEO</b>		PROJECT NO: 194-8214	Boring No: 063-Z009
		PROJECT NAME: PPG SITE 63	LOCATION SKETCH
COMPLETION DATE: 12-21-12	TOTAL DEPTH OF BOREHOLE: 25' bgs	MONITORING DEVICE: PID	GEOLOGIST / OFFICE: TRAVIS Kot
DRILLING CONTRACTOR / DRILLER: Epi / Bob	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Direct push.	
SAMPLING METHOD: S-sleeve	DEPTH TO GROUNDWATER:	GROUND SURFACE ELEVATION:	WELL INSTALLED? <input type="checkbox"/>
MEMO:			


DEPTH (Feet)	RECOVERY (feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION	FIELD NOTES & SAMPLE SUMMARY
0				
1		0	0-1.5 Black m-f SAND w/ abundant m-f slag fragments, dry, med-firm, no odor.	063-Z009-0.5
2	2.25			
3	5.0	299	1.5-5 Gray-black med silty SAND (red rock frags from 1.75-2'), med-firm, moist, strong hydrocarbon odor.	
4		4-5'		
5				
6		0	5-10' Gray-black SILT, trace fine sand, and med subangular gravel, wet, medium-dense, light color	063-Z009-5.0'
7	0.5			
8	5.0			
9				
10				
11		0	10-15 PEAT, dk brown SILT w/ abundant vegetation, med-moist, sulfurous odor.	063-Z009-10.0'
12	1.5			
13	5.0			
14				
15				
16		0	15-16.5 Red-brown silty CLAY, soft, moist, no odor.	063-Z009-15.0'
17	3.41			
18	5.0	0	16.5-20 Red-brown clayey SILT and coarse-med subangular gravel throughout, dense, moist, no odor.	
19				
20				
21		0	20-23 Brown sandy SILT and gravel, moist, no odor.	
22	3.75			
23	5.0	0	23-25 - SAA w/ more gravel.	
24				
25			EOB @ 25' bgs	

# SOIL BORING LOG

 <b>TETRA TECH GEO</b>	PROJECT NO: <b>194-8214</b>		Boring No: <b>063-2011</b>
	PROJECT NAME: <b>PPG SITE 03</b>		LOCATION SKETCH
COMPLETION DATE: <b>12-20-12</b>	TOTAL DEPTH OF BOREHOLE: <b>25' bgs</b>	MONITORING DEVICE: <b>PID</b>	GEOLOGIST / OFFICE: <b>TRAVIS Kot</b>
DRILLING CONTRACTOR / DRILLER: <b>EPI / Bob</b>	DRILLING EQUIPMENT: <b>Geoprobe</b>	DRILLING METHOD / BIT: <b>Direct push</b>	
SAMPLING METHOD: <b>S sleeves</b>	DEPTH TO GROUNDWATER	GROUND SURFACE ELEVATION:	WELL INSTALLED?
MEMO:			

DEPTH (Feet)	RECOVERY (feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION	FIELD NOTES & SAMPLE SUMMARY
-1		0	0-1.3' DK gray-black m-f SAND, some silt, and subangular slag frags, moist	063-2011-0.0
-2	2.75	0	1.3-1.5' (10R <sup>3/2</sup> ) Red purple-brown m-f silty SAND and gravel, loose, med-firm	
-3	5.0	0	1.5-5' DK brown to black m-f silty SAND and m-c gravel, moist-wet, no odor	
-4				
-5				
-6		0	5-6' Brown fine SAND and silt, firm, moist	063-2011-5.0'
-7	3.25	0:3	6-6.5' Light gray-green rock frags, m-c sandstone, dry-moist.	
-8	5.0		6.5-10' Red-brown SILT, trace subangular m-f gravel, moist-wet, no odor	
-9				
-10				
-11		0	10-11' Brown SILT, trace clay. Native/fill interface at 11' bgs.	
-12	1.6			
-13	5.0	0	11-15' PEAT, some vegetation, moist, soft, sulfurous odor.	
-14				
-15				
-16		0	15-20' Red brown m-f silty SAND, trace med gravel, med-firm, moist	063-2011-15.0
-17	0.5		no odor.	
-18	5.0			
-19				
-20				
-21		0	20-21.5' Red brown SILT, trace sand and gravel.	063-2011-20.0
-22	4.0	0	21.5-22' Gray-white rock frags, dry.	
-23	5.0	0	22-25' Brown SILT and subangular gravel, dense, moist.	
-24				
-25			EOB @ 25' bgs.	

# SOIL BORING LOG

 <b>TETRA TECH GEO</b>		PROJECT NO: 194-8214	Boring No: 063-2013
		PROJECT NAME PPG SITE 03	LOCATION SKETCH
COMPLETION DATE 12-19-13	TOTAL DEPTH OF BOREHOLE 25 bgs	MONITORING DEVICE PID	GEOLOGIST / OFFICE TRAUIS Kot
DRILLING CONTRACTOR / DRILLER: EPI / Bob	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Direct push	
SAMPLING METHOD: 5 sleeves	DEPTH TO GROUNDWATER	GROUND SURFACE ELEVATION:	WELL INSTALLED?
MEMO:			

DEPTH (Feet)	RECOVERY (feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION	FIELD NOTES & SAMPLE SUMMARY
1	3.58 5.0	0	0-1.5' DK brown med-fine SAND, little silt and m-c subangular gravel throughout, dry, loose, no odor	063-2013-1.5
2				
3			0	1.5-5 Black m-c SAND w/ trace silt, angular to subangular slag and gravel, loose, moist, slight petrol odor
4				
5				
6	3.5 5.0	0	5-6 DK gray-black m-c SAND, some silt, subangular gravel throughout, loose, wet	063-2013-5.5
7				
8		0	6-7 As above w/ little subangular gravel, med-dense, saturated, light hydrocarb odor	
9				
10				
11		0	7-8 DK gray to brown m-f silty sand and subangular gravel, loose, saturated, petroleum odor.	
12				
13		0	8-10 DK gray m-c sandy SILT w/ coarse angular-subangular gravel, m-loose moist-wet; hydrocarbon odor	
14				
15				
16	3.66 5.0	0	10-10.6 Black SILT w/ m-f sand and slag fragments, loose, hydrocarbon odor wet.	063-2013-10.0
17				
18		0	10.6-15 Black SILT, Peat, abundant vegetation strong sulfur odor, med moist	
19				
20				
21	2.5 5.0	0	15-16.5 SAA, PEAT w/ abundant vegetation.	
22		0	16.5-20 (GLEY 1 <sup>3</sup> /5a), fine-med SAND w/ silt, med-firm, moist, slight sulfur odor.	
23				
24				
25				

# SOIL BORING LOG

		PROJECT NO.: 194-8214		Boring No: 003-7013		
		PROJECT NAME: PPG SITE 03		LOCATION SKETCH		
COMPLETION DATE: 12-19-13	TOTAL DEPTH OF BOREHOLE: 25' bgs	MONITORING DEVICE: PID	GEOLOGIST / OFFICE: TRAVIS KOT			
DRILLING CONTRACTOR / DRILLER: EPI / Sob		DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Direct push			
SAMPLING METHOD: 5' sleeves	DEPTH TO GROUNDWATER	GROUND SURFACE ELEVATION:	WELL INSTALLED? -			
MEMO:						

DEPTH (Feet)	RECOVERY (feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION	FIELD NOTES & SAMPLE SUMMARY
<del>26</del>		0	20-21' SAA	26
<del>27</del>	3.3 <hr/> 5.0	0	21-22 Orange-brown SILT, trace clay, firm, moist-dry, no odor (7.5y <sup>2</sup> 3/4)	27
<del>28</del>		0	22-24 Orange-brown CLAY, some silt, med plasticity, loose, wet, no odor	28
<del>29</del>				29
<del>30</del>				30
<del>31</del>			24-25 Orange-brown SILT, little clay, loose, little fine sand and gravel throughout, moist-wet, no odor	31
<del>32</del>				32
<del>33</del>				33
<del>34</del>			EOB @ 25' bgs	34
<del>35</del>				35
36				36
37				37
38				38
39				39
40				40
41				41
42				42
43				43
44				44
45				45
46				46
47				47
48				48
49				49
50				50



