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VIA ELECTRONIC MAIL

December 20, 2013

Karen Cahill
Project Manager
New York State Department of Environmental Conservation
Department of Environmental Remediation
615 Erie Boulevard West
Syracuse, New York 13204-2400

Re: Excavation of Petroleum Impacted Soil at Test Pit 3-4
Emerson Power Transmission – Ithaca, New York
Order on Consent #A7-0125-87-09

Dear Karen:

On behalf of Emerson, WSP USA Corp. (WSP) is submitting this letter report summarizing the activities undertaken involving the excavation of petroleum containing soil identified at Test Pit 3-4 located to the south and west of the fire water reservoir at the Emerson Power Transmission (EPT) site in Ithaca, New York. As described in WSP's October 3, 2013 correspondence to the New York State Department of Environmental Conservation (NYSDEC), no light non aqueous phase liquid was measured in the 5 requested monitoring points installed around the south tank of the fire water reservoir, thus, Emerson proceeded with excavating petroleum affected soil identified around Test Pit 3-4. Figure 1 shows the location of Test Pit 3-4 and the limits of the soil excavation work. Enclosure A contains a log of photographs showing the work progress.

Scope of Work

The excavation work was undertaken on November 14, 2013. A backhoe was used to excavate the soils (Figure 1). A total of approximately 13 cubic yards of soil was excavated from the Test Pit 3-4 area. The limits of the excavation are depicted in Figure 1 and photo 1. The excavated soil was directly loaded into a truck and disposed of at the High Acres Landfill in Fairport, New York. A waste profile was completed and approved based on the previous Test Pit 3-4 data. Enclosure B contains the disposal documentation for the single load of soil.

A photoionization detector (PID) was used to screen the sidewalls and base of the cavity to assess whether any organic compounds may be present. PID measurements ranged from 0.1 to 0.2 parts per million which was consistent with background readings. No visible indications of oil or odors were noted in soils within the excavated area. Next, confirmation samples were collected from the four walls and the base of the excavation. The samples were submitted to Accutest of New England for analysis of polycyclic aromatic hydrocarbons (PAHs) by EPA SW846 method 8270C and target compound list (TCL) volatile organic compounds (VOCs) by EPA SW846 method 8260B.

Immediately following sample collection, the excavation was lined with a fabric and backfilled with imported clean topsoil (photo 2). To protect the slope against erosion from runoff, a straw mat fabric was placed over the disturbed area and anchored with soil staples and rocks (photo 3). The area will be

seeded and treated with fertilizer in the spring. In accordance with the guidance in NYSDEC DER-10, a sample was previously collected of the topsoil that was to be used for backfilling the Test Pit 3-4 excavation. The sample was submitted to Accutest Laboratory of New England for analysis of TCL VOCs by EPA SW846 method 8260B, TCL semi-volatile organic compounds (SVOCs) by EPA SW846 method 8270C, target analyte list (TAL) metals by EPA SW846 method 6061/7000, and TCL pesticides and polychlorinated biphenyls (PCBs) by EPA SW846 methods 8081/8082. In accordance with the guidance, the analytical results were compared against the unrestricted use soil cleanup objectives (SCOs) of Title 6 of New York Codes, Rules, and Regulations (6 NYCRR) Part 375-6.8(a). The results of the analyses are presented in Table 1. None of the compounds detected in the topsoil sample exceeded the unrestricted use SCOs.

The laboratory analytical results for the confirmation samples are presented in Table 2 and the laboratory reports are provided in the enclosed disc. In accordance with the scope of work outlined in WSP's August 6, 2013 letter to the NYSDEC dated August 6, 2013, the results were initially compared to the industrial use SCOs. No constituents were detected above the industrial use SCOs. As an additional measure, the analytical results were also compared to the unrestricted use SCOs provided in 6 NYCRR Part 375-6.8(a). No PAH's or site-related VOCs were detected above the unrestricted SCOs. Figure 2 proved the confirmation sampling results along with the unrestricted use SCOs. Acetone was detected in four of the five confirmation samples at levels slightly above the unrestricted use SCOs. Acetone is not a site-related COC and is believed to be attributable to laboratory contamination.

In summary, the confirmation sampling results demonstrate that the petroleum affected soil in the area of Test Pit 3-4 has been removed. Therefore, we request that NYSDEC close out this matter.

Please contact us if you have any questions.

Sincerely yours,

Kevin D. Sullivan, PE
Senior Project Director

Scott P. Haitz
Vice President

JBP:rlo

Enclosures

cc\encl: Derek Chase, Emerson

Figures

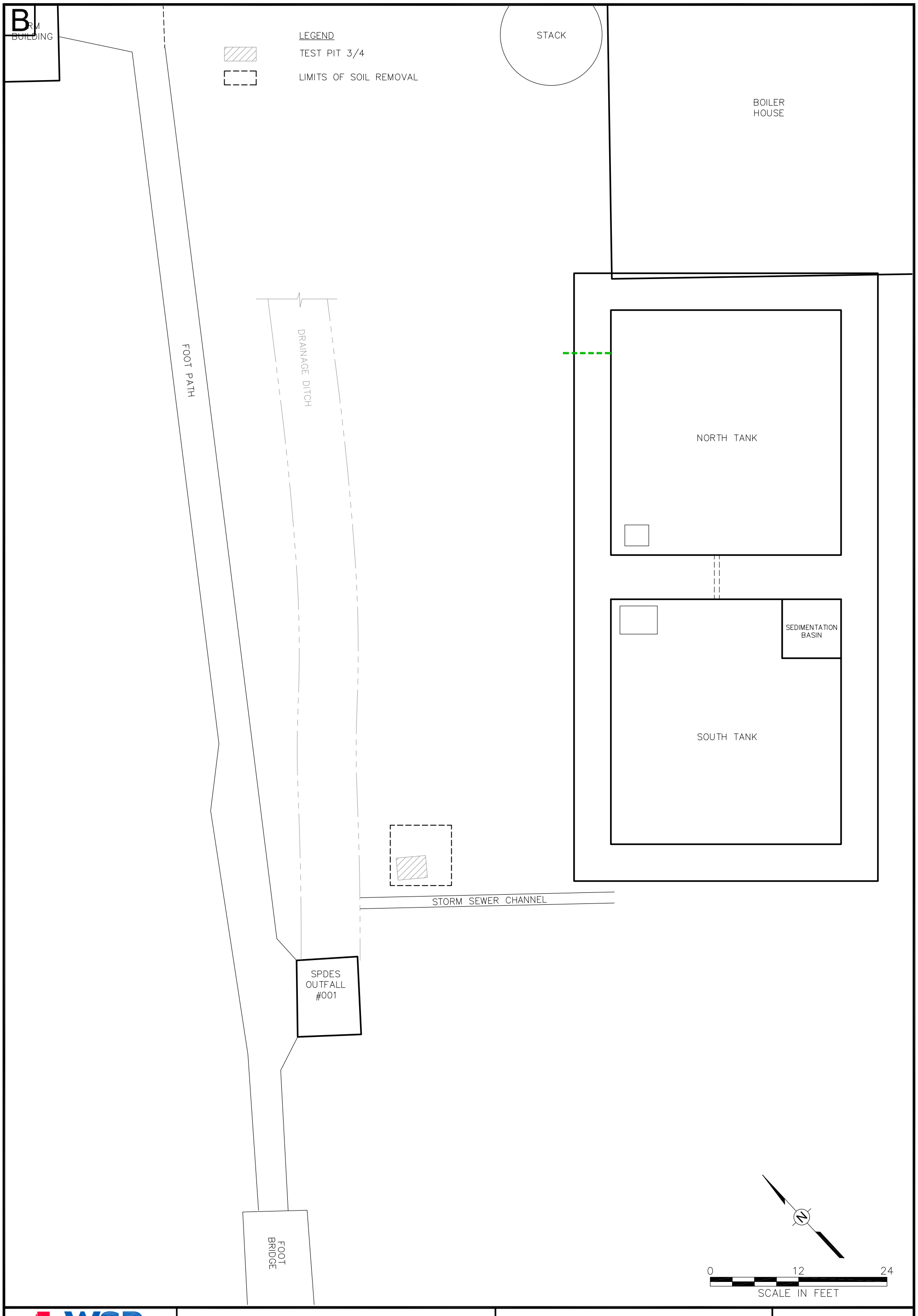

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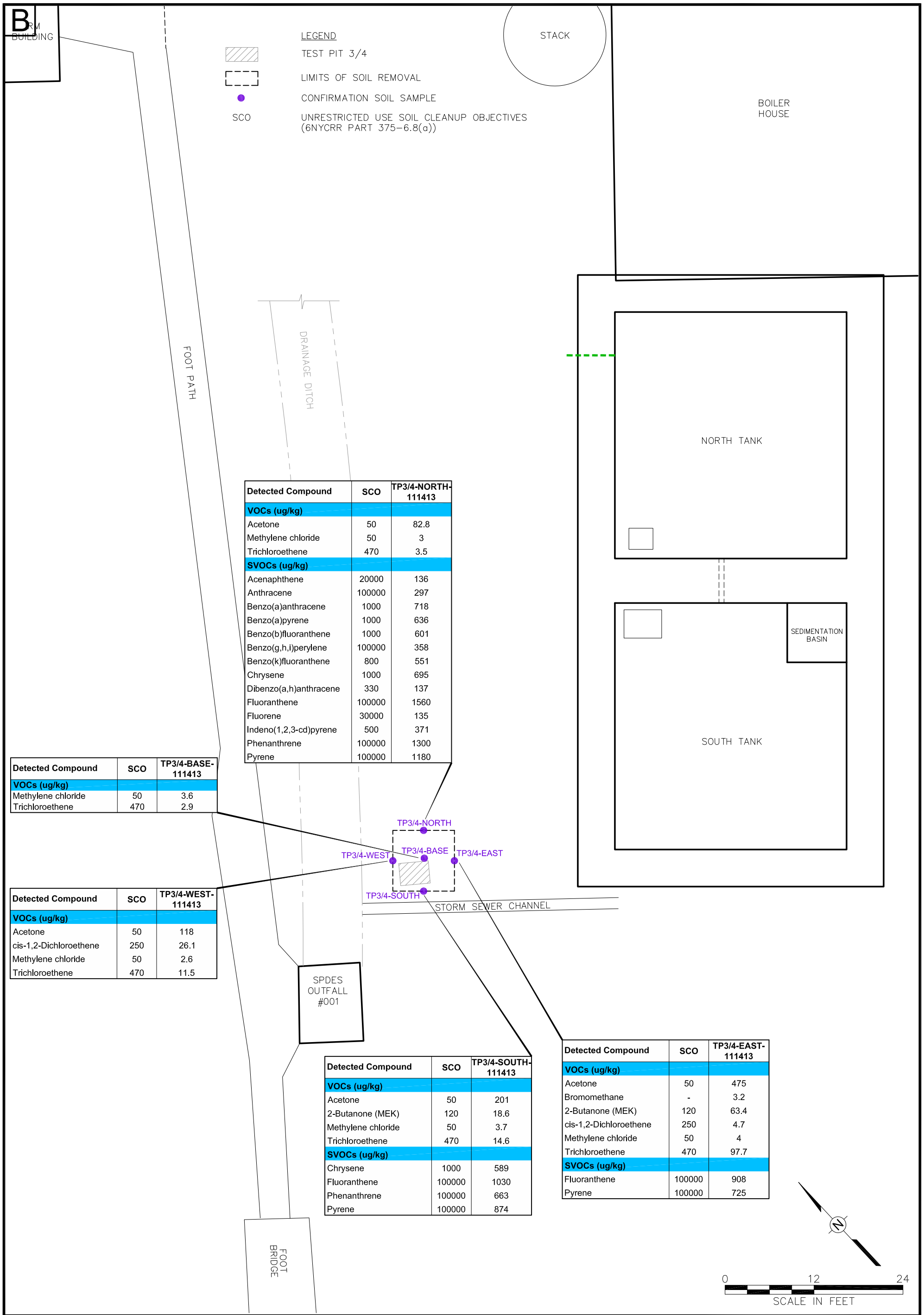
Figure 1

TEST PIT 3–4 EXCAVATION LOCATION

EMERSON POWER TRANSMISSION
ITHACA, NEW YORK

PREPARED FOR
EMERSON POWER TRANSMISSION

Drawn By: EGC
Checked: KJS 12/12/2013
Approved:
DWG Name: 00004507–109



Detected Compound	SCO	TP3/4-NORTH-111413
VOCs (ug/kg)		
Acetone	50	82.8
Methylene chloride	50	3
Trichloroethene	470	3.5
SVOCs (ug/kg)		
Acenaphthene	20000	136
Anthracene	100000	297
Benzo(a)anthracene	1000	718
Benzo(a)pyrene	1000	636
Benzo(b)fluoranthene	1000	601
Benzo(g,h,i)perylene	100000	358
Benzo(k)fluoranthene	800	551
Chrysene	1000	695
Dibenzo(a,h)anthracene	330	137
Fluoranthene	100000	1560
Fluorene	30000	135
Indeno(1,2,3-cd)pyrene	500	371
Phenanthrene	100000	1300
Pyrene	100000	1180

Detected Compound	SCO	TP3/4-BASE-111413
VOCs (ug/kg)		
Methylene chloride	50	3.6
Trichloroethene	470	2.9

Detected Compound	SCO	TP3/4-WEST-111413
VOCs (ug/kg)		
Acetone	50	118
cis-1,2-Dichloroethene	250	26.1
Methylene chloride	50	2.6
Trichloroethene	470	11.5

Detected Compound	SCO	TP3/4-SOUTH-111413
VOCs (ug/kg)		
Acetone	50	201
2-Butanone (MEK)	120	18.6
Methylene chloride	50	3.7
Trichloroethene	470	14.6
SVOCs (ug/kg)		
Chrysene	1000	589
Fluoranthene	100000	1030
Phenanthrene	100000	663
Pyrene	100000	874

Detected Compound	SCO	TP3/4-EAST-111413
VOCs (ug/kg)		
Acetone	50	475
Bromomethane	-	3.2
2-Butanone (MEK)	120	63.4
cis-1,2-Dichloroethene	250	4.7
Methylene chloride	50	4
Trichloroethene	470	97.7
SVOCs (ug/kg)		
Fluoranthene	100000	908
Pyrene	100000	725

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Figure 2

TEST PIT 3-4 EXCAVATION
CONFIRMATION SAMPLE RESULTS

EMERSON POWER TRANSMISSION
ITHACA, NEW YORK

PREPARED FOR
EMERSON POWER TRANSMISSION

Drawn By: EGC
Checked: KDS 12/12/2013
Approved:
DWG Name: 00004507-109

Tables

Table 1

Imported Topsoil Sample Analyses
Test Pit 3-4 Soil Removal
Emerson Power Transmission
Ithaca, New York

Client Sample ID:	Criteria - 6NYCRR Part 375-6.8(a) Unrestricted	TOPSOIL-110513
Date Sampled:		11/14/2013
Matrix:		Soil
VOCs (ug/kg)		
Acetone	50	36
Benzene	60	ND (0.60)
Bromodichloromethane	-	ND (2.4)
Bromoform	-	ND (2.4)
Bromomethane	-	ND (2.4)
2-Butanone (MEK)	120	ND (6.0)
Carbon disulfide	-	ND (6.0)
Carbon tetrachloride	760	ND (2.4)
Chlorobenzene	1100	ND (2.4)
Chloroethane	-	ND (6.0)
Chloroform	370	ND (2.4)
Chloromethane	-	ND (6.0)
Dibromochloromethane	-	ND (2.4)
1,1-Dichloroethane	270	ND (2.4)
1,2-Dichloroethane	20	ND (2.4)
1,1-Dichloroethene	330	ND (2.4)
cis-1,2-Dichloroethene	250	ND (2.4)
trans-1,2-Dichloroethene	190	ND (2.4)
1,2-Dichloropropane	-	ND (2.4)
cis-1,3-Dichloropropene	-	ND (2.4)
trans-1,3-Dichloropropene	-	ND (2.4)
Ethylbenzene	1000	ND (2.4)
2-Hexanone	-	ND (6.0)
4-Methyl-2-pentanone (MIBK)	-	ND (6.0)
Methylene chloride	50	ND (2.4)
Styrene	-	ND (6.0)
1,1,2,2-Tetrachloroethane	-	ND (2.4)
Tetrachloroethene	1300	ND (2.4)
Toluene	700	ND (6.0)
1,1,1-Trichloroethane	680	ND (2.4)
1,1,2-Trichloroethane	-	ND (2.4)
Trichloroethene	470	ND (2.4)
Vinyl chloride	20	ND (2.4)
Xylene (total)	260	ND (2.4)

Table 1

Imported Topsoil Sample Analyses
Test Pit 3-4 Soil Removal
Emerson Power Transmission
Ithaca, New York

Client Sample ID:	Criteria - 6NYCRR Part 375-6.8(a) Unrestricted	TOPSOIL-110513
Date Sampled:		11/14/2013
Matrix:		Soil
SVOCs (ug/kg)		
2-Chlorophenol	-	ND (300)
4-Chloro-3-methyl phenol	-	ND (590)
2,4-Dichlorophenol	-	ND (590)
2,4-Dimethylphenol	-	ND (590)
2,4-Dinitrophenol	-	ND (1200)
4,6-Dinitro-o-cresol	-	ND (590)
2-Methylphenol	330	ND (590)
3&4-Methylphenol	-	ND (590)
2-Nitrophenol	-	ND (590)
4-Nitrophenol	-	ND (1200)
Pentachlorophenol	800	ND (590)
Phenol	330	ND (300)
2,4,5-Trichlorophenol	-	ND (590)
2,4,6-Trichlorophenol	-	ND (590)
Acenaphthene	20000	ND (120)
Acenaphthylene	100000	ND (120)
Anthracene	100000	ND (120)
Benzo(a)anthracene	1000	ND (120)
Benzo(a)pyrene	1000	ND (120)
Benzo(b)fluoranthene	1000	ND (120)
Benzo(g,h,i)perylene	100000	ND (120)
Benzo(k)fluoranthene	800	ND (120)
4-Bromophenyl phenyl ether	-	ND (300)
Butyl benzyl phthalate	-	ND (300)
2-Chloronaphthalene	-	ND (300)
4-Chloroaniline	-	ND (590)
Carbazole	-	ND (120)
Chrysene	1000	ND (120)
bis(2-Chloroethoxy)methane	-	ND (300)
bis(2-Chloroethyl)ether	-	ND (300)
bis(2-Chloroisopropyl)ether	-	ND (300)
4-Chlorophenyl phenyl ether	-	ND (300)
1,2-Dichlorobenzene	1100	ND (300)
1,3-Dichlorobenzene	2400	ND (300)
1,4-Dichlorobenzene	1800	ND (300)
2,4-Dinitrotoluene	-	ND (590)
2,6-Dinitrotoluene	-	ND (590)
3,3'-Dichlorobenzidine	-	ND (300)
Dibenzo(a,h)anthracene	330	ND (120)
Dibenzofuran	7000	ND (120)
Di-n-butyl phthalate	-	ND (300)
Di-n-octyl phthalate	-	ND (300)
Diethyl phthalate	-	ND (300)
Dimethyl phthalate	-	ND (300)

Table 1

Imported Topsoil Sample Analyses
Test Pit 3-4 Soil Removal
Emerson Power Transmission
Ithaca, New York

Client Sample ID:	Criteria - 6NYCRR Part 375-6.8(a) Unrestricted	TOPSOIL-110513
Date Sampled:		11/14/2013
Matrix:		Soil
SVOCs (ug/kg)		
bis(2-Ethylhexyl)phthalate	-	ND (300)
SVOCs (ug/kg)		
Fluoranthene	100000	ND (120)
Fluorene	30000	ND (120)
Hexachlorobenzene	330	ND (300)
Hexachlorobutadiene	-	ND (300)
Hexachlorocyclopentadiene	-	ND (590)
Hexachloroethane	-	ND (300)
Indeno(1,2,3-cd)pyrene	500	ND (120)
Isophorone	-	ND (300)
2-Methylnaphthalene	-	ND (120)
2-Nitroaniline	-	ND (590)
3-Nitroaniline	-	ND (590)
4-Nitroaniline	-	ND (590)
Naphthalene	12000	ND (120)
Nitrobenzene	-	ND (300)
N-Nitroso-di-n-propylamine	-	ND (300)
N-Nitrosodiphenylamine	-	ND (300)
Phenanthrene	100000	ND (120)
Pyrene	100000	ND (120)
1,2,4-Trichlorobenzene	-	ND (300)
Pesticides (ug/kg)		
Aldrin	5	ND (5.9)
alpha-BHC	20	ND (5.9)
beta-BHC	36	ND (5.9)
delta-BHC	40	ND (5.9)
gamma-BHC (Lindane)	100	ND (5.9)
alpha-Chlordane	94	ND (5.9)
gamma-Chlordane	-	ND (5.9)
Dieldrin	5	ND (5.9)
4,4'-DDD	3.3	ND (5.9)
4,4'-DDE	3.3	ND (5.9)
4,4'-DDT	3.3	ND (5.9)
Endrin	14	ND (5.9)
Endosulfan sulfate	2400	ND (5.9)
Endrin aldehyde	-	ND (5.9)
Endosulfan-I	2400	ND (5.9)
Endosulfan-II	2400	ND (5.9)
Heptachlor	42	ND (5.9)
Heptachlor epoxide	-	ND (5.9)
Methoxychlor	-	ND (5.9)
Endrin ketone	-	ND (5.9)
Toxaphene	-	ND (59)

Table 1

Imported Topsoil Sample Analyses
Test Pit 3-4 Soil Removal
Emerson Power Transmission
Ithaca, New York

Client Sample ID:	Criteria - 6NYCRR Part 375-6.8(a) Unrestricted	TOPSOIL-110513
Date Sampled:		11/14/2013
Matrix:		Soil
PCBs (ug/kg)		
Aroclor 1016	100	ND (29)
Aroclor 1221	100	ND (29)
Aroclor 1232	100	ND (29)
Aroclor 1242	100	ND (29)
Aroclor 1248	100	ND (29)
Aroclor 1254	100	ND (29)
Aroclor 1260	100	ND (29)
Metals (mg/kg)		
Aluminum	-	11700
Antimony	-	0.14 U
Arsenic	13	5.9
Barium	350	62.4
Beryllium	7.2	0.4
Cadmium	2.5	0.085 B
Calcium	-	1730
Chromium	-	12.7
Cobalt	-	7.3
Copper	50	13.2
Iron	-	18000
Lead	63	12
Magnesium	-	2740
Manganese	1600	686
Mercury	0.18	0.048
Nickel	30	14.5
Potassium	-	771
Selenium	3.9	0.46 B
Silver	2	0.12 U
Sodium	-	18.5 B
Thallium	-	0.13 U
Vanadium	-	16.5
Zinc	109	52.6
General Chemistry		
Solids, Percent	-	84.4

Table 2

Confirmation Sample Analyses
Test Pit 3-4 Soil Removal
Emerson Power Transmission
Ithaca, New York

Client Sample ID:	Criteria - 6NYCRR Part 375-6.8(a) Unrestricted	TP3/4-BASE-111413	TP3/4-EAST-111413	TP3/4-NORTH-111413	TP3/4-SOUTH-111413	TP3/4-WEST-111413
Date Sampled:		11/14/2013	11/14/2013	11/14/2013	11/14/2013	11/14/2013
Matrix:		Soil	Soil	Soil	Soil	Soil
VOCs (ug/kg)						
Acetone	50	ND (12)	475	82.8	201	118
Benzene	60	ND (0.59)	ND (0.62)	ND (0.64)	ND (0.58)	ND (0.57)
Bromodichloromethane	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Bromoform	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Bromomethane	-	ND (2.4)	3.2	ND (2.6)	ND (2.3)	ND (2.3)
2-Butanone (MEK)	120	ND (5.9)	63.4	ND (6.4)	18.6	ND (5.7)
Carbon disulfide	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
Carbon tetrachloride	760	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Chlorobenzene	1100	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Chloroethane	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
Chloroform	370	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Chloromethane	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
Dibromochloromethane	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
1,1-Dichloroethane	270	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
1,2-Dichloroethane	20	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
1,1-Dichloroethene	330	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
cis-1,2-Dichloroethene	250	ND (2.4)	4.7	ND (2.6)	ND (2.3)	26.1
trans-1,2-Dichloroethene	190	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
1,2-Dichloropropane	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
cis-1,3-Dichloropropene	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
trans-1,3-Dichloropropene	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Ethylbenzene	1000	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
2-Hexanone	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
4-Methyl-2-pentanone (MIBK)	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
Methylene chloride	50	3.6	4	3	3.7	2.6
Styrene	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
1,1,2,2-Tetrachloroethane	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Tetrachloroethene	1300	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Toluene	700	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (5.7)
1,1,1-Trichloroethane	680	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
1,1,2-Trichloroethane	-	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Trichloroethene	470	2.9	97.7	3.5	14.6	11.5
Vinyl chloride	20	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
Xylene (total)	260	ND (2.4)	ND (2.5)	ND (2.6)	ND (2.3)	ND (2.3)
SVOCs (ug/kg)						
Acenaphthene	20000	ND (110)	ND (590)	136	ND (570)	ND (120)
Acenaphthylene	100000	ND (110)	ND (590)	ND (120)	ND (570)	ND (120)
Anthracene	100000	ND (110)	ND (590)	297	ND (570)	ND (120)
Benzo(a)anthracene	1000	ND (110)	ND (590)	718	ND (570)	ND (120)
Benzo(a)pyrene	1000	ND (110)	ND (590)	636	ND (570)	ND (120)
Benzo(b)fluoranthene	1000	ND (110)	ND (590)	601	ND (570)	ND (120)
Benzo(g,h,i)perylene	100000	ND (110)	ND (590)	358	ND (570)	ND (120)
Benzo(k)fluoranthene	800	ND (110)	ND (590)	551	ND (570)	ND (120)
Chrysene	1000	ND (110)	ND (590)	695	589	ND (120)
Dibenzo(a,h)anthracene	330	ND (110)	ND (590)	137	ND (570)	ND (120)
Fluoranthene	100000	ND (110)	908	1560	1030	ND (120)
Fluorene	30000	ND (110)	ND (590)	135	ND (570)	ND (120)
Indeno(1,2,3-cd)pyrene	500	ND (110)	ND (590)	371	ND (570)	ND (120)
2-Methylnaphthalene	-	ND (110)	ND (590)	ND (120)	ND (570)	ND (120)
Naphthalene	12000	ND (110)	ND (590)	ND (120)	ND (570)	ND (120)
Phenanthrene	100000	ND (110)	ND (590)	1300	663	ND (120)
Pyrene	100000	ND (110)	725	1180	874	ND (120)
General Chemistry						
Solids, Percent	-	87.5	82.3	80.1	84.2	85.7

Enclosure A

WSP	PHOTOGRAPHIC LOG	
Client: Emerson **Project No.: 00003197**	**Test Pit 3-4 Soil Removal** **Emerson Power Transmission, Ithaca, NY**	**Date** **November 2013**

Photo No.	**1**

Description

11/14/13

Completed Test Pit 3-4 Excavation. Excavation dimensions are approximately 10 ft by 10 ft by 2 to 5 feet in depth. Confirmation sample locations are marked with orange flagging. Samples collected of the 4 walls and excavation base.

Photo No.	**2**

Description

11/14/13

Test Pit 3-4 Excavation backfilled with imported topsoil (confirmed clean by analysis) from RMS Gravel, Inc., of Dryden, New York. Existing DPE well chambers are visible in the background.

WSP	PHOTOGRAPHIC LOG	
Client: Emerson **Project No.: 00003197**	**Test Pit 3-4 Soil Removal** **Emerson Power Transmission, Ithaca, NY**	**Date** **November 2013**

Photo No.	**3**
Description 11/15/13 Restoration of the Test Pit 3-4 Area using straw matt. Area will be seeded during the spring of 2014.	

Enclosure B