



MEMO

TO: Meghan Yovankin
FROM: Thomas Waldron
CC: Mohammad Yousef and Kasey McDonnell – NJDOT
Rachel Malaniak and Chris Watt – WSP
SUBJECT: **Soil and Monitoring Well Information – Solar PPA**
NJDOT Fernwood Maintenance Facility and Office Complex
DATE: **April 7, 2020**

WSP USA Solutions, Inc. (WSP) is providing soil and groundwater information collected at the Fernwood Maintenance Facility and Office Complex (Site) for the New Jersey Department of Transportation's (NJDOTs) proposed Solar Power Purchase Agreement (PPA) Project located in Ewing Township, New Jersey. The NJDOT anticipates the Project will consist of roof-mounted panels (yellow), ground-mounted panels (black), and parking canopy-mounted panels (red) to be installed throughout the Site; as depicted on Figure 1. Five known and suspected soil contamination areas are present at the Site (Figure 1). In addition, the proposed and existing monitoring well network is depicted on Figure 2. Pertinent soil and monitoring well information collected as part of ongoing environmental activities are attached.

Area 1- Former Thiokol Area: A soil and groundwater screening investigation is anticipated to be conducted by WSP in May 2020. This investigation is being conducted to evaluate suspected petroleum and chlorinated volatile organic compounds (VOCs) in soils. Contaminated soils are suspected based on the presence of contaminated groundwater plumes in Plume Area 1; depicted on Figure 2. The proposed investigation will include the installation of soil borings and monitoring wells. Currently, no known soil investigations have been conducted in the area of the proposed ground mounts.

Monitoring well logs for MW-41 and MW-42, which include a description of soils in Area 1, are provided in Attachment 1.

Area 2 – Vehicle Wash Area: A soil and groundwater investigation has been conducted in this area. During the installation of the vehicle wash building, a subsurface dumping area was discovered with most of the debris being removed. The area excavated was then filled with clean three-quarter inch stone. Residual soil contamination containing polychlorinated biphenyls (PCBs), SVOCs, and metals, particularly lead (assumed to be associated with spent sand blasting material), are present. Residual soil contamination in this area will be deed noticed; however, additional soil delineation is anticipated in May 2020. This investigation is being conducted to

evaluate the horizontal extent of the contamination in the vicinity of the proposed canopy mounts.

Soil sampling results and monitoring well logs for wells MW-25 through MW-27, which include a description of the soils in Area 2, are provided in Attachment 2.

Area 3 and Area 4- Area 3 is the drum crusher area and Area 4 is the location of a former Underground Storage Tank (UST). Soil contamination is known and suspected in both these areas; however, no solar mounts are currently proposed. VOCs and semi-volatile organic compounds (SVOCs) are suspected in Area 3, while extractible petroleum hydrocarbons (EPH) are known to be present in Area 4.

Area 5- Fueling Station Area: Soil and groundwater investigations have been conducted in this area to evaluate discharges associated with the fueling station and Underground Storage Tanks (USTs). There are currently three 20,000-gallon capacity USTs in this area. Low concentrations of petroleum and chlorinated VOCs have been identified in the soils. A soil investigation is proposed May 2020 to evaluate VOCs in soils. Two groundwater plumes are present in this area, a gasoline additive (tertiary-butyl-alcohol [TBA]) plume and a benzene plume which are located in the vicinity of the fueling station area. Both plumes are depicted on Figure 2 as Plume Areas 2 and 3.

Soil sampling results and monitoring well logs for MW-1 through MW-4, MW-8, MW-9 and MW-10, which include a description of soil in Area 5, are provided in Attachment 3.

Kind Regards,
WSP USA Solutions Inc.

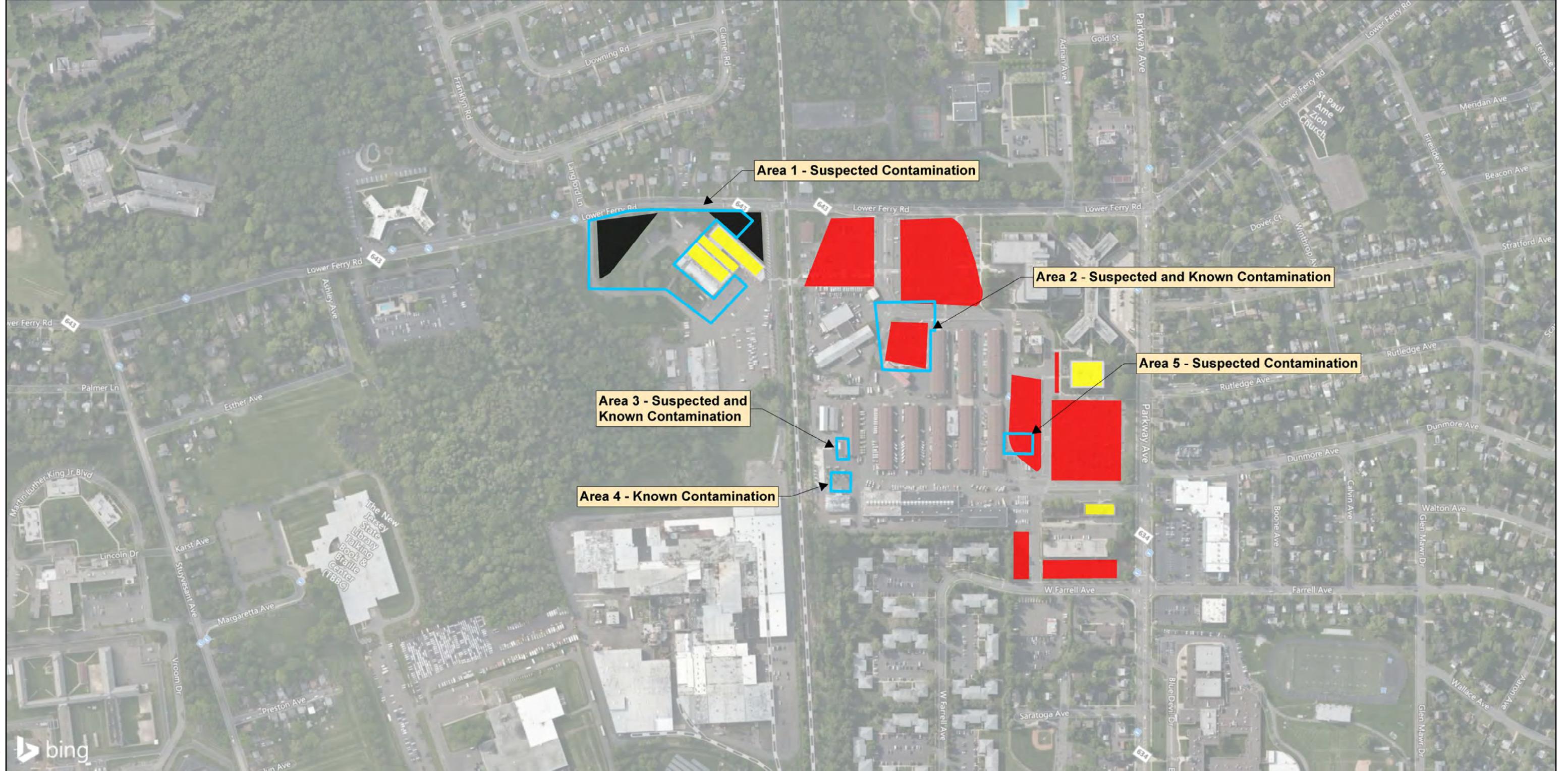


Thomas Waldron, LSRP
Program Manager, Water and Environment

Enclosure:

- Figure 1 Known and Suspected Areas of Soil Contamination
- Figure 2 Shallow Groundwater Plumes and Monitoring Well Locations
- Attachment 1 Monitoring Well Logs (Area 1)
- Attachment 2 Soil Sampling Results and Monitoring Well Logs (Area 2)
- Attachment 3 Soil Sampling Results and Monitoring Well Logs (Area 5)

FIGURES



Solar Development Areas
Canopy Mount
Ground Mount
Roof Mount
Site Boundary
Suspected or Known Area of Soil Contamination

Contaminants of Concern

- Area 1 = VOCs
- Area 2 = Lead, SVOCs, PCBs, & other Metals
- Area 3 = VOCs and SVOCs
- Area 4 = EPH
- Area 5 = VOCs

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Coordinate System:
NAD 1983 StatePlane New Jersey FIPS 2900 Feet

April 2020



Figure 1
Known and Suspected Areas of Soil Contamination
NJDOT - Fernwood
Trenton, New Jersey



WSP

0 400 800
Feet





Date Saved: 2020/04/06 \\mnts\fs01\Op\Operations\034\1012 - Fernwood05 - MappingGIS2020 SolarInstall Figure 2 Shallow GW Plumes and MW Locations.mxd

Solar Development Areas	Existing Monitoring Wells	Proposed FY2020 Activity Locations	<p>Service Layer Credits: © 2020 Microsoft Corporation © 2020 DigitalGlobe ©CNES (2020) Distribution Airbus DS © 2020</p> <p>Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet</p> <p>April 2020</p>	<p>Figure 2 Shallow Groundwater Plumes and Monitoring Well Locations NJDOT - Fernwood Trenton, New Jersey</p> <p> </p> <p>0 400 800 Feet</p>
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ATTACHMENT 1
AREA 1: FORMER THIOKOL AREA



Drilling Log

Page 1 of 2

BORING NO.: MW-41

WELL NO.: MW-41

CLIENT: New Jersey Department of Transportation

PROJECT NO.: 2001811.004

PROJECT: Fernwood Maintenance Complex

DATE STARTED: 5/17/2019

DRILLING CONTRACTOR: Talon Drilling, Inc

DATE FINISHED: 5/17/2019

DRILLING METHOD: Direct Push

DRILLER: C. Jarowski

BOREHOLE DATA

WELL DATA

INSPECTOR: J. Shulack

Diameter (in): 6

Completion: Flushmount

NORTHING: NA

Total Depth (ft.): 12.5

Total Depth (ft.): 12

EASTING: NA

Sampler: Macrocore

Screen Length (ft.)/Slot (in): 10/0.010

GROUND ELEVATION: NA

Depth to Water (ft.): 4.0

Depth to Water (ft.): 5.35

TOC ELEVATION: NA

Depth to Rock (ft.): 12.5

Permit No.: E201903945

NOTES:

Well Construction	Depth (feet)	Lithology	USCS	SPT (blows/6 in)	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy		Remarks
		TOPSOIL					<1	Dusky yellowish brown (10YR 2/2), TOPSOIL, moist.		Topsoil
		CL					<1	Dark yellowish orange (10YR 6/6) to pale yellowish orange (10YR 8/6), Silty CLAY, some medium to fine Sand, moist.		Sandy Silty Clay
	2									
	4	SC					<1	Dark yellowish orange (10YR 6/6) to pale yellowish orange (10YR 8/6), coarse to fine SAND, some Silty Clay, trace medium to fine Gravel, wet.		Silty Clayey Sand
		SC					117	Dark yellowish orange (10YR 6/6) to pale yellowish orange (10YR 8/6), coarse to fine SAND, some Silty Clay, trace medium to fine Gravel, wet.		



Drilling Log

Page 2 of 2

BORING NO.: MW-41

WELL NO.: MW-41

CLIENT: New Jersey Department of Transportation

PROJECT NO.: 2001811.004

Well Construction	Depth (feet)	Lithology	USCS	SPT (blows/6 in)	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy		Remarks
	-							Dark yellowish orange (10YR 6/6) to pale yellowish orange (10YR 8/6), coarse to fine SAND, some Silty Clay, trace medium to fine Gravel, wet.		
	-		ML				4.5	Pale reddish brown (10R 5/4) to dark yellowish orange (10YR 6/6), Clayey SILT, some medium to fine Sand, wet.		Sandy Clayey Silt
	8									
	-									
	-									
	-									
	10		SILTSTONE				<1	Pale reddish brown (10R 5/4), Weathered SILTSTONE, dry.		Weathered Sandstone
	-									
	-									
	12									
	-									
	14							Total Depth of Boring 12.5 feet.		



Drilling Log

Page 1 of 2

BORING NO.: MW-42**WELL NO.: MW-42****CLIENT:** New Jersey Department of Transportation**PROJECT NO.:** 2001811.004**PROJECT:** Fernwood Maintenance Complex**DATE STARTED:** 5/10/2019**DRILLING CONTRACTOR:** Talon Drilling, Inc**DATE FINISHED:** 5/10/2019**DRILLING METHOD:** Hollow Stem Auger**DRILLER:** C. Jarowski**BOREHOLE DATA****WELL DATA****INSPECTOR:** J. Shulack**Diameter (in):**

6

Completion: Flushmount**NORTHING:** NA**Total Depth (ft.):**

9.5

Total Depth (ft.): 9**EASTING:** NA**Sampler:** Split Spoon**Screen Length (ft.)/Slot (in):** 7/0.010**GROUND ELEVATION:** NA**Depth to Water (ft.):**

3.8

Depth to Water (ft.): 2.97**TOC ELEVATION:** NA**Depth to Rock (ft.):**

9.5

Permit No.: E201903946**NOTES:**

Well Construction	Depth (feet)	Lithology	USCS	SPT (blows/6 in)	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy		Remarks
								Top	Bottom	
	-	SC					<1	Moderate brown (5YR 4/4), coarse to fine SAND, some Silty Clay, trace medium to fine Gravel, moist.		Silty Clayey Sand
	2									
	-	SC	3				<1	Moderate brown (5YR 4/4), coarse to fine SAND, some Silty Clay, trace medium to fine Gravel, moist.		
	-		5							
	4	SC	4				<1	Moderate brown (5YR 4/4), coarse to fine SAND, some Silty Clay, trace medium to fine Gravel, moist.		
	-		3							

ATTACHMENT 2
AREA 2: VEHICLE WASH AREA



● Approximate Soil Sample Location

□ Approximate Test Pit Location

— Approximate Extent of Excavation

Wood Debris

Metal Debris/ Tar/ Petroleum/ Concrete

Black Beauty

Image courtesy of:
Microsoft Corp, 2018;
DigitalGlobe, 2018;
CNES Distribution Airbus DS, 2018

Coordinate System:
NAD 1983 StatePlane New Jersey
FIPS 2900 Feet

September 2018

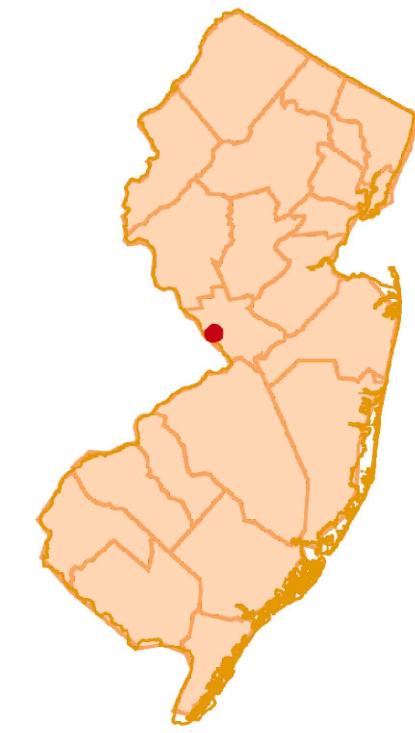
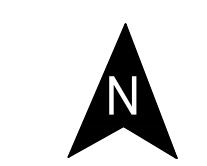


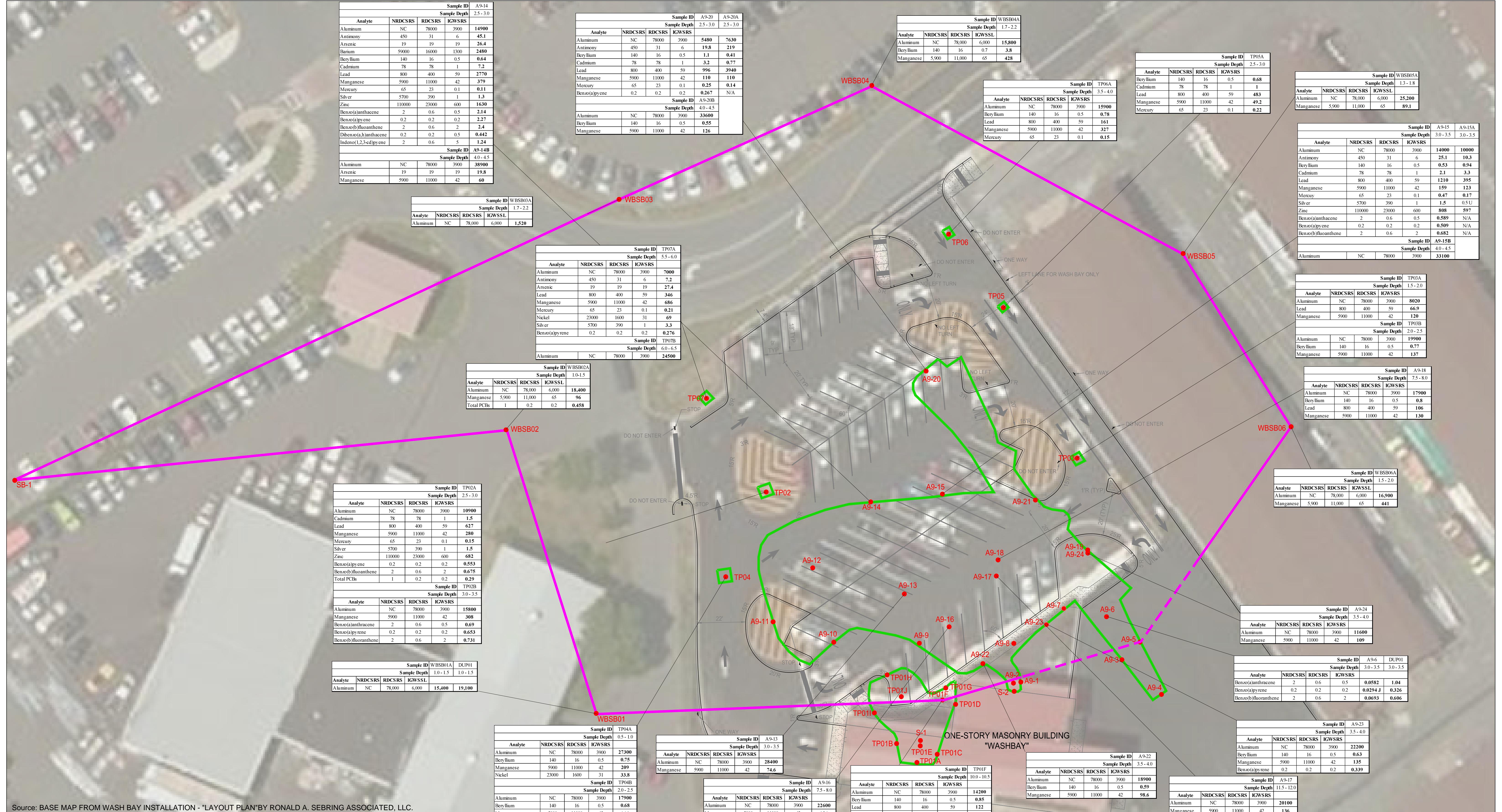
Figure 19
Debris and Excavation Extent AOC 34
NJDOT - Fernwood Maintenance Facility
and Office Complex
Ewing Township, New Jersey



Louis Berger

0 20 40 80
Feet





Source: BASE MAP FROM WASH BAY INSTALLATION - "LAYOUT PLAN" BY RONALD A. SEBRING ASSOCIATED, LLC.

- Approximate Soil Sample Location
- Approximate Test Pit Location
- Approximate Extent of Excavation
- Approximate Extent of Delineation

Notes:

- All results are dry weight and are reported in parts per million (mg/kg)
- NRDCSR = Non Residential Direct Contact Soil Remediation Standards, NJDEP, May 7, 2012
- RDCSR = Residential Direct Contact Soil Remediation Standards, NJDEP, May 7, 2012
- IGWSR = Default Impact to Ground Water Soil Remediation Standard is from the NJDEP's "Soil-Water Partition Equation Guidance Document" dated June 2008 (revised December 2008)
- NC = No Criteria
- U = Not detected above the quantitation limit; the value presented is the sample quantitation limit
- N/A = Not Analyzed
- J = Estimated value
- **Bolded values indicate positive detections**
- **Bolded and Shaded value exceeds one or more of SRS**

Image courtesy of:
Microsoft Corp, 2018;
DigitalGlobe, 2018;
CNES Distribution Airbus DS, 2018

Coordinate System:
NAD 1983 StatePlane New Jersey
FIPS 2900 Feet

September 2018



Figure 20
EPH Results and Post Excavation Soil Exceedances AOC 34
NJDOT - Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey



Louis Berger

0 20 40 80
Feet



Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
EPH Soil Analytical Results - Vehicle Wash Area (AOC 34)

Location ID				TP01												TP02				TP03			
Sample ID				TP01A	TP01B	TP01C	TP01D	TP01E	TP01F	TP01G	TP01H	TP01I	TP01J	DUP01	TP02A	TP02B	TP03A	TP03B	TP03	DUP01	TP04A	TP04B	
Lab ID				JB42805-1	JB42805-2	JB42849-1	JB42849-2	JB42849-3	JB43224-1	JB43224-2	JB43224-5	JB43224-3	JB43224-4	JB43224-6	JB44970-1	JB44970-2	JB45917-1	JB45917-2	JB47515-3	JB47515-11	JB45917-3	JB45917-4	
Sample Depth (ft, bgs)				11.5 - 12.0	11.5 - 12.0	11.5 - 12.0	8.5 - 9.0	11.5 - 12.0	10.0 - 10.5	5.5 - 6.0	5.5 - 6.0	5.5 - 6.0	7.5 - 8.0	3.0 - 3.5	2.5 - 3.0	3.0 - 3.5	1.5 - 2.0	2.0 - 2.5	3.0 - 3.5	3.0 - 3.5	0.5 - 1.0	2.0 - 2.5	
Sample Date				7/22/2013	7/22/2013	7/23/2013	7/23/2013	7/26/2013	7/26/2013	7/26/2013	7/26/2013	7/26/2013	7/26/2013	7/26/2013	8/16/2013	8/16/2013	8/28/2013	8/28/2013	9/16/2013	9/16/2013	8/28/2013	8/28/2013	
EPH	NRDCSRS	RDCSRS	IGWSRS																				
EPH (C9-C28)	NC	NC	NC	8.2 U	8.1 U	7.7 U	7.6 U	7.8 U	417	7.3 U	9.1 U	7.6 U	7.6 U	7.7 U	428	7.1 U	6420	6.9 U	1470	1350	10100	305	
EPH (>C28-C40)	NC	NC	NC	8.2 U	8.1 U	7.7 U	7.6 U	7.8 U	306	7.3 U	9.1 U	7.6 U	7.6 U	7.7 U	312	7.1 U	5410	6.9 U	2550	2480	1680	276	
Total EPH (C9-C40)	54000	5100	NC	8.2 U	8.1 U	7.7 U	7.6 U	7.8 U	723	7.3 U	9.1 U	7.6 U	7.6 U	7.7 U	740	7.1 U	11800	6.9 U	4020	3830	11700	581	

Location ID				TP05		TP06		TP07		A9-1	A9-2	A9-3	A9-4	A9-5	A9-6		A9-7	A9-8	A9-9	A9-10	A9-11	
Sample ID				TP05A	TP05B	TP06A	TP06B	TP07A	TP07B	A9-1	A9-2	A9-3	A9-4	A9-5	A9-6	DUP01	A9-6(2)	A9-7	A9-8	A9-9	A9-10	A9-11
Lab ID				JB46022-2	JB46022-4	JB46022-5	JB46022-6	JB46022-7	JB46022-8	JB44266-1	JB44266-2	JB44712-1	JB44712-2	JB44712-3	JB44712-4	JB44712-5	JB46022-1	JB44712-6	JB44712-7	JB44970-3	JB44970-4	JB44970-5
Sample Depth (ft, bgs)				2.5 - 3.0	3.0 - 3.5	3.5 - 4.0	4.0 - 4.5	5.5 - 6.0	6.0 - 6.5	4.0 - 4.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	8.0 - 8.5	8.0 - 8.5	2.5 - 3.0	1.5 - 2.0	1.0 - 1.5	
Sample Date				8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/8/2013	8/8/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/16/2013	8/16/2013	8/16/2013
EPH	NRDCSRS	RDCSRS	IGWSRS																			
EPH (C9-C28)	NC	NC	NC	87.3	7.7 U	634	7.6 U	223	7.3 U	7.2 U	7.5 U	8.1 U	7.8 U	7.7 U	94.5	222	7.6 U	8.2 U	8.1 U	7.8 U	7.7 U	33.7
EPH (>C28-C40)	NC	NC	NC	51.6	7.7 U	764	7.6 U	192	7.3 U	7.2 U	7.5 U	8.1 U	7.8 U	7.7 U	28.7	111	7.6 U	8.2 U	8.1 U	7.8 U	7.7 U	7.7 U
Total EPH (C9-C40)	54000	5100	NC	139	7.7 U	1400	7.6 U	415	7.3 U	7.2 U	7.5 U	8.1 U	7.8 U	7.7 U	123	333	7.6 U	8.2 U	8.1 U	7.8 U	7.7 U	33.7

Location ID				A9-12	A9-13	A9-14		A9-15		A9-16	A9-17	A9-18	A9-19	A9-20		A9-22	A9-23	A9-24	
Sample ID				A9-12	A9-13	A9-14	A9-14B	A9-15	A9-15B	A9-16	A9-17	A9-18	A9-19	A9-20	A9-20A	A9-20B	A9-22	A9-23	A9-24
Lab ID				JB44970-6	JB44970-7	JB45307-1	JB47515-6	JB45307-2	JB47515-8	JB45722-1	JB45722-2	JB45722-3	JB45722-4	JB45779-1	JB47515-9	JB47515-10	JB46022-9	JB46022-10	JB46022-11
Sample Depth (ft, bgs)				3.0 - 3.5	3.0 - 3.5	2.5 - 3.0	4.0 - 4.5	3.0 - 3.5	4.0 - 4.5	7.5 - 8.0	11.5 - 12.0	7.5 - 8.0	5.5 - 6.0	2.5 - 3.0	2.5 - 3.0	4.0 - 4.5	3.5 - 4.0	3.5 - 4.0	
Sample Date				8/16/2013	8/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	8/26/2013	8/26/2013	8/26/2013	8/26/2013	8/26/2013	8/27/2013	9/16/2013	9/16/2013	8/26/2013	8/26/2013

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID			TP01	TP02			TP03		TP04		TP05		TP06		TP07		A9-3	A9-4	A9-5	
Sample ID			TP01F	TP02A	TP02B	TP02B	TP03A	TP03B	TP04A	TP04B	TP05A	TP05B	TP06A	TP06B	TP07A	TP07B	A9-3	A9-4	A9-5	
Lab ID			JB43224-1	JB44970-1	JB44970-2	JB47515-2	JB45917-1	JB45917-2	JB45917-3	JB45917-4	JB46022-2	JB46022-4	JB46022-5	JB46022-6	JB46022-7	JB46022-8	JB44712-1	JB44712-2	JB44712-3	
Sample Depth (ft , bgs)			10 - 10.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	1.5 - 2.0	2.0 - 2.5	0.5 - 1.0	2.0 - 2.5	2.5 - 3.0	3.0 - 3.5	3.5 - 4.0	4.0 - 4.5	5.5 - 6.0	6.0 - 6.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	
Sample Date			7/26/2013	8/16/2013	8/16/2013	9/16/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/14/2013	
Metals	NRDCSRS	DCSRS	IGWSRS																	
Aluminum	NC	78000	3900	14200	10900	15800	N/A	8020	19900	27300	17900	3790	N/A	15900	N/A	7000	24500	N/A	N/A	
Antimony	450	31	6	3.5	3.8	2.4 U	N/A	2.1 U	2.5 U	2.2 U	2.3 U	5.1	N/A	2 U	N/A	7.2	2.2 U	N/A	N/A	
Arsenic	19	19	19	9.8	10.3	5.5	N/A	4.5	8.2	7.7	6.1	7.9	N/A	10.5	N/A	27.4	5.4	N/A	N/A	
Barium	59000	16000	1300	90.1	280	44.5	N/A	90.9	41.7	79.1	37.6	430	N/A	114	N/A	156	25.4	N/A	N/A	
Beryllium	140	16	0.5	0.85	0.49	0.24 U	N/A	0.4	0.77	0.75	0.68	0.68	N/A	0.78	N/A	0.99 U	0.28	N/A	N/A	
Cadmium	78	78	1	0.59 U	1.5	0.59 U	N/A	0.53 U	0.62 U	0.56 U	0.57 U	1	0.61 U	0.72	N/A	2.5 U	0.56 U	N/A	N/A	
Calcium	NC	NC	NC	3920	11400	938	N/A	11300	704	560 U	570 U	1470	N/A	1480	N/A	3160	957	N/A	N/A	
Chromium	NC	NC	NC	22.9	36.1	23.8	N/A	8.1	28	7	26.7	7.2	N/A	21.6	N/A	28.6	28.1	N/A	N/A	
Cobalt	590	1600	59	8.3	8.9	6.6	N/A	6.3	6.6	11.3	5.7 U	5.3	N/A	7.4	N/A	11.2	5.6 U	N/A	N/A	
Copper	45000	3100	7300	96.2	127	10.2	N/A	42.1	12.2	17.9	11.5	48.5	N/A	66.2	N/A	137	8.3	N/A	N/A	
Cyanide	680	47	13	N/A	N/A	N/A	N/A	0.24 U	0.29 U	0.26 U	0.26 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Iron	NC	NC	NC	21500	25200	19400	N/A	14000	26400	11200	24300	9510	N/A	19900	N/A	154000	19200	N/A	N/A	
Lead	800	400	90	122	627	13.7	N/A	66.9	10.6	11.8	10.4	483	10.7	161	10.1	346	9	N/A	N/A	
Magnesium	NC	NC	NC	2440	2750	2290	N/A	2180	2240	1610	2240	500 U	N/A	1990	N/A	861	695	N/A	N/A	
Manganese	5900	11000	42	226	280	308	N/A	120	137	209	146	49.2	N/A	327	N/A	686	27.5	N/A	N/A	
Mercury	65	23	0.1	0.037	0.15	0.036 U	N/A	0.053	0.038 U	0.036 U	0.036 U	0.22	N/A	0.15	N/A	0.21	0.049	N/A	N/A	
Nickel	23000	1600	31	16.8	17	13.1	N/A	10.9	12.9	33.8	12.5	14.1	14	15.4	N/A	69	8.1	N/A	N/A	
Potassium	NC	NC	NC	1200 U	1200 U	1200 U	N/A	1100 U	1200 U	1100 U	1100 U	990 U	N/A	1000 U	N/A	990 U	1100 U	N/A	N/A	
Selenium	5700	390	7	2.3 U	2.4 U	2.4 U	N/A	2.1 U	2.5 U	2.2 U	2.3 U	2 U	N/A	2 U	N/A	9.9 U	2.2 U	N/A	N/A	
Silver	5700	390	1	0.59 U	1.5	0.59 U	N/A	0.53 U	0.62 U	0.56 U	0.57 U	0.5	N/A	0.96	N/A	3.3	0.56 U	N/A	N/A	
Sodium	NC	NC	NC	1200 U	1200 U	1200 U	N/A	1100 U	1200 U	1100 U	1100 U	1390	990 U	N/A	1000 U	N/A	990 U	1100 U	N/A	N/A
Thallium	79	5	3	1.2 U	1.2 U	1.2 U	N/A	1.1 U	1.2 U	1.1 U	1.1 U	0.99 U	N/A	1 U	N/A	5 U	1.1 U	N/A	N/A	
Vanadium	1100	78	NC	35	49.1	35.7	N/A	54.8	43.3	10	35.9	14	N/A	33.9	N/A	22.4	37.1	N/A	N/A	
Zinc	110000	23000	600	197	682	35.4	N/A	61	32.1	53.9	36.2	340	N/A	209	N/A	481	19.9	N/A	N/A	
PCBs																				
Aroclor 1016	NC	NC	NC	0.038 U	0.037 U	N/A	0.034 U	0.033 U	0.036 U	0.036 U	0.038 U	0.043 U	N/A	0.039 U	N/A	0.042 U	N/A	N/A	N/A	
Aroclor 1221	NC	NC	NC	0.038 U	0.037 U	N/A	0.034 U	0.033 U	0.036 U	0.036 U	0.038 U	0.043 U	N/A	0.039 U	N/A	0.042 U	N/A	N/A	N/A	
Aroclor 1232	NC	NC	NC	0.038 U	0.037 U	N/A	0.034 U	0.033 U	0.036 U	0.036 U	0.038 U	0.043 U	N/A	0.039 U	N/A	0.042 U	N/A	N/A	N/A	
Aroclor 1242	NC	NC	NC	0.038 U	0.037 U	N/A	0.034 U	0.033 U	0.036 U	0.036 U	0.038 U	0.043 U	N/A	0.039 U	N/A	0.042 U	N/A	N/A	N/A	
Aroclor 1248	NC	NC	NC	0.038 U	0.037 U	N/A	0.034 U	0.033 U	0.036 U	0.036 U	0.038 U	0.043 U	N/A	0.039 U	N/A	0.042 U	N/A	N/A	N/A	

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID			4		A9-13		A9-14		A9-15			A9-16	A9-17	A9-18	A9-20		A9-21	A9-22	A9-23	A9-24		
Sample ID			A9-6	DUP01	A9-6(2)	A9-13	A9-14	A9-14B	A9-15	A9-15A	A9-15B	A9-16	A9-17	A9-18	A9-20	A9-20A	A9-20B	A9-21	A9-22	A9-23	A9-24	
Lab ID			JB44712-4	JB44712-5	JB46022-1	JB44970-7	JB45307-1	JB47515-6	JB45307-2	JB47515-7	JB47515-8	JB45722-1	JB45722-2	JB45722-3	JB45779-1	JB47515-9	JB47515-10	JB45779-2	JB46022-9	JB46022-10	JB46022-11	
Sample Depth (ft , bgs)			3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	3.0 - 3.5	2.5 - 3.0	4.0 - 4.5	3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	7.5 - 8.0	11.5 - 12.0	7.5 - 8.0	2.5 - 3.0	2.5 - 3.0	4.0 - 4.5	2.5 - 3.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	
Sample Date			8/14/2013	8/14/2013	8/29/2013	8/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	8/26/2013	9/16/2013	8/26/2013	8/26/2013	8/26/2013	8/27/2013	9/16/2013	8/27/2013	8/29/2013	8/29/2013	8/29/2013	
Metals	NRDCSRS	DCSRS	IGWSRS																			
Aluminum	NC	78000	3900	N/A	N/A	N/A	28400	14900	38900	14000	10000	33100	22600	20100	17900	5480	7630	33600	N/A	18900	22200	11600
Antimony	450	31	6	N/A	N/A	N/A	2.3 U	45.1	2.2 U	25.1	10.3	2.1 U	2.2 U	2.4 U	2.5 U	19.8	219	2.3 U	N/A	2.3 U	2.3 U	2.3 U
Arsenic	19	19	19	N/A	N/A	N/A	8.1	26.4	19.8	7.8	13.5	7.5	12.4	7.4	7	13.9	13.8	14.5	N/A	6.7	7.2	6.2
Barium	59000	16000	1300	N/A	N/A	N/A	71.8	2480	42.8	443	523	44.7	127	132	80	268	231	51.3	N/A	36.7	49.2	36.2
Beryllium	140	16	0.5	N/A	N/A	N/A	0.45	0.64	0.38	0.53	0.94	0.28	0.31	0.32	0.8	1.1	0.41	0.55	N/A	0.59	0.63	0.23 U
Cadmium	78	78	1	N/A	N/A	N/A	0.57 U	7.2	0.56 U	2.1	3.3	0.52 U	0.56 U	0.64	0.63 U	3.2	0.77	0.58 U	N/A	0.57 U	0.7	0.58 U
Calcium	NC	NC	NC	N/A	N/A	N/A	863	5640	832	2640	5130	2400	1120	663	630 U	1360	2210	1240	N/A	812	1260	N/A
Chromium	NC	NC	NC	N/A	N/A	N/A	34.4	65.5	43.4	35.8	20.4	40.1	28.2	14.7	24.6	15.3	13.9	50	N/A	25	26.1	18.2
Cobalt	590	1600	59	N/A	N/A	N/A	0.57 U	9.8	5.6 U	7.7	7.5	5.2 U	5.6 U	5.9 U	8.3	6.2	6.3	N/A	0.57 U	0.58 U	0.58 U	
Copper	45000	3100	7300	N/A	N/A	N/A	14.3	282	14.9	520	179	25.3	19	28.6	21.3	90.5	119	20.1	N/A	11.4	168	11.1
Cyanide	680	47	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.28 U	N/A	N/A	0.28 U	N/A	N/A	
Iron	NC	NC	NC	N/A	N/A	N/A	24600	46800	34500	24000	15800	24000	29400	28200	42200	32300	20700	39400	N/A	22600	24700	16900
Lead	800	400	90	N/A	N/A	N/A	9.1	2770	10.7	1210	395	26.4	48.9	58.2	106	996	3940	20.8	N/A	10.5	29.3	9.5
Magnesium	NC	NC	NC	N/A	N/A	N/A	809	1400	1080	2170	1170	1860	1280	787	672	610 U	900	1420	N/A	1450	1640	1840
Manganese	5900	11000	42	N/A	N/A	N/A	74.6	379	60	159	123	39.9	134	136	130	110	110	126	N/A	98.6	135	109
Mercury	65	23	0.1	N/A	N/A	N/A	0.042	0.11	0.059	0.47	0.17	0.04 U	0.042	0.038 U	0.037 U	0.25	0.14	0.038	0.041	0.066	0.08	0.034 U
Nickel	23000	1600	31	N/A	N/A	N/A	9.4	21.6	13.7	22.2	18.3	9.5	10.9	14.7	20.2	16.1	16.7	14.2	N/A	10.4	12.7	11.4
Potassium	NC	NC	NC	N/A	N/A	N/A	1100 U	1200 U	1100 U	1000 U	1000	1100 U	1200 U	1300 U	1200 U	1100 U	1200 U	N/A	1100 U	1200 U	1200 U	
Selenium	5700	390	7	N/A	N/A	N/A	2.3 U	2.4 U	2.2 U	2.2 U	2.3	2.1 U	2.2 U	2.4 U	2.5 U	2.4 U	2.3 U	N/A	2.3 U	2.3 U	2.3 U	
Silver	5700	390	1	N/A	N/A	N/A	0.92	1.3	0.56 U	1.5	0.5 U	0.52 U	0.56 U	0.59 U	0.63 U	0.61 U	0.95	0.58 U	N/A	0.88	0.96	0.58 U
Sodium	NC	NC	NC	N/A	N/A	N/A	1630	1200 U	1100 U	1100 U	1000 U	1000 U	1100 U	1200 U	1300 U	1200 U	1100 U	1200 U	N/A	1100 U	1200 U	1200 U
Thallium	79	5	3	N/A	N/A	N/A	1.1 U	1.2 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	N/A	1.1 U	1.2 U	1.2 U
Vanadium	1100	78	NC	N/A	N/A	N/A	44	36.4	52.8	39.6	27.3	59	39.2	27.1	23.7	19.9	19.3	52.8	N/A	35.6	39.5	27.9
Zinc	110000	23000	600	N/A	N/A	N/A	23.9	1630	32.6	808	597	29	63.3	458	258	288	381	30.2	N/A	23.7	112	30.7
PCBs																						
Aroclor 1016	NC	NC	NC	N/A	N/A	N/A	0.035 U	0.036 U</td														

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID			TP01	TP02			TP03		TP04		TP05		TP06		TP07		A9-3	A9-4	A9-5
Sample ID			TP01F	TP02A	TP02B	TP02B	TP03A	TP03B	TP04A	TP04B	TP05A	TP05B	TP06A	TP06B	TP07A	TP07B	A9-3	A9-4	A9-5
Lab ID			JB43224-1	JB44970-1	JB44970-2	JB47515-2	JB45917-1	JB45917-2	JB45917-3	JB45917-4	JB46022-2	JB46022-4	JB46022-5	JB46022-6	JB46022-7	JB46022-8	JB44712-1	JB44712-2	JB44712-3
Sample Depth (ft , bgs)			10 - 10.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	1.5 - 2.0	2.0 - 2.5	0.5 - 1.0	2.0 - 2.5	2.5 - 3.0	3.0 - 3.5	3.5 - 4.0	4.0 - 4.5	5.5 - 6.0	6.0 - 6.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Sample Date			7/26/2013	8/16/2013	8/16/2013	9/16/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/14/2013	8/14/2013
Pesticides	NRDCSRS	DCSRS	IGWSRS																
4,4'-DDD	13	3	3	N/A	N/A	N/A	N/A	0.0016	0.00073 U	0.00072 U	0.00076 U	N/A							
4,4'-DDE	9	2	12	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
4,4'-DDT	8	2	7	N/A	N/A	N/A	N/A	0.0018	0.00073 U	0.00072 U	0.00076 U	N/A							
Aldrin	0.2	0.04	0.1	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
alpha-BHC	0.5	0.1	0.002	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
alpha-Chlordane	NC	NC	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
beta-BHC	2	0.4	0.002	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Chlordane (alpha and gamma)	NC	NC	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
delta-BHC	NC	NC	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Dieldrin	0.2	0.04	0.003	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Endosulfan sulfate	6800	470	1	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Endosulfan-I	6800	470	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Endosulfan-II	6800	470	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Endrin	340	23	0.6	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Endrin aldehyde	NC	NC	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Endrin ketone	NC	NC	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
gamma-BHC (Lindane)	2	0.4	0.002	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
gamma-Chlordane	NC	NC	NC	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Heptachlor	0.7	0.1	0.3	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Heptachlor epoxide	0.3	0.07	0.009	N/A	N/A	N/A	N/A	0.00067 U	0.00073 U	0.00072 U	0.00076 U	N/A							
Methoxychlor	5700	390	100	N/A	N/A	N/A	N/A	0.0013 U	0.0015 U	0.0014 U	0.0015 U	N/A							
Toxaphene	3	0.6	0.2	N/A	N/A	N/A	N/A	0.017 U	0.018 U	0.018 U	0.019 U	N/A							
VOCs																			
1,1,1-Trichloroethane	NC	160,000	0.2	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane	3	1	0.005	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,1,2-Trichloroethane	6	2	0.01	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,1-Dichloroethane	24	8	0.2	0.0062 U	0.0018 J	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,1-Dichloroethene	150	11	0.005	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,2,3-Trichlorobenzene	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,2,4-Trichlorobenzene	820	73	0.4	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	N/A	0.011 U	N/A	N/A	0.012 U	0.0099 U	0.011 U	0.0093 U	0.018 U	N/A	0.011 U	N/A	0.013 U	N/A	N/A	N/A
1,2-Dibromoethane	0.04	0.008	0.005	N/A	0.011 U	N/A	N/A	0.0012 U	0.00099 U	0.0011 U	0.00093 U	0.0018 U	N/A	0.0011 U	N/A	0.0013 U	N/A	N/A	N/A
1,2-Dichlorobenzene	59000	5300	11	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	N/A
1,2-Dichloroethane	3	0.9	0.005	0.0012 U	0.0011 U	N/A	N/A	0.0012 U	0.00099 U	0.00									

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID				A9-6		A9-13		A9-14		A9-15		A9-16		A9-17		A9-18		A9-20		A9-21		A9-22		A9-23		A9-24	
Sample ID				A9-6	DUP01	A9-6(2)	A9-13	A9-14	A9-14B	A9-15	A9-15A	A9-15B	A9-16	A9-17	A9-18	A9-20	A9-20A	A9-20B	A9-21	A9-22	A9-23	A9-24					
Lab ID				JB44712-4	JB44712-5	JB46022-1	JB44970-7	JB45307-1	JB47515-6	JB45307-2	JB47515-7	JB47515-8	JB45722-1	JB45722-2	JB45722-3	JB45779-1	JB47515-9	JB47515-10	JB45779-2	JB46022-9	JB46022-10	JB46022-11					
Sample Depth (ft , bgs)				3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	3.0 - 3.5	2.5 - 3.0	4.0 - 4.5	3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	7.5 - 8.0	11.5 - 12.0	7.5 - 8.0	2.5 - 3.0	2.5 - 3.0	4.0 - 4.5	2.5 - 3.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0				
Sample Date				8/14/2013	8/14/2013	8/29/2013	8/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	9/16/2013	8/26/2013	9/16/2013	8/26/2013	8/26/2013	8/26/2013	8/27/2013	9/16/2013	8/27/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013			
Pesticides	NRDCSRS	DCSRS	IGWSRS																								
4,4'-DDD	13	3	3	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
4,4'-DDE	9	2	12	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
4,4'-DDT	8	2	7	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Aldrin	0.2	0.04	0.1	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
alpha-BHC	0.5	0.1	0.002	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
alpha-Chlordane	NC	NC	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
beta-BHC	2	0.4	0.002	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Chlordane (alpha and gamma)	NC	NC	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
delta-BHC	NC	NC	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Dieldrin	0.2	0.04	0.003	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Endosulfan sulfate	6800	470	1	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Endosulfan-I	6800	470	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Endosulfan-II	6800	470	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Endrin	340	23	0.6	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Endrin aldehyde	NC	NC	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Endrin ketone	NC	NC	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
gamma-BHC (Lindane)	2	0.4	0.002	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
gamma-Chlordane	NC	NC	NC	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Heptachlor	0.7	0.1	0.3	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Heptachlor epoxide	0.3	0.07	0.009	N/A	N/A	0.00071 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Methoxychlor	5700	390	100	N/A	N/A	0.0014 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
Toxaphene	3	0.6	0.2	N/A	N/A	0.018 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A													
VOCs																											
1,1,1-Trichloroethane	NC	160,000	0.2	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U					
1,1,2,2-Tetrachloroethane	3	1	0.005	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U					
1,1,2-Trichloroethane	6	2	0.01	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U					
1,1-Dichloroethane	24	8	0.2	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U					
1,1-Dichloroethene	150	11	0.005	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U					
1,2,3-Trichlorobenzene	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U</td					

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID			TP01	TP02		TP03		TP04		TP05		TP06		TP07		A9-3	A9-4	A9-5	
Sample ID			TP01F	TP02A	TP02B	TP02B	TP03A	TP03B	TP04A	TP04B	TP05A	TP05B	TP06A	TP06B	TP07A	TP07B	A9-3	A9-4	A9-5
Lab ID			JB43224-1	JB44970-1	JB44970-2	JB47515-2	JB45917-1	JB45917-2	JB45917-3	JB45917-4	JB46022-2	JB46022-4	JB46022-5	JB46022-6	JB46022-7	JB46022-8	JB44712-1	JB44712-2	JB44712-3
Sample Depth (ft , bgs)			10 - 10.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	1.5 - 2.0	2.0 - 2.5	0.5 - 1.0	2.0 - 2.5	2.5 - 3.0	3.0 - 3.5	3.5 - 4.0	4.0 - 4.5	5.5 - 6.0	6.0 - 6.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Sample Date			7/26/2013	8/16/2013	8/16/2013	9/16/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/14/2013
VOCs	NRDCSRS	DCSRS	IGWSRS																
1,4-Dichlorobenzene	13	5	1	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
1,4-Dioxane	NC	NC	NC	N/A	0.14 U	N/A	N/A	0.15 U	0.12 U	0.13 U	0.12 U	0.23 U	N/A	0.14 U	N/A	0.16 U	N/A	N/A	
2-Butanone (MEK)	44000	3100	0.6	0.012 U	0.0044 J	N/A	N/A	0.012 U	0.0099 U	0.011 U	0.0093 U	0.018 U	N/A	0.0117	N/A	0.0109 J	N/A	N/A	
2-Hexanone	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
4-Methyl-2-pentanone(MIBK)	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Acetone	NC	70000	12	0.012 U	0.0451	N/A	N/A	0.012 U	0.0099 U	0.033	0.0093 U	0.018 U	N/A	0.104	N/A	0.108	N/A	N/A	
Benzene	5	2	0.005	0.0012 U	0.00032 J	N/A	N/A	0.0012 U	0.00099 U	0.0011 U	0.00093 U	0.0018 U	N/A	0.0011 U	N/A	0.0013 U	N/A	N/A	
Bromochloromethane	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Bromodichloromethane	3	1	0.005	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Bromoform	280	81	0.02	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Bromomethane	59	25	0.03	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Carbon disulfide	110000	7800	4	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0013 J	N/A	N/A	
Carbon tetrachloride	4	2	0.005	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Chlorobenzene	7400	510	0.4	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Chloroethane	1100	220	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Chloroform	2	0.6	0.2	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Chloromethane	12	4	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
cis-1,2-Dichloroethene	560	230	0.2	0.0062 U	0.00071 J	N/A	N/A	0.0059 U	0.005 U	0.0005 J	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
cis-1,3-Dichloropropene	7	2	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Cyclohexane	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Dibromochloromethane	8	3	0.005	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Dichlorodifluoromethane	230000	490	25	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Ethylbenzene	110000	7800	8	0.0012 U	0.0011 U	N/A	N/A	0.0012 U	0.00099 U	0.0011 U	0.00093 U	0.0018 U	N/A	0.0011 U	N/A	0.0013 U	N/A	N/A	
Freon 113	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Isopropylbenzene	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
m,p-Xylene	NC	NC	NC	0.0012 U	0.0011 U	N/A	N/A	0.0012 U	0.00099 U	0.0011 U	0.00093 U	0.0018 U	N/A	0.0011 U	N/A	0.0013 U	N/A	N/A	
Methyl Acetate	NC	78000	14	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Methyl Tert Butyl Ether	320	110	0.2	0.0012 U	0.0011 U	N/A	N/A	0.0012 U	0.00099 U	0.0011 U	0.00093 U	0.0018 U	N/A	0.0011 U	N/A	0.0013 U	N/A	N/A	
Methylcyclohexane	NC	NC	NC	0.0062 U	0.0057 U	N/A	N/A	0.0059 U	0.005 U	0.0054 U	0.0047 U	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
Methylene chloride	230	46	0.007	0.002 J	0.0016 J	N/A	N/A	0.0059 U	0.0037 J	0.0018 J	0.0018 J	0.0092 U	N/A	0.0057 U	N/A	0.0064 U	N/A	N/A	
o-Xylene	170000	12000	NC	0.0012 U	0.0011 U	N/A	N/A	0.0012 U	0.00099 U	0.0011 U	0.00093 U	0.0018 U	N/A	0.0011 U	N/A	0.0013 U	N/A	N/A	

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID			A9-6		A9-13		A9-14		A9-15			A9-16	A9-17	A9-18	A9-20		A9-21	A9-22	A9-23	A9-24	
Sample ID			A9-6	DUP01	A9-6(2)	A9-13	A9-14	A9-14B	A9-15	A9-15A	A9-15B	A9-16	A9-17	A9-18	A9-20	A9-20A	A9-20B	A9-21	A9-22	A9-23	A9-24
Lab ID			JB44712-4	JB44712-5	JB46022-1	JB44970-7	JB45307-1	JB47515-6	JB45307-2	JB47515-7	JB47515-8	JB45722-1	JB45722-2	JB45722-3	JB45779-1	JB47515-9	JB47515-10	JB45779-2	JB46022-9	JB46022-10	JB46022-11
Sample Depth (ft , bgs)			3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	3.0 - 3.5	2.5 - 3.0	4.0 - 4.5	3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	7.5 - 8.0	11.5 - 12.0	7.5 - 8.0	2.5 - 3.0	2.5 - 3.0	4.0 - 4.5	2.5 - 3.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0
Sample Date			8/14/2013	8/14/2013	8/29/2013	8/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	8/26/2013	8/26/2013	8/26/2013	8/26/2013	8/27/2013	9/16/2013	8/27/2013	8/29/2013	8/29/2013
VOCs	NRDCSRS	DCSRS	IGWSRS																		
1,4-Dichlorobenzene	13	5	1	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
1,4-Dioxane	NC	NC	NC	N/A	N/A	N/A	0.12 U	0.15 U	N/A	0.14 U	N/A	0.15 U	0.12 U	0.15 U	0.14 U	N/A	0.14 U	0.13 U	0.12 U	0.13 U	
2-Butanone (MEK)	44000	3100	0.6	N/A	N/A	N/A	0.01 U	0.012 U	N/A	0.011 U	N/A	0.012 U	0.0095 U	0.012 U	0.011 U	N/A	0.011 U	0.011 U	0.0094 U	0.011 U	
2-Hexanone	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
4-Methyl-2-pentanone(MIBK)	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Acetone	NC	70000	12	N/A	N/A	N/A	0.0081 J	0.0322	N/A	0.0261	N/A	0.0055 J	0.0095 J	0.0054 J	0.0088 J	N/A	N/A	0.011 U	0.011 U	0.0094 U	0.011 U
Benzene	5	2	0.005	N/A	N/A	N/A	0.001 U	0.00037 J	N/A	0.00065 J	N/A	0.0012 U	0.00095 U	0.0012 U	0.00041 J	N/A	N/A	0.0011 U	0.0011 U	0.00094 U	0.0011 U
Bromochloromethane	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Bromodichloromethane	3	1	0.005	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Bromoform	280	81	0.02	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Bromomethane	59	25	0.03	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Carbon disulfide	110000	7800	4	N/A	N/A	N/A	0.005 U	0.00046 J	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Carbon tetrachloride	4	2	0.005	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Chlorobenzene	7400	510	0.4	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Chloroethane	1100	220	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Chloroform	2	0.6	0.2	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Chloromethane	12	4	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
cis-1,2-Dichloroethene	560	230	0.2	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.00076 J	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
cis-1,3-Dichloropropene	7	2	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Cyclohexane	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Dibromochloromethane	8	3	0.005	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Dichlorodifluoromethane	230000	490	25	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Ethylbenzene	110000	7800	8	N/A	N/A	N/A	0.001 U	0.0012 U	N/A	0.0011 U	N/A	0.0012 U	0.00095 J	0.0012 U	0.0011 U	N/A	0.0011 U	0.0011 U	0.00094 U	0.0011 U	
Freon 113	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
Isopropylbenzene	NC	NC	NC	N/A	N/A	N/A	0.005 U	0.0059 U	N/A	0.0054 U	N/A	0.0058 U	0.0047 U	0.0058 U	0.0056 U	N/A	0.0055 U	0.0054 U	0.0047 U	0.0054 U	
m,p-Xylene	NC	NC	NC	N/A	N/A	N/A	0.001 U	0.0012 U	N/A	0.00063 J	N/A	0.0012 U	0.00095 U	0.0012 U	0.0011 U	N/A	0.0011 U	0.0011 U	0.00094 U	0.0011 U	
Methyl Acetate	NC	78000	14	N/A	N/A																

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID		TP01	TP02			TP03		TP04		TP05		TP06		TP07		A9-3	A9-4	A9-5		
Sample ID		TP01F	TP02A	TP02B	TP02B	TP03A	TP03B	TP04A	TP04B	TP05A	TP05B	TP06A	TP06B	TP07A	TP07B	A9-3	A9-4	A9-5		
Lab ID		JB43224-1	JB44970-1	JB44970-2	JB47515-2	JB45917-1	JB45917-2	JB45917-3	JB45917-4	JB46022-2	JB46022-4	JB46022-5	JB46022-6	JB46022-7	JB46022-8	JB44712-1	JB44712-2	JB44712-3		
Sample Depth (ft , bgs)		10 - 10.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	1.5 - 2.0	2.0 - 2.5	0.5 - 1.0	2.0 - 2.5	2.5 - 3.0	3.0 - 3.5	3.5 - 4.0	4.0 - 4.5	5.5 - 6.0	6.0 - 6.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5		
Sample Date		7/26/2013	8/16/2013	8/16/2013	9/16/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/14/2013		
SVOCs	NRDCSRS	DCSRS	IGWSRS																	
1,1'-Biphenyl	240	61	90	0.15 U	0.0235 J	N/A	0.076 U	0.064 U	0.07 U	0.0647	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 J	0.077 U	0.084 U	0.0311 J	0.075 U
1,2,4,5-Tetrachlorobenzene	NC	NC	NC	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
2,3,4,6-Tetachloophenol	NC	NC	NC	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.21 U	0.19 U	0.19 U	0.19 U
2,4,5-Tichloophenol	68000	6100	44	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.21 U	0.19 U	0.19 U	0.19 U
2,4,6-Tichloophenol	74	19	0.2	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	N/A	0.21 U	0.19 U	0.19 U
2,4-Dichloophenol	2100	180	0.2	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	N/A	0.21 U	0.19 U	0.19 U
2,4-Dimethylphenol	14000	1200	0.7	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	N/A	0.21 U	0.19 U	0.19 U
2,4-Dinitrophenol	1400	120	0.3	N/A	N/A	N/A	N/A	0.64 U	0.7 U	0.75 U	0.66 U	0.81 U	N/A	0.71 U	N/A	0.83 U	N/A	0.84 U	0.77 U	0.75 U
2,4-Dinitrotoluene	3	0.7	NC	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
2,6-Dinitrotoluene	3	0.7	NC	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
2-Chloonaphthalene	NC	NC	NC	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
2-Chloophenol	2200	310	0.5	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	N/A	0.21 U	0.19 U	0.19 U
2-Methylnaphthalene	2400	230	5	0.15 U	0.0909	N/A	0.0494 J	0.0473 J	0.07 U	0.075 U	0.066 U	0.081 J	N/A	0.071 U	N/A	0.083 J	0.077 U	0.084 U	0.0429 J	0.075 U
2-Methylphenol	3400	310	NC	N/A	N/A	N/A	N/A	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	N/A	0.084 U	0.077 U	0.075 U
2-Nitroaniline	23000	39	NC	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
2-Nitrophenol	NC	NC	NC	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	N/A	0.21 U	0.19 U	0.19 U
3&4-Methylphenol	340	31	NC	N/A	N/A	N/A	N/A	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	N/A	0.084 U	0.077 U	0.075 U
3,3'-Dichlorobenzidine	4	1	0.2	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
3-Nitroaniline	NC	NC	NC	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
4,6-Dinitro-o-cesol	68	6	0.3	N/A	N/A	N/A	N/A	0.64 U	0.7 U	0.75 U	0.66 U	0.81 U	N/A	0.71 U	N/A	0.83 U	N/A	0.84 U	0.77 U	0.75 U
4-Bromophenyl phenyl ethe	NC	NC	NC	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
4-Chloo-3-methyl phenol	NC	NC	NC	N/A	N/A	N/A	N/A	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	N/A	0.21 U	0.19 U	0.19 U
4-Chloroaniline	NC	NC	NC	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
4-Chlorophenyl phenyl ether	NC	NC	NC	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
4-Nitroaniline	NC	NC	NC	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
4-Nitrophenol	NC	NC	NC	N/A	N/A	N/A	N/A	0.32 U	0.35 U	0.37 U	0.33 U	0.41 U	N/A	0.36 U	N/A	0.42 U	N/A	0.42 U	0.38 U	0.37 U
Acenaphthene	37000	3400	74	0.075 U	0.132	N/A	0.115	0.032 U	0.035 U	0.037 U	0.033 U	0.041 U	N/A	0.036 U	N/A	0.042 J	0.038 U	0.042 U	0.115	0.0516
Acenaphthylene	300000	NC	NC	0.075 U	0.0431	N/A	0.026 J	0.032 U	0.035 U	0.037 U	0.033 U	0.041 U	N/A	0.036 U	N/A	0.042 J	0.038 U	0.042 U	0.038 U	0.037 U
Acetophenone	5	2	2	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.		

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID		A9-6			A9-13		A9-14			A9-15			A9-16	A9-17	A9-18	A9-20			A9-21	A9-22	A9-23	A9-24
Sample ID		A9-6	DUP01	A9-6(2)	A9-13	A9-14	A9-14B	A9-15	A9-15A	A9-15B	A9-16	A9-17	A9-18	A9-20	A9-20A	A9-20B	A9-21	A9-22	A9-23	A9-24		
Lab ID		JB44712-4	JB44712-5	JB46022-1	JB44970-7	JB45307-1	JB47515-6	JB45307-2	JB47515-7	JB47515-8	JB45722-1	JB45722-2	JB45722-3	JB45779-1	JB47515-9	JB47515-10	JB45779-2	JB46022-9	JB46022-10	JB46022-11		
Sample Depth (ft , bgs)		3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	3.0 - 3.5	2.5 - 3.0	4.0 - 4.5	3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	7.5 - 8.0	11.5 - 12.0	7.5 - 8.0	2.5 - 3.0	2.5 - 3.0	4.0 - 4.5	2.5 - 3.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0		
Sample Date		8/14/2013	8/14/2013	8/29/2013	8/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	9/16/2013	8/26/2013	9/16/2013	8/26/2013	8/26/2013	8/26/2013	8/27/2013	9/16/2013	8/27/2013	8/29/2013	8/29/2013		
SVOCs	NRDCSRS	DCSRS	IGWSRS																			
1,1'-Biphenyl	240	61	90	0.074 U	0.0203 J	0.072 U	0.072 U	0.0355 J	0.07 U	0.0205 J	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
1,2,4,5-Tetrachlorobenzene	NC	NC	NC	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	N/A	0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U
2,3,4,6-Tetachlophenol	NC	NC	NC	0.18 U	0.128 J	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
2,4,5-Tichlophenol	68000	6100	44	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
2,4,6-Tichlophenol	74	19	0.2	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
2,4-Dichlophenol	2100	180	0.2	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
2,4-Dimethylphenol	14000	1200	0.7	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
2,4-Dinitophenol	1400	120	0.3	0.74 U	0.79 U	0.72 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.66 U	0.77 U	0.75 U	N/A	N/A	N/A	0.73 U	0.8 U	0.71 U
2,4-Dinitrotoluene	3	0.7	NC	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
2,6-Dinitrotoluene	3	0.7	NC	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
2-Chloonaphthalene	NC	NC	NC	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
2-Chlophenol	2200	310	0.5	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
2-Methylnaphthalene	2400	230	5	0.051 J	0.0507 J	0.072 U	0.072 U	0.141	0.07 U	0.104	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.0579 J	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
2-Methylphenol	3400	310	NC	0.074 U	0.079 U	0.072 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.066 U	0.077 U	0.075 U	0.076 U	N/A	N/A	0.073 U	0.08 U	0.071 U
2-Nitroaniline	23000	39	NC	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	N/A	0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U
2-Nitophenol	NC	NC	NC	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
3&4-Methylphenol	340	31	NC	0.074 U	0.079 U	0.072 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.066 U	0.077 U	0.075 U	0.076 U	N/A	N/A	0.073 U	0.08 U	0.071 U
3,3'-Dichlorobenzidine	4	1	0.2	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	N/A	0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U
3-Nitroaniline	NC	NC	NC	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	N/A	0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U
4,6-Dinitro-o-cesol	68	6	0.3	0.74 U	0.79 U	0.72 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.66 U	0.77 U	0.75 U	0.76 U	N/A	N/A	0.73 U	0.8 U	0.71 U
4-Bomophenyl phenyl ethe	NC	NC	NC	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
4-Chloo-3-methyl phenol	NC	NC	NC	0.18 U	0.2 U	0.18 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17 U	0.19 U	0.19 U	N/A	N/A	N/A	0.18 U	0.2 U	0.18 U
4-Chloroaniline	NC	NC	NC	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	N/A	0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U
4-Chlorophenyl phenyl ether	NC	NC	NC	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U	N/A	0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U
4-Nitroaniline	NC	NC	NC	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U	N/A	0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U
4-Nitrophenol	NC	NC	NC	0.37 U	0.39 U	0.36 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.33 U	0.38 U	0.37 U	0.38 U	N/A	N/A	0.36 U	0.4 U	0.35 U
Ac																						

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID			TP01	TP02		TP03		TP04		TP05		TP06		TP07		A9-3	A9-4	A9-5		
Sample ID			TP01F	TP02A	TP02B	TP02B	TP03A	TP03B	TP04A	TP04B	TP05A	TP05B	TP06A	TP06B	TP07A	TP07B	A9-3	A9-4	A9-5	
Lab ID			JB43224-1	JB44970-1	JB44970-2	JB47515-2	JB45917-1	JB45917-2	JB45917-3	JB45917-4	JB46022-2	JB46022-4	JB46022-5	JB46022-6	JB46022-7	JB46022-8	JB44712-1	JB44712-2	JB44712-3	
Sample Depth (ft , bgs)			10 - 10.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	1.5 - 2.0	2.0 - 2.5	0.5 - 1.0	2.0 - 2.5	2.5 - 3.0	3.0 - 3.5	3.5 - 4.0	4.0 - 4.5	5.5 - 6.0	6.0 - 6.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	
Sample Date			7/26/2013	8/16/2013	8/16/2013	9/16/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/14/2013	8/14/2013	
SVOCs	NRDCSRS	DCSRS	IGWSRS																	
bis(2-Chloroisopropyl)ether	67	23	3	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
bis(2-Ethylhexyl)phthalate	140	35	790	0.15 U	0.12	N/A	0.067 J	0.064 U	0.07 U	1.33	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Butyl benzyl phthalate	14000	1200	150	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Caprolactam	340000	31000	8	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Carbazole	96	24	NC	0.15 U	0.0579 J	N/A	0.0884	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 J	0.077 U	0.084 U	0.077 U	0.075 U
Chrysene	1700	450	52	0.0646 J	0.562	N/A	0.655	0.121	0.035 U	0.037 U	0.033 U	0.26	N/A	0.036 J	N/A	0.469	0.038 U	0.0174 J	0.0313 J	0.037 U
Dibenzo(a,h)anthracene	2	0.5	0.5	0.075 U	0.106	N/A	0.0999	0.032 U	0.035 U	0.037 U	0.033 U	0.041 J	N/A	0.036 U	N/A	0.0788	0.038 U	0.042 U	0.038 U	0.037 U
Dibenzofuran	NC	NC	NC	0.15 U	0.068 J	N/A	0.0586 J	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 J	0.077 U	0.084 U	0.0398 J	0.0165 J
Diethyl phthalate	550000	49000	57	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Dimethyl phthalate	NC	NC	NC	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Di-n-butyl phthalate	68000	6100	620	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Di-n-octyl phthalate	27000	2400	3300	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Fluoranthene	24000	2300	840	0.0527 J	0.827	N/A	1.59	0.0589	0.035 U	0.0236	0.033 U	0.123	N/A	0.0362	N/A	0.504	0.038 U	0.042 U	0.0655	0.037 U
Fluorene	24000	2300	110	0.075 U	0.106	N/A	0.114	0.0148 J	0.035 U	0.037 U	0.033 U	0.041 J	N/A	0.036 U	N/A	0.0549	0.038 U	0.042 U	0.0334 J	0.037 U
Hexachlorobenzene	1	0.3	0.2	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Hexachlorobutadiene	25	6	0.6	0.075 U	0.036 U	N/A	0.038 U	0.032 U	0.035 U	0.037 U	0.033 U	0.041 U	N/A	0.036 U	N/A	0.042 U	0.038 U	0.042 U	0.038 U	0.037 U
Hexachlorocyclopentadiene	110	45	210	0.75 U	0.36 U	N/A	0.38 U	0.32 U	0.35 U	0.37 U	0.33 U	0.41 U	N/A	0.36 U	N/A	0.42 U	0.38 U	0.42 U	0.38 U	0.37 U
Hexachloroethane	48	12	0.2	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
Indeno(1,2,3-cd)pyrene	17	5	5	0.0374 J	0.323	N/A	0.292	0.032 U	0.035 U	0.037 U	0.033 U	0.0516	N/A	0.036 J	N/A	0.215	0.038 U	0.042 U	0.038 U	0.037 U
Isophorone	2000	510	0.2	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
Naphthalene	17	6	16	0.075 U	0.121	N/A	0.0513	0.0373	0.035 U	0.037 U	0.033 U	0.041 J	N/A	0.036 U	N/A	0.0642	0.038 U	0.042 U	0.119	0.0508
Nitrobenzene	14	5	0.2	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
N-Nitroso-di-n-propylamine	0.3	0.2	0.2	0.15 U	0.072 U	N/A	0.076 U	0.064 U	0.07 U	0.075 U	0.066 U	0.081 U	N/A	0.071 U	N/A	0.083 U	0.077 U	0.084 U	0.077 U	0.075 U
N-Nitrosodiphenylamine	390	99	0.2	0.37 U	0.18 U	N/A	0.19 U	0.16 U	0.18 U	0.19 U	0.17 U	0.2 U	N/A	0.18 U	N/A	0.21 U	0.19 U	0.21 U	0.19 U	0.19 U
Pentachlorophenol	3	0.9	0.3	N/A	N/A	N/A	N/A	0.32 U	0.35 U	0.37 U	0.33 U	0.41 U	N/A	0.36 U	N/A	0.42 U	N/A	0.42 U	0.38 U	0.37 U
Phenanthrene	300000	NC	NC	0.0617 J	0.715	N/A	1.18	0.087	0.035 U	0.104	0.033 U	0.145	N/A	0.036 J	N/A	0.371	0.038 U	0.042 U	0.0391	0.037 U
Phenol	210000																			

Table 5
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
TCL/TAL Soil Sampling Analytical Results - Vehicle Wash Area (AOC 34)

Location ID				A9-6		A9-13		A9-14		A9-15		A9-16		A9-17		A9-18		A9-20		A9-21		A9-22		A9-23		A9-24	
Sample ID				A9-6	DUP01	A9-6(2)	A9-13	A9-14	A9-14B	A9-15	A9-15A	A9-15B	A9-16	A9-17	A9-18	A9-19	A9-20	A9-20A	A9-20B	A9-21	A9-22	A9-23	A9-24				
Lab ID				JB44712-4	JB44712-5	JB46022-1	JB44970-7	JB45307-1	JB47515-6	JB45307-2	JB47515-7	JB47515-8	JB45722-1	JB45722-2	JB45722-3	JB45779-1	JB47515-9	JB47515-10	JB45779-2	JB46022-9	JB46022-10	JB46022-11					
Sample Depth (ft , bgs)				3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	3.0 - 3.5	2.5 - 3.0	4.0 - 4.5	3.0 - 3.5	3.0 - 3.5	4.0 - 4.5	7.5 - 8.0	11.5 - 12.0	7.5 - 8.0	2.5 - 3.0	2.5 - 3.0	4.0 - 4.5	2.5 - 3.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0				
Sample Date				8/14/2013	8/14/2013	8/29/2013	8/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	8/21/2013	9/16/2013	8/26/2013	8/26/2013	8/26/2013	8/26/2013	8/27/2013	9/16/2013	8/27/2013	9/16/2013	8/27/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	
SVOCs	NRDCSRS	DCSRS	IGWSRS																								
bis(2-Chloroisopropyl)ether	67	23	3	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
bis(2-Ethylhexyl)phthalate	140	35	790	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.117		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Butyl benzyl phthalate	14000	1200	150	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Caprolactam	340000	31000	8	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Carbazole	96	24	NC	0.956	0.188	0.072 U	0.072 U	0.11	0.07 U	0.0562 J		0.084 U	0.066 U	0.077 U	0.075 U	0.0266 J	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Chrysene	1700	450	52	0.0853	0.823	0.036 U	0.147	2.45	0.0154 J	0.737		0.042 U	0.035	0.038 U	0.024 J	0.488	N/A	0.033 U	N/A	0.036 U	0.427	0.035 U					
Dibenzo(a,h)anthracene	2	0.5	0.5	0.037 U	0.0345 J	0.036 U	0.036 U	0.442	0.035 U	0.103		0.042 U	0.033 U	0.038 U	0.037 U	0.0634	N/A	0.033 U	N/A	0.036 U	0.0528	0.035 U					
Dibenzo furan	NC	NC	NC	0.249	0.135	0.072 U	0.072 U	0.0802	0.07 U	0.0518 J		0.084 U	0.066 U	0.077 U	0.075 U	0.0213 J	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Diethyl phthalate	550000	49000	57	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Dimethyl phthalate	NC	NC	NC	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Di-n-butyl phthalate	68000	6100	620	0.074 U	0.079 U	0.072 U	0.072 U	0.0909	0.07 U	0.048 J		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Di-n-octyl phthalate	27000	2400	3300	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Fluoranthene	24000	2300	840	0.523	8.01	0.036 U	0.0766	3.25	0.0203 J	0.969		0.042 U	0.0552	0.038 U	0.0362 J	0.49	N/A	0.033 U	N/A	0.036 U	0.71	0.035 U					
Fluorene	24000	2300	110	0.585	0.62	0.036 U	0.036 U	0.231	0.035 U	0.14		0.042 U	0.033 U	0.038 U	0.037 U	0.0433	N/A	0.033 U	N/A	0.036 U	0.053	0.035 U					
Hexachlorobenzene	1	0.3	0.2	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U					
Hexachlorobutadiene	25	6	0.6	0.037 U	0.039 U	0.036 U	0.036 U	0.037 U	0.035 U	0.036 U		0.042 U	0.033 U	0.038 U	0.037 U	0.038 U	N/A	0.033 U	N/A	0.036 U	0.04 U	0.035 U					
Hexachlorocyclopentadiene	110	45	210	0.37 U	0.39 U	0.36 U	0.36 U	0.37 U	0.35 U	0.36 U		0.42 U	0.33 U	0.38 U	0.37 U	0.38 U	N/A	0.33 U	N/A	0.36 U	0.4 U	0.35 U					
Hexachloroethane	48	12	0.2	0.18 U	0.2 U	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U		0.21 U	0.17 U	0.19 U	0.19 U	0.19 U	N/A	0.17 U	N/A	0.18 U	0.2 U	0.18 U					
Indeno(1,2,3-cd)pyrene	17	5	5	0.0217 J	0.15	0.036 U	0.0235 J	1.24	0.035 U	0.278		0.042 U	0.0164 J	0.038 U	0.037 U	0.193	N/A	0.033 U	N/A	0.036 U	0.156	0.035 U					
Isophorone	2000	510	0.2	0.074 U	0.079 U	0.072 U	0.072 U	0.073 U	0.07 U	0.071 U		0.084 U	0.066 U	0.077 U	0.075 U	0.076 U	N/A	0.067 U	N/A	0.073 U	0.08 U	0.071 U		</			

Table 7
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
SPLP Soil Analytical Results - Vehicle Wash Area (AOC 34)

Sample ID		A9-14	A9-15A	A9-20A	TP01F	TP02A	TP05A	TP07A
Lab ID		JB45307-1	JB47515-7	JB47515-9	JB43224-1	JB44970-1	JB46022-2	JB46022-7
Sample Depth (ft, bgs)		2.5 - 3.0	3.0 - 3.5	2.5 - 3.0	10 - 10.5	2.5 - 3.0	2.5 - 3.0	5.5 - 6.0
Sample Date		8/21/2013	9/16/2013	9/16/2013	7/26/2013	8/16/2013	8/29/2013	8/29/2013
Metals	SPLP							
Aluminum	2600	1510	2190	1280	N/A	N/A	N/A	N/A
Antimony	78	120	50 U	50 U	N/A	N/A	N/A	50 U
Arsenic	3	4.7	3.8	3 U	N/A	N/A	N/A	N/A
Barium	78000	1000 U	1000 U	1000 U	N/A	N/A	N/A	N/A
Beryllium	13	5 U	5 U	5 U	5 U	5 U	N/A	N/A
Cadmium	52	5 U	5 U	5 U	N/A	5 U	N/A	N/A
Calcium	NC	15200	6470	6750	N/A	N/A	N/A	N/A
Chromium	NC	10 U	10 U	10 U	N/A	N/A	N/A	N/A
Cobalt	1300	50 U	50 U	50 U	N/A	N/A	N/A	N/A
Copper	16900	10 U	12.4	10 U	N/A	N/A	N/A	N/A
Iron	NC	1440	2250	1220	N/A	N/A	N/A	N/A
Lead	65	64.7	50 U	91.9	50 U	N/A	N/A	N/A
Magnesium	NC	5000 U	5000 U	5000 U	N/A	N/A	N/A	N/A
Manganese	650	15 U	15 U	15 U	N/A	N/A	N/A	N/A
Mercury	26	0.2 U	0.2 U	0.2 U	N/A	N/A	0.2 U	0.2 U
Nickel	1300	10 U	10 U	10 U	N/A	N/A	N/A	10 U
Potassium	NC	10000 U	10000 U	10000 U	N/A	N/A	N/A	N/A
Selenium	520	50 U	50 U	50 U	N/A	N/A	N/A	N/A
Silver	520	10 U	10 U	10 U	N/A	N/A	N/A	10 U
Sodium	NC	33200	20600	20200	N/A	N/A	N/A	N/A
Thallium	6.5	2 U	2 U	2 U	N/A	N/A	N/A	N/A
Vanadium	NC	50 U	50 U	50 U	N/A	N/A	N/A	N/A
Zinc	26000	80.7	74.3	26.6	N/A	N/A	N/A	N/A
Other								
pH	NC	9.17	9.11	9.23	8.41	N/A	8.71	8.68

Notes:

All results are reported in ug/L

Bolded and shaded exceeds one or more of SRS

SPLP = Guidance for the use of the Synthetic Precipitation Leaching Procedure to Develop New Jersey Site-Specific Impact to Ground Water Remediation Standards, NJDEP, April 2013

- U = Not detected above the quantitation limit; the value presented is the sample quantitation limit

N/A = Not Analyzed

Table 8
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
Supplemental Soil Sampling Analytical Results - Vehicle Wash Area AOC 34

Location ID			WBSB01A	WBSB02A	WBSB03A	WBSB04A	WBSB05A	WBSB06A	SB1-1	FB01	TB		
Sample ID			WBSB01A	DUP01	WBSB02A	WBSB03A	WBSB04A	WBSB05A	WBSB06A	SB1A	SB1B	FB01	TB
Lab ID			JB81080-1	JB81080-13	JB81080-3	JB81080-5	JB81080-7	JB81080-9	JB81080-11	JC8585-8	JC8585-9	JB81080-14	JB81080-15
Sample Depth (ft, bgs)			1.0-1.5	1.0-1.5	1.7-2.2	1.7-2.2	1.7-2.2	1.3-2.0	1.5-2.0	1.5-2.0	11.3-11.8	NA	NA
Sample Date			11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	10/7/2015	10/7/2015	2/7/5054	2/7/5054
Analyte	NRDCSRS	RDCSRS	IGWSSL										
Metals													
Aluminum	NC	78,000	6,000	15,400	19,100	18,400	1,520	15,800	25,200	16,900	NA	NA	NA
Antimony	450	31	6	2.3 U	2.3 U	2.4 U	3.4 U	2.3 U	2.3 U	2.4 U	NA	NA	NA
Arsenic	19	19	19	5.5	6.7	5.9	3.4 U	7.8	8.3	7.6	NA	NA	NA
Barium	59,000	16,000	2100	27.1	34.4	35.2	34 U	178	38.7	66	NA	NA	NA
Beryllium	140	16	0.7	0.36	0.43	0.45	0.34 U	3.8	0.62	0.48	NA	NA	NA
Cadmium	78	78	2	0.58 U	0.58 U	0.59 U	0.84	0.57 U	0.58 U	0.61 U	NA	NA	NA
Calcium	NC	NC	NC	580 U	677	4,720	214,000	950	580 U	610 U	NA	NA	NA
Chromium	NC	NC	NC	20.5	24.9	53.2	4.4	22.8	27.1	23	NA	NA	NA
Cobalt	590	1,600	90	5.8 U	5.8 U	5.9 U	8.4 U	16	5.8 U	6.1 U	NA	NA	NA
Copper	45,000	3,100	11,000	9	10.4	10.4	6.6	22.1	11.8	10.3	NA	NA	NA
Iron	NC	NC	NC	15,900	19,900	23,900	14,100	33,000	24,300	22,000	NA	NA	NA
Lead	800	400	90	9.2	10.4	10.7	30.2	44.3	14.8	9.2	NA	NA	NA
Magnesium	NC	NC	NC	1,390	1,280	1,680	840 U	2,670	1,400	1,860	NA	NA	NA
Manganese	5,900	11,000	65	63.2	56.8	96	57.8	428	89.1	441	NA	NA	NA
Mercury	65	23	0.1	0.092	0.04 U	0.036 U	0.087	0.037 U	0.059	0.036 U	NA	NA	NA
Nickel	23,000	1,600	48	9.9	10.1	8.9	6.7 U	22.6	11.5	10.3	NA	NA	NA
Potassium	NC	NC	NC	1200 U	1200 U	1200 U	1700 U	1100 U	1200 U	1200 U	NA	NA	NA
Selenium	5,700	390	11	2.3 U	2.3 U	2.4 U	34 U	2.3 U	2.3 U	2.4 U	NA	NA	NA
Silver	5,700	390	1	0.75	0.58 U	0.74	8.4 U	0.7	0.71	0.7	NA	NA	NA
Sodium	NC	NC	NC	1200 U	1200 U	1200 U	1700 U	1100 U	1200 U	1200 U	NA	NA	NA
Thallium	79	5	3	1.2 U	1.2 U	1.2 U	1.7 U	1.1 U	1.2 U	1.2 U	NA	NA	NA
Vanadium	1,100	78	NC	31.3	37.5	37	8.4 U	41.2	42.9	36.8	NA	NA	NA
Zinc	110,000	23,000	930	22.9	21.8	40.9	292	49.9	25.7	29.6	NA	NA	NA
Polychlorinated Biphenyls													
Aroclor 1016	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1221	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1232	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1242	NC	NC	NC	0.04 U	0.038 U	0.458	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1248	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1254	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1260	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1268	NC	NC	NC	0.04 U	0.038 U	0.039 U	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor 1262	NC	NC	NC	0.04 U	0.038 U	0.458	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Aroclor (Total)	1	0.2	0.2	0.04 U	0.038 U	0.458	0.054 U	0.037 U	0.035 U	0.039 U	0.035 U	0.04 U	NA
Volatile Organic Compounds													
1,1,1-Trichloroethane	4,200	290	0.3	0.002 U	0.002 U	0.002 U	0.0039 U	0.0021 U	0.002 U	0.0019 U	NA	NA	0.001 U
1,1,2,2-Tetrachloroethane	3	1	0.007	0.002 U	0.002 U	0.002 U	0.0039 U	0.0021 U	0.002 U	0.0019 U	NA	NA	0.001 U
1,1,2-Trichloroethane	6	2	0.02	0.002 U	0.002 U	0.002 U	0.0039 U	0.0021 U	0.002 U	0.0019 U	NA	NA	0.001 U
1,1-Dichloroethane	24	8	0.2	0.00098 U	0.00098 U	0.00098 U	0.0019 U	0.0011 U	0.001 U	0.00096 U	NA	NA	0.001 U
1,1-Dichloroethene	150	11	0.008	0.00098 U	0.00098 U	0.00098 U	0.0019 U	0.0011 U	0.001 U	0.00096 U	NA	NA	0.001 U
1,2,3-Trichlorobenzene	NC	NC	NC	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0097 U	0.0054 U	0.0051 U	0.0048 U	NA	NA
1,2,4-Trichlorobenzene	820	73	0.7	0.0049 U	0.0049 U	0.0049 U	0.0097 U	0.0054 U	0.0051 U	0.0048 U	NA	NA	0.001 U
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	0.0049 U	0.0049 U	0.0049 U	0.0097 U	0.0054 U	0.0051 U	0.0048 U	NA	NA	0.002 U
1,2-Dibromoethane	0.04	0.008	0.005	0.00098 U	0.00098 U	0.00098 U	0.0019 U	0.0011 U	0.001 U	0.00096 U			

Table 8
NJDOT
Fernwood Maintenance Facility and Office Complex
Ewing Township, New Jersey
Supplemental Soil Sampling Analytical Results - Vehicle Wash Area AOC 34

Analyte	Sample ID	WBSB01A	DUP01	WBSB02A	WBSB03A	WBSB04A	WBSB05A	WBSB06A	SB1-1	FB01	TB		
	Lab ID	JB81080-1	JB81080-13	JB81080-3	JB81080-5	JB81080-7	JB81080-9	JB81080-11	SB1A	SB1B	JB81080-14	JB81080-15	
	Sample Depth (ft, bgs)	1.0-1.5	1.0-1.5	1.7-2.2	1.7-2.2	1.7-2.2	1.3-2.0	1.5-2.0	JC8585-8	JC8585-9	NA	NA	
Sample Date	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014	11.3-11.8	2/7/5054	2/7/5054		
Semi-Volatile Organic Compounds Cont.													
4-Chloro-3-methyl phenol	NC	NC	NC	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.2 U	NA	0.005 U	NA	
4-Chloroaniline	NC	NC	NC	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.2 U	NA	0.005 U	NA	
4-Chlorophenyl phenyl ether	NC	NC	NC	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
4-Nitroaniline	NC	NC	NC	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.19 U	0.2 U	NA	0.005 U	NA
4-Nitrophenol	NC	NC	NC	0.38 U	0.34 U	0.35 U	0.52 U	0.37 U	0.37 U	0.41 U	NA	0.01 U	NA
Acenaphthene	37,000	3,400	110	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Acenaphthylene	300,000	NC	NC	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Acetophenone	5	2	3	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.19 U	0.2 U	NA	0.002 U	NA
Anthracene	30,000	17,000	2,400	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Atrazine	2,400	210	0.2	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Benzaldehyde	68,000	6,100	NC	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.19 U	0.2 U	NA	0.001 U	NA
Benz[a]anthracene	2	0.6	0.8	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.005 U	NA
Benz[a]pyrene	0.2	0.2	0.2	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Benz[b]fluoranthene	2	0.6	2	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Benz[g,h,i]perylene	30,000	380,000	NC	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Benz[k]fluoranthene	23	6	25	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
bis(2-Chloroethoxy)methane	NC	NC	NC	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
bis(2-Chloroethyl)ether	2	0.4	0.2	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
bis(2-Chloroisopropyl)ether	67	23	5	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Butyl benzyl phthalate	14,000	1,200	230	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Caprolactam	340,000	31,000	12	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Carbazole	96	24	NC	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.001 U	NA
Chrysene	230	62	80	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Dibenzo(a,h)anthracene	0.2	0.2	0.8	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Dibenzo furan	NC	NC	NC	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.005 U	NA
Diethyl phthalate	550,000	49,000	88	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Dimethyl phthalate	NC	NC	NC	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Di-n-butyl phthalate	68,000	6,100	760	0.261	0.0935	0.22	0.436	0.233	0.225	0.0884	NA	0.002 U	NA
Di-n-octyl phthalate	27,000	2,400	3,300	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Fluoranthene	24,000	2,300	1,300	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Fluorene	24,000	2,300	170	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Hexachlorobenzene	1	0.3	0.2	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.001 U	NA
Hexachlorobutadiene	25	6	0.9	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Hexachlorocyclopentadiene	110	45	320	0.38 U	0.34 U	0.35 U	0.52 U	0.37 U	0.37 U	0.41 U	NA	0.01 U	NA
Hexachloroethane	140	35	0.2	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.19 U	0.2 U	NA	0.002 U	NA
Indeno(1,2,3-cd)pyrene	2	0.6	7	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Isophorone	2,000	510	0.2	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Naphthalene	17	6	25	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Nitrobenzene	340	31	0.2	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
N-Nitroso-di-n-propylamine	0.3	0.2	0.2	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
N-Nitrosodiphenylamine	390	99	0.4	0.19 U	0.17 U	0.18 U	0.26 U	0.19 U	0.19 U	0.2 U	NA	0.005 U	NA
Pentachlorophenol	10	3	0.3	0.38 U	0.34 U	0.35 U	0.52 U	0.37 U	0.37 U	0.41 U	NA	0.01 U	NA
Phenanthrene	300,000	NC	NC	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U	NA	0.001 U	NA
Phenol	210,000	18,000	8	0.077 U	0.069 U	0.07 U	0.1 U	0.074 U	0.074 U	0.081 U	NA	0.002 U	NA
Pyrene	18,000	1,700	840	0.038 U	0.034 U	0.035 U	0.052 U	0.037 U	0.037 U	0.041 U		0.001 U	
Extractable Petroleum Hydrocarbons													
EPH (C9-C28)	NC	NC	NC	7.8 U	7 U	6.9 U	11 U	7.3 U	7.5 U	8 U			



Louis Berger

Drilling Log

Page 1 of 3

BORING NO.: MW25

WELL NO.: MW25

CLIENT: New Jersey Department of Transportation

PROJECT NO.: 2001811.004

PROJECT: Fernwood Maintenance Complex

DATE STARTED: 11/8/2014

DRILLING CONTRACTOR: Summit Drilling Co., Inc.

DATE FINISHED: 11/8/2014

DRILLING METHOD: Hollow Stem Auger

DRILLER: K. Barber

BOREHOLE DATA

WELL DATA

Diameter (in):	8	Completion:	2-inch PVC/Flushmount	INSPECTOR:	J. Ganz
Total Depth (ft):	23.00	Total Depth (ft):	23.0	NORTHING:	N/A
Sampler:	Split Spoon/ Soil Cuttings	Screen Length (ft)/Slot (in):	10 / 0.010	EASTING:	N/A
Depth to Water (ft):	16	Depth to Water (ft):	16.5	GROUND ELEVATION:	N/A
Depth to Rock (ft):	N/A	Permit No.:	N/A	TOC ELEVATION:	N/A

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description		Remarks
								Start	End	
	0	GP					N/A	Medium gray (N5) coarse to fine GRAVEL, trace Silt, little coarse to fine Sand; dry.		Gravel
	6	ML					N/A	Dark yellowish orange (10YR6/6) Clayey SILT, trace fine Gravel; moist.		Clayey Silt



Louis Berger

PROJECT NO.: 2001811.004

BORING NO.: MW25

Page 2 of 3

WELL NO.: MW25

Well		Depth	Lith.	USCS	Interval	Blows	PID	Description		Remarks
					Rec.					
		8								
		10		SP			N/A	Pale yellowish brown (10YR6/2) medium to fine SAND; moist.		Sand
		12	SP-SM SP-SM				N/A	Grayish black (N2) medium to fine SAND, trace Silt, trace fine Gravel; moist.		
		14					N/A	Grayish brown (5YR3/2) medium to fine SAND, little Silt, trace coarse to fine Gravel; wet.		
		16	SP-SM				N/A	Grayish brown (5YR3/2) medium to fine SAND, little Silt, trace coarse to fine Gravel; wet.		
										Water Level at 16 ft bgs



Louis Berger

PROJECT NO.: 2001811.004

BORING NO.: MW25

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WELL NO.: MW25

Well	Depth	Lith.	USCS	Interval	Blows	PID	Description	Remarks
				Rec.				
	18							
	20	SP-SM			N/A		Grayish brown (5YR3/2) medium to fine SAND, little Silt, trace coarse to fine Gravel; wet.	
	22							End of Boring at 23 ft.



Louis Berger

Drilling Log

Page 1 of 3

BORING NO.: MW26

WELL NO.: MW26

CLIENT: New Jersey Department of Transportation

PROJECT NO: 2001811.004

PROJECT: Fernwood Maintenance Complex

DATE STARTED: 11/8/2014

DRILLING CONTRACTOR: Summit Drilling Co., Inc.

DATE FINISHED: 11/8/2014

DRILLING METHOD: Hollow Stem Auger

DRILLER: K. Barber

BOREHOLE DATA

WELL DATA

Diameter (in): 8

Completion: 2-inch PVC/Flushmount

Total Depth (ft): 23.00

Total Depth (ft): 23.0

Sampler: Split Spoon/ Soil Cuttings

Screen Length (ft)/Slot (in): 10 / 0.010

Depth to Water (ft): 16

Depth to Water (ft): 16.5

Depth to Rock (ft): N/A

Permit No.: N/A

NOTES:

Well Construction	Depth	Lithology	Description				Remarks
			Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	
	0	GP			N/A		Medium gray (N5) coarse to fine GRAVEL, trace Silt, little coarse to fine Sand; dry.
	2						
	4						
	6						



Louis Berger

PROJECT NO.: 2001811.004

BORING NO.: MW26

Page 2 of 3

WELL NO.: MW26

Well		Depth	Lith.	USCS	Interval	Blows	PID	Description		Remarks
					Rec.					
		8								
		10	GP				N/A	Medium gray (N5) coarse to fine GRAVEL, trace Silt, little coarse to fine Sand; dry.		
		12	SM				N/A	Grayish brown (5YR3/2) medium to fine SAND, some Silt, trace coarse to fine Gravel; moist.	Silty Sand	
		14	SM				N/A	Grayish brown (5YR3/2) medium to fine SAND, some Silt, trace coarse to fine Gravel; moist.		
		16							Water Level at 16 ft bgs	



Louis Berger

PROJECT NO.: 2001811.004

BORING NO.: MW26

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WELL NO.: MW26

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	18								
	20	SM			N/A			Grayish brown (5YR3/2) medium to fine SAND, some Silt, trace coarse to fine Gravel; wet.	
	22	SP SP- SM			N/A N/A N/A			Moderate yellowish brown (10YR5/4) coarse to fine SAND, trace Silt; saturated. Very pale orange (10YR8/2) medium to fine SAND, little Silt; wet. Black (N1) to moderate brown (5YR4/4) medium to fine SAND, little Silt, some fine Gravel; wet.	Sand Gravelly Sand End of Boring at 23 ft bgs



Louis Berger

PROJECT NO.: 2001811.004

BORING NO.: MW27

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WELL NO.: MW27

Well		Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description		Remarks
		8	SP SP-SM					N/A N/A	Dark gray (N3) medium to fine SAND, trace Silt, little coarse to fine Gravel; moist. Grayish brown (5YR3/2) medium to fine SAND, little Silt, little coarse to fine Gravel; moist.		Sand
		10	SM					N/A	Grayish brown (5YR3/2) medium to fine SAND, some Silt, trace coarse to fine Gravel; wet.		Silty Sand
		12									
		14									
		16									Water Level at 16 ft bgs



Louis Berger

PROJECT NO.: 2001811.004

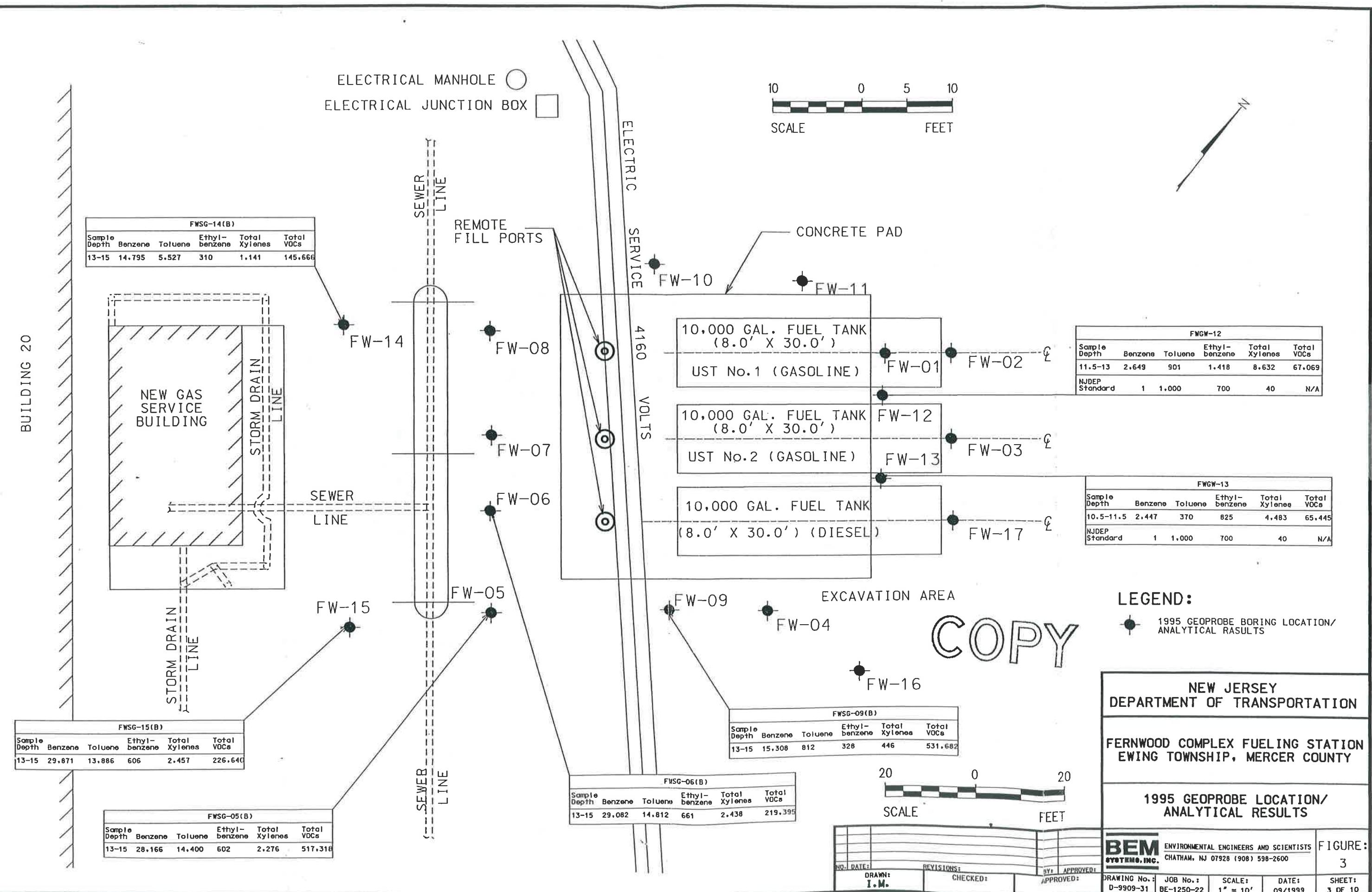
BORING NO.: MW27

Page 3 of 3

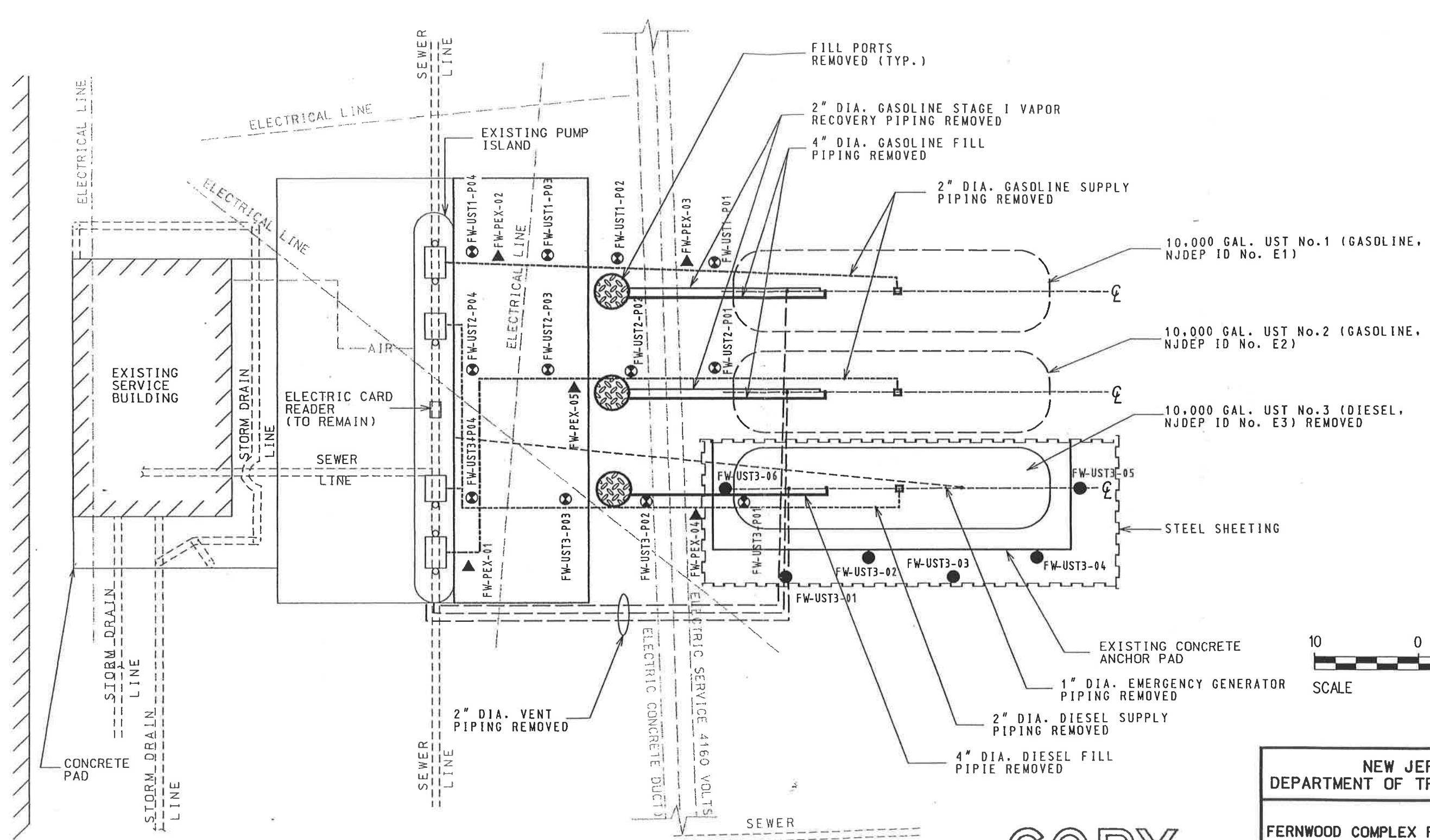
WELL NO.: MW27

Well	Depth	Lith.	USCS	Interval	Blows	PID	Description	Remarks
				Rec.				
	18							
	20	GP		N/A			Dark gray (N3) to light gray (N7) coarse to fine GRAVEL, little medium to fine Sand; dry.	Gravel
	SP			N/A			Grayish brown (5YR3/2) medium to fine SAND, trace Silt, little coarse to fine Gravel; saturated.	Sand
	22							End of Boring at 23 ft bgs

ATTACHMENT 3
AREA 5: FUELING STATION AREA



EXISTING BUILDING 20



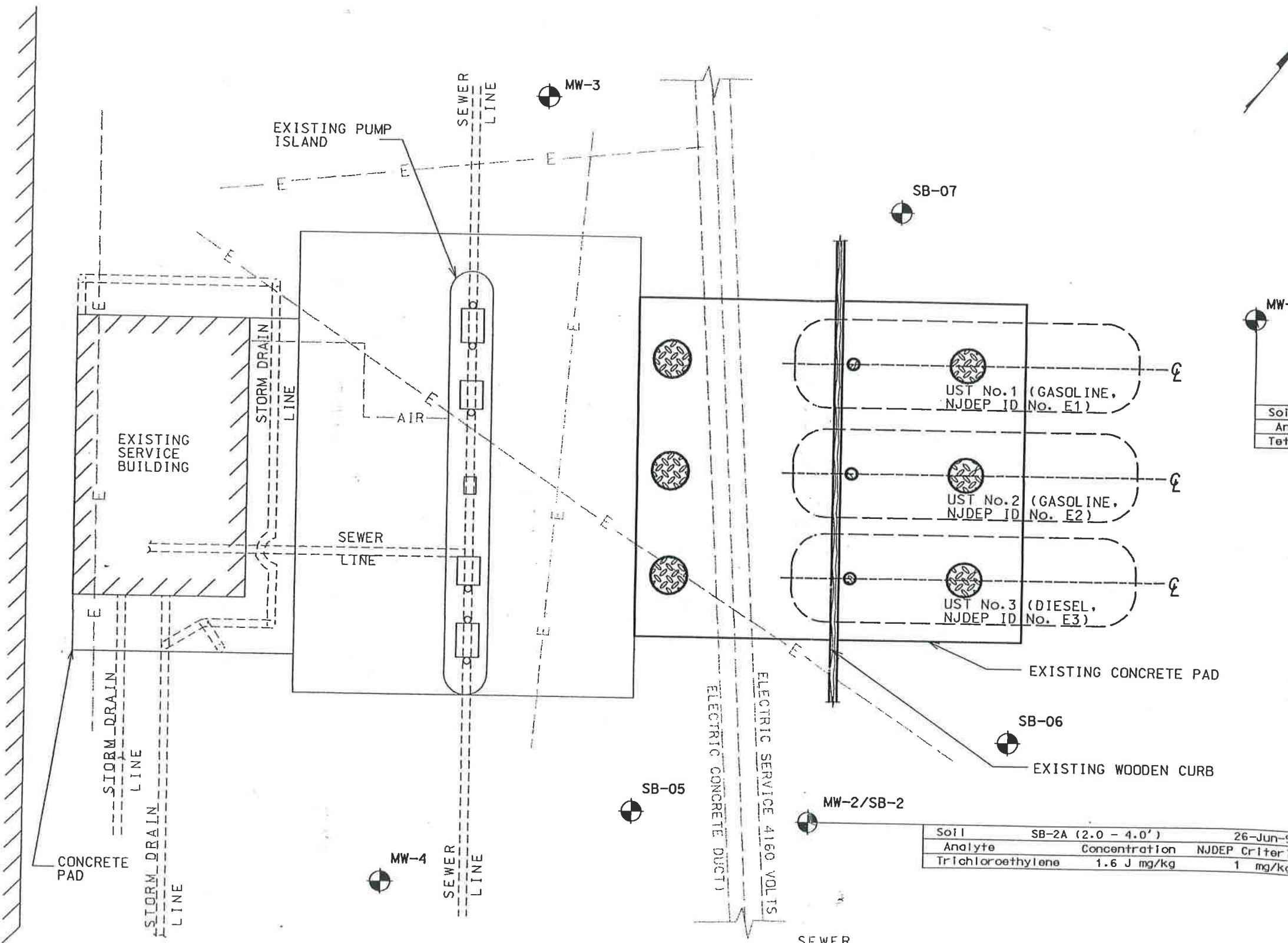
LEGEND:

- PIPING SAMPLING LOCATION (12/01/98)
- TANK PIT POST-EXCAVATION SAMPLING LOCATION (01/13/99)
- ▲ PIPING POST-EXCAVATION SAMPLING LOCATION (01/22/99)

COPY

NEW JERSEY DEPARTMENT OF TRANSPORTATION			
FERNWOOD COMPLEX FUELING STATION EWING TOWNSHIP, MERCER COUNTY			
UST CLOSURE SOIL SAMPLE LOCATION			
BEM SYSTEMS, INC. ENVIRONMENTAL ENGINEERS AND SCIENTISTS CHATHAM, NJ 07928 (908) 598-2600			
FIGURE: 4			
NO. / DATE:	REVISIONS:	B/S APPROVED:	
DRAWN: I.M.	CHECKED: D.B.	APPROVED: O.S.	
DRAWING NO.: B-9909-32	JOB NO.: BE-1250-22	SCALE: 1" = 10'	DATE: 09/1999
SHEET 4 OF 10			

EXISTING BUILDING 20



NEW JERSEY
DEPARTMENT OF TRANSPORTATION

FERNWOOD COMPLEX FUELING STATION
EWING TOWNSHIP, MERCER COUNTY

1998 SOIL BORING/MONITORING WELL
LOCATION/ANALYTICAL RESULTS

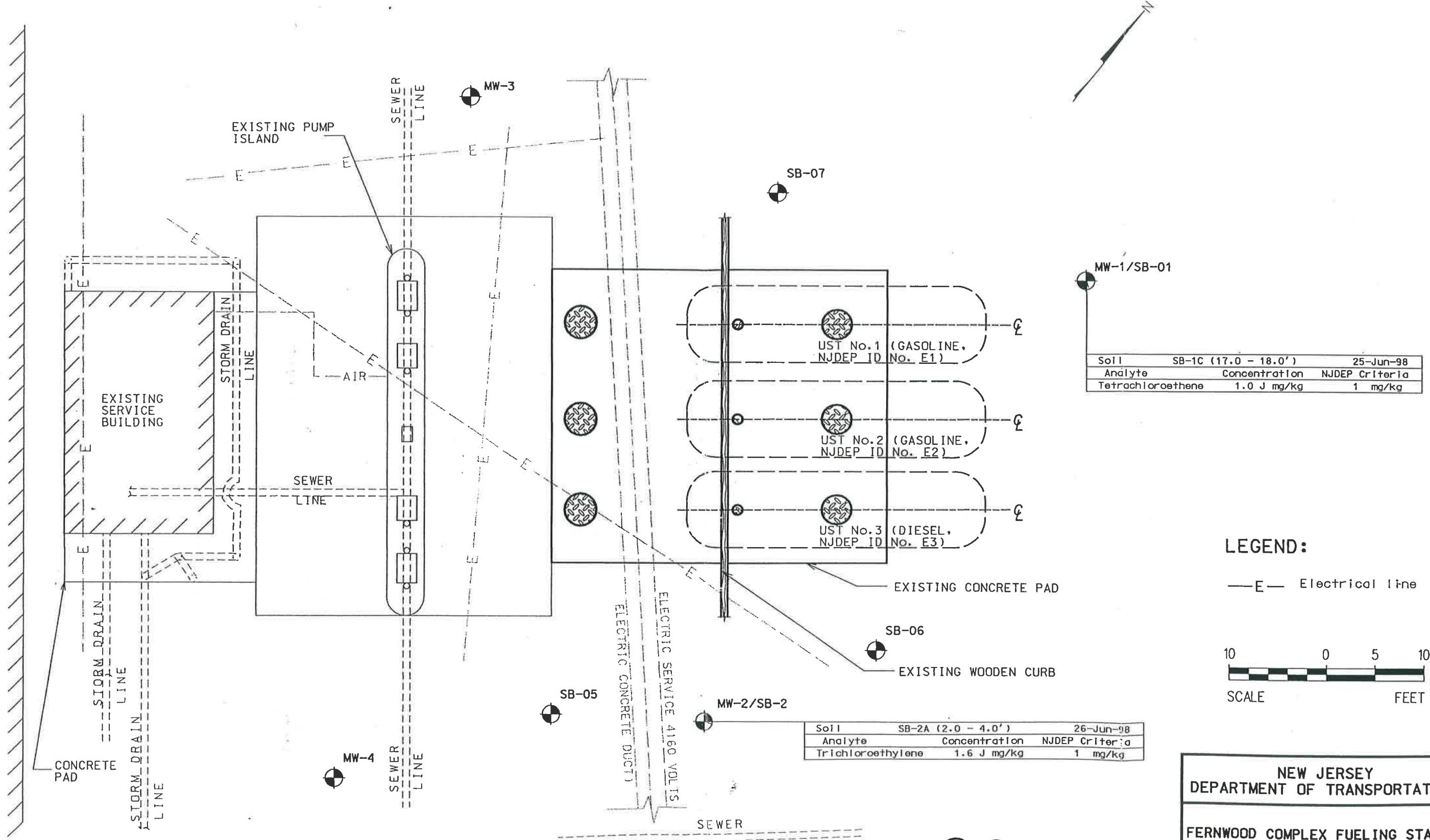
COPY

NO.	DATE:	REVISIONS:	BY: APPROVED:
DRAWN:	I.M.	CHECKED:	APPROVED:
DRAWING NO.: B-9909-33		JOB NO.: BE-1250-22	SCALE: 1" = 10'
			DATE: 09/1999
			SHEET: 5 OF 10

BEM ENVIRONMENTAL ENGINEERS AND SCIENTISTS
SYSTEMS, INC. CHATHAM, NJ 07928 (908) 598-2600

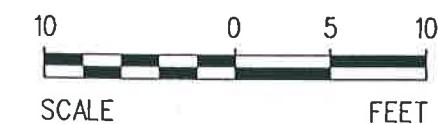
FIGURE:
5

EXISTING BUILDING 20



LEGEND:

— E — Electrical line



COPY

NEW JERSEY
DEPARTMENT OF TRANSPORTATION

FERNWOOD COMPLEX FUELING STATION
EWING TOWNSHIP, MERCER COUNTY

1998 SOIL BORING/MONITORING WELL
LOCATION/ANALYTICAL RESULTS

NO.	DATE:	REVISIONS:	BY:	APPROVED:
DRAWN: I.M.	CHECKED:	APPROVED:		
DRAWING NO. 1 B-9909-33	JOB NO. 1 BE-1250-22	SCALE: 1" = 10'	DATE: 09/1999	
FIGURE: 5				

TABLE 1 - GEOPROBE INVESTIGATION VOC ANALYTICAL RESULTS
(Cont'd)

SOIL SAMPLES

<u>Sample ID</u>	<u>Sample Depth (ft)</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>m&p-Xylenes</u>	<u>o-Xylene</u>	<u>Total Xylenes</u>	<u>Total VOCs</u>
FWSO-04	14-15	48	ND(2)	13	17	ND(2)	17	635
FWSO-05	4-6	11	ND(2)	19	69	6	75	271
FWSO-06	4-6	118	107	56	107	71	178	666
FWSO-07	4-6	212	8	ND(2)	7	ND(2)	7	336
FWSO-08	4-6	72	2	6	26	11	37	381
FWSO-09	4-6	49	4	ND(2)	40	ND(2)	40	158
FWSO-10	4-6	5	ND(2)	ND(2)	7	ND(2)	7	28
FWSO-11	4-6	3	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	17
FWSO-12	4-6	ND(2)	ND(2)	ND(2)	17	ND(2)	17	25
FWSO-13	3-5	10	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	174
FWSO-14	4-6	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	13
FWSO-15	4-6	183	11	71	193	37	230	665
FWSO-16	3-5	25	2	ND(2)	8	ND(2)	8	161
FWSO-17	3-5	55	3	ND(2)	18	ND(2)	18	304

Notes:

- 1) All results are presented in micrograms per liter ($\mu\text{g/l}$)
- 2) ND - Not detected at lower quantifiable limit indicated in parentheses.
- 3) (D) - Field Duplicate Sample

TABLE 2 - GEOPROBE INVESTIGATION TPHC ANALYTICAL RESULTS

<u>Sample ID</u>	<u>Sample Depth (ft)</u>	<u>TPHCs</u>
FWSO-03	10-12	58
FWSO-03(D)	10-12	52
FWSO-05	4-6	38
FWSO-06	4-6	42
FWSO-07	4-6	70
FWSO-08	4-6	38
FWSO-09	4-6	98
FWSO-09(D)	4-6	94
FWSO-10	4-6	42
FWSO-11	4-6	78
FWSO-13	3-5	164
FWSO-14	4-6	32
FWSO-15	4-6	82
FWSO-16	3-5	58
FWSO-17	3-5	154

Notes:

- 1) All results are presented in milligrams per kilogram (mg/kg)
- 2) ND - Not detected at lower quantifiable limit indicated in parentheses
- 3) (D) - Field Duplicate Sample

Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in June 1998 at the NJDOT-Fernwood Site, Fernwood, New Jersey.

Analyte	Sample ID:	Unknown Std	SB-1A	SB-1B	SB-1C	SB-2A	SB-2A	SB-2A	SB-2B	SB-2C	SB-2D
		(2.0' - 3.0')	(12.0' - 13.0')	(17.0' - 18.0')	(2.0' - 4.0')	(2.0' - 4.0')	Run 2	(2.0' - 3.5')	(8.0' - 10.0')	(12.0' - 13.5')	(16.0' - 17.5')
	Date:	25-Jun-98	25-Jun-98	25-Jun-98	25-Jun-98	26-Jun-98	26-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98
Acetone	100	0.85	0.90 UJ	0.96 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.87
Acrolein	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Acrylonitrile	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Bromodichloromethane	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
Bromobenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Bromochloromethane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Bromomethane	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
n-Butylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
sec-Butylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
t-Butylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Benzene	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
Toluene	500	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
Carbon disulfide	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
2-Chloroethyl vinyl ether	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Chlorobenzene	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
2-Chlorotoluene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
4-Chlorotoluene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Chlorehane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Chloromethane	10	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Carbon tetrachloride	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
Dibromoethane	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
1,2-Dibromo-3-chloropropane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Dibromomethane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,1-Dichloroethane	10	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,2-Dichloroethane	1	0.75 U	0.74 UJ	0.73 UJ	0.75 UJ	0.75 UJ	0.75 UJ	0.77 UJ	0.77 UJ	0.74 UJ	0.75 U
1,2-Dichlorobenzene	50	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,3-Dichlorobenzene	100	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,4-Dichlorobenzene	100	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,1-Dichloroethene	8	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
cis-1,2-Dichloroethene	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
trans-1,2-Dichloroethene	50	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,1-Dichloropropene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
cis-1,2-Dichloropropene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
trans-1,3-Dichloropropene	10	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,2-Dichloropropane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
1,3-Dichloropropane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
2,2-Dichloropropane	100	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Ethylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Ethylene dibromide	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U
Trichlorofluoromethane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.77 U	0.77 U	0.74 U	0.75 U

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Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in June 1998 at the NJDOT-Fernwood Site, Fernwood, New Jersey.

Analyte	Sample ID:	Unknown Std	SB-1A	SB-1B	SB-1C	SB-2A	SB-2A	SB-2A	SB-2B	SB-2C	SB-2D
			(2.0' - 3.0')	(12.0' - 13.0')	(17.0' - 18.0')	(2.0' - 4.0')	Run 2	(2.0' - 4.0')	(2.0' - 3.5')	(8.0' - 10.0')	(12.0' - 13.5')
Date:	25-Jun-98	25-Jun-98	25-Jun-98	25-Jun-98	26-Jun-98	26-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98
Dichlorodifluoromethane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Hexachlorobutadiene	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
2-Hexanone	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Isopropylbenzene ((Cumene))	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
p-Isopropyltoluene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
4-Methyl-2-pentanone	50	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Methyl ethyl ketone	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Methylene chloride	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.51 J
Naphthalene	100	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
n-Propylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,1,2,2-Tetrachloroethane	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Tetrachloroethene	1	0.75 U	0.32 J	1.0 J	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Syrene	23	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Tribromomethane	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,1,1,2-Tetrachloroethane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,1,1-Trichloroethane	50	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,1,2-Trichloroethane	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,2,3-Trichlorobenzene	68	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,2,4-Trichlorobenzene	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Trichloroethylene	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Trichloromethane	1	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,2,3-Trichloropropane	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,2,4-Trimethylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
1,3,5-Trimethylbenzene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Vinyl acetate	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Vinyl chloride	2	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
Xylenes, m & p	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U
o-Xylene	NA	0.75 U	0.74 U	0.73 U	0.75 U	0.75 U	0.75 U	0.75 U	0.77 U	0.74 U	0.75 U

Do not use Strikeout results for interpretation, although these results are not technically rejectable
 Shaded results exceed stated criteria

Analyte concentrations in mg/kg (ppm)
 Analyses were performed by Chemtech, Inc., using standard analytical methodology

B Analyte is also detected in the laboratory blank
 J Result is detected below the reporting limit and/or is an estimated concentration

U Analyte analyzed for but undetected at the corresponding quantitation limit

Table 6. Concentrations of Indicator Parameters and Metals in Soil Samples Collected in June 1998 at the NJDOT-Fernwood Site, Fernwood, New Jersey.

Analyte	Sample ID:	Unknown Std	SB-1A (2.0' - 3.0')	SB-1B (12.0' - 13.0')	SB-1C (17.0' - 18.0')	SB-1D (23.0' - 24.0')	SB-2A (2.0' - 4.0')	SB-2ARE (2.0' - 3.5')	SB-2B (8.0' - 10.0')	SB-2C (12.0' - 13.5')	SB-2D (16.0' - 17.5')	SB-2E (18.0' - 19.5')	SB-3A (2.0' - 3.0')
	Date:	25-Jun-98	25-Jun-98	25-Jun-98	25-Jun-98	25-Jun-98	26-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98	27-Jun-98	25-Jun-98
Iron, mg/kg (ppm)		NA	35800	30900	19700	37600	NA	NA	NA	12200	36700	41300	70100
Lead, mg/kg (ppm)		400	11.9	11.8	4.1	8.1	NA	NA	NA	10.1	7.7	8.5	19.4
pH, pH Units		NA	NA	NA	7.5	6.2	NA	NA	NA	NA	NA	5.2	7.0
Redox Potential, Millivolts		NA	NA	NA	710	608	NA	NA	NA	NA	NA	NA	NA
Total Solids, Percent		NA	82.7	85.1	85.8	72.4	82.8	81.4	81.1	84.5	82.9	489	NA
TOC (Fines), mg/kg (ppm)		NA	NA	NA	233	252	NA	NA	NA	NA	NA	66.5	83.8
TOC (Sand), mg/kg (ppm)		NA	NA	NA	176	165	NA	NA	NA	NA	NA	300	NA
										NA	NA	147	NA

Analyte concentrations in units specified

Analyses were performed by Chemtech, Inc., using standard analytical methodology

NA Not applicable

SB-3B (12.0' - 13.0')	SB-3C (15.0' - 16.0')	SB-3D (21.0' - 22.0')	SB-4A (2.0' - 3.5')	SB-4B (12.5' - 14.0')	SB-4C (15.5' - 17.0')	SB-4D (22.0' - 24.0')	SB-4E (12.5' - 14.0')	SB-5A (2.0' - 3.0')	SB-5B (12.0' - 13.0')	SB-5C (15.0' - 16.0')	SB-6A (2.0' - 3.0')	SB-6B (12.0' - 13.0')	SB-6C (15.0' - 16.0')
25-Jun-98	25-Jun-98	25-Jun-98	26-Jun-98	26-Jun-98	26-Jun-98	26-Jun-98	26-Jun-98	26-Jun-98	24-Jun-98	24-Jun-98	24-Jun-98	24-Jun-98	24-Jun-98
9330	26500	35600	21800	28800	40200	39000	34700	30100	16700	59100	24200	27300	45000
8.6	10.5	7.6	9.2	7.1	10.7	9.9	7.4	11.7	9.4	13.8	15.5	12	10.6
NA	5.5	5.3	NA	NA	5.0	5.5	NA	NA	NA	NA	NA	NA	NA
NA	666	640	NA	NA	624	615	NA	NA	NA	NA	NA	NA	NA
86.2	78	77	85.9	82.9	82.8	80.7	83.1	82.6	86.4	84.8	85.2	81.2	83.5
NA	652	262	NA	NA	268	219	NA	NA	NA	NA	NA	NA	NA
NA	390	157	NA	NA	188	498	NA	NA	NA	NA	NA	NA	NA

SB-7A (2.0' - 3.0')	SB-7B (12.0' - 13.0')	SB-7C (17.0' - 18.0')
24-Jun-98	24-Jun-98	24-Jun-98
47600	17300	21700
14.5	15.1	7.6
NA	NA	NA
NA	NA	NA
81.4	84.5	83.2
NA	NA	NA
NA	NA	NA

Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in January 1999 at the NJDOT Fernwood Complex Fueling Station, Fernwood, New Jersey.

Analyte	NJDEP RDC	FW-UST3-05
	Date:	Cleanup Criteria
Acetone	1000	0.0063 U
Acrolein	NA	0.0063 U
Acrylonitrile	NA	0.0063 U
Bromodichloromethane	11	0.0013 U
Bromobenzene	NA	0.0013 U
Bromoform	NA	0.0022 U
Bromomethane	79	0.0048 U
n-Butylbenzene	NA	0.0022 U
sec-Butylbenzene	NA	0.0015 U
t-Butylbenzene	NA	0.0015 U
Benzene	3	0.0013 U
Toluene	1000	0.0016 U
Carbon disulfide	NA	0.0063 U
2-Chloroethyl vinyl ether	NA	0.0063 U
Chlorobenzene	37	0.0014 U
2-Chlorotoluene	NA	0.0014 U
4-Chlorotoluene	NA	0.0013 U
Chloroethane	NA	0.0063 U
Chloromethane	520	0.0042 U
Carbon tetrachloride	2	0.0051 U
Dibromochloromethane	110	0.00090 U
1,2-Dibromo-3-chloropropane	NA	0.0063 U
Dibromomethane	NA	0.0018 U
1,1-Dichloroethane	570	0.0016 U
1,2-Dichloroethane	6	0.0013 U
1,2-Dichlorobenzene	5100	0.0013 U
1,3-Dichlorobenzene	5100	0.0015 U
1,4-Dichlorobenzene	570	0.0015 U
1,1-Dichloroethene	8	0.0024 U
cis-1,2-Dichloroethene	79	0.0022 U
trans-1,2-Dichloroethene	1000	0.0054 U
1,1-Dichloropropene	NA	0.0014 U
cis-1,3-Dichloropropene	NA	0.0013 U
trans-1,3-Dichloropropene	NA	0.0013 U
1,2-Dichloropropane	10	0.0043 U
1,3-Dichloropropane	NA	0.0015 U
2,2-Dichloropropane	NA	0.0013 U
Ethylbenzene	1000	0.0053
Ethylene dibromide	NA	0.0020 U
Trichlorofluoromethane	NA	0.0015 U

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Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in January 1999 at the NJDOT Fernwood Complex Fueling Station, Fernwood, New Jersey.

Analyte	Sample ID:	NJDEP RDC	FW-UST3-05
	Date:	Cleanup Criteria	
	11-Jul-96	13-Jan-99	
Dichlorodifluoromethane		NA	0.0021 U
Hexachlorobutadiene		1	0.0013 U
2-Hexanone		NA	0.0063 U
Isopropylbenzene ((Cumene))		NA	0.0054
p-Isopropyltoluene		NA	0.0011 U
4-Methyl-2-pentanone	1000		0.0063 U
Methyl ethyl ketone		NA	0.0063 U
Methylene chloride		49	0.0038
Naphthalene	230		0.0030 U
n-Propylbenzene		NA	0.0016 U
1,1,2,2-Tetrachloroethane	34		0.0020 U
Tetrachloroethene		4	0.0014 U
Styrene	23		0.00030 U
Tribromomethane	86		0.00060 U
1,1,1,2-Tetrachloroethane		NA	0.0015 U
1,1,1-Trichloroethane	210		0.0011 U
1,1,2-Trichloroethane		22	0.0017 U
1,2,3-Trichlorobenzene		NA	0.0018 U
1,2,4-Trichlorobenzene		68	0.0015 U
Trichloroethylene	23		0.0033 U
Trichloromethane		19	0.0015 U
1,2,3-Trichloropropane		NA	0.0032 U
1,2,4-Trimethylbenzene		NA	0.017
1,3,5-Trimethylbenzene		NA	0.0020 U
Vinyl acetate		NA	0.0063 U
Vinyl chloride	2		0.0024 U
Xylenes, m & p		NA	0.0029 U
o-Xylene		NA	0.0015 U

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using USEPA CLP SOW (3/90 and revisions)/VOA

U Analyte analyzed for but undetected at the corresponding quantitation limit

Table 3. Concentrations of Metals in Groundwater Samples Collected in January 1999 at the NJDOT Fernwood Complex Fueling Station, Fernwood, New Jersey.

Sample ID:	NJDEP GW Std or PQL	FW-DW01
Analy Date:	18-Mar-96	13-Jan-99
Lead	10	4.4

Analyte concentrations in ug/L (ppb)

Analyses were performed by Chemtech, Inc., using USEPA CLP SOW (3/90 and revisions)/MT

Table 4. Concentrations of Petroleum Hydrocarbons in Soil Samples Collected in January 1999 at the NJDOT Fernwood Complex Fueling Station, Fernwood, New Jersey.

	Sample ID:	NJDEP RDC Cleanup Criteria	FW-UST3-01	FW-UST3-02	FW-UST3-03	FW-UST3-04	FW-UST3-05	FW-UST3-06
Analyte	Date:	11-Jul-96	13-Jan-99	13-Jan-99	13-Jan-99	13-Jan-99	13-Jan-99	13-Jan-99
Petroleum hydrocarbons		NA	39.4 U	40.7 U	40.1 U	40.5 U	109	40.2 U

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using USEPA 418.1 (modified for soils)

U Analyte analyzed for but undetected at the corresponding detection limit

Table 5. Concentrations of Indicator Parameters in Soil Samples Collected in January 1999 at the NJDOT Fernwood Complex Fueling Station, Fernwood, New Jersey.

Sample ID:	NJDEP RDC Cleanup Criteria	FW-UST3-01	FW-UST3-02	FW-UST3-03	FW-UST3-04	FW-UST3-05	FW-UST3-06
Analyte	Date:	11-Jul-96	13-Jan-99	13-Jan-99	13-Jan-99	13-Jan-99	13-Jan-99
Total Solids		NA	84.6	81.9	83	82.3	79.2
							82.8

Analyte concentrations in Percent

Analyses were performed by Chemtech, Inc., using USEPA 160.3 Modified

Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in December 1998 at NJDOT-Fernwood

	NJDEP RDC Cleanup Criteria	FWUST1-P01 (0.0' - 6.0')	FWUST1-P01 (0.0' - 6.0') Run 2	FWUST1-P02 (0.0' - 6.0')	FWUST1-P03 (0.0' - 6.0')	FWUST1-P04 (0.0' - 6.0')	FWUST2-P01 (1.8' - 2.0') Run 2	FWUST2-P01 (1.8' - 2.0') Run 2	FWUST2-P02 (0.0' - 6.0')	
Analyte	Date:	11-Jul-96	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98
Acetone		1000	0.69 UJ	4.4 D	0.72 U	0.73 U	0.72 U	0.74 UJ	16 JD	0.24 J
Acrolein		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Acrylonitrile		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Bromodichloromethane		11	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Bromobenzene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Bromochloromethane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Bromomethane		79	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
n-Butylbenzene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
sec-Butylbenzene		NA	1.2	3.4 UD	0.72 U	0.73 U	0.56 J	3.0	37 UD	2.9
t-Butylbenzene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Benzene		3	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Toluene		1000	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.58 J	12 J	37 UD	22 EJ
Carbon disulfide		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
2-Chloroethyl vinyl ether		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Chlorobenzene		37	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
2-Chlorotoluene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
4-Chlorotoluene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Chloroethane		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Chloromethane		520	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Carbon tetrachloride		2	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Dibromochloromethane		110	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.34 J
1,2-Dibromo-3-chloropropane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Dibromomethane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,1-Dichloroethane		570	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,2-Dichloroethane		6	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,2-Dichlorobenzene		5100	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,3-Dichlorobenzene		5100	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,4-Dichlorobenzene		570	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,1-Dichloroethene		8	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
cis-1,2-Dichloroethene		79	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
trans-1,2-Dichloroethene		1000	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,1-Dichloropropene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
cis-1,3-Dichloropropene		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
trans-1,3-Dichloropropene		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,2-Dichloropropane		10	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,3-Dichloropropane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
2,2-Dichloropropane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Ethylbenzene		1000	0.26 J	3.4 UD	0.72 U	0.73 U	2.2	13 J	13 JD	22 EJ
Ethylene dibromide		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Trichlorofluoromethane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U

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Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in December 1998 at NJDOT-Fernwood

Analyte	Sample ID:	NJDEP RDC	FWUST1-P01 (0.0' - 6.0')	FWUST1-P01 (0.0' - 6.0') Run 2	FWUST1-P02 (0.0' - 6.0')	FWUST1-P03 (0.0' - 6.0')	FWUST1-P04 (0.0' - 6.0')	FWUST2-P01 (1.8' - 2.0') Run 2	FWUST2-P01 (1.8' - 2.0')	FWUST2-P02 (0.0' - 6.0')
	Date:	11-Jul-96	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98
Dichlorodifluoromethane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Hexachlorobutadiene		1	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
2-Hexanone		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Isopropylbenzene ((Cumene))		NA	1.5	1.7 JD	0.72 U	0.73 U	0.99	20	20 JD	24 EJ
p-Isopropyltoluene		NA	1.2	1.3 JD	0.72 U	0.73 U	0.72 U	2.4	37 UD	2.2
4-Methyl-2-pentanone		1000	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Methyl ethyl ketone		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Methylene chloride		49	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Naphthalene		230	7.2	8.2 D	0.72 U	0.73 U	2.5	36 EJ	36 JD	29 EJ
n-Propylbenzene		NA	1.1	3.4 UD	0.72 U	0.73 U	2.4	13	37 UD	25 EJ
1,1,2,2-Tetrachloroethane		34	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Tetrachloroethene		4	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Styrene		23	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Tribromomethane		86	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,1,1,2-Tetrachloroethane		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,1,1-Trichloroethane		210	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,1,2-Trichloroethane		22	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,2,3-Trichlorobenzene		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,2,4-Trichlorobenzene		68	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Trichloroethylene		23	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Trichloromethane		19	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
1,2,3-Trichloropropane	JK	NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
1,2,4-Trimethylbenzene	NP	NA	42 EJ	85 D	0.37 J	0.39 J	12	62 EJ	270 D	54 EJ
1,3,5-Trimethylbenzene	NP	NA	27 EJ	32 D	0.45 J	0.53 J	4.0	38 EJ	84 D	38 EJ
Vinyl acetate		NA	0.69 U	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 U	37 UD	0.69 U
Vinyl chloride		2	0.69 UJ	3.4 UD	0.72 U	0.73 U	0.72 U	0.74 UJ	37 UD	0.69 UJ
Xylenes, m & p		NA	5.4 J	5.4 D	0.72 U	0.73 U	7.3	120 EJ	200 D	160 EJ
o-Xylene		NA	0.69 UJ	3.4 UD	0.72 U	0.73 U	2.2	61 EJ	90 D	67 EJ

Do not use Strikeout results for interpretation, although these results are not technically rejectable

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using USEPA SW846 8260

D Analyte identified at a secondary dilution

E Concentration exceeds calibration range

J Result is detected below the reporting limit and/or is an estimated concentration

U Analyte analyzed for but undetected at the corresponding quantitation limit

Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in December 1998 at NJDOT-Fernwood

Analyte	Sample ID:	NJDEP RDC	FWUST2-P02 Cleanup Criteria Run 2	FWUST2-P03 (1.8' - 2.0')	FWUST2-P03 (1.8' - 2.0') Run 2	FWUST2-P04 (0.0' - 6.0')	FWUST3-P03 (0.0' - 6.0') Run 2
	Date:	11-Jul-96	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98
Acetone		1000	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Acrolein		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Acrylonitrile		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Bromodichloromethane		11	34 UD	0.75 U	3.2 JD	0.71 U	0.72 U
Bromobenzene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Bromoform		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Bromochloromethane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Bromomethane		79	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
n-Butylbenzene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
sec-Butylbenzene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
t-Butylbenzene		NA	34 UD	1.0	1.4 JD	0.71 U	1.4
Benzene		3	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Toluene		1000	25 JD	1.0	1.4 JD	0.71 U	0.72 U
Carbon disulfide		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
2-Chloroethyl vinyl ether		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Chlorobenzene		37	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
2-Chlorotoluene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
4-Chlorotoluene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Chloroethane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Chloromethane		520	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Carbon tetrachloride		2	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Dibromochloromethane		110	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2-Dibromo-3-chloropropane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Dibromomethane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,1-Dichloroethane		570	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2-Dichloroethane		6	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2-Dichlorobenzene		5100	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,3-Dichlorobenzene		5100	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,4-Dichlorobenzene		570	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,1-Dichloroethene		8	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
cis-1,2-Dichloroethene		79	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
trans-1,2-Dichloroethene		1000	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,1-Dichloropropene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
cis-1,3-Dichloropropene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
trans-1,3-Dichloropropene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2-Dichloropropane		10	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,3-Dichloropropane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
2,2-Dichloropropane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Ethylbenzene		1000	53 D	5.8	5.8 D	0.71 U	0.72 U
Ethylene dibromide		NA	34 UD	0.75 U	3.8 UD	0.71 U	3.6
Trichlorofluoromethane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U

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Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in December 1998 at NJDOT-Fernwood

Analyte	Sample ID:	NJDEP RDC Cleanup Criteria	FWUST2-P02 (0.0' - 6.0') Run 2	FWUST2-P03 (1.8' - 2.0')	FWUST2-P03 (1.8' - 2.0') Run 2	FWUST2-P04 (0.0' - 6.0') Run 2	FWUST3-P03 (0.0' - 6.0')
			01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98	01-Dec-98
Dichlorodifluoromethane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Hexachlorobutadiene		1	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
2-Hexanone		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Isopropylbenzene ((Cumene))		NA	25 JD	3.1	3.5 JD	0.71 U	9.0
p-Isopropyltoluene		NA	34 UD	0.93	2.7 JD	0.71 U	3.8
4-Methyl-2-pentanone		1000	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Methyl ethyl ketone		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Methylene chloride		49	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Naphthalene		230	18 JD	6.1	3.6 JD	0.71 U	11
n-Propylbenzene		NA	26 JD	4.4	4.4 D	0.71 U	3.3
1,1,2,2-Tetrachloroethane		34	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Tetrachloroethylene		4	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Styrene		23	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Tribromomethane		86	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,1,1,2-Tetrachloroethane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,1,1-Trichloroethane		210	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,1,2-Trichloroethane		22	34 UD	0.34 J	3.8 UD	0.71 U	0.72 U
1,2,3-Trichlorobenzene		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2,4-Trichlorobenzene		68	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Trichloroethylene		23	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Trichloromethane		19	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2,3-Trichloropropane		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
1,2,4-Trimethylbenzene		NA	290 D	44 EJ	54 D	1.6	2.7
1,3,5-Trimethylbenzene		NA	89 D	20	49 D	0.68 J	14
Vinyl acetate		NA	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Vinyl chloride		2	34 UD	0.75 U	3.8 UD	0.71 U	0.72 U
Xylenes, m & p		NA	330 D	48 EJ	47 D	1.1	6.6
o-Xylene		NA	130 D	46	16 D	0.54 J	0.52 J

Do not use Strikeout results for interpretation, although these results are not technically rejectable

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using USEPA SW846 8260

D Analyte identified at a secondary dilution

E Concentration exceeds calibration range

J Result is detected below the reporting limit and/or is an estimated concentration

U Analyte analyzed for but undetected at the corresponding quantitation limit

Table 2. Concentrations of Volatile Organic Compounds in Water QC Samples Collected in December 1998 at NJDOT-Fernwood

Analyte	Sample ID:	NJDEP RDC Cleanup Criteria	Field Blank	Trip Blank
			Date: 11-Jul-96	01-Dec-98
Acetone		1000	5.0 U	0.63 U
Acrolein		NA	5.0 U	0.63 U
Acrylonitrile		NA	5.0 U	0.63 U
Bromodichloromethane		11	0.60 U	0.63 U
Bromobenzene		NA	0.70 U	0.63 U
Bromochloromethane		NA	0.90 U	0.63 U
Bromomethane		79	2.0 U	0.63 U
n-Butylbenzene		NA	1.0 U	0.63 U
sec-Butylbenzene		NA	0.60 U	0.63 U
t-Butylbenzene		NA	0.70 U	0.63 U
Benzene		3	0.90 U	0.63 U
Toluene		1000	1.0 U	0.63 U
Carbon disulfide		NA	5.0 U	0.63 U
2-Chloroethyl vinyl ether		NA	5.0 U	0.63 U
Chlorobenzene		37	0.90 U	0.63 U
2-Chlorotoluene		NA	1.0 U	0.63 U
4-Chlorotoluene		NA	0.90 U	0.63 U
Chloroethane		NA	2.0 U	0.63 U
Chloromethane		520	2.0 U	0.63 U
Carbon tetrachloride		2	2.0 U	0.63 U
Dibromochloromethane		110	1.0 U	0.63 U
1,2-Dibromo-3-chloropropane		NA	1.0 U	0.63 U
Dibromomethane		NA	0.90 U	0.63 U
1,1-Dichloroethane		570	0.40 U	0.63 U
1,2-Dichloroethane		6	0.90 U	0.63 U
1,2-Dichlorobenzene		5100	0.80 U	0.63 U
1,3-Dichlorobenzene		5100	1.0 U	0.63 U
1,4-Dichlorobenzene		570	1.0 U	0.63 U
1,1-Dichloroethene		8	0.60 U	0.63 U
cis-1,2-Dichloroethene		79	0.80 U	0.63 U
trans-1,2-Dichloroethene		1000	0.70 U	0.63 U
1,1-Dichloropropene		NA	0.70 U	0.63 U
cis-1,3-Dichloropropene		NA	0.10 U	0.63 U
trans-1,3-Dichloropropene		NA	0.20 U	0.63 U
1,2-Dichloropropene		10	1.0 U	0.63 U
1,3-Dichloropropane		NA	0.90 U	0.63 U
2,2-Dichloropropane		NA	1.0 U	0.63 U
Ethylbenzene		1000	0.90 U	0.63 U
Ethylene dibromide		NA	1.0 U	0.63 U
Trichlorofluoromethane		NA	1.0 U	0.63 U

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Table 3. Concentrations of Metals in Soil Samples Collected in December 1998 at NJDOT-Fernwood

Sample ID:	NJDEP RDC Cleanup Criteria	FWUST1-P01 (0.0' - 6.0')	FWUST1-P02 (0.0' - 6.0')	FWUST1-P03 (0.0' - 6.0')	FWUST1-P04 (0.0' - 6.0')	FWUST2-P01 (1.8' - 2.0')	FWUST2-P02 (0.0' - 6.0')	FWUST2-P03 (1.8' - 2.0')	FWUST2-P04 (0.0' - 6.0')
Analy Date:	11-Jul-96	01-Dec-98							
Lead	400	1.8	2.3	8.3	9.3	2.2	2.0	3.5	3.0

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using SW846 6010

Table 4. Concentrations of Indicator Parameters in Soil Samples Collected in December 1998 at NJDOT-Fernwood

	Sample ID:	NJDEP RDC Cleanup Criteria	FWUST1-P01 (0.0' - 6.0')	FWUST1-P02 (0.0' - 6.0')	FWUST1-P03 (0.0' - 6.0')	FWUST1-P04 (0.0' - 6.0')	FWUST2-P01 (1.8' - 2.0')	FWUST2-P02 (0.0' - 6.0')	FWUST2-P03 (1.8' - 2.0')	FWUST2-P04 (0.0' - 6.0')	FWUST3-P01 (0.0' - 6.0')	FWUST3-P02 (0.0' - 6.0')
Analyte	Date:	11-Jul-96	01-Dec-98									
Petroleum hydrocarbons, mg/kg (ppm)		NA	NA	NA	NA	NA	NA	NA	NA	NA	6760	7860
Total Solids, Percent		NA	91.4	87	86	86.7	83.9	91.3	83.1	88.1	89.8	85.9

Analyte concentrations in units specified

Analyses were performed by Chemtech, Inc., using standard analytical methodology

NA Not applicable

Table 4. Concentrations of Indicator Parameters in Soil Samples Collected in December 1998 at NJDOT-Fernwood

Analyte	Sample ID: Date:	NJDEP RDC Cleanup Criteria	FWUST3-P03 (0.0' - 6.0')	FWUST3-P04 (0.0' - 6.0')
Petroleum hydrocarbons, mg/kg (ppm)		NA	14800	578
Total Solids, Percent		NA	87.5	86.4

Analyte concentrations in units specified

Analyses were performed by Chemtech, Inc., using standard analytical methodology

NA Not applicable

Table 2. Concentrations of Volatile Organic Compounds in Soil Samples Collected in January 1999 at the NJDOT-Fernwood Site, Fernwood, New Jersey.

Analyte	Sample ID:	NJDEP RDC	FW-PEX-01	FW-PEX-02	FW-PEX-03	FW-PEX-04	FW-PEX-05
	Date:	Cleanup Criteria	11-Jul-96	22-Jan-99	22-Jan-99	22-Jan-99	22-Jan-99
Acetone		1000	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Bromodichloromethane		11	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Bromomethane		79	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
tert-Butyl alcohol		NA	6.9 U	7.5 U	6.9 U	7.5 U	7.4 U
Benzene		3	0.69 U	1.2	0.69 U	0.75 U	0.74 U
Toluene		1000	0.69 U	15.2	0.69 U	0.75 U	2.1
Carbon disulfide		NA	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Chlorobenzene		37	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Chloroethane		NA	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Chloromethane		520	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Carbon tetrachloride		2	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Dibromochloromethane		110	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
1,1-Dichloroethane		570	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
1,2-Dichloroethane		6	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
1,1-Dichloroethylene		8	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
cis-1,2-Dichloroethylene		79	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
trans-1,2-Dichloroethylene		1000	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
cis-1,3-Dichloropropene		NA	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
trans-1,3-Dichloropropene		NA	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
1,2-Dichloropropane		10	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Ethylbenzene		1000	0.69 U	7.6	0.69 U	0.75 U	0.45 J
2-Hexanone		NA	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
4-Methyl-2-pentanone		1000	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Methyl ethyl ketone		NA	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Methylene chloride		49	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
1,1,2,2-Tetrachloroethane		34	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Tetrachloroethene		4	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Styrene		23	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Tribromomethane		86	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
tert-Butyl methyl ether		NA	0.69 U	15.3	0.69 U	0.75 U	0.74 U
1,1,1-Trichloroethane		210	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
1,1,2-Trichloroethane		22	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Trichloroethylene		23	0.38 J	0.75 U	0.69 U	0.75 U	0.74 U
Trichloromethane		19	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Vinyl chloride		2	0.69 U	0.75 U	0.69 U	0.75 U	0.74 U
Xylenes, m & p		NA	0.69 U	44.4	0.69 U	0.75 U	45.5
o-Xylene		NA	0.69 U	16.2	0.69 U	0.75 U	29.6

6.96

75.1

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using SW846 8260

J Result is detected below the reporting limit and/or is an estimated concentration

U Analyte analyzed for but undetected at the corresponding quantitation limit

Table 3. Concentrations of Metals in Soil Samples Collected in January 1999 at the NJDOT-Fernwood Site, Fernwood, New Jersey.

Sample ID:	NJDEP RDC Cleanup Criteria	FW-PEX-01	FW-PEX-02	FW-PEX-03	FW-PEX-04	FW-PEX-05
Analy Date:	11-Jul-96	22-Jan-99	22-Jan-99	22-Jan-99	22-Jan-99	22-Jan-99
Lead	400	6.5	9.3	1.2 J	21.2	14.6

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using SW846 6010

J Result is an estimated concentration

Table 4. Concentrations of Petroleum hydrocarbons in Soil Samples Collected in January 1999 at the NJDOT-Fernwood Site, Fernwood, New Jersey.

	Sample ID:	NJDEP RDC Cleanup Criteria	FW-PEX-01	FW-PEX-02	FW-PEX-03	FW-PEX-04	FW-PEX-05
Analyte	Date:	11-Jul-96	22-Jan-99	22-Jan-99	22-Jan-99	22-Jan-99	22-Jan-99
Petroleum hydrocarbons		NA	36.9 U	738	42.4	168	378

Analyte concentrations in mg/kg (ppm)

Analyses were performed by Chemtech, Inc., using USEPA 418.1 (modified for soils)

U Analyte analyzed for but undetected at the corresponding detection limit



Project No: 1250-22
 Client: NJDOT
 Location: Fenwood
 Property Owner: NJDOT
 Date Started: 6/25/99
 Date Completed: 6/25/99
 Logged By: C. Stebbins

Borehole Number: SB-01/MW-01

Ground Surface Elevation: NA
 State Plane Coordinates: NA
 Total Depth Drilled: 26 feet
 Well Set Depth: 25 feet
 Depth to Groundwater: 18 feet
 Date/Time of Measurement: 6/25/99 10:00

SUBSURFACE PROFILE

Depth	Symbol	Description	USCS	Well Data	SAMPLE				Remarks/ Analytical Samples
					Type	Recovery	N-Values	PID (ppm)	
0'		Ground Surface							
1'		Asphalt			SS	NA	NA	0	
2'		Trap Rock and Fill Material	Fill		SS	12	20	0	SB-01A (2-3')
3'			SM		SS	16	49	0	No Odor
4'		Brown grading to tan brown, medium to fine SAND, trace Gravel mix with red Silt, dry			SS	21	17	0	
5'					SS	14	43	0	No Odor
6'			ML		SS	16	29	0	
7'					SS	20	47	0	SB-01B (12-13')
8'					SS	24	11	0	No Odor
9'									
10'		Tan brown grading to orange brown SILT grading with Quartz Gravel, little Clay, slightly moist							
11'			ML						
12'									
13'									
14'									
15'									
16'									No Odor

Drilling Company: CT & E

Driller(s): L. Lynch. & J. Lewis

Rig Type: Mobile B-61

Drilling Method: Hollow Stem auger

Auger/Hole Diameter (O.D./I.D.) inches: 6 5/8" ID / 12" OD

Sampling Method: Split spoon

Hammer/Fall: 140 lbs/ 30"

Sheet: 1 of 2

Scr. Length/Diam.: 10 feet

Slot Size: 0.01

Gravel Type: #1 Moraine

Flush/Stick Up: Flush



Project No: 1250-22
 Client: NJDOT
 Location: Fernwood
 Property Owner: NJDOT
 Date Started: 6/25/99
 Date Completed: 6/25/99
 Logged By: C. Stebbins

Borehole Number: SB-01/MW-01
 Ground Surface Elevation: NA
 State Plane Coordinates: NA
 Total Depth Drilled: 26 feet
 Well Set Depth: 25 feet
 Depth to Groundwater: 18 feet
 Date/Time of Measurement: 6/25/99 10:00

SUBSURFACE PROFILE			SAMPLE				Remarks/ Analytical Samples	
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	
5								
17		Orange brown coarse to fine GRAVEL, some Silt, moist	ML		SS	24	19	0
18								SB-01C (17-18')
19								
20		Orange brown SILT and coarse to fine SAND, some Gravel, wet	ML		SS	18	18	0
21					SS	20	26	0
22								No Odor
23		Orange brown coarse to fine SAND, some Gravel, little Silt, wet.	SP		SS	18	28	0
24		Dark red SILT, some Clay, wet.	ML					SB-01D (23-24')
25		Orange brown, coarse to fine SAND, some Gravel, little Silt, wet.	SM		SS	24	75	0
26		End of Borehole						No Odor
27								
28								
29								
30								
31								
32								

Drilling Company: CT & E

Auger/Hole Diameter (O.D./I.D.) inches: 6 5/8" ID / 12" OD

Scr. Length/Diam.: 10 feet

Driller(s): L. Lynch. & J. Lewis

Sampling Method: Split spoon

Slot Size: 0.01

Rig Type: Mobile B-61

Hammer/Fall: 140 lbs/ 30"

Gravel Type: #1 Moraine

Drilling Method: Hollow Stem auger

Sheet: 2 of 2

Flush/Stick Up: Flush



Project No: 1250-22
 Client: NJDOT
 Location: Fernwood
 Property Owner: NJDOT
 Date Started: 6/26/99
 Date Completed: 6/26/99
 Logged By: R. Glover

Borehole Number: SB-02/MW-02
 Ground Surface Elevation: NA
 State Plane Coordinates: NA
 Total Depth Drilled: 22 feet
 Well Set Depth: 22 feet
 Depth to Groundwater: 14.2 feet
 Date/Time of Measurement: 6/26/99 10:30

SUBSURFACE PROFILE			SAMPLE				Remarks/ Analytical Samples	
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	
0		Ground Surface						
1		Asphalt			SS	NA	NA	0
2		Trap Rock and Fill Material			SS	22	6	0
3		Brown fine SAND and CLAY, little Gravel and Clay, moist			SS	15	10	0
4		Gray SILT, trace of fine Sand, moist			SS	24	29	0
5					SS	14	44	0
6		Brown fine silty SAND, grading to Silt, moist.			SS	21	32	0
7					SS	21	26	0
8		Brown to red brown silty SAND, trace of Silt and Clay, moist			SS	24	9	0
9								No Odor
10								SB-02B (8-9')
11								No Odor
12								SB-02C (12-13')
13								No Odor
14		Brown to yellow fine medium SAND, trace of Gravel, occasional fine Sand lens						No Odor
15								
16								
Drilling Company: CT & E Driller(s): L. Lynch. & J. Lewis Rig Type: Mobile B-61 Drilling Method: Hollow Stem auger			Auger/Hole Diameter (O.D.I.D.) inches: 6 5/8" ID / 12" OD Sampling Method: Splitspoon Hammer/Fall: 140 lbs/ 30" Sheet: 1 of 2			Scr. Length/Diam.: 10 feet Slot Size: 0.01 Gravel Type: #1 Moraine Flush/Stick Up: Flush		



Project No: 1250-22
Client: NJDOT
Location: Fenwood
Property Owner: NJDOT
Date Started: 6/26/99
Date Completed: 6/26/99
Logged By: R. Glover

Borehole Number: SB-02/MW-02
Ground Surface Elevation: NA
State Plane Coordinates: NA
Total Depth Drilled: 22 feet
Well Set Depth: 22 feet
Depth to Groundwater: 14.2 feet
Date/Time of Measurement: 6/26/99 10:30

SUBSURFACE PROFILE					SAMPLE				Remarks/ Analytical Samples
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	PID (ppm)	
5					SS	24	10	0	SB-02D (17-18')
17					SS	23	8	0	SB-02E (18-19')
18					SS	22	27	0	No Odor
19		Red brown to yellow brown fine medium silty SAND, some Sand lens with Gravel, wet.							
20									
21									
22		End of Borehole							
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

Drilling Company: CT & E

Auger/Hole Diameter (O.D./I.D.) inches: 6 5/8" ID / 12" OD

Scr. Length/Diam.: 10 feet

Driller(s): L. Lynch. & J. Lewis

Sampling Method: Splitspoon

Slot Size: 0.01

Rig Type: Mobile B-61

Hammer/Fall: 140 lbs/ 30"

Gravel Type: #1 Moraine

Drilling Method: Hollow Stem auger

Sheet: 2 of 2

Flush/Stick Up: Flush



Project No: 1250-22
 Client: NJDOT
 Location: Fernwood
 Property Owner: NJDOT
 Date Started: 6/25/99
 Date Completed: 6/25/99
 Logged By: C. Stebbins

Borehole Number: SB-03/MW-03
 Ground Surface Elevation: NA
 State Plane Coordinates: NA
 Total Depth Drilled: 26 feet
 Well Set Depth: 25 feet
 Depth to Groundwater: 16.4 feet
 Date/Time of Measurement: 6/25/99 14:00

SUBSURFACE PROFILE			SAMPLE				Remarks/ Analytical Samples	
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	
0		Ground Surface	Fill					
1		Asphalt			SS	NA	NA	0
2		Trap Rock and Fill Material			SS	17	10	0
3		Brown medium to fine SAND, little Silt, dry			SS	12	62	0
4					SS	24	22	0
5					SS	21	36	0
6					SS	18	24	0
7					SS	18	41	0
8		Brown gray grading to orange brown SILT, little to some Gravel, little Clay, slightly moist			SS	24	8	0
9								No Odor
10			ML					
11								
12								
13								
14		Orange brown fine to medium SAND, some Gravel, little Clay, moist	SM					
15								
16		Dark red SILT						
Drilling Company: CT & E Driller(s): L. Lynch. & J. Lewis Rig Type: Mobile B-61 Drilling Method: Hollow Stem auger			Auger/Hole Diameter (O.D./I.D.) inches: 6 5/8" ID / 12" OD Sampling Method: Splitspoon Hammer/Fall: 140 lbs/ 30" Sheet: 1 of 2				Scr. Length/Diam.: 12 feet Slot Size: 0.01 Gravel Type: #1 Moraine Flush/Stick Up: Flush	



Project No: 1250-22
 Client: NJDOT
 Location: Fernwood
 Property Owner: NJDOT
 Date Started: 6/25/99
 Date Completed: 6/25/99
 Logged By: C. Stebbins

Borehole Number: SB-03/MW-03
 Ground Surface Elevation: NA
 State Plane Coordinates: NA
 Total Depth Drilled: 26 feet
 Well Set Depth: 25 feet
 Depth to Groundwater: 16.4 feet
 Date/Time of Measurement: 6/25/99 14:00

SUBSURFACE PROFILE				SAMPLE				Remarks/ Analytical Samples
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	
5					SS	12	13	0
17					SS	14	7	0
18					SS	18	35	0
19		Orange brown SILT grading with fine to medium SAND, little Gravel, wet.						SB-03D (21-22')
20								No Odor
21								No Odor
22								No Odor
23	7	Dark red SILT, slightly moist.			SS	16	19	0
24		End of Borehole						
25								
26								
27								
28								
29								
30								
31								
32								
Drilling Company: CT & E			Auger/Hole Diameter (O.D/I.D.) inches: 6 5/8" ID / 12" OD			Scr. Length/Diam.: 12 feet		
Driller(s): L. Lynch. & J. Lewis			Sampling Method: Splitspoon			Slot Size: 0.01		
Rig Type: Mobile B-61			Hammer/Fall: 140 lbs/30"			Gravel Type: #1 Moraine		
Drilling Method: Hollow Stem auger			Sheet: 2 of 2			Flush/Stick Up: Flush		



Project No: 1250-22
 Client: NJDOT
 Location: Fernwood
 Property Owner: NJDOT
 Date Started: 6/26/99
 Date Completed: 6/26/99
 Logged By: Ray Glover

Borehole Number: SB-04/MW-04
 Ground Surface Elevation: NA
 State Plane Coordinates: NA
 Total Depth Drilled: 24 feet
 Well Set Depth: 24 feet
 Depth to Groundwater: 16 feet
 Date/Time of Measurement: 6/26/99 12:30

SUBSURFACE PROFILE			SAMPLE				Remarks/ Analytical Samples	
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	
0.0		Ground Surface						
1.0		Asphalt			SS	NA	NA	0
2.0		Red brown silty fine medium SAND, little to coarse Sand and fine medium Gravel, moist.	SM -SC		SS	21	20	0
3.0			ML		SS	23	20	0
4.0		Dark gray to yellow brown SILT and fine SAND, trace of Clay, moist.	ML		SS	16	25	0
5.0			ML		SS	16	34	0
6.0			SP -SM		SS	NA	NA	0
7.0					SS	24	7	0
8.0					SS	NA	NA	0
9.0		Gray to yellow brown silty CLAY and fine SAND, trace of coarse Sand, moist						
10.0								
11.0								
12.0								SB-04B (12-13')
13.0								No Odor
14.0								
15.0								SB-04C (15-16')
16.0		Yellow brown fine medium silty SAND, trace to little coarse Sand and medium Gravel, moist to wet.						
Drilling Company: CT & E			Auger/Hole Diameter (O.D./I.D.) inches: 6 5/8" ID / 12" OD				Scr. Length/Diam.: 10 feet	
Driller(s): L. Lynch. & J. Lewis			Sampling Method: Splitspoon				Slot Size: 0.01	
Rig Type: Mobile B-61			Hammer/Fall: 140 lbs/ 30"				Gravel Type: #1 Moraine	
Drilling Method: Hollow Stem auger			Sheet: 1 of 2				Flush/Stick Up: Flush	



Project No: 1250-22
Client: NJDOT
Location: Fernwood
Property Owner: NJDOT
Date Started: 6/26/99
Date Completed: 6/26/99
Logged By: Ray Glover

Borehole Number: SB-04/MW-04
Ground Surface Elevation: NA
State Plane Coordinates: NA
Total Depth Drilled: 24 feet
Well Set Depth: 24 feet
Depth to Groundwater: 16 feet
Date/Time of Measurement: 6/26/99 12:30

SUBSURFACE PROFILE				SAMPLE				Remarks/ Analytical Samples
Depth	Symbol	Description	USCS	Well Data	Type	Recovery	N-Values	
5					SS	18	8	0
17					SS	NA	NA	0
18					SS	24	14	0
19					SS	24	26	0
6								No Odor
20								No Odor
21								
22		Yellow brown fine medium silty SAND, trace to little coarse Sand and Gravel, wet						SB-04D (22-23')
7								No Odor
23								
24		End of Borehole						
25								
26								
8								
27								
28								
29								
9								
30								
31								
32								

Drilling Company: CT & E
Driller(s): L. Lynch. & J. Lewis
Rig Type: Mobile B-61
Drilling Method: Hollow Stem auger

Auger/Hole Diameter (O.D./I.D.) inches: 6 5/8" ID / 12" OD
Sampling Method: Splitspoon
Hammer/Fall: 140 lbs/ 30"
Sheet: 2 of 2

Scr. Length/Diam.: 10 feet
Slot Size: 0.01
Gravel Type: #1 Moraine
Flush/Stick Up: Flush

New Jersey Department of Environmental Protection
Bureau of Water Allocation
MONITORING WELL RECORDWell Permit No. 27 - 16414Atlas Sheet Coordinates 27 : 25 : 117

OWNER IDENTIFICATION - Owner NJDOT
 Address 951 PARKWAY AVE PO BOX 600
 City TRENTON State NJ Zip Code 08625

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW 8
 County MERCER Municipality EWING TWP Lot No. 11 Block No. 320
 Address 951 PARKWAY AVE

TYPE OF WELL (as per Well Permit Categories) MONITORING DATE WELL STARTED 8/21/02
 Regulatory Program Requiring Well _____ DATE WELL COMPLETED 8/21/02

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Parsons Eng. Case I.D.# (781)401-322 Tele. # (781)401-322

WELL CONSTRUCTION

Total depth drilled 28 ft.
 Well finished to 27 ft.

Borehole diameter:
 Top 4.8 in.
 Bottom 4.8 in.

Well was finished: above grade
 flush mounted

If finished above grade, casing height (stick up) above land surface _____ ft.

Was steel protective casing installed?
 Yes No

Static water level after drilling 19 ft.

Water level was measured using STI GROPS

Well was developed for 2 hours
 at 1 gpm

Method of development Pump

Was permanent pumping equipment installed? Yes No

Pump capacity _____ gpm

Pump type: _____

Drilling Fluid None Type of Rig CME 75

Health and Safety Plan submitted? Yes No

Level of Protection used on site (circle one) None C B A

I certify that I have constructed the above referenced well in
 accordance with all well permit requirements and applicable

STAR DIAMOND DRILLING, INC.

Drilling Company _____

Well Driller (Print) Mr. Brinkhoff

Driller's Signature 7

Registration No. J1496 Date 8/21/02

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch nc)
Single/Inner Casing	125	17	4	PVC	GAL 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 01)	17	27	4	PVC	GAL 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	15	28	10	MARL	#1
Grout	0	15	10	Neat Cement Bentonite	700 lb 30 lb

Grouting Method Pressure
 Drilling Method Auger

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0'-5' AS-FACT
5'-10' CLEAR DENSE FIL
10'-12' GRAY-TAN SILTY GRAN
12'-19' DARK BROWN MUD SAND
 AND CHANNEL
19'-28' DARK REWORKED SAND
 WITH LITTLE CHANNEL
 AS-BUILT WELL LOCATION
 (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING: _____ EASTING: _____

LATITUDE: _____ OR
 LONGITUDE: _____

BORING CONSTRUCTION LOG

BORING CONSTRUCTION LOG

PARSONS						CLIENT: NJDOT			BORING NO.: MW-9		
COMMENTS:									DRILLER: ADT		
									INSPECTOR: Ayesha		
									DATE: 8-5-02		
D E P T H (FT)	SAMPLING			SAMPLE			SAMPLE DESCRIPTION			USCS CLASS	STRATUM CLASS
	BLOWS PER 6 INCHES	PENETRATION RANGE (FEET)	RECOVERY RANGE (FEET)	DEPTH INT (FEET)	NO.	VOC	RAD SCRNL	(As per Burmeister: color, grain size, MAJOR COMPONENT, Minor Components with amount modifiers and grain-size, density, stratification, wetness, etc.)			
5											
10											
12	2	1.25	10 to 12	1	0						CL
15	6	2	15 to 17	2	0						SM
17	7	2									
20	7										
	8										

BORING CONSTRUCTION LOG



The Louis Berger Group, Inc.
412 Mt. Kemble Ave.
Morristown, NJ 07960

Drilling Log

Page 1 of 2

BORING NO.: MW10

WELL NO.: MW10

CLIENT: New Jersey Department of Transportation

PROJECT NO.: JG500L4

PROJECT: Fernwood Maintenance Complex

DATE STARTED: 10/23/2007

DRILLING CONTRACTOR: Summit Drilling Co., Inc.

DATE FINISHED: 10/23/2007

DRILLING METHOD: Hollow Stem Auger

DRILLER: J. Murtha

BOREHOLE DATA

WELL DATA

Diameter (in):	7	Completion:	2-inch PVC/Flushmount	INSPECTOR:	N. Save
Total Depth (ft):	25.00	Total Depth (ft):	24.5	NORTHING:	N/A
Sampler:	Grab Cuttings	Screen Length (ft)/Slot (in):	10 / 0.020	EASTING:	N/A
Depth to Water (ft):	18	Depth to Water (ft):	17.3	GROUND ELEVATION:	N/A
Depth to Rock (ft):	N/A	Permit No.:	N/A	TOC ELEVATION:	N/A

NOTES: All descriptions based on cuttings

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description		Remarks
								Start	End	
	0	SP				0		Brownish black (5YR 2/1) medium to fine SAND, little medium to fine Gravel; Dry.		Sand
	2									
	4									
	5	SM				5		Dusky brown (5YR 2/2) medium to fine SAND, some Silt, little medium to fine Gravel; Dry.		Silty Sand
	6									
	8									
	10	SM				4.3		Dusky brown (5YR 2/2) medium to fine SAND, and Silt; Dry.		



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WELL NO.: MW10

Well		Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description		Remarks
		12									
		14									
		16									
		18	SM					5.9	Moderate brown (5YR 4/4) coarse to fine SAND, and Clayey Silt, trace coarse to fine Gravel; Moist.		
		20	SM					4.7	Moderate brown (5YR 4/4) medium to fine SAND, and Clayey Silt, trace coarse to fine Gravel; Moist.		Water Level at 18 ft.
		22									
		24									End of Boring at 25 ft.