



2455 South Road  
Poughkeepsie, NY 12601

July 18, 2013

Mr. Alex Czuhanych  
Division of Environmental Remediation  
Remedial Bureau E  
New York State Dept. of Environmental Conservation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, New York 12233-7017

**Re: Newly Discovered Area of Concern F: B052 NW Parking Lot & Roadway  
Transmittal of Assessment Results  
IBM-Poughkeepsie, Part 373 Permit Number 3-1346-00035/00123  
EPA ID Number NYD 080480734**

Dear Mr. Czuhanych:

This correspondence is being sent regarding the completion of field activities associated with the above listed unit. The status of the unit was briefly discussed with you on July 3, 2013 and IBM provided formal written notice regarding this newly discovered Area of Concern (AOC) to NYSDEC on July 8, 2013. In addition, and in accordance with the Facilities' Part 373 Permit Requirements, IBM is providing additional information to the NYSDEC regarding AOC F, the B052 NW Parking Lot and Roadway at the IBM-Poughkeepsie facility.

This unit was identified during the course of field investigations in support of the construction and renovations of an above-ground utility service. The surrounding land use is parking lots and roadways and access to the area is limited by steep slopes, site utilities and roadways. The current zoned site use is Industrial.

In two of the ten soil borings installed, soils were recovered where monitoring with the hand-held photo-ionization detector showed readings above background. Samples were collected from those split spoon intervals and submitted for analysis for VOCs, SVOCs and TCLP metals. In addition, non-native materials believed to be associated with railroad ties (cinders, wood) were observed in several other split spoons. Samples were collected from two of these intervals and were also submitted for analysis of VOCs, SVOCs and TCLP metals.

Results of this assessment indicate that subsurface impacts were localized and consistent with railroad debris containing materials. Historically, a railroad spur serviced nearby manufacturing buildings and several split spoon samples, including those associated with PID readings above background, contained fragments of wood believed to be associated with railroad materials and railroad ties.

If during the course of the anticipated future excavations in this area encounter impacted soils where an assay of excavated materials by hand-held photo-ionization detector yields readings above background, following the Site's Solid Management Protocol, these materials will be segregated and any removed and impacted soils will be managed and disposed of in accordance with all applicable regulations.

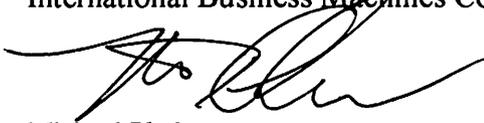
IBM respectfully requests NYSDEC concurrence that the investigation described above satisfies the requirement for an RFA for this AOC and that no further action is necessary or appropriate.

If you have any questions or need additional information, please do not hesitate to contact Steve Brannen at (845) 433-1509.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

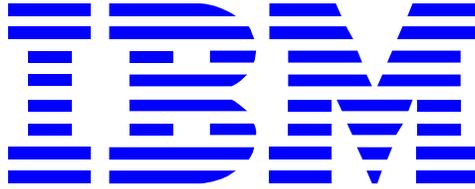
Sincerely,

International Business Machines Corporation



Michael Phelan  
Manager Environmental, Planning and Site Support Services

cc: Denise Radtke, NYSDEC Albany  
Martin Brand, NYSDEC, Region III w/o attachment  
Carol Stein, USEPA Region II w/ attachment



Poughkeepsie, New York

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**IBM POUGHKEEPSIE  
B052 NW PARKING LOT & ROADWAY (Area of Concern F)  
MAIN PLANT SITE**

Part 373 Hazardous Waste Permit 3-1346-00035/00123

EPA ID Number NYD 080480734

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**Prepared for:**

**IBM Poughkeepsie  
Poughkeepsie, New York**

**July 18, 2013**

**Prepared by:**

**Groundwater Sciences Corporation**

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Harrisburg, Pennsylvania 17110**

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## 1 INTRODUCTION

Groundwater Sciences Corporation (GSC) has prepared this report at the request of the International Business Machines Corporation (IBM) for its Poughkeepsie, New York Main Plant site operations. This report was prepared to document the field activities associated with Area of Concern F (AOC F), the Building 052 Northwest Parking Lot and Roadway Area. IBM provided formal written notice regarding this newly discovered Area of Concern (AOC) to New York State Department of Environmental Conservation (NYSDEC) on July 8, 2013.

In accordance with the Facilities' Part 373 Permit Requirements, IBM is providing additional information to the NYSDEC regarding AOC F, the B052 NW Parking Lot and Roadway Area at the IBM Poughkeepsie facility.

Figure 1 shows the location of the IBM Poughkeepsie Main Plant site; Building 052 lies in the north western portion of the manufacturing area. As shown on Figure 2, the newly identified area of concern lies just north and west of Building 052. The current zoned site use is Industrial.

This unit was identified during the course of field investigations in support of the construction and renovations of an above-ground utility service that lies along the western edge of Perimeter Road. On June 25 and June 26, 2013, subsurface borings were installed to collect samples for physical characteristics in support of the construction efforts and anticipated excavations in this area of the site. As part of these efforts, the subsurface soils were assayed using a hand-held photo-ionization detector and the recovered soils from two borings yielded readings above background. The soils associated with the other eight borings did not yield readings above background.

The surrounding land use is parking lots and roadways and access to the area is limited by steep slopes, site utilities and roadways.

## 2 ASSESSMENT ACTIVITIES

At the time of discovery, IBM was conducting field investigations in support of the construction efforts and anticipated excavations associated with the renovations of an above-ground utility service that lies along the western edge of Perimeter Road.

### 2.1 Field Activities

On June 25 and June 26, 2013, a total of ten (10) subsurface borings were installed to a target depth of eight (8) feet below ground surface to collect samples for physical characteristics. The location of the ten subsurface borings are shown on Figure 2.

As part of these efforts, the subsurface soils recovered from each split spoon were assayed using a hand-held photo-ionization detector. Following field screening of the recovered soils, an assessment was conducted of each split spoon including notation of any visible staining, inclusions or fragments of non-native materials.

Soils associated with the four foot depth below ground surface at Boring B3 and at the eight foot depth below ground surface at Boring 2A yielded readings above background. Other depths associated with these two borings did not yield results above background. The soils associated with the other eight borings did not yield readings above background.

Several split spoon samples, including those associated with PID readings above background, contained fragments of wood believed to be associated with railroad materials and railroad ties. Historically a railroad spur serviced nearby manufacturing buildings in this area of the Site. As noted previously, the soils where readings were above background were discovered in an area of limited access, containing steep slopes, site utilities and roadways.

Following the Site's Solids Management Protocol, the borings have been backfilled to prevent any potential contact with these materials and the recovered soils have been segregated into a drum to be managed and disposed of in accordance with all applicable regulations.

Appendix A contains the boring installation and recovered soils assessment summary including boring logs, prepared by SoilTesting Inc. of Oxford, Connecticut.

## 2.2 Analytical Methodologies

Samples were collected of the recovered soils from four split spoons and submitted for analysis by United States Environmental Protection Agency (USEPA) semi-volatile organic compounds (SVOCs) USEPA SW-846 Method 8270C; volatile organic compounds (VOCs) by USEPA Method 8260B; and for Total Concentrate Leachate Procedures (TCLP) metals by USEPA SW-846 methodologies.

A sample was collected of the visibly stained soils discovered at a depth of 4 feet bgs from Boring B3 and also from Boring B2A at a depth of 8 feet bgs. Samples were also collected from a depth of 7 feet bgs at B3 and also at a depth of 6 to 8 feet bgs at Boring B3A where fragments of wood and other materials believed to be associated with railroad materials and railroad ties were observed. All samples were submitted for analysis of VOCs, SVOCs and TCLP Metals to EnviroTest Laboratories of Newburgh, New York.

### 3 SAMPLING RESULTS

This section reports on the sampling results of the visibly stained soils discovered in Boring B3 at 4 feet bgs and also of Boring B2A at 8 feet bgs. In addition, results of the recovered soils with associated railroad materials and railroad ties from Boring B3 and Boring B3A are also discussed.

All samples were analyzed for VOCs, SVOCs and TCLP metals by SW846 methodologies.

#### 3.1 Boring B2A (7 to 8 foot bgs)

Analytical results of the recovered soil from the 7 to 8 foot bgs sample indicate presence of several VOCs and SVOCs. A summary of the results of this sampling is presented in Appendix B, Table B-1. The sample was collected from the depth at which the hand-held photo-ionization detector readings were above background and the spoon showed the presence of what appeared to be a portion of railroad tie (wood). The laboratory analytical data report is presented in Appendix C.

Sample results were compared with the soil cleanup objective values for Part 375 (Table 375-6.8) and the supplemental soil cleanup objective values presented in CP-51. Based on this comparison, with the exception of one parameter, benzo(a) pyrene, these soils meet current or exceed the current industrial land use standard.

The TCLP metals results were compared with *Table 1, Maximum Concentration of Contaminants for the Toxicity Characteristic* as defined in the 40CFR 261.24. The results of this comparison is presented in Table B-5 of Appendix B. As shown in Table B-5, the TCLP metals results for the soil sample collected from Boring B2A (7 to 8 ft bgs) does not exceed the regulatory limits for TCLP.

#### 3.2 Boring B3

Samples were collected at two depths from Boring B3: the 4 foot depth bgs and; the 7 foot bgs depth.

##### 3.2.1 Boring B3 (4 foot bgs)

Analytical results of the recovered soil from the 4 foot bgs sample of Boring B3 indicate presence of several VOCs and SVOCs. A summary of the results of this sampling is presented in Appendix B, Table B-2. The sample was collected from the depth at which the hand-held photo-ionization detector readings were above background and the split spoon recovered the presence of what

appeared to be a two-inch thick layer of a semi-fluid tar-like material with some gravel inclusions. The laboratory analytical data report is presented in Appendix C.

Sample results were compared with the soil cleanup objective values for Part 375 (Table 375-6.8) and the supplemental soil cleanup objective values presented in CP-51. Based on this comparison, three parameters, benzo(a)anthracene, benzo(a)pyrene and chrysene exceed the current industrial use standard. For all other VOC and SVOCs, these soils meet current or exceed the current industrial land use standard.

The TCLP metals results were compared with *Table 1, Maximum Concentration of Contaminants for the Toxicity Characteristic* as defined in the 40CFR 261.24. The results of this comparison is presented in Table B-5 of Appendix B. As shown in Table B-5, the TCLP metals results for the soil sample collected from Boring B3 (4 foot bgs) does not exceed the regulatory limits for TCLP.

### **3.2.2 Boring B3 (7 foot bgs)**

Analytical results of the recovered soil from the 7 foot bgs sample of Boring B3 indicate presence of several VOCs and SVOCs. A summary of the results of this sampling is presented in Appendix B, Table B-3. The sample was collected from the depth at which the hand-held photo-ionization detector readings were below background and the split spoon recovered the presence of what appeared to be materials associated with railroad debris (cinders). The laboratory analytical data report is presented in Appendix C.

Sample results were compared with the soil cleanup objective values for Part 375 (Table 375-6.8) and the supplemental soil cleanup objective values presented in CP-51. Based on this comparison, with the exception of one parameter, benzo(a)pyrene, these soils meet current or exceed the current industrial land use standard. It should be noted that the result for benzo(a)pyrene is roughly equivalent to the industrial use standard.

The TCLP metals results were compared with *Table 1, Maximum Concentration of Contaminants for the Toxicity Characteristic* as defined in the 40CFR 261.24. The results of this comparison is presented in Table B-5 of Appendix B. As shown in Table B-5, the TCLP metals results for the soil sample collected from Boring B3 (7 foot bgs) does not exceed the regulatory limits for TCLP.

### 3.3 Boring B3A (6 to 8 foot bgs)

Analytical results of the recovered soil from the 6 to 8 foot bgs sample of Boring B3A indicate presence of several VOCs and SVOCs. A summary of the results of this sampling is presented in Appendix B, Table B-4. The sample was collected from the depth at which the hand-held photo-ionization detector readings were below background but the split spoon recovered the presence of what appeared to be materials associated with railroad debris (cinders, wood chips). The laboratory analytical data report is presented in Appendix C.

Sample results were compared with the soil cleanup objective values for Part 375 (Table 375-6.8) and the supplemental soil cleanup objective values presented in CP-51. Based on this comparison, with the exception of one parameter, benzo(a)pyrene, these soils meet current or exceed the current industrial land use standard. It should be noted that the result for benzo(a)pyrene is roughly equivalent to the industrial use standard.

The TCLP metals results were compared with *Table 1, Maximum Concentration of Contaminants for the Toxicity Characteristic* as defined in the 40CFR 261.24. The results of this comparison is presented in Table B-5 of Appendix B. As shown in Table B-5, the TCLP metals results for the soil sample collected from Boring B3A (6 to 8 foot bgs) does not exceed the regulatory limits for TCLP.

## 4 SUMMARY

During the course of routine construction activities, soil borings were installed to ascertain certain physical characteristics of soils in anticipation of future excavations in this area of the site associated with utility renovations. The recovered split spoon samples were field assayed with a hand-held photo-ionization detector as per the Site's Solid Management Protocol and assessed for content. In total, ten soil borings were installed to the target depth of eight feet below ground surface as shown on Figure 2.

In two of these borings, soils were recovered where monitoring with the hand-held photo-ionization detector showed readings above background. Samples were collected from those split spoon intervals and submitted for analysis for VOCs, SVOCs and TCLP metals. In addition, non-native materials believed to be associated with railroad ties (cinders, wood) were observed in several other split spoons. Samples were collected from two of these intervals and were also submitted for analysis of VOCs, SVOCs and TCLP metals.

The soils where readings were above background were discovered in an area of limited access, containing steep slopes, site utilities and roadways. The surrounding land use is parking lots and roadways.

Results of this assessment indicate that historic subsurface impacts were localized and consistent with railroad debris containing materials.

During the course of the anticipated future excavations in this area, if impacted soils or debris are encountered, the Site's Solid Management Protocol will be applied and these materials will be removed, segregated, and will be managed and dispose of in accordance with all applicable regulations.

## 5 RECOMMENDATIONS

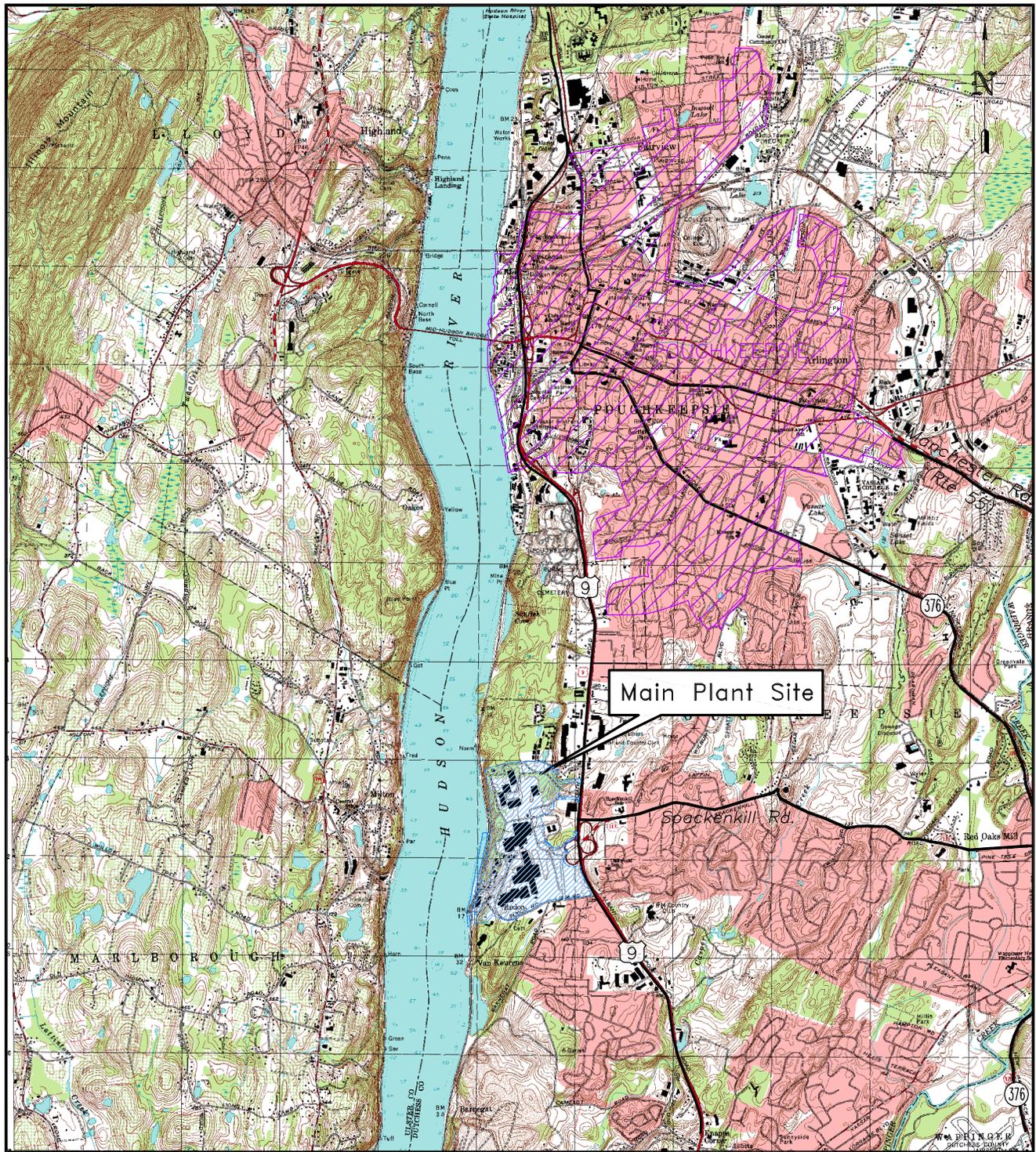
This investigation satisfies the technical requirements of a RCRA Facility Assessment (RFA).

This RFA indicates that subsurface impacts were localized and consistent with railroad debris containing materials. Historically a railroad spur serviced nearby manufacturing buildings in this area of the Site. As noted previously, the soils where readings were above background were discovered in an area of limited access, containing steep slopes, site utilities and roadways.

The results of the two samples collected that were associated with the general debris and did not yield hand-held photo-ionization detector readings above background exceed the industrial use standard on only one parameter, benzo(a)pyrene. A comparison of these results however, show that results are only slightly elevated above industrial use standard.

If during the course of the anticipated future infrastructure repair excavations in this area encounter impacted soils where an assay of excavated materials by hand-held photo-ionization detector yields readings above background, following the Site's Solid Management Protocol, these materials will be segregated and any removed and impacted soils will be managed and disposed of in accordance with all applicable regulations.

Based on this RFA and the resultant data that demonstrates characteristics similar to the current land use and zoning (Industrial), IBM is requesting that the Agency provide an assessment of this AOC F as completed and that no further actions are required.



Portion of the Poughkeepsie, NY, 7.5-minute USGS Quadrangle (1995)

Figure 1



### Site Location Map

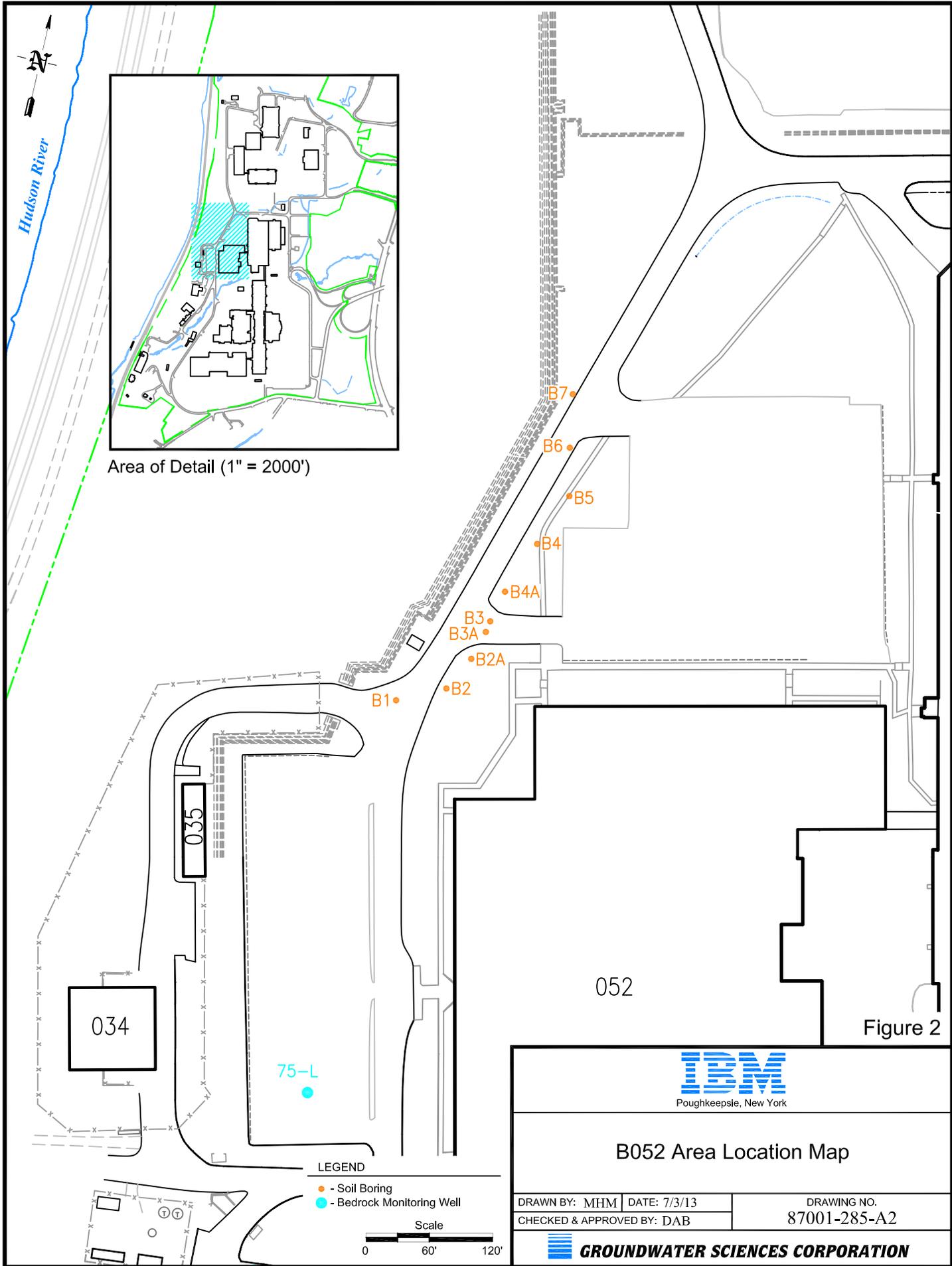
DRAWN BY: MHM      DATE: 6/29/07

DRAWING NO.

CHECKED & APPROVED BY: DAB

87001-236-16





## APPENDIX A

### Boring Installation and Recovered Soils Assessment Summary

Notes:

PID: Photo-ionization Detector

ND: Not detect, No reading above background



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b>	SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <b>G124-9447-13</b>	HOLE NO. <b>B-2</b>
	PROJECT NAME <b>IBM</b>	BORING LOCATIONS per Plan
FOREMAN - DRILLER <b>PD/rw/bd</b>	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	
INSPECTOR	CASING TYPE <b>HSA</b> SAMPLER <b>SS</b> CORE BAR	OFFSET
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS	SIZE I.D. <b>4 1/4"</b> <b>1 3/8"</b>	DATE START <b>6/25/13</b>
AT <u>   </u> FT AFTER <u>   </u> HOURS	HAMMER WT. <b>140#</b> BIT	DATE FINISH <b>6/25/13</b>
	HAMMER FALL <b>30"</b>	SURFACE ELEV.
		GROUND WATER ELEV.

DEPTH FT	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0 - 6	6 - 12				
5	1	ss	24"	18"	2'0"	7	11		dry	6"	TOPSOIL	
	2	ss	24"	12"	4'0"	75	80		v dense	8'0"	brn FMC SAND, lit silt, tr F gravel	
						51	62		dry			
	3	ss	24"	11"	6'0"	12	33		v dense			brn FMC SAND, sm silt, tr FC gravel, wood
4	ss	24"	9"	8'0"	24	25		dry	SAME			
					13	14		dry				
					16	17		dense		brn FM SAND, sm silt, C sand, tr FC gravel		
10											E.O.B. 8'0"	
15												
20												
25												
30												
35												
40											<i>Boring grouted on completion</i>	

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. **HOLE NO. B-2**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE  
 SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM  
 PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE

<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b>	SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <b>G124-9447-13</b>	HOLE NO. <b>B-2A</b>
FOREMAN - DRILLER <b>PD/rw/bd</b>	PROJECT NAME <b>IBM</b>	BORING LOCATIONS per Plan
INSPECTOR	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	OFFSET
GROUND WATER OBSERVATIONS AT ___ FT AFTER ___ HOURS	CASING TYPE <b>HSA</b>	SAMPLER <b>SS</b>
AT ___ FT AFTER ___ HOURS	SIZE I.D. <b>4 1/4"</b>	CORE BAR <b>1 3/8"</b>
	HAMMER WT. <b>140#</b>	BIT <b>BIT</b>
	HAMMER FALL <b>30"</b>	DATE START <b>6/25/13</b>
		DATE FINISH <b>6/25/13</b>
		SURFACE ELEV.
		GROUND WATER ELEV.

DEPTH FEET	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0 - 6	6 - 12				
5		1	ss	24"	14"	2'0"	3	5		dry	6"	TOPSOIL
							7	23		compact	1'6"	brn FM SAND & SILT, tr C sand
		2	ss	24"	16"	4'0"	27	65		dry	4'0"	brn FMC SAND, sm silt, tr F gravel
							89	66		v dense		SAME; olive
	3	ss	24"	12"	6'0"	27	45		dry	E.O.B. 8'0"	Boring grouted on completion	
						32	31		v dense			
	4	ss	24"	18"	8'0"	20	30		moist			
						35	30		v dense			
10												
15												
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. HOLE NO. **B-2A**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE  
 SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM  
 PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE



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	PROJECT NO. <b>G124-9447-13</b>	HOLE NO. <b>B-3A</b>
FOREMAN - DRILLER <b>PD/rw/bd</b>	PROJECT NAME <b>IBM</b>	BORING LOCATIONS 10' Offset South
INSPECTOR	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	OFFSET <b>10' South</b>
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	CASING TYPE <b>HSA</b>	SAMPLER <b>SS</b>
	SIZE I.D. <b>4 1/4"</b>	CORE BAR <b>1 3/8"</b>
	HAMMER WT. <b>140#</b>	BIT <b>BIT</b>
	HAMMER FALL <b>30"</b>	DATE START <b>6/25/13</b>
		DATE FINISH <b>6/25/13</b>
		SURFACE ELEV.
		GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0-6	6-12				
5		1	ss	24"	10"	2'0"	-	12		moist	1'6"	6" ASPHALT/ 10"-12" ROAD MIX
		2	ss	24"	18"	4'0"	15	10		compact		brn FM SAND, & SILT, tr C sand, F gravel
							35	31		v dense	4'0"	brn gry FMC SAND & SILT, tr FC gravel
		3	ss	24"	16"	6'0"	20	19		l moist		
10		4	ss	24"	14"	8'0"	10	30		compact		olive SILT & FMC SAND, tr wood
							62	30		moist		drk gry SILT & FMC SAND, tr F gravel, wood, coal, cinders, brick
						21	23		v dense	8'0"		
15												
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.	HOLE NO. <b>B-3A</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST	
WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS	C = COARSE
SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER	M = MEDIUM
PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50%	F = FINE

<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b>	SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <b>G124-9447-13</b>	HOLE NO. <b>B-4</b>
FOREMAN - DRILLER <b>PD/rw/bd</b>	PROJECT NAME <b>IBM</b>	BORING LOCATIONS per Plan
INSPECTOR	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	OFFSET
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	TYPE HSA SS	DATE START 6/25/13
	SIZE I.D. 4 1/4" 1 3/8"	DATE FINISH 6/25/13
	HAMMER WT. 140# BIT	SURFACE ELEV.
	HAMMER FALL 30"	GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)				CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0-6	6-12	12-18	MOIST				
5	1	ss	24"	12"	2'0"	3	9				l moist	6"	TOPSOIL	
	2	ss	24"	12"	4'0"	14	14				compact	8'0"	brn FMC SAND, sm silt, tr F gravel, clay	
						27	29				moist		gry brn FM SAND & SILT, lit c sand, tr FC gravel, wood	
	3	ss	24"	16"	6'0"	12	19				moist		gry FMC SAND, sm silt, tr F gravel, clay	
4	ss	24"	20"	8'0"	10	6				v moist	gry FM SAND, sm silt, tr C sand, clay			
10						5	6				compact			
	15													
20														
25														
30														
35														
40														

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. **HOLE NO. B-4**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE  
 SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM  
 PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE

<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b> <hr/> PROJECT NO. <b>G124-9447-13</b> PROJECT NAME <b>IBM</b>	SHEET <u>1</u> OF <u>1</u> HOLE NO. <b>B-4A</b>
FOREMAN - DRILLER <b>PD/rw/bd</b>	LOCATION <b>2285 South Road          Poughkeepsie, New York</b>	BORING LOCATIONS per Plan
INSPECTOR	TYPE <b>HSA SS</b> SIZE I.D. <b>4 1/4" 1 3/8"</b> HAMMER WT. <b>140# BIT</b> HAMMER FALL <b>30"</b>	OFFSET DATE START <b>6/25/13</b> DATE FINISH <b>6/25/13</b> SURFACE ELEV. GROUND WATER ELEV.
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS		

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)		CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0 - 6	6 - 12				
5		1	ss	24"	16"	2'0"	5	17		6"	TOPSOIL brn FMC SAND, sm silt, tr F gravel, tile  olv FM SAND & SILT, lit C sand, tr FC gravel, cinders  SAME; tile  gry olv FMC SAND & SILT, lit cinders, tr F gravel, tile, wood	
		2	ss	24"	14"	4'0"	17	105				
							52	43				
		3	ss	24"	14"	6'0"	20	31				
10							63	34		8'0"		
		4	ss	24"	11"	8'0"	17	14				
							17	17				
15												
20												
25												
30												
35												
40												

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO _____ FT. USED _____ CASING THEN _____ CASING TO _____ FT.	<b>HOLE NO. B-4A</b>
A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50%	C = COARSE M = MEDIUM F = FINE

<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b>	SHEET <u>1</u> OF <u>1</u> HOLE NO. <b>B-5</b>
	PROJECT NO. <b>G124-9447-13</b>	
	PROJECT NAME <b>IBM</b>	BORING LOCATIONS per Plan
FOREMAN - DRILLER <b>PD/rw/bd</b>	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	
INSPECTOR	CASING TYPE <b>HSA</b> SAMPLER <b>SS</b> CORE BAR	OFFSET
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS AT <u>  </u> FT AFTER <u>  </u> HOURS	SIZE I.D. <b>4 1/4"</b> <b>1 3/8"</b>	DATE START <b>6/25/13</b> DATE FINISH <b>6/25/13</b>
	HAMMER WT. <b>140#</b> BIT	SURFACE ELEV.
	HAMMER FALL <b>30"</b>	GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)			CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0-6	6-12	12-18				
5		1	ss	24"	18"	2'0"	5	12		dry compact dry dense dry v dense moist compact	6"	TOPSOIL	
		2	ss	24"	16"	4'0"	15	18				brn FMC SAND, sm silt, tr F gravel	
		3	ss	24"	12"	6'0"	20	27				lt brn FM SAND, sm silt, lit C sand, tr F gravel	
		4	ss	24"	0"	8'0"	12	12				lt brn FMC SAND, sm silt, tr F gravel, clay No Recovery	
10												E.O.B. 8'0"	
11													
12													
13													
14													
15													
16													
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**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. HOLE NO. **B-5**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE  
 SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM  
 PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE

<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b>	SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <b>G124-9447-13</b>	HOLE NO. <b>B-6</b>
	PROJECT NAME <b>IBM</b>	BORING LOCATIONS per Plan
FOREMAN - DRILLER <b>PD/rw/bd</b>	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	
INSPECTOR	CASING TYPE <b>HSA</b> SAMPLER <b>SS</b> CORE BAR	OFFSET
GROUND WATER OBSERVATIONS AT <u>none</u> FT AFTER <u>0</u> HOURS	SIZE I.D. <b>4 1/4"</b> <b>1 3/8"</b>	DATE START <b>6/25/13</b>
AT <u>   </u> FT AFTER <u>   </u> HOURS	HAMMER WT. <b>140#</b> BIT	DATE FINISH <b>6/25/13</b>
	HAMMER FALL <b>30"</b>	SURFACE ELEV.
		GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE)			CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT	0-6	6-12	12-18				
5		1	ss	24"	18"	2'0"	38	38		dry v dense dry v dense moist compact moist compact	1'3"	3" ASPHALT/ 1'0" Road Process	
		2	ss	24"	16"	4'0"	38	32				lt brn FMC SAND, sm silt, tr F gravel, asphalt	
		3	ss	24"	14"	6'0"	15	14				brn FMC SAND, sm silt, lit F gravel, tr cobbles, clay	
		4	ss	24"	10"	8'0"	12	12				lt brn FMC SAND, lit silt, tr F gravel	
						9	7			8'0"	lt brn FM SAND, lit silt, tr C sand, F gravel		
10												<b>E.O.B. 8'0"</b>	
15													
20													
25													
30													
35													
40												<i>Boring grouted on completion</i>	

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. **HOLE NO. B-6**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS  
 SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER  
 PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% C = COARSE  
 M = MEDIUM  
 F = FINE



<b>SOILTESTING, INC.</b> 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 262-9328 NY (914) 946-4850	CLIENT: <b>FLUOR c/o IBM Poughkeepsie</b>	SHEET <u>1</u> OF <u>1</u>
	PROJECT NO. <b>G124-9447-13</b>	HOLE NO. <b>P-1/ P-2</b>
	PROJECT NAME <b>IBM</b>	BORING LOCATIONS per Plan
FOREMAN - DRILLER <b>PD/rw/bd</b>	LOCATION <b>2285 South Road Poughkeepsie, New York</b>	
INSPECTOR	CASING SAMPLER CORE BAR	OFFSET
	TYPE <b>HSA SS</b>	DATE START <b>6/25/13</b>
GROUND WATER OBSERVATIONS	SIZE I.D. <b>4 1/4" 1 3/8"</b>	DATE FINISH <b>6/25/13</b>
AT <u>none</u> FT AFTER <u>0</u> HOURS	HAMMER WT. <b>140# BIT</b>	SURFACE ELEV.
AT <u> </u> FT AFTER <u> </u> HOURS	HAMMER FALL <b>30"</b>	GROUND WATER ELEV.

DEPTH	CASING BLOWS PER FOOT	SAMPLE					BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18	CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.
		NO	Type	PEN	REC	DEPTH @ BOT					
	<b>P-1</b>								2"	ASPHALT	
									1'0"	ROAD MIX, (processed STONE)	
5											
10											
	GROUND WATER OBSERVATIONS										<b>P-2</b>
	AT <u>none</u> FT AFTER <u>0</u> HOURS										
	AT <u> </u> FT AFTER <u> </u> HOURS										
0											
	<b>P-2</b>								6"	ASPHALT	
									1'0"	ROAD MIX, (processed STONE)	
5											
10											
15											
20											
25											

**NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.**

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. **HOLE NO. P-1/ P-2**

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WOR = WEIGHT OF RODS WOH = WEIGHT OF HAMMER & RODS C = COARSE  
 SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM  
 PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE

**B052 NW Parking Lot Soil Borings**

**FIELD NOTES**

**6/25/13**

<p><b><u>B-2: 0830 Start</u></b></p> <p>0-2': (7, 11, 75, 80) – blow counts PID=ND, no visual contamination</p> <p>2-4': (89, 98, 51, 62) – blow counts PID=ND, no visual contamination</p> <p>4-6': (12, 33, 24, 25) – blow counts PID=ND, no visual contamination</p> <p>6-8': (13, 14, 16, 17) – blow counts PID=ND, no visual contamination</p> <p>Damp at base</p>	<p><b><u>B-4: 0911 Start</u></b></p> <p>0-2': (3, 9, 14, 14) – blow counts PID=ND, no visual contamination</p> <p>2-4': (9, 10, 27, 29) – blow counts PID=ND, no visual contamination</p> <p>4-6': (6, 12, 19, 21) – blow counts PID=ND, no visual contamination</p> <p>6-8': (8, 6, 5, 6) – blow counts PID=ND, no visual contamination</p>
<p><b><u>B-5: 0935 Start</u></b></p> <p>0-2': (5, 12, 10, 15) – blow counts PID=ND, no visual contamination</p> <p>2-4': (15, 18, 17, 22) – blow counts PID=ND, no visual contamination</p> <p>4-6': (20, 27, 27, 20) – blow counts PID=ND, no visual contamination</p> <p>6-8': (12, 12, 10, 13) – blow counts No recovery</p>	<p><b><u>B-6: 1005 Start</u></b></p> <p>0-2': (38, 38, 19, 25) – blow counts PID=ND, no visual contamination</p> <p>2-4': (15, 18, 17, 22) – blow counts PID=ND, no visual contamination</p> <p>4-6': (20, 27, 27, 20) – blow counts PID=ND, no visual contamination</p> <p>6-8': (12, 12, 10, 13) – blow counts No recovery</p>
<p><b><u>B-3: 1035 Start</u></b></p> <p>0-2': (Asphalt 0-6", 32, 22, 14) – blow counts PID=ND, no visual contamination</p> <p>2-4': (12, 14, 22, 34) – blow counts Note: Driller on ≈ 12-degree angle 2" black tar w/ creosote odor, semi-fluid, some gravel at 4', sample collected at 1120, PID = 3.8ppm (B-3,4')</p> <p>4-6': (15, 15, 22, 26) – blow counts PID=ND, no visual contamination</p> <p>6-8': (22, 20, 10, 7) – blow counts Silt and clay with black organic material, PID=ND, sample collected at 1123 (B-3, 7')</p>	<p><b><u>B-3A (B-3 Offset): 1345 Start</u></b></p> <p>0-2': (Asphalt 0-6", 12, 15, 10) – blow counts PID=ND, no visual contamination</p> <p>2-4': (23, 57, 35, 31) – blow counts PID=ND, no visual contamination</p> <p>4-6': (11, 6, 7, 6) – blow counts PID=ND, wood chunk at 5.9' (RR tie?) collected in ziploc bag at 1355</p> <p>6-8': (62, 30, 21, 23) – blow counts PID=ND, black coal-like material, cinders, wood, brick. sample collected from entire interval at 1400 (B-3A, 6-8')</p>

**B-1: 1411 Start**

0-2': (Asphalt 0-6", 20, 9, 12) – blow counts  
PID=ND, no visual contamination

2-4': (12, 9, 11, 9) – blow counts  
PID=ND, no visual contamination

4-6': (11, 6, 7, 6) – blow counts  
PID=ND, no visual contamination

6-8': (5, 4, 4, 4) – blow counts  
No recovery

**B052 NW Parking Lot Soil Borings  
FIELD NOTES (continued)**

**6/26/13**

<p><b><u>B-7: 0830 Start</u></b>  0-2': (2, 3, 5, 7) – blow counts  PID=ND, no visual contamination</p> <p>2-4': (3, 2, 4, 4) – blow counts  PID=ND, no visual contamination</p> <p>4-6': (3, 3, 6, 7) – blow counts  PID=ND, no visual contamination</p> <p>6-8': (6, 6, 7, 6) – blow counts  No recovery, 2 attempts</p>	<p><b><u>B-4A: 0900 Start</u></b>  0-2': (5, 17, 24, 27) – blow counts  PID=ND, no visual contamination, brick at base</p> <p>2-4': (17, 105, 52, 43) – blow counts  Driller angled at <math>\approx</math> 12-degree angle  PID=ND, no visible contamination, cobble in middle, possible cinders at base</p> <p>4-6': (20, 31, 63, 34)* – blow counts  PID=ND, trace cinders, some yellow bricks/tile (collected), trace small gravel sized red brick</p> <p>6-8': (17, 14, 17, 17)* – blow counts  PID=ND, higher cinder and brick/tile content, splintered/shredded wood at base, no odor</p>
<p><b><u>B-2A: 0928 Start</u></b>  0-2': (3, 5, 7, 23) – blow counts  PID=ND, light brown silt, little sand, no visible contamination</p> <p>2-4': (27, 65, 89, 66) – blow counts  PID=ND, brown silt, sand, clay and gravel, no bricks, cinders, etc.</p> <p>4-6': (27, 45, 323, 31) – blow counts  PID=ND, gray-brown sand and silt, no visible contamination, no bricks, cinders, etc.</p> <p>6-8': (20, 30, 35, 30) – blow counts  Sand, silt and cinders with wood core (<math>\approx</math>3") at base. PID=ND at <math>\approx</math> 6', 0.5 ppm at <math>\approx</math> 7', 3.2 ppm at <math>\approx</math> 7.5', wood at base, had creosote type odor and PID = 13.4 ppm. Sample collected, B-2A, 7-8ft</p>	

## APPENDIX B

### Sampling Results Summary Tables

Notes:

U: Not detected at or above the stated limit

**Table B-1. Boring B2A, 7 to 8ft below ground surface  
Chilled Water Line Replacement / B052 NW Parking Lot and Roadway  
Split Spoon Sampling Results  
Comparison to Part 375-6.8 Soil Cleanup Objectives & Supplemental Soil Cleanup Objectives (CP-51)**

Sampling Location	Parameter Group	Parameter	Reported Value	Units	Part 375-6.8(b)	CP-51 Suppl SCO	CP-51 Suppl SCO
					Industrial SCO	Protection of Ecological Resources	Protection of Groundwater
<b>Chilled Water Line Repl Boring B2A</b>  Depth: 7 to 8 ft bgs Sample Type: Soil  Date Sampled: 6/26/2013 Time Sampled: 0955  LabId: 420-67423-4	<b>VOCs (total)</b>	1,2,4-Trimethylbenzene	630	ug/kg	380,000	None	None
		1,3,5-Trimethylbenzene	140	ug/kg	380,000	None	None
		Benzene	1.3	ug/kg	89,000	None	None
		Ethylbenzene	1.9	ug/kg	780,000	None	None
		Isopropylbenzene	2.0	ug/kg	None	None	2,300
		Naphthalene	5200	ug/kg	1,000,000	None	None
		n-Butylbenzene	3.6	ug/kg	1,000,000	None	None
		n-Propylbenzene	1.4	ug/kg	1,000,000	None	None
		p-Isopropyltoluene	5.8	ug/kg	None	None	10,000
		sec-Butylbenzene	4.3	ug/kg	1,000,000	None	None
		Toluene	2.2	ug/kg	1,000,000	None	None
		Xylenes, total	340	ug/kg	1,000,000	None	None
		Carbon disulfide	1.1 U	ug/kg	None	None	2,700
		cis-1,2-Dichloroethene	2.9	ug/kg	1,000,000	None	None
		Acetone	46	ug/kg	1,000,000	None	None
		m-Xylene & p-Xylene	4.2	ug/kg	1,000,000	None	None
		o-Xylene	3.9	ug/kg	1,000,000	None	None
		1,2-Dichloroethene, Total	3.3	ug/kg	1,000,000	None	None
	<b>SVOCs (total)</b>	2-Methylnapthalene	3900 U	ug/kg	None	None	None
		3 & 4 Methylphenol	3900 U	ug/kg	None	None	None
		Acenaphthene	4,000	ug/kg	1,000,000	None	None
		Acenaphthylene	3900 U	ug/kg	1,000,000	None	None
		Anthracene	4,700	ug/kg	1,000,000	None	None
		Benzo(a)anthracene	7,100	ug/kg	11,000	None	None
		Benzo(a)pyrene	6,100	ug/kg	1,100	None	None
		Benzo(b)fluoranthrene	5,500	ug/kg	11,000	None	None
		Benzo(ghi)perylene	3900 U	ug/kg	1,000,000	None	None
		Benzo(k)fluoroanthrene	5,800	ug/kg	110,000	None	None
		Bis(2-ethylhexyl) phalate	3900 U	ug/kg	None	239,000	435,000
		Carbazole	4,100	ug/kg	None	None	None
		Chrysene	7,900	ug/kg	110,000	None	None
		Dibenzofuran	3900 U	ug/kg	None	None	None
Fluoranthrene	17,000	ug/kg	1,000,000	None	None		
Fluorene	3900 U	ug/kg	1,000,000	None	None		
Indeno(1,2,3-cd)Pyrene	3900 U	ug/kg	11,000	None	None		
Napthalene	7,500	ug/kg	1,000,000	None	None		
Phenanthrene	19,000	ug/kg	1,000,000	None	None		
Pyrene	14,000	ug/kg	1,000,000	None	None		

**Table B-2. Boring B3, 4ft below ground surface  
Chilled Water Line Replacement / B052 NW Parking Lot and Roadway  
Split Spoon Sampling Results  
Comparison to Part 375-6.8 Soil Cleanup Objectives & Supplemental Soil Cleanup Objectives (CP-51)**

Sampling Location	Parameter Group	Parameter	Reported Value	Units	Part 375-6.8(b)	CP-51 Suppl SCO	CP-51 Suppl SCO
					Industrial SCO	Protection of Ecological Resources	Protection of Groundwater
<b>Chilled Water Line Repl Boring B3</b>  Depth: 4 ft bgs Sample Type: Soil  Date Sampled: 6/25/2013 Time Sampled: 1120  LabId: 420-67423-3	<b>VOCs (total)</b>	1,2,4-Trimethylbenzene	3400	ug/kg	380,000	None	None
		1,3,5-Trimethylbenzene	2700 U	ug/kg	380,000	None	None
		Benzene	2700 U	ug/kg	89,000	None	None
		Ethylbenzene	2700 U	ug/kg	780,000	None	None
		Isopropylbenzene	2700 U	ug/kg	None	None	2,300
		Naphthalene	110000	ug/kg	1,000,000	None	None
		n-Butylbenzene	2700 U	ug/kg	1,000,000	None	None
		n-Propylbenzene	2700 U	ug/kg	1,000,000	None	None
		p-Isopropyltoluene	2700 U	ug/kg	None	None	10,000
		sec-Butylbenzene	2700 U	ug/kg	1,000,000	None	None
		Toluene	2700 U	ug/kg	1,000,000	None	None
		Xylenes, total	5400 U	ug/kg	1,000,000	None	None
		Carbon disulfide	2700 U	ug/kg	None	None	2,700
		cis-1,2-Dichloroethene	2700 U	ug/kg	1,000,000	None	None
		Acetone	14000 U	ug/kg	1,000,000	None	None
		m-Xylene & p-Xylene	5400 U	ug/kg	1,000,000	None	None
		o-Xylene	5400 U	ug/kg	1,000,000	None	None
		1,2-Dichloroethene, Total	2700 U	ug/kg	1,000,000	None	None
	<b>SVOCs (total)</b>	2-Methylnaphthalene	350,000	ug/kg	None	None	None
		3 & 4 Methylphenol	59000 U	ug/kg	None	None	None
		Acenaphthene	59000 U	ug/kg	1,000,000	None	None
		Acenaphthylene	76,000	ug/kg	1,000,000	None	None
		Anthracene	110,000	ug/kg	1,000,000	None	None
		Benzo(a)anthracene	120,000	ug/kg	11,000	None	None
		Benzo(a)pyrene	92,000	ug/kg	1,100	None	None
		Benzo(b)fluoranthrene	59000 U	ug/kg	11,000	None	None
		Benzo(ghi)perylene	59000 U	ug/kg	1,000,000	None	None
		Benzo(k)fluoranthrene	61,000	ug/kg	110,000	None	None
		Bis(2-ethylhexyl) phalate	59000 U	ug/kg	None	239,000	435,000
		Carbazole	59000 U	ug/kg	None	None	None
		Chrysene	130,000	ug/kg	110,000	None	None
		Dibenzofuran	59000 U	ug/kg	None	None	None
Fluoranthrene	230,000	ug/kg	1,000,000	None	None		
Fluorene	160,000	ug/kg	1,000,000	None	None		
Indeno(1,2,3-cd)Pyrene	59000 U	ug/kg	11,000	None	None		
Napthalene	360,000	ug/kg	1,000,000	None	None		
Phenanthrene	600,000	ug/kg	1,000,000	None	None		
Pyrene	330,000	ug/kg	1,000,000	None	None		

**Table B-3. Boring B3, 7ft below ground surface  
Chilled Water Line Replacement / B052 NW Parking Lot and Roadway  
Split Spoon Sampling Results  
Comparison to Part 375-6.8 Soil Cleanup Objectives & Supplemental Soil Cleanup Objectives (CP-51)**

Sampling Location	Parameter Group	Parameter	Reported Value	Units	Part 375-6.8(b)	CP-51 Suppl SCO	CP-51 Suppl SCO
					Industrial SCO	Protection of Ecological Resources	Protection of Groundwater
<b>Chilled Water Line Repl Boring B3</b>  Depth: 7 ft bgs Sample Type: Soil  Date Sampled: 6/25/2013 Time Sampled: 1123  LabId: 420-67423-2	<b>VOCs (total)</b>	1,2,4-Trimethylbenzene	2.9	ug/kg	380,000	None	None
		1,3,5-Trimethylbenzene	2.7	ug/kg	380,000	None	None
		Benzene	1.4 U	ug/kg	89,000	None	None
		Ethylbenzene	1.4 U	ug/kg	780,000	None	None
		Isopropylbenzene	1.4 U	ug/kg	None	None	2,300
		Naphthalene	23	ug/kg	1,000,000	None	None
		n-Butylbenzene	1.4 U	ug/kg	1,000,000	None	None
		n-Propylbenzene	1.4 U	ug/kg	1,000,000	None	None
		p-Isopropyltoluene	4.4	ug/kg	None	None	10,000
		sec-Butylbenzene	3.0	ug/kg	1,000,000	None	None
		Toluene	1.4 U	ug/kg	1,000,000	None	None
		Xylenes, total	2.9 U	ug/kg	1,000,000	None	None
		Carbon disulfide	1.4 U	ug/kg	None	None	2,700
		cis-1,2-Dichloroethene	1.4 U	ug/kg	1,000,000	None	None
		Acetone	71	ug/kg	1,000,000	None	None
		m-Xylene & p-Xylene	2.9 U	ug/kg	1,000,000	None	None
		o-Xylene	2.9 U	ug/kg	1,000,000	None	None
	1,2-Dichloroethene, Total	1.4 U	ug/kg	1,000,000	None	None	
	<b>SVOCs (total)</b>	2-Methylnaphthalene	390	ug/kg	None	None	None
		3 & 4 Methylphenol	1,000	ug/kg	None	None	None
		Acenaphthene	480	ug/kg	1,000,000	None	None
		Acenaphthylene	380 U	ug/kg	1,000,000	None	None
		Anthracene	1,300	ug/kg	1,000,000	None	None
		Benzo(a)anthracene	1,700	ug/kg	11,000	None	None
		Benzo(a)pyrene	1,400	ug/kg	1,100	None	None
		Benzo(b)fluoranthrene	1,600	ug/kg	11,000	None	None
		Benzo(ghi)perylene	710	ug/kg	1,000,000	None	None
		Benzo(k)fluroanthrene	1,000	ug/kg	110,000	None	None
		Bis(2-ethylhexyl) phalate	1,400	ug/kg	None	239,000	435,000
		Carbazole	640	ug/kg	None	None	None
		Chrysene	1,700	ug/kg	110,000	None	None
		Dibenzofuran	410	ug/kg	None	None	None
		Fluoranthrene	4,700	ug/kg	1,000,000	None	None
Fluorene		680	ug/kg	1,000,000	None	None	
Indeno(1,2,3-cd)Pyrene	680	ug/kg	11,000	None	None		
Napthalene	610	ug/kg	1,000,000	None	None		
Phenanthrene	5,000	ug/kg	1,000,000	None	None		
Pyrene	4,000	ug/kg	1,000,000	None	None		

**Table B-4. Boring B3A, 6 to 8ft below ground surface  
Chilled Water Line Replacement / B052 NW Parking Lot and Roadway  
Split Spoon Sampling Results  
Comparison to Part 375-6.8 Soil Cleanup Objectives & Supplemental Soil Cleanup Objectives (CP-51)**

Sampling Location	Parameter Group	Parameter	Reported Value	Units	Part 375-6.8(b)	CP-51 Suppl SCO	CP-51 Suppl SCO
					Industrial SCO	Protection of Ecological Resources	Protection of Groundwater
<b>Chilled Water Line Repl Boring B3A</b>  Depth: 6 to 8 ft bgs Sample Type: Soil  Date Sampled: 6/25/2013 Time Sampled: 1400  LabId: 420-67423-1	<b>VOCs (total)</b>	1,2,4-Trimethylbenzene	5.7	ug/kg	380,000	None	None
		1,3,5-Trimethylbenzene	6.7	ug/kg	380,000	None	None
		Benzene	1.1 U	ug/kg	89,000	None	None
		Ethylbenzene	1.1 U	ug/kg	780,000	None	None
		Isopropylbenzene	1.1 U	ug/kg	None	None	2,300
		Naphthalene	13	ug/kg	1,000,000	None	None
		n-Butylbenzene	2.8	ug/kg	1,000,000	None	None
		n-Propylbenzene	1.1 U	ug/kg	1,000,000	None	None
		p-Isopropyltoluene	4.9	ug/kg	None	None	10,000
		sec-Butylbenzene	3.1	ug/kg	1,000,000	None	None
		Toluene	1.2	ug/kg	1,000,000	None	None
		Xylenes, total	4.5	ug/kg	1,000,000	None	None
		Carbon disulfide	1.3	ug/kg	None	None	2,700
		cis-1,2-Dichloroethene	1.1 U	ug/kg	1,000,000	None	None
		Acetone	43	ug/kg	1,000,000	None	None
		m-Xylene & p-Xylene	2.4	ug/kg	1,000,000	None	None
		o-Xylene	2.2 U	ug/kg	1,000,000	None	None
		1,2-Dichloroethene, Total	1.1 U	ug/kg	1,000,000	None	None
		<b>SVOCs (total)</b>	2-Methylnaphthalene	1,600	ug/kg	None	None
	3 & 4 Methylphenol		460	ug/kg	None	None	None
	Acenaphthene		590	ug/kg	1,000,000	None	None
	Acenaphthylene		370 U	ug/kg	1,000,000	None	None
	Anthracene		970	ug/kg	1,000,000	None	None
	Benzo(a)anthracene		1,500	ug/kg	11,000	None	None
	Benzo(a)pyrene		1,200	ug/kg	1,100	None	None
	Benzo(b)fluoranthrene		990	ug/kg	11,000	None	None
	Benzo(ghi)perylene		600	ug/kg	1,000,000	None	None
	Benzo(k)fluoroanthrene		1,100	ug/kg	110,000	None	None
	Bis(2-ethylhexyl) phalate		370 U	ug/kg	None	239,000	435,000
	Carbazole		510	ug/kg	None	None	None
	Chrysene		1,700	ug/kg	110,000	None	None
	Dibenzofuran	500	ug/kg	None	None	None	
Fluoranthrene	3,300	ug/kg	1,000,000	None	None		
Fluorene	680	ug/kg	1,000,000	None	None		
Indeno(1,2,3-cd)Pyrene	540	ug/kg	11,000	None	None		
Napthalene	2,000	ug/kg	1,000,000	None	None		
Phenanthrene	4,000	ug/kg	1,000,000	None	None		
Pyrene	3,300	ug/kg	1,000,000	None	None		

**Table B-5. TCLP Metals**  
**Chilled Water Line Replacement / B052 NW Parking Lot and Roadway**  
**Split Spoon Sampling Results**

<b>TCLP Metal</b>	<b>Maximum Concentration of Contaminant for Toxicity Characteristic</b>	<b>units</b>	<b>Boring B2A 7 to 8 ft bgs</b>	<b>Boring B3 4ft bgs</b>	<b>Boring B3 7ft bgs</b>	<b>Boring B3A 6 to 8 ft bgs</b>
Arsenic	5.0	mg/l	0.200 U	0.200 U	0.200 U	0.200 U
Barium	100.0	mg/l	0.450	0.400 U	1.300	0.610
Cadmium	1.0	mg/l	0.020 U	0.020 U	0.020 U	0.020 U
Chromium	5.0	mg/l	0.020 U	0.020 U	0.020 U	0.020 U
Lead	5.0	mg/l	0.100 U	0.100 U	0.100 U	0.100 U
Selenium	1.0	mg/l	0.050 U	0.050 U	0.050 U	0.050 U
Silver	5.0	mg/l	0.020 U	0.020 U	0.020 U	0.020 U
Mercury	0.2	mg/l	0.00050 U	0.00050 U	0.00050 U	0.00050 U

## APPENDIX C

### Laboratory Analytical Data Packages (CD)

**ANALYTICAL REPORT**

Job Number: 420-67423-1

Job Description: Perimeter Road Chilled Water Line

For:  
Fluor Industrial Services, Inc.  
PO BOX 1769  
Poughkeepsie, NY 12601

Attention: Mr. Ed Axtmann

*Meredith Ruthven*

---

Meredith W Ruthven  
Customer Service Manager  
mruthven@envirotestlaboratories.com

07/10/2013

Revision: 1

cc: Ms. Dorothy Bergmann  
Mr. Steve Brannen  
Mr. Pat Griffin  
Mr. George Lopuch

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. EnviroTest Laboratories Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our laboratory. All questions regarding this report should be directed to the EnviroTest Customer Service Representative.

EnviroTest Laboratories, Inc. Certifications and Approvals: NELAP Accredited, NYSDOH 10142, NJDEP NY015, CTDOH PH-0554, EPA NY00049.

Envirotest Laboratories, Inc.  
315 Fullerton Avenue, Newburgh, NY 12550  
Tel (845) 562-0890 Fax (845) 562-0841 www.envirotestlaboratories.com



**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC/MS VOA**

No analytical or quality issues were noted.

**GC/MS Semi VOA**

Method 8270D: Due to the sample matrix and high level of target compounds requiring a 10x dilution, several compounds in the matrix spike are outside of the acceptable control limits. The associated laboratory control standard (LCS) met acceptance criteria for all compounds except for benzoic acid.

Method 8270D: Due to the matrix of the following samples and expected high level of target compounds the amount of sample analyzed was modified from the typical 15 grams:

67423-3 (8.59 grams)

Due to expected high level of target compounds the following sample were diluted as indicated, resulting in an elevated reporting limit:

67423-3: 100X

67423-4: 10 X

Several compounds in the following sample exceeded the upper control limit and was subsequently diluted as indicated and re-analyzed:

67423-2: 2X

No other analytical or quality issues were noted.

**Metals**

No analytical or quality issues were noted.

**General Chemistry**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

**VOA Prep**

No analytical or quality issues were noted.

**EXECUTIVE SUMMARY - Detections**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
420-67423-1	PERIMETER ROAD CHILLED WATER B3A, 6-8'				
1,2,4-Trimethylbenzene		5.7	1.1	ug/Kg Dry	8260C
1,3,5-Trimethylbenzene		6.7	1.1	ug/Kg Dry	8260C
Naphthalene		13	1.1	ug/Kg Dry	8260C
n-Butylbenzene		2.8	1.1	ug/Kg Dry	8260C
p-Isopropyltoluene		4.9	1.1	ug/Kg Dry	8260C
sec-Butylbenzene		3.1	1.1	ug/Kg Dry	8260C
Toluene		1.2	1.1	ug/Kg Dry	8260C
Xylenes, Total		4.5	2.2	ug/Kg Dry	8260C
Carbon disulfide		1.3	1.1	ug/Kg Dry	8260C
Acetone		43	5.5	ug/Kg Dry	8260C
m-Xylene & p-Xylene		2.4	2.2	ug/Kg Dry	8260C
2-Methylnaphthalene		1600	370	ug/Kg Dry	8270D
3 & 4 Methylphenol		460	370	ug/Kg Dry	8270D
Acenaphthene		590	370	ug/Kg Dry	8270D
Anthracene		970	370	ug/Kg Dry	8270D
Benzo[a]anthracene		1500	370	ug/Kg Dry	8270D
Benzo[a]pyrene		1200	370	ug/Kg Dry	8270D
Benzo[b]fluoranthene		990	370	ug/Kg Dry	8270D
Benzo[g,h,i]perylene		600	370	ug/Kg Dry	8270D
Benzo[k]fluoranthene		1100	370	ug/Kg Dry	8270D
Carbazole		510	370	ug/Kg Dry	8270D
Chrysene		1700	370	ug/Kg Dry	8270D
Dibenzofuran		500	370	ug/Kg Dry	8270D
Fluoranthene		3300	370	ug/Kg Dry	8270D
Fluorene		680	370	ug/Kg Dry	8270D
Indeno[1,2,3-cd]pyrene		540	370	ug/Kg Dry	8270D
Naphthalene		2000	370	ug/Kg Dry	8270D
Phenanthrene		4000	370	ug/Kg Dry	8270D
Pyrene		3300	370	ug/Kg Dry	8270D
Percent Solids		89	0.10	%	PercentMoisture
<b>TCLP</b>					
Ba		610	400	ug/L	6010B

## EXECUTIVE SUMMARY - Detections

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
420-67423-2	PERIMETER ROAD CHILLED WATER B3, 7'				
1,2,4-Trimethylbenzene		2.9	1.4	ug/Kg Dry	8260C
1,3,5-Trimethylbenzene		2.7	1.4	ug/Kg Dry	8260C
Naphthalene		23	1.4	ug/Kg Dry	8260C
p-Isopropyltoluene		4.4	1.4	ug/Kg Dry	8260C
sec-Butylbenzene		3.0	1.4	ug/Kg Dry	8260C
Acetone		71	7.2	ug/Kg Dry	8260C
2-Methylnaphthalene		390	380	ug/Kg Dry	8270D
3 & 4 Methylphenol		1000	380	ug/Kg Dry	8270D
Acenaphthene		480	380	ug/Kg Dry	8270D
Anthracene		1300	380	ug/Kg Dry	8270D
Benzo[a]anthracene		1700	380	ug/Kg Dry	8270D
Benzo[a]pyrene		1400	380	ug/Kg Dry	8270D
Benzo[b]fluoranthene		1600	380	ug/Kg Dry	8270D
Benzo[g,h,i]perylene		710	380	ug/Kg Dry	8270D
Benzo[k]fluoranthene		1000	380	ug/Kg Dry	8270D
Bis(2-ethylhexyl) phthalate		1400	380	ug/Kg Dry	8270D
Carbazole		640	380	ug/Kg Dry	8270D
Chrysene		1700	380	ug/Kg Dry	8270D
Dibenzofuran		410	380	ug/Kg Dry	8270D
Fluoranthene		4800	760	ug/Kg Dry	8270D
Fluorene		680	380	ug/Kg Dry	8270D
Indeno[1,2,3-cd]pyrene		680	380	ug/Kg Dry	8270D
Naphthalene		610	380	ug/Kg Dry	8270D
Phenanthrene		5000	760	ug/Kg Dry	8270D
Pyrene		4000	760	ug/Kg Dry	8270D
Percent Solids		90	0.10	%	PercentMoisture
<b>TCLP</b>					
Ba		1300	400	ug/L	6010B

**EXECUTIVE SUMMARY - Detections**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
420-67423-3	PERIMETER ROAD CHILLED WATER B-3, 4'				
1,2,4-Trimethylbenzene		3400	2700	ug/Kg Dry	8260C
Naphthalene		110000	2700	ug/Kg Dry	8260C
2-Methylnaphthalene		350000	59000	ug/Kg Dry	8270D
Acenaphthylene		76000	59000	ug/Kg Dry	8270D
Anthracene		110000	59000	ug/Kg Dry	8270D
Benzo[a]anthracene		120000	59000	ug/Kg Dry	8270D
Benzo[a]pyrene		92000	59000	ug/Kg Dry	8270D
Benzo[k]fluoranthene		61000	59000	ug/Kg Dry	8270D
Chrysene		130000	59000	ug/Kg Dry	8270D
Fluoranthene		230000	59000	ug/Kg Dry	8270D
Fluorene		160000	59000	ug/Kg Dry	8270D
Naphthalene		360000	59000	ug/Kg Dry	8270D
Phenanthrene		600000	59000	ug/Kg Dry	8270D
Pyrene		330000	59000	ug/Kg Dry	8270D
Percent Solids		98	0.10	%	PercentMoisture

## EXECUTIVE SUMMARY - Detections

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
420-67423-4	PERIMETER ROAD CHILLED WATER B2A, 7-8'				
1,2,4-Trimethylbenzene		27	1.1	ug/Kg Dry	8260C
1,2,4-Trimethylbenzene		630	120	ug/Kg Dry	8260C
1,3,5-Trimethylbenzene		7.2	1.1	ug/Kg Dry	8260C
1,3,5-Trimethylbenzene		140	120	ug/Kg Dry	8260C
Benzene		1.3	1.1	ug/Kg Dry	8260C
Ethylbenzene		1.9	1.1	ug/Kg Dry	8260C
Isopropylbenzene		2.0	1.1	ug/Kg Dry	8260C
Naphthalene		180	1.1	ug/Kg Dry	8260C
Naphthalene		5200 E	120	ug/Kg Dry	8260C
n-Butylbenzene		3.6	1.1	ug/Kg Dry	8260C
N-Propylbenzene		1.4	1.1	ug/Kg Dry	8260C
p-Isopropyltoluene		5.8	1.1	ug/Kg Dry	8260C
p-Isopropyltoluene		160	120	ug/Kg Dry	8260C
sec-Butylbenzene		4.3	1.1	ug/Kg Dry	8260C
Toluene		2.2	1.1	ug/Kg Dry	8260C
Xylenes, Total		8.1	2.2	ug/Kg Dry	8260C
Xylenes, Total		340	230	ug/Kg Dry	8260C
cis-1,2-Dichloroethene		2.9	1.1	ug/Kg Dry	8260C
Acetone		46	5.6	ug/Kg Dry	8260C
m-Xylene & p-Xylene		4.2	2.2	ug/Kg Dry	8260C
o-Xylene		3.9	2.2	ug/Kg Dry	8260C
1,2-Dichloroethene, Total		3.3	1.1	ug/Kg Dry	8260C
Acenaphthene		4000	3900	ug/Kg Dry	8270D
Anthracene		4700	3900	ug/Kg Dry	8270D
Benzo[a]anthracene		7100	3900	ug/Kg Dry	8270D
Benzo[a]pyrene		6100	3900	ug/Kg Dry	8270D
Benzo[b]fluoranthene		5500	3900	ug/Kg Dry	8270D
Benzo[k]fluoranthene		5800	3900	ug/Kg Dry	8270D
Carbazole		4100	3900	ug/Kg Dry	8270D
Chrysene		7900	3900	ug/Kg Dry	8270D
Fluoranthene		17000	3900	ug/Kg Dry	8270D
Naphthalene		7500	3900	ug/Kg Dry	8270D
Phenanthrene		19000	3900	ug/Kg Dry	8270D
Pyrene		14000	3900	ug/Kg Dry	8270D
Percent Solids		87	0.10	%	PercentMoisture
<b>TCLP</b>					
Ba		450	400	ug/L	6010B

## METHOD SUMMARY

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Solid</b>			
Inductively Coupled Plasma - Atomic Emission Spectrometry	EnvTest	SW846 6010B	
Toxicity Characteristic Leaching Procedure	EnvTest		SW846 1311
Acid Digestion of Aqueous Samples and Extracts for	EnvTest		SW846 3010A
Mercury in Liquid Waste (Manual Cold Vapor Technique)	EnvTest	SW846 7470A	
Toxicity Characteristic Leaching Procedure (Hg Only)	EnvTest		SW846 1311
Mercury in Liquid Waste (Manual Cold Vapor)	EnvTest		SW846 7470A
Volatile Organic Compounds by GC/MS	EnvTest	SW846 8260C	
Closed System Purge&Trap High Level	EnvTest		EPA 5035-H
Closed System Purge & Trap Low Level	EnvTest		EPA 5035-L
Semivolatile Compounds by GC/MS	EnvTest	SW846 8270D	
Microwave Extraction	EnvTest		SW846 3546

### Lab References:

EnvTest = EnviroTest

### Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260C	Andersen, Eric C	ECA
SW846 8270D	Labare, Alicia M	AML
SW846 6010B	Palentino, Gus J	GJP
SW846 7470A	McPhillips, Julie	JM
EPA PercentMoisture	Mawe, Ian	IM

## SAMPLE SUMMARY

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
420-67423-1	Perimeter Road Chilled Water B3A, 6-8'	Solid	06/25/2013 1400	06/26/2013 1110
420-67423-2	Perimeter Road Chilled Water B3, 7'	Solid	06/25/2013 1123	06/26/2013 1110
420-67423-3	Perimeter Road Chilled Water B-3, 4'	Solid	06/25/2013 1120	06/26/2013 1110
420-67423-4	Perimeter Road Chilled Water B2A, 7-8'	Solid	06/26/2013 0955	06/26/2013 1110

# SAMPLE RESULTS

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	Perimeter Road Chilled	Project:	General Testing
Lab Name:	EnviroTest Laboratories,	Job No.:	420-67423-1
SDG No.:			
Matrix:	Solid	Lab Sample ID:	420-67423-1
Analysis Method:	8260C	Lab File ID:	X062606.D
Sample wt/vol:	5.15 (g)	Date Received:	06/26/2013 11:10
Level: (low/med)	Low	Date Analyzed:	06/26/2013 13:13
% Moisture:	11.1	Dilution Factor:	1
GC Column/ID:	DB-VRX 0.18 (um)	Soil Aliquot:	5.15 (g)
Soil Extract Vol.:		Units:	ug/Kg Dry
Analy. Batch No.:	66977		

CAS No.	Compound Name	Result	Q	RL	RL
107-02-8	Acrolein	1.1	U	1.1	1.1
107-13-1	Acrylonitrile	5.5	U	5.5	5.5
97-63-2	Ethyl methacrylate	1.1	U	1.1	1.1
80-62-6	Methyl methacrylate	11	U	11	11
120-82-1	1,2,4-Trichlorobenzene	1.1	U	1.1	1.1
95-63-6	1,2,4-Trimethylbenzene	5.7		1.1	1.1
95-50-1	1,2-Dichlorobenzene	1.1	U	1.1	1.1
107-06-2	1,2-Dichloroethane	1.1	U	1.1	1.1
78-87-5	1,2-Dichloropropane	1.1	U	1.1	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	1.1	U	1.1	1.1
108-67-8	1,3,5-Trimethylbenzene	6.7		1.1	1.1
541-73-1	1,3-Dichlorobenzene	1.1	U	1.1	1.1
142-28-9	1,3-Dichloropropane	1.1	U	1.1	1.1
106-46-7	1,4-Dichlorobenzene	1.1	U	1.1	1.1
123-91-1	1,4-Dioxane	1.1	U	1.1	1.1
95-49-8	2-Chlorotoluene	1.1	U	1.1	1.1
110-75-8	2-Chloroethyl vinyl ether	1.1	U	1.1	1.1
106-43-4	4-Chlorotoluene	1.1	U	1.1	1.1
71-43-2	Benzene	1.1	U	1.1	1.1
108-86-1	Bromobenzene	1.1	U	1.1	1.1
75-25-2	Bromoform	1.1	U	1.1	1.1
74-83-9	Bromomethane	1.1	U	1.1	1.1
108-90-7	Chlorobenzene	1.1	U	1.1	1.1
67-66-3	Chloroform	1.1	U	1.1	1.1
74-87-3	Chloromethane	1.1	U	1.1	1.1
75-00-3	Chloroethane	1.1	U	1.1	1.1
124-48-1	Chlorodibromomethane	1.1	U	1.1	1.1
74-97-5	Chlorobromomethane	1.1	U	1.1	1.1
100-41-4	Ethylbenzene	1.1	U	1.1	1.1
98-82-8	Isopropylbenzene	1.1	U	1.1	1.1
91-20-3	Naphthalene	13		1.1	1.1
104-51-8	n-Butylbenzene	2.8		1.1	1.1

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	Perimeter Road Chilled	Project:	General Testing
Lab Name:	EnviroTest Laboratories,	Job No.:	420-67423-1
SDG No.:			
Matrix:	Solid	Lab Sample ID:	420-67423-1
Analysis Method:	8260C	Lab File ID:	X062606.D
Sample wt/vol:	5.15 (g)	Date Received:	06/26/2013 11:10
Level: (low/med)	Low	Date Analyzed:	06/26/2013 13:13
% Moisture:	11.1	Dilution Factor:	1
GC Column/ID:	DB-VRX 0.18 (um)	Soil Aliquot:	5.15 (g)
Soil Extract Vol.:		Units:	ug/Kg Dry
Analy. Batch No.:	66977		

CAS No.	Compound Name	Result	Q	RL	RL
103-65-1	N-Propylbenzene	1.1	U	1.1	1.1
99-87-6	p-Isopropyltoluene	4.9		1.1	1.1
135-98-8	sec-Butylbenzene	3.1		1.1	1.1
100-42-5	Styrene	1.1	U	1.1	1.1
98-06-6	tert-Butylbenzene	1.1	U	1.1	1.1
108-88-3	Toluene	1.2		1.1	1.1
1330-20-7	Xylenes, Total	4.5		2.2	2.2
100-44-7	Benzyl chloride	1.1	U	1.1	1.1
630-20-6	1,1,1,2-Tetrachloroethane	1.1	U	1.1	1.1
71-55-6	1,1,1-Trichloroethane	1.1	U	1.1	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	U	1.1	1.1
79-00-5	1,1,2-Trichloroethane	1.1	U	1.1	1.1
75-34-3	1,1-Dichloroethane	1.1	U	1.1	1.1
75-35-4	1,1-Dichloroethene	1.1	U	1.1	1.1
563-58-6	1,1-Dichloropropene	1.1	U	1.1	1.1
594-20-7	2,2-Dichloropropane	1.1	U	1.1	1.1
591-78-6	2-Hexanone	1.1	U	1.1	1.1
107-05-1	3-Chloropropene	1.1	U	1.1	1.1
75-27-4	Bromodichloromethane	1.1	U	1.1	1.1
75-71-8	Dichlorodifluoromethane	1.1	U	1.1	1.1
56-23-5	Carbon tetrachloride	1.1	U	1.1	1.1
75-15-0	Carbon disulfide	1.3		1.1	1.1
156-59-2	cis-1,2-Dichloroethene	1.1	U	1.1	1.1
10061-01-5	cis-1,3-Dichloropropene	1.1	U	1.1	1.1
87-68-3	Hexachlorobutadiene	1.1	U	1.1	1.1
74-95-3	Dibromomethane	1.1	U	1.1	1.1
75-09-2	Methylene Chloride	1.1	U	1.1	1.1
127-18-4	Tetrachloroethene	1.1	U	1.1	1.1
156-60-5	trans-1,2-Dichloroethene	1.1	U	1.1	1.1
10061-02-6	trans-1,3-Dichloropropene	1.1	U	1.1	1.1
110-57-6	trans-1,4-Dichloro-2-butene	1.1	U	1.1	1.1
79-01-6	Trichloroethene	1.1	U	1.1	1.1

FORM I 8260C

1  
 ORGANIC ANALYSIS DATA SHEET  
 VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:	_____		
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-1</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>X062606.D</u>
Sample wt/vol:	<u>5.15 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 13:13</u>
% Moisture:	<u>11.1</u>	Dilution Factor:	<u>1</u>
GC Column/ID:	<u>DB-VRX 0.18 (um)</u>	Soil Aliquot:	<u>5.15 (g)</u>
Soil Extract Vol.:	_____	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66977</u>	_____	

CAS No.	Compound Name	Result	Q	RL	RL
75-69-4	Trichlorofluoromethane	1.1	U	1.1	1.1
75-01-4	Vinyl chloride	1.1	U	1.1	1.1
108-05-4	Vinyl acetate	1.1	U	1.1	1.1
78-93-3	2-Butanone (MEK)	1.1	U	1.1	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.1	U	1.1	1.1
1634-04-4	Methyl tert-butyl ether	1.1	U	1.1	1.1
67-64-1	Acetone	43		5.5	5.5
75-05-8	Acetonitrile	2.2	U	2.2	2.2
136777-61-2	m-Xylene & p-Xylene	2.4		2.2	2.2
95-47-6	o-Xylene	2.2	U	2.2	2.2
106-93-4	1,2-Dibromoethane	1.1	U	1.1	1.1
540-59-0	1,2-Dichloroethene, Total	1.1	U	1.1	1.1

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-1</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06271305.D</u>
Sample wt/vol:	<u>15.10 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>11.1</u>	Date Analyzed:	<u>06/27/2013 16:52</u>
Con. Extract Vol.:	<u>1 (mL)</u>	Dilution Factor:	<u>1</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67055</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	370	U	370	180
95-95-4	2,4,5-Trichlorophenol	370	U	370	110
88-06-2	2,4,6-Trichlorophenol	370	U	370	110
120-83-2	2,4-Dichlorophenol	370	U	370	190
105-67-9	2,4-Dimethylphenol	370	U	370	180
51-28-5	2,4-Dinitrophenol	370	U	370	99
121-14-2	2,4-Dinitrotoluene	370	U	370	97
606-20-2	2,6-Dinitrotoluene	370	U	370	90
91-58-7	2-Chloronaphthalene	370	U	370	160
95-57-8	2-Chlorophenol	370	U	370	170
91-57-6	2-Methylnaphthalene	1600		370	190
95-48-7	2-Methylphenol	370	U	370	180
88-74-4	2-Nitroaniline	370	U	370	100
88-75-5	2-Nitrophenol	370	U	370	200
91-94-1	3,3'-Dichlorobenzidine	370	U	370	240
15831-10-4	3 & 4 Methylphenol	460		370	190
99-09-2	3-Nitroaniline	370	U	370	180
534-52-1	4,6-Dinitro-2-methylphenol	370	U	370	170
101-55-3	4-Bromophenyl phenyl ether	370	U	370	100
106-47-8	4-Chloroaniline	370	U	370	210
7005-72-3	4-Chlorophenyl phenyl ether	370	U	370	110
100-02-7	4-Nitrophenol	370	U	370	300
83-32-9	Acenaphthene	590		370	110
208-96-8	Acenaphthylene	370	U	370	140
62-53-3	Aniline	370	U	370	250
120-12-7	Anthracene	970		370	110
92-87-5	Benzidine	2800	U	2800	310
56-55-3	Benzo[a]anthracene	1500		370	110
50-32-8	Benzo[a]pyrene	1200		370	97
205-99-2	Benzo[b]fluoranthene	990		370	110

FORM I 8270D

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	Perimeter Road Chilled	Project:	General Testing
Lab Name:	EnviroTest Laboratories,	Job No.:	420-67423-1
SDG No.:			
Matrix:	Solid	Lab Sample ID:	420-67423-1
Analysis Method:	8270D	Lab File ID:	06271305.D
Sample wt/vol:	15.10 (g)	Date Received:	06/26/2013 11:10
Level: (low/med)	Low	Date Extracted:	06/27/2013 09:30
% Moisture:	11.1	Date Analyzed:	06/27/2013 16:52
Con. Extract Vol.:	1 (mL)	Dilution Factor:	1
Injection Volume:		Extract. Method:	3546
GPC Cleanup: (Y/N)	N	Units:	ug/Kg Dry
Analy. Batch No.:	67055		

CAS No.	Compound Name	Result	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	600		370	110
207-08-9	Benzo[k]fluoranthene	1100		370	100
100-51-6	Benzyl alcohol	370	U	370	220
111-91-1	Bis(2-chloroethoxy)methane	370	U	370	260
111-44-4	Bis(2-chloroethyl) ether	370	U	370	210
117-81-7	Bis(2-ethylhexyl) phthalate	370	U	370	120
108-60-1	bis(chloroisopropyl) ether	370	U	370	190
85-68-7	Butyl benzyl phthalate	370	U	370	120
86-74-8	Carbazole	510		370	130
218-01-9	Chrysene	1700		370	100
53-70-3	Dibenz(a,h)anthracene	370	U	370	110
132-64-9	Dibenzofuran	500		370	110
84-66-2	Diethyl phthalate	370	U	370	96
131-11-3	Dimethyl phthalate	370	U	370	91
84-74-2	Di-n-butyl phthalate	370	U	370	97
117-84-0	Di-n-octyl phthalate	370	U	370	130
206-44-0	Fluoranthene	3300		370	94
86-73-7	Fluorene	680		370	110
118-74-1	Hexachlorobenzene	370	U	370	110
87-68-3	Hexachlorobutadiene	370	U	370	160
77-47-4	Hexachlorocyclopentadiene	370	U	370	180
67-72-1	Hexachloroethane	370	U	370	160
193-39-5	Indeno[1,2,3-cd]pyrene	540		370	300
78-59-1	Isophorone	370	U	370	180
91-20-3	Naphthalene	2000		370	200
621-64-7	N-Nitrosodi-n-propylamine	370	U	370	190
98-95-3	Nitrobenzene	370	U	370	190
62-75-9	N-Nitrosodimethylamine	370	U	370	240
86-30-6	N-Nitrosodiphenylamine	370	U	370	110
87-86-5	Pentachlorophenol	2800	U	2800	130

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-1</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06271305.D</u>
Sample wt/vol:	<u>15.10 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>11.1</u>	Date Analyzed:	<u>06/27/2013 16:52</u>
Con. Extract Vol.:	<u>1 (mL)</u>	Dilution Factor:	<u>1</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67055</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
108-95-2	Phenol	370	U	370	140
85-01-8	Phenanthrene	4000		370	100
129-00-0	Pyrene	3300		370	110
110-86-1	Pyridine	1100	U	1100	180
59-50-7	4-Chloro-3-methylphenol	370	U	370	120
99-65-0	1,3-Dinitrobenzene	370	U	370	92
92-52-4	1,1'-Biphenyl	370	U	370	170
109-06-8	2-Picoline	370	U	370	200
98-86-2	Acetophenone	370	U	370	210
65-85-0	Benzoic acid	1100	U *	1100	32
55-18-5	N-Nitrosodiethylamine	370	U	370	230
930-55-2	N-Nitrosopyrrolidine	370	U	370	270
95-94-3	1,2,4,5-Tetrachlorobenzene	370	U	370	180

FORM I 8270D

1A-IN  
 INORGANIC ANALYSIS DATA SHEET  
 METALS - TCLP

Client Sample ID: Perimeter Road Chilled Water B3A, Lab Sample ID: 420-67423-1  
 Lab Name: EnviroTest Laboratories, Inc. Job No.: 420-67423-1  
 SDG ID.: \_\_\_\_\_  
 Matrix: Solid Date Sampled: 06/25/2013 14:00  
 Reporting Basis: WET Date Received: 06/26/2013 11:10  
 % Moisture: \_\_\_\_\_

CAS No.	Analyte	Conc.	RL		Units	C	Q	DIL	Method
7440-22-4	Ag	20	20		ug/L	U		2	6010B
7440-38-2	As	200	200		ug/L	U		2	6010B
7440-39-3	Ba	610	400		ug/L			2	6010B
7440-43-9	Cd	20	20		ug/L	U		2	6010B
7440-47-3	Cr	20	20		ug/L	U		2	6010B
7439-92-1	Pb	100	100		ug/L	U		2	6010B
7782-49-2	Se	50	50		ug/L	U		2	6010B
7439-97-6	Hg	0.50	0.50		ug/L	U		1	7470A

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID: Perimeter Road Chilled Project: General Testing  
 Lab Name: EnviroTest Laboratories, Job No.: 420-67423-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid Lab Sample ID: 420-67423-2  
 Analysis Method: 8260C Lab File ID: X062607.D  
 Sample wt/vol: 5.21 (g) Date Received: 06/26/2013 11:10  
 Level: (low/med) Low Date Analyzed: 06/26/2013 13:42  
 % Moisture: 33.6 Dilution Factor: 1  
 GC Column/ID: DB-VRX 0.18 (um) Soil Aliquot: \_\_\_\_\_  
 Soil Extract Vol.: \_\_\_\_\_ Units: ug/Kg Dry  
 Analy. Batch No.: 66977

CAS No.	Compound Name	Result	Q	RL	RL
107-02-8	Acrolein	1.4	U	1.4	1.4
107-13-1	Acrylonitrile	7.2	U	7.2	7.2
97-63-2	Ethyl methacrylate	1.4	U	1.4	1.4
80-62-6	Methyl methacrylate	14	U	14	14
120-82-1	1,2,4-Trichlorobenzene	1.4	U	1.4	1.4
95-63-6	1,2,4-Trimethylbenzene	2.9		1.4	1.4
95-50-1	1,2-Dichlorobenzene	1.4	U	1.4	1.4
107-06-2	1,2-Dichloroethane	1.4	U	1.4	1.4
78-87-5	1,2-Dichloropropane	1.4	U	1.4	1.4
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U	1.4	1.4
108-67-8	1,3,5-Trimethylbenzene	2.7		1.4	1.4
541-73-1	1,3-Dichlorobenzene	1.4	U	1.4	1.4
142-28-9	1,3-Dichloropropane	1.4	U	1.4	1.4
106-46-7	1,4-Dichlorobenzene	1.4	U	1.4	1.4
123-91-1	1,4-Dioxane	1.4	U	1.4	1.4
95-49-8	2-Chlorotoluene	1.4	U	1.4	1.4
110-75-8	2-Chloroethyl vinyl ether	1.4	U	1.4	1.4
106-43-4	4-Chlorotoluene	1.4	U	1.4	1.4
71-43-2	Benzene	1.4	U	1.4	1.4
108-86-1	Bromobenzene	1.4	U	1.4	1.4
75-25-2	Bromoform	1.4	U	1.4	1.4
74-83-9	Bromomethane	1.4	U	1.4	1.4
108-90-7	Chlorobenzene	1.4	U	1.4	1.4
67-66-3	Chloroform	1.4	U	1.4	1.4
74-87-3	Chloromethane	1.4	U	1.4	1.4
75-00-3	Chloroethane	1.4	U	1.4	1.4
124-48-1	Chlorodibromomethane	1.4	U	1.4	1.4
74-97-5	Chlorobromomethane	1.4	U	1.4	1.4
100-41-4	Ethylbenzene	1.4	U	1.4	1.4
98-82-8	Isopropylbenzene	1.4	U	1.4	1.4
91-20-3	Naphthalene	23		1.4	1.4
104-51-8	n-Butylbenzene	1.4	U	1.4	1.4

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-2</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>X062607.D</u>
Sample wt/vol:	<u>5.21 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 13:42</u>
% Moisture:	<u>33.6</u>	Dilution Factor:	<u>1</u>
GC Column/ID:	<u>DB-VRX 0.18 (um)</u>	Soil Aliquot:	
Soil Extract Vol.:		Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66977</u>		

CAS No.	Compound Name	Result	Q	RL	RL
103-65-1	N-Propylbenzene	1.4	U	1.4	1.4
99-87-6	p-Isopropyltoluene	4.4		1.4	1.4
135-98-8	sec-Butylbenzene	3.0		1.4	1.4
100-42-5	Styrene	1.4	U	1.4	1.4
98-06-6	tert-Butylbenzene	1.4	U	1.4	1.4
108-88-3	Toluene	1.4	U	1.4	1.4
1330-20-7	Xylenes, Total	2.9	U	2.9	2.9
100-44-7	Benzyl chloride	1.4	U	1.4	1.4
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	1.4	1.4
71-55-6	1,1,1-Trichloroethane	1.4	U	1.4	1.4
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.4	U	1.4	1.4
79-00-5	1,1,2-Trichloroethane	1.4	U	1.4	1.4
75-34-3	1,1-Dichloroethane	1.4	U	1.4	1.4
75-35-4	1,1-Dichloroethene	1.4	U	1.4	1.4
563-58-6	1,1-Dichloropropene	1.4	U	1.4	1.4
594-20-7	2,2-Dichloropropane	1.4	U	1.4	1.4
591-78-6	2-Hexanone	1.4	U	1.4	1.4
107-05-1	3-Chloropropene	1.4	U	1.4	1.4
75-27-4	Bromodichloromethane	1.4	U	1.4	1.4
75-71-8	Dichlorodifluoromethane	1.4	U	1.4	1.4
56-23-5	Carbon tetrachloride	1.4	U	1.4	1.4
75-15-0	Carbon disulfide	1.4	U	1.4	1.4
156-59-2	cis-1,2-Dichloroethene	1.4	U	1.4	1.4
10061-01-5	cis-1,3-Dichloropropene	1.4	U	1.4	1.4
87-68-3	Hexachlorobutadiene	1.4	U	1.4	1.4
74-95-3	Dibromomethane	1.4	U	1.4	1.4
75-09-2	Methylene Chloride	1.4	U	1.4	1.4
127-18-4	Tetrachloroethene	1.4	U	1.4	1.4
156-60-5	trans-1,2-Dichloroethene	1.4	U	1.4	1.4
10061-02-6	trans-1,3-Dichloropropene	1.4	U	1.4	1.4
110-57-6	trans-1,4-Dichloro-2-butene	1.4	U	1.4	1.4
79-01-6	Trichloroethene	1.4	U	1.4	1.4

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:	_____		
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-2</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>X062607.D</u>
Sample wt/vol:	<u>5.21 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 13:42</u>
% Moisture:	<u>33.6</u>	Dilution Factor:	<u>1</u>
GC Column/ID:	<u>DB-VRX 0.18 (um)</u>	Soil Aliquot:	_____
Soil Extract Vol.:	_____	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66977</u>		

CAS No.	Compound Name	Result	Q	RL	RL
75-69-4	Trichlorofluoromethane	1.4	U	1.4	1.4
75-01-4	Vinyl chloride	1.4	U	1.4	1.4
108-05-4	Vinyl acetate	1.4	U	1.4	1.4
78-93-3	2-Butanone (MEK)	1.4	U	1.4	1.4
108-10-1	4-Methyl-2-pentanone (MIBK)	1.4	U	1.4	1.4
1634-04-4	Methyl tert-butyl ether	1.4	U	1.4	1.4
67-64-1	Acetone	71		7.2	7.2
75-05-8	Acetonitrile	2.9	U	2.9	2.9
136777-61-2	m-Xylene & p-Xylene	2.9	U	2.9	2.9
95-47-6	o-Xylene	2.9	U	2.9	2.9
106-93-4	1,2-Dibromoethane	1.4	U	1.4	1.4
540-59-0	1,2-Dichloroethene, Total	1.4	U	1.4	1.4

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-2</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06271306.D</u>
Sample wt/vol:	<u>14.65 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>10.1</u>	Date Analyzed:	<u>06/27/2013 17:22</u>
Con. Extract Vol.:	<u>1 (mL)</u>	Dilution Factor:	<u>1</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67055</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	380	U	380	180
95-95-4	2,4,5-Trichlorophenol	380	U	380	120
88-06-2	2,4,6-Trichlorophenol	380	U	380	120
120-83-2	2,4-Dichlorophenol	380	U	380	190
105-67-9	2,4-Dimethylphenol	380	U	380	180
51-28-5	2,4-Dinitrophenol	380	U	380	100
121-14-2	2,4-Dinitrotoluene	380	U	380	99
606-20-2	2,6-Dinitrotoluene	380	U	380	92
91-58-7	2-Chloronaphthalene	380	U	380	160
95-57-8	2-Chlorophenol	380	U	380	180
91-57-6	2-Methylnaphthalene	390		380	190
95-48-7	2-Methylphenol	380	U	380	190
88-74-4	2-Nitroaniline	380	U	380	100
88-75-5	2-Nitrophenol	380	U	380	200
91-94-1	3,3'-Dichlorobenzidine	380	U	380	240
15831-10-4	3 & 4 Methylphenol	1000		380	190
99-09-2	3-Nitroaniline	380	U	380	180
534-52-1	4,6-Dinitro-2-methylphenol	380	U	380	170
101-55-3	4-Bromophenyl phenyl ether	380	U	380	110
106-47-8	4-Chloroaniline	380	U	380	220
7005-72-3	4-Chlorophenyl phenyl ether	380	U	380	110
100-02-7	4-Nitrophenol	380	U	380	300
83-32-9	Acenaphthene	480		380	120
208-96-8	Acenaphthylene	380	U	380	140
62-53-3	Aniline	380	U	380	260
120-12-7	Anthracene	1300		380	110
92-87-5	Benzidine	2800	U	2800	310
56-55-3	Benzo[a]anthracene	1700		380	110
50-32-8	Benzo[a]pyrene	1400		380	99
205-99-2	Benzo[b]fluoranthene	1600		380	110

FORM I 8270D

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-2</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06271306.D</u>
Sample wt/vol:	<u>14.65 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>10.1</u>	Date Analyzed:	<u>06/27/2013 17:22</u>
Con. Extract Vol.:	<u>1 (mL)</u>	Dilution Factor:	<u>1</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67055</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	710		380	110
207-08-9	Benzo[k]fluoranthene	1000		380	110
100-51-6	Benzyl alcohol	380	U	380	230
111-91-1	Bis(2-chloroethoxy)methane	380	U	380	260
111-44-4	Bis(2-chloroethyl) ether	380	U	380	220
117-81-7	Bis(2-ethylhexyl) phthalate	1400		380	120
108-60-1	bis(chloroisopropyl) ether	380	U	380	190
85-68-7	Butyl benzyl phthalate	380	U	380	120
86-74-8	Carbazole	640		380	140
218-01-9	Chrysene	1700		380	100
53-70-3	Dibenz(a,h)anthracene	380	U	380	110
132-64-9	Dibenzofuran	410		380	110
84-66-2	Diethyl phthalate	380	U	380	98
131-11-3	Dimethyl phthalate	380	U	380	93
84-74-2	Di-n-butyl phthalate	380	U	380	99
117-84-0	Di-n-octyl phthalate	380	U	380	130
86-73-7	Fluorene	680		380	110
118-74-1	Hexachlorobenzene	380	U	380	110
87-68-3	Hexachlorobutadiene	380	U	380	170
77-47-4	Hexachlorocyclopentadiene	380	U	380	180
67-72-1	Hexachloroethane	380	U	380	160
193-39-5	Indeno[1,2,3-cd]pyrene	680		380	300
78-59-1	Isophorone	380	U	380	180
91-20-3	Naphthalene	610		380	200
621-64-7	N-Nitrosodi-n-propylamine	380	U	380	200
98-95-3	Nitrobenzene	380	U	380	190
62-75-9	N-Nitrosodimethylamine	380	U	380	250
86-30-6	N-Nitrosodiphenylamine	380	U	380	110
87-86-5	Pentachlorophenol	2800	U	2800	130
108-95-2	Phenol	380	U	380	140

FORM I 8270D

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-2</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06271306.D</u>
Sample wt/vol:	<u>14.65 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>10.1</u>	Date Analyzed:	<u>06/27/2013 17:22</u>
Con. Extract Vol.:	<u>1 (mL)</u>	Dilution Factor:	<u>1</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67055</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
110-86-1	Pyridine	1100	U	1100	180
59-50-7	4-Chloro-3-methylphenol	380	U	380	120
99-65-0	1,3-Dinitrobenzene	380	U	380	94
92-52-4	1,1'-Biphenyl	380	U	380	180
109-06-8	2-Picoline	380	U	380	200
98-86-2	Acetophenone	380	U	380	210
65-85-0	Benzoic acid	1100	U *	1100	32
55-18-5	N-Nitrosodiethylamine	380	U	380	230
930-55-2	N-Nitrosopyrrolidine	380	U	380	280
95-94-3	1,2,4,5-Tetrachlorobenzene	380	U	380	180

FORM I 8270D



1A-IN  
 INORGANIC ANALYSIS DATA SHEET  
 METALS - TCLP

Client Sample ID: Perimeter Road Chilled Water B3, 7'      Lab Sample ID: 420-67423-2  
 Lab Name: EnviroTest Laboratories, Inc.      Job No.: 420-67423-1  
 SDG ID.: \_\_\_\_\_  
 Matrix: Solid      Date Sampled: 06/25/2013 11:23  
 Reporting Basis: WET      Date Received: 06/26/2013 11:10  
 % Moisture: \_\_\_\_\_

CAS No.	Analyte	Conc.	RL		Units	C	Q	DIL	Method
7440-22-4	Ag	20	20		ug/L	U		2	6010B
7440-38-2	As	200	200		ug/L	U		2	6010B
7440-39-3	Ba	1300	400		ug/L			2	6010B
7440-43-9	Cd	20	20		ug/L	U		2	6010B
7440-47-3	Cr	20	20		ug/L	U		2	6010B
7439-92-1	Pb	100	100		ug/L	U		2	6010B
7782-49-2	Se	50	50		ug/L	U		2	6010B
7439-97-6	Hg	0.50	0.50		ug/L	U		1	7470A

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-3</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>V062616.D</u>
Sample wt/vol:	<u>1.88 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 18:15</u>
% Moisture:	<u>2.0</u>	Dilution Factor:	<u>1000</u>
GC Column/ID:	<u>DB-624 0.53 (um)</u>	Soil Aliquot:	<u>5 (mL)</u>
Soil Extract Vol.:		Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66976</u>		

CAS No.	Compound Name	Result	Q	RL	RL
107-02-8	Acrolein	2700	U	2700	2700
107-13-1	Acrylonitrile	14000	U	14000	14000
97-63-2	Ethyl methacrylate	2700	U	2700	2700
80-62-6	Methyl methacrylate	27000	U	27000	27000
120-82-1	1,2,4-Trichlorobenzene	2700	U	2700	2700
95-63-6	1,2,4-Trimethylbenzene	3400		2700	2700
95-50-1	1,2-Dichlorobenzene	2700	U	2700	2700
107-06-2	1,2-Dichloroethane	2700	U	2700	2700
78-87-5	1,2-Dichloropropane	2700	U	2700	2700
96-12-8	1,2-Dibromo-3-Chloropropane	2700	U	2700	2700
108-67-8	1,3,5-Trimethylbenzene	2700	U	2700	2700
541-73-1	1,3-Dichlorobenzene	2700	U	2700	2700
142-28-9	1,3-Dichloropropane	2700	U	2700	2700
106-46-7	1,4-Dichlorobenzene	2700	U	2700	2700
123-91-1	1,4-Dioxane	2700	U	2700	2700
95-49-8	2-Chlorotoluene	2700	U	2700	2700
110-75-8	2-Chloroethyl vinyl ether	2700	U	2700	2700
106-43-4	4-Chlorotoluene	2700	U	2700	2700
71-43-2	Benzene	2700	U	2700	2700
108-86-1	Bromobenzene	2700	U	2700	2700
75-25-2	Bromoform	2700	U	2700	2700
74-83-9	Bromomethane	2700	U	2700	2700
108-90-7	Chlorobenzene	2700	U	2700	2700
67-66-3	Chloroform	2700	U	2700	2700
74-87-3	Chloromethane	2700	U	2700	2700
75-00-3	Chloroethane	2700	U	2700	2700
124-48-1	Chlorodibromomethane	2700	U	2700	2700
74-97-5	Chlorobromomethane	2700	U	2700	2700
100-41-4	Ethylbenzene	2700	U	2700	2700
98-82-8	Isopropylbenzene	2700	U	2700	2700
91-20-3	Naphthalene	110000		2700	2700
104-51-8	n-Butylbenzene	2700	U	2700	2700

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-3</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>V062616.D</u>
Sample wt/vol:	<u>1.88 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 18:15</u>
% Moisture:	<u>2.0</u>	Dilution Factor:	<u>1000</u>
GC Column/ID:	<u>DB-624 0.53 (um)</u>	Soil Aliquot:	<u>5 (mL)</u>
Soil Extract Vol.:		Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66976</u>		

CAS No.	Compound Name	Result	Q	RL	RL
103-65-1	N-Propylbenzene	2700	U	2700	2700
99-87-6	p-Isopropyltoluene	2700	U	2700	2700
135-98-8	sec-Butylbenzene	2700	U	2700	2700
100-42-5	Styrene	2700	U	2700	2700
98-06-6	tert-Butylbenzene	2700	U	2700	2700
108-88-3	Toluene	2700	U	2700	2700
1330-20-7	Xylenes, Total	5400	U	5400	5400
100-44-7	Benzyl chloride	2700	U	2700	2700
630-20-6	1,1,1,2-Tetrachloroethane	2700	U	2700	2700
71-55-6	1,1,1-Trichloroethane	2700	U	2700	2700
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2700	U	2700	2700
79-00-5	1,1,2-Trichloroethane	2700	U	2700	2700
75-34-3	1,1-Dichloroethane	2700	U	2700	2700
75-35-4	1,1-Dichloroethene	2700	U	2700	2700
563-58-6	1,1-Dichloropropene	2700	U	2700	2700
594-20-7	2,2-Dichloropropane	2700	U	2700	2700
591-78-6	2-Hexanone	2700	U	2700	2700
107-05-1	3-Chloropropene	2700	U	2700	2700
75-27-4	Bromodichloromethane	2700	U	2700	2700
75-71-8	Dichlorodifluoromethane	2700	U	2700	2700
56-23-5	Carbon tetrachloride	2700	U	2700	2700
75-15-0	Carbon disulfide	2700	U	2700	2700
156-59-2	cis-1,2-Dichloroethene	2700	U	2700	2700
10061-01-5	cis-1,3-Dichloropropene	2700	U	2700	2700
87-68-3	Hexachlorobutadiene	2700	U	2700	2700
74-95-3	Dibromomethane	2700	U	2700	2700
75-09-2	Methylene Chloride	2700	U	2700	2700
127-18-4	Tetrachloroethene	2700	U	2700	2700
156-60-5	trans-1,2-Dichloroethene	2700	U	2700	2700
10061-02-6	trans-1,3-Dichloropropene	2700	U	2700	2700
110-57-6	trans-1,4-Dichloro-2-butene	2700	U	2700	2700
79-01-6	Trichloroethene	2700	U	2700	2700

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID: Perimeter Road Chilled Project: General Testing  
 Lab Name: EnviroTest Laboratories, Job No.: 420-67423-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid Lab Sample ID: 420-67423-3  
 Analysis Method: 8260C Lab File ID: V062616.D  
 Sample wt/vol: 1.88 (g) Date Received: 06/26/2013 11:10  
 Level: (low/med) Low Date Analyzed: 06/26/2013 18:15  
 % Moisture: 2.0 Dilution Factor: 1000  
 GC Column/ID: DB-624 0.53 (um) Soil Aliquot: 5 (mL)  
 Soil Extract Vol.: \_\_\_\_\_ Units: ug/Kg Dry  
 Analy. Batch No.: 66976

CAS No.	Compound Name	Result	Q	RL	RL
75-69-4	Trichlorofluoromethane	2700	U	2700	2700
75-01-4	Vinyl chloride	2700	U	2700	2700
108-05-4	Vinyl acetate	2700	U	2700	2700
78-93-3	2-Butanone (MEK)	2700	U	2700	2700
108-10-1	4-Methyl-2-pentanone (MIBK)	2700	U	2700	2700
1634-04-4	Methyl tert-butyl ether	2700	U	2700	2700
67-64-1	Acetone	14000	U	14000	14000
75-05-8	Acetonitrile	5400	U	5400	5400
136777-61-2	m-Xylene & p-Xylene	5400	U	5400	5400
95-47-6	o-Xylene	5400	U	5400	5400
106-93-4	1,2-Dibromoethane	2700	U	2700	2700
540-59-0	1,2-Dichloroethene, Total	2700	U	2700	2700

FORM I 8260C



1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-3</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06281305.D</u>
Sample wt/vol:	<u>8.59 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>2.0</u>	Date Analyzed:	<u>06/28/2013 14:54</u>
Con. Extract Vol.:	<u>10 (mL)</u>	Dilution Factor:	<u>10</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67056</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	59000	U	59000	17000
207-08-9	Benzo[k]fluoranthene	61000		59000	17000
100-51-6	Benzyl alcohol	59000	U	59000	35000
111-91-1	Bis(2-chloroethoxy)methane	59000	U	59000	41000
111-44-4	Bis(2-chloroethyl) ether	59000	U	59000	34000
117-81-7	Bis(2-ethylhexyl) phthalate	59000	U	59000	19000
108-60-1	bis(chloroisopropyl) ether	59000	U	59000	30000
85-68-7	Butyl benzyl phthalate	59000	U	59000	18000
86-74-8	Carbazole	59000	U	59000	21000
218-01-9	Chrysene	130000		59000	16000
53-70-3	Dibenz(a,h)anthracene	59000	U	59000	17000
132-64-9	Dibenzofuran	59000	U	59000	18000
84-66-2	Diethyl phthalate	59000	U	59000	15000
131-11-3	Dimethyl phthalate	59000	U	59000	15000
84-74-2	Di-n-butyl phthalate	59000	U	59000	16000
117-84-0	Di-n-octyl phthalate	59000	U	59000	20000
206-44-0	Fluoranthene	230000		59000	15000
86-73-7	Fluorene	160000		59000	17000
118-74-1	Hexachlorobenzene	59000	U	59000	17000
87-68-3	Hexachlorobutadiene	59000	U	59000	26000
77-47-4	Hexachlorocyclopentadiene	59000	U	59000	28000
67-72-1	Hexachloroethane	59000	U	59000	26000
193-39-5	Indeno[1,2,3-cd]pyrene	59000	U	59000	47000
78-59-1	Isophorone	59000	U	59000	29000
91-20-3	Naphthalene	360000		59000	32000
621-64-7	N-Nitrosodi-n-propylamine	59000	U	59000	31000
98-95-3	Nitrobenzene	59000	U	59000	30000
62-75-9	N-Nitrosodimethylamine	59000	U	59000	39000
86-30-6	N-Nitrosodiphenylamine	59000	U	59000	17000
87-86-5	Pentachlorophenol	450000	U	450000	20000



1A-IN  
 INORGANIC ANALYSIS DATA SHEET  
 METALS - TCLP

Client Sample ID: Perimeter Road Chilled Water B-3, 4'      Lab Sample ID: 420-67423-3  
 Lab Name: EnviroTest Laboratories, Inc.      Job No.: 420-67423-1  
 SDG ID.: \_\_\_\_\_  
 Matrix: Solid      Date Sampled: 06/25/2013 11:20  
 Reporting Basis: WET      Date Received: 06/26/2013 11:10  
 % Moisture: \_\_\_\_\_

CAS No.	Analyte	Conc.	RL		Units	C	Q	DIL	Method
7440-22-4	Ag	20	20		ug/L	U		2	6010B
7440-38-2	As	200	200		ug/L	U		2	6010B
7440-39-3	Ba	400	400		ug/L	U		2	6010B
7440-43-9	Cd	20	20		ug/L	U		2	6010B
7440-47-3	Cr	20	20		ug/L	U		2	6010B
7439-92-1	Pb	100	100		ug/L	U		2	6010B
7782-49-2	Se	50	50		ug/L	U		2	6010B
7439-97-6	Hg	0.50	0.50		ug/L	U		1	7470A

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-4</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>X062608.D</u>
Sample wt/vol:	<u>5.12 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 14:10</u>
% Moisture:	<u>12.7</u>	Dilution Factor:	<u>1</u>
GC Column/ID:	<u>DB-VRX 0.18 (um)</u>	Soil Aliquot:	
Soil Extract Vol.:		Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66977</u>		

CAS No.	Compound Name	Result	Q	RL	RL
107-02-8	Acrolein	1.1	U	1.1	1.1
107-13-1	Acrylonitrile	5.6	U	5.6	5.6
97-63-2	Ethyl methacrylate	1.1	U	1.1	1.1
80-62-6	Methyl methacrylate	11	U	11	11
120-82-1	1,2,4-Trichlorobenzene	1.1	U	1.1	1.1
95-63-6	1,2,4-Trimethylbenzene	27		1.1	1.1
95-50-1	1,2-Dichlorobenzene	1.1	U	1.1	1.1
107-06-2	1,2-Dichloroethane	1.1	U	1.1	1.1
78-87-5	1,2-Dichloropropane	1.1	U	1.1	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	1.1	U	1.1	1.1
108-67-8	1,3,5-Trimethylbenzene	7.2		1.1	1.1
541-73-1	1,3-Dichlorobenzene	1.1	U	1.1	1.1
142-28-9	1,3-Dichloropropane	1.1	U	1.1	1.1
106-46-7	1,4-Dichlorobenzene	1.1	U	1.1	1.1
123-91-1	1,4-Dioxane	1.1	U	1.1	1.1
95-49-8	2-Chlorotoluene	1.1	U	1.1	1.1
110-75-8	2-Chloroethyl vinyl ether	1.1	U	1.1	1.1
106-43-4	4-Chlorotoluene	1.1	U	1.1	1.1
71-43-2	Benzene	1.3		1.1	1.1
108-86-1	Bromobenzene	1.1	U	1.1	1.1
75-25-2	Bromoform	1.1	U	1.1	1.1
74-83-9	Bromomethane	1.1	U	1.1	1.1
108-90-7	Chlorobenzene	1.1	U	1.1	1.1
67-66-3	Chloroform	1.1	U	1.1	1.1
74-87-3	Chloromethane	1.1	U	1.1	1.1
75-00-3	Chloroethane	1.1	U	1.1	1.1
124-48-1	Chlorodibromomethane	1.1	U	1.1	1.1
74-97-5	Chlorobromomethane	1.1	U	1.1	1.1
100-41-4	Ethylbenzene	1.9		1.1	1.1
98-82-8	Isopropylbenzene	2.0		1.1	1.1
91-20-3	Naphthalene	180	E	1.1	1.1
104-51-8	n-Butylbenzene	3.6		1.1	1.1

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-4</u>
Analysis Method:	<u>8260C</u>	Lab File ID:	<u>X062608.D</u>
Sample wt/vol:	<u>5.12 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Analyzed:	<u>06/26/2013 14:10</u>
% Moisture:	<u>12.7</u>	Dilution Factor:	<u>1</u>
GC Column/ID:	<u>DB-VRX 0.18 (um)</u>	Soil Aliquot:	
Soil Extract Vol.:		Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>66977</u>		

CAS No.	Compound Name	Result	Q	RL	RL
103-65-1	N-Propylbenzene	1.4		1.1	1.1
99-87-6	p-Isopropyltoluene	5.8		1.1	1.1
135-98-8	sec-Butylbenzene	4.3		1.1	1.1
100-42-5	Styrene	1.1	U	1.1	1.1
98-06-6	tert-Butylbenzene	1.1	U	1.1	1.1
108-88-3	Toluene	2.2		1.1	1.1
1330-20-7	Xylenes, Total	8.1		2.2	2.2
100-44-7	Benzyl chloride	1.1	U	1.1	1.1
630-20-6	1,1,1,2-Tetrachloroethane	1.1	U	1.1	1.1
71-55-6	1,1,1-Trichloroethane	1.1	U	1.1	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	U	1.1	1.1
79-00-5	1,1,2-Trichloroethane	1.1	U	1.1	1.1
75-34-3	1,1-Dichloroethane	1.1	U	1.1	1.1
75-35-4	1,1-Dichloroethene	1.1	U	1.1	1.1
563-58-6	1,1-Dichloropropene	1.1	U	1.1	1.1
594-20-7	2,2-Dichloropropane	1.1	U	1.1	1.1
591-78-6	2-Hexanone	1.1	U	1.1	1.1
107-05-1	3-Chloropropene	1.1	U	1.1	1.1
75-27-4	Bromodichloromethane	1.1	U	1.1	1.1
75-71-8	Dichlorodifluoromethane	1.1	U	1.1	1.1
56-23-5	Carbon tetrachloride	1.1	U	1.1	1.1
75-15-0	Carbon disulfide	1.1	U	1.1	1.1
156-59-2	cis-1,2-Dichloroethene	2.9		1.1	1.1
10061-01-5	cis-1,3-Dichloropropene	1.1	U	1.1	1.1
87-68-3	Hexachlorobutadiene	1.1	U	1.1	1.1
74-95-3	Dibromomethane	1.1	U	1.1	1.1
75-09-2	Methylene Chloride	1.1	U	1.1	1.1
127-18-4	Tetrachloroethene	1.1	U	1.1	1.1
156-60-5	trans-1,2-Dichloroethene	1.1	U	1.1	1.1
10061-02-6	trans-1,3-Dichloropropene	1.1	U	1.1	1.1
110-57-6	trans-1,4-Dichloro-2-butene	1.1	U	1.1	1.1
79-01-6	Trichloroethene	1.1	U	1.1	1.1

FORM I 8260C

1  
 ORGANIC ANALYSIS DATA SHEET  
 VOLATILE ORGANIC COMPOUNDS BY GC/MS

Client Sample ID: Perimeter Road Chilled Project: General Testing  
 Lab Name: EnviroTest Laboratories, Job No.: 420-67423-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid Lab Sample ID: 420-67423-4  
 Analysis Method: 8260C Lab File ID: X062608.D  
 Sample wt/vol: 5.12 (g) Date Received: 06/26/2013 11:10  
 Level: (low/med) Low Date Analyzed: 06/26/2013 14:10  
 % Moisture: 12.7 Dilution Factor: 1  
 GC Column/ID: DB-VRX 0.18 (um) Soil Aliquot: \_\_\_\_\_  
 Soil Extract Vol.: \_\_\_\_\_ Units: ug/Kg Dry  
 Analy. Batch No.: 66977

CAS No.	Compound Name	Result	Q	RL	RL
75-69-4	Trichlorofluoromethane	1.1	U	1.1	1.1
75-01-4	Vinyl chloride	1.1	U	1.1	1.1
108-05-4	Vinyl acetate	1.1	U	1.1	1.1
78-93-3	2-Butanone (MEK)	1.1	U	1.1	1.1
108-10-1	4-Methyl-2-pentanone (MIBK)	1.1	U	1.1	1.1
1634-04-4	Methyl tert-butyl ether	1.1	U	1.1	1.1
67-64-1	Acetone	46		5.6	5.6
75-05-8	Acetonitrile	2.2	U	2.2	2.2
136777-61-2	m-Xylene & p-Xylene	4.2		2.2	2.2
95-47-6	o-Xylene	3.9		2.2	2.2
106-93-4	1,2-Dibromoethane	1.1	U	1.1	1.1
540-59-0	1,2-Dichloroethene, Total	3.3		1.1	1.1

FORM I 8260C

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID:	<u>Perimeter Road Chilled</u>	Project:	<u>General Testing</u>
Lab Name:	<u>EnviroTest Laboratories,</u>	Job No.:	<u>420-67423-1</u>
SDG No.:			
Matrix:	<u>Solid</u>	Lab Sample ID:	<u>420-67423-4</u>
Analysis Method:	<u>8270D</u>	Lab File ID:	<u>06281306.D</u>
Sample wt/vol:	<u>14.79 (g)</u>	Date Received:	<u>06/26/2013 11:10</u>
Level: (low/med)	<u>Low</u>	Date Extracted:	<u>06/27/2013 09:30</u>
% Moisture:	<u>12.7</u>	Date Analyzed:	<u>06/28/2013 15:24</u>
Con. Extract Vol.:	<u>1 (mL)</u>	Dilution Factor:	<u>10</u>
Injection Volume:		Extract. Method:	<u>3546</u>
GPC Cleanup: (Y/N)	<u>N</u>	Units:	<u>ug/Kg Dry</u>
Analy. Batch No.:	<u>67056</u>		

CAS No.	Compound Name	Result	Q	RL	MDL
120-82-1	1,2,4-Trichlorobenzene	3900	U	3900	1900
95-95-4	2,4,5-Trichlorophenol	3900	U	3900	1200
88-06-2	2,4,6-Trichlorophenol	3900	U	3900	1200
120-83-2	2,4-Dichlorophenol	3900	U	3900	2000
105-67-9	2,4-Dimethylphenol	3900	U	3900	1900
51-28-5	2,4-Dinitrophenol	3900	U	3900	1000
121-14-2	2,4-Dinitrotoluene	3900	U	3900	1000
606-20-2	2,6-Dinitrotoluene	3900	U	3900	940
91-58-7	2-Chloronaphthalene	3900	U	3900	1600
95-57-8	2-Chlorophenol	3900	U	3900	1800
91-57-6	2-Methylnaphthalene	3900	U	3900	1900
95-48-7	2-Methylphenol	3900	U	3900	1900
88-74-4	2-Nitroaniline	3900	U	3900	1100
88-75-5	2-Nitrophenol	3900	U	3900	2100
91-94-1	3,3'-Dichlorobenzidine	3900	U	3900	2500
15831-10-4	3 & 4 Methylphenol	3900	U	3900	2000
99-09-2	3-Nitroaniline	3900	U	3900	1900
534-52-1	4,6-Dinitro-2-methylphenol	3900	U	3900	1800
101-55-3	4-Bromophenyl phenyl ether	3900	U	3900	1100
106-47-8	4-Chloroaniline	3900	U	3900	2200
7005-72-3	4-Chlorophenyl phenyl ether	3900	U	3900	1100
100-02-7	4-Nitrophenol	3900	U	3900	3100
83-32-9	Acenaphthene	4000		3900	1200
208-96-8	Acenaphthylene	3900	U	3900	1400
62-53-3	Aniline	3900	U	3900	2600
120-12-7	Anthracene	4700		3900	1100
92-87-5	Benzidine	29000	U	29000	3200
56-55-3	Benzo[a]anthracene	7100		3900	1200
50-32-8	Benzo[a]pyrene	6100		3900	1000
205-99-2	Benzo[b]fluoranthene	5500		3900	1100

FORM I 8270D

1  
ORGANIC ANALYSIS DATA SHEET  
SEMIVOLATILE COMPOUNDS BY GC/MS

Client Sample ID: Perimeter Road Chilled Project: General Testing  
 Lab Name: EnviroTest Laboratories, Job No.: 420-67423-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid Lab Sample ID: 420-67423-4  
 Analysis Method: 8270D Lab File ID: 06281306.D  
 Sample wt/vol: 14.79 (g) Date Received: 06/26/2013 11:10  
 Level: (low/med) Low Date Extracted: 06/27/2013 09:30  
 % Moisture: 12.7 Date Analyzed: 06/28/2013 15:24  
 Con. Extract Vol.: 1 (mL) Dilution Factor: 10  
 Injection Volume: \_\_\_\_\_ Extract. Method: 3546  
 GPC Cleanup: (Y/N) N Units: ug/Kg Dry  
 Analy. Batch No.: 67056

CAS No.	Compound Name	Result	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	3900	U	3900	1100
207-08-9	Benzo[k]fluoranthene	5800		3900	1100
100-51-6	Benzyl alcohol	3900	U	3900	2300
111-91-1	Bis(2-chloroethoxy)methane	3900	U	3900	2700
111-44-4	Bis(2-chloroethyl) ether	3900	U	3900	2200
117-81-7	Bis(2-ethylhexyl) phthalate	3900	U	3900	1300
108-60-1	bis(chloroisopropyl) ether	3900	U	3900	2000
85-68-7	Butyl benzyl phthalate	3900	U	3900	1200
86-74-8	Carbazole	4100		3900	1400
218-01-9	Chrysene	7900		3900	1100
53-70-3	Dibenz(a,h)anthracene	3900	U	3900	1100
132-64-9	Dibenzofuran	3900	U	3900	1200
84-66-2	Diethyl phthalate	3900	U	3900	990
131-11-3	Dimethyl phthalate	3900	U	3900	950
84-74-2	Di-n-butyl phthalate	3900	U	3900	1000
117-84-0	Di-n-octyl phthalate	3900	U	3900	1300
206-44-0	Fluoranthene	17000		3900	970
86-73-7	Fluorene	3900	U	3900	1100
118-74-1	Hexachlorobenzene	3900	U	3900	1100
87-68-3	Hexachlorobutadiene	3900	U	3900	1700
77-47-4	Hexachlorocyclopentadiene	3900	U	3900	1800
67-72-1	Hexachloroethane	3900	U	3900	1700
193-39-5	Indeno[1,2,3-cd]pyrene	3900	U	3900	3100
78-59-1	Isophorone	3900	U	3900	1900
91-20-3	Naphthalene	7500		3900	2100
621-64-7	N-Nitrosodi-n-propylamine	3900	U	3900	2000
98-95-3	Nitrobenzene	3900	U	3900	2000
62-75-9	N-Nitrosodimethylamine	3900	U	3900	2500
86-30-6	N-Nitrosodiphenylamine	3900	U	3900	1100
87-86-5	Pentachlorophenol	29000	U	29000	1300

FORM I 8270D



1A-IN  
 INORGANIC ANALYSIS DATA SHEET  
 METALS - TCLP

Client Sample ID: Perimeter Road Chilled Water B2A, Lab Sample ID: 420-67423-4  
 Lab Name: EnviroTest Laboratories, Inc. Job No.: 420-67423-1  
 SDG ID.: \_\_\_\_\_  
 Matrix: Solid Date Sampled: 06/26/2013 09:55  
 Reporting Basis: WET Date Received: 06/26/2013 11:10  
 % Moisture: \_\_\_\_\_

CAS No.	Analyte	Conc.	RL		Units	C	Q	DIL	Method
7440-22-4	Ag	20	20		ug/L	U		2	6010B
7440-38-2	As	200	200		ug/L	U		2	6010B
7440-39-3	Ba	450	400		ug/L			2	6010B
7440-43-9	Cd	20	20		ug/L	U		2	6010B
7440-47-3	Cr	20	20		ug/L	U		2	6010B
7439-92-1	Pb	100	100		ug/L	U		2	6010B
7782-49-2	Se	50	50		ug/L	U		2	6010B
7439-97-6	Hg	0.50	0.50		ug/L	U		1	7470A

## DATA REPORTING QUALIFIERS

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Lab Section	Qualifier	Description
GC/MS VOA		
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range, secondary dilution required.
	F	RPD of the MS and MSD exceeds the control limits
	U	The analyte was analyzed for but not detected at or above the stated limit.
GC/MS Semi VOA		
	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
	U	The analyte was analyzed for but not detected at or above the stated limit.
Metals		
	U	The analyte was analyzed for but not detected at or above the stated limit.

## Definitions and Glossary

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

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<u>Abbreviation</u>	<u>These commonly used abbreviations may or may not be present in this report.</u>
%R	Percent Recovery
DL, RA, RE	Indicates a Dilution, Reanalysis or Reextraction.
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit - an estimate of the minimum amount of a substance that an analytical process can reliably detect. A MDL is analyte- and matrix-specific and may be laboratory-dependent.
ND	Not detected at the reporting limit (or MDL if shown).
QC	Quality Control
RL	Reporting Limit - the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.
RPD	Relative Percent Difference - a measure of the relative difference between two points

# QUALITY CONTROL RESULTS

**Quality Control Results**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**QC Association Summary**

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Prep Batch: 420-66965</b>					
420-67423-3	Perimeter Road Chilled Water B-3, 4'	T	Solid	5035-H	
<b>Prep Batch: 420-66967</b>					
420-67423-4	Perimeter Road Chilled Water B2A,	T	Solid	5035-H	
<b>Analysis Batch:420-66976</b>					
LCS 420-66976/1	Lab Control Spike	T	Solid	8260C	
MB 420-66976/2	Method Blank	T	Solid	8260C	
420-67423-3	Perimeter Road Chilled Water B-3, 4'	T	Solid	8260C	420-66965
420-67423-4	Perimeter Road Chilled Water B2A,	T	Solid	8260C	420-66967
<b>Analysis Batch:420-66977</b>					
LCS 420-66977/1	Lab Control Spike	T	Solid	8260C	
MB 420-66977/2	Method Blank	T	Solid	8260C	
420-67423-1	Perimeter Road Chilled Water B3A,	T	Solid	8260C	
420-67423-1MS	Matrix Spike	T	Solid	8260C	
420-67423-1MSD	Matrix Spike Duplicate	T	Solid	8260C	
420-67423-2	Perimeter Road Chilled Water B3, 7'	T	Solid	8260C	
420-67423-4	Perimeter Road Chilled Water B2A,	T	Solid	8260C	

**Report Basis**

T = Total

**Quality Control Results**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**QC Association Summary**

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS Semi VOA</b>					
<b>Prep Batch: 420-67054</b>					
LCS 420-67054/2-A	Lab Control Spike	T	Solid	3546	
MB 420-67054/1-A	Method Blank	T	Solid	3546	
420-67423-1	Perimeter Road Chilled Water B3A,	T	Solid	3546	
420-67423-2	Perimeter Road Chilled Water B3, 7'	T	Solid	3546	
420-67423-3	Perimeter Road Chilled Water B-3, 4'	T	Solid	3546	
420-67423-4	Perimeter Road Chilled Water B2A,	T	Solid	3546	
420-67423-4MS	Matrix Spike	T	Solid	3546	
<b>Analysis Batch:420-67055</b>					
LCS 420-67054/2-A	Lab Control Spike	T	Solid	8270D	420-67054
MB 420-67054/1-A	Method Blank	T	Solid	8270D	420-67054
420-67423-1	Perimeter Road Chilled Water B3A,	T	Solid	8270D	420-67054
420-67423-2	Perimeter Road Chilled Water B3, 7'	T	Solid	8270D	420-67054
<b>Analysis Batch:420-67056</b>					
420-67423-2	Perimeter Road Chilled Water B3, 7'	T	Solid	8270D	420-67054
420-67423-3	Perimeter Road Chilled Water B-3, 4'	T	Solid	8270D	420-67054
420-67423-4	Perimeter Road Chilled Water B2A,	T	Solid	8270D	420-67054
420-67423-4MS	Matrix Spike	T	Solid	8270D	420-67054

**Report Basis**

T = Total

Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>Metals</b>					
<b>Prep Batch: 420-67020</b>					
420-67423-1	Perimeter Road Chilled Water B3A,	P	Solid	1311	
420-67423-2	Perimeter Road Chilled Water B3, 7'	P	Solid	1311	
420-67423-3	Perimeter Road Chilled Water B-3, 4'	P	Solid	1311	
420-67423-4	Perimeter Road Chilled Water B2A,	P	Solid	1311	
<b>Prep Batch: 420-67039</b>					
LCS 420-67039/3-A	Lab Control Spike	T	Water	3010A	
MB 420-67039/2-A	Method Blank	T	Water	3010A	
420-67423-1	Perimeter Road Chilled Water B3A,	P	Solid	3010A	420-67020
420-67423-2	Perimeter Road Chilled Water B3, 7'	P	Solid	3010A	420-67020
420-67423-3	Perimeter Road Chilled Water B-3, 4'	P	Solid	3010A	420-67020
420-67423-4DU	Duplicate	P	Solid	3010A	
420-67423-4MS	Matrix Spike	P	Solid	3010A	
420-67423-4	Perimeter Road Chilled Water B2A,	P	Solid	3010A	420-67020
<b>Prep Batch: 420-67074</b>					
MB 420-67074/1-A	Method Blank	T	Water	7470A	
420-67423-1	Perimeter Road Chilled Water B3A,	P	Solid	7470A	
420-67423-1DU	Duplicate	P	Solid	7470A	
420-67423-1MS	Matrix Spike	P	Solid	7470A	
420-67423-2	Perimeter Road Chilled Water B3, 7'	P	Solid	7470A	
420-67423-3	Perimeter Road Chilled Water B-3, 4'	P	Solid	7470A	
420-67423-4	Perimeter Road Chilled Water B2A,	P	Solid	7470A	
<b>Analysis Batch:420-67105</b>					
LCS 420-67039/3-A	Lab Control Spike	T	Water	6010B	420-67039
MB 420-67039/2-A	Method Blank	T	Water	6010B	420-67039
420-67423-1	Perimeter Road Chilled Water B3A,	P	Solid	6010B	420-67039
420-67423-2	Perimeter Road Chilled Water B3, 7'	P	Solid	6010B	420-67039
420-67423-3	Perimeter Road Chilled Water B-3, 4'	P	Solid	6010B	420-67039
420-67423-4	Perimeter Road Chilled Water B2A,	P	Solid	6010B	420-67039
420-67423-4DU	Duplicate	P	Solid	6010B	420-67039
420-67423-4MS	Matrix Spike	P	Solid	6010B	420-67039
<b>Analysis Batch:420-67106</b>					
MB 420-67074/1-A	Method Blank	T	Water	7470A	420-67074
420-67423-1	Perimeter Road Chilled Water B3A,	P	Solid	7470A	420-67074
420-67423-1DU	Duplicate	P	Solid	7470A	420-67074
420-67423-1MS	Matrix Spike	P	Solid	7470A	420-67074
420-67423-2	Perimeter Road Chilled Water B3, 7'	P	Solid	7470A	420-67074
420-67423-3	Perimeter Road Chilled Water B-3, 4'	P	Solid	7470A	420-67074
420-67423-4	Perimeter Road Chilled Water B2A,	P	Solid	7470A	420-67074

EnviroTest Laboratories, Inc.

07/10/2013

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>Report Basis</b>					
P = TCLP					
T = Total					
<b>General Chemistry</b>					
<b>Analysis Batch:420-66975</b>					
420-67423-1	Perimeter Road Chilled Water B3A,	T	Solid	PercentMoisture	
420-67423-2	Perimeter Road Chilled Water B3, 7'	T	Solid	PercentMoisture	
420-67423-3	Perimeter Road Chilled Water B-3, 4'	T	Solid	PercentMoisture	
420-67423-4	Perimeter Road Chilled Water B2A,	T	Solid	PercentMoisture	
420-67423-4DU	Duplicate	T	Solid	PercentMoisture	

#### Report Basis

T = Total

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Method Blank - Batch: 420-66976**

**Method: 8260C**  
**Preparation: N/A**

Lab Sample ID: MB 420-66976/2  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1141  
Date Prepared: N/A

Analysis Batch: 420-66976  
Prep Batch: N/A  
Units: ug/Kg Dry

Instrument ID: HP  
Lab File ID: V062605.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acrolein	1.0	U	1.0
Acrylonitrile	5.0	U	5.0
Ethyl methacrylate	1.0	U	1.0
Methyl methacrylate	10	U	10
1,2,4-Trichlorobenzene	1.0	U	1.0
1,2,4-Trimethylbenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
1,3,5-Trimethylbenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,3-Dichloropropane	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
1,4-Dioxane	1.0	U	1.0
2-Chlorotoluene	1.0	U	1.0
2-Chloroethyl vinyl ether	1.0	U	1.0
4-Chlorotoluene	1.0	U	1.0
Benzene	1.0	U	1.0
Bromobenzene	1.0	U	1.0
Bromoform	1.0	U	1.0
Bromomethane	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroform	1.0	U	1.0
Chloromethane	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
Isopropylbenzene	1.0	U	1.0
Naphthalene	1.0	U	1.0
n-Butylbenzene	1.0	U	1.0
N-Propylbenzene	1.0	U	1.0
p-Isopropyltoluene	1.0	U	1.0
sec-Butylbenzene	1.0	U	1.0
Styrene	1.0	U	1.0
tert-Butylbenzene	1.0	U	1.0
Toluene	1.0	U	1.0
Xylenes, Total	2.0	U	2.0
Benzyl chloride	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Method Blank - Batch: 420-66976**

**Method: 8260C**  
**Preparation: N/A**

Lab Sample ID: MB 420-66976/2  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1141  
Date Prepared: N/A

Analysis Batch: 420-66976  
Prep Batch: N/A  
Units: ug/Kg Dry

Instrument ID: HP  
Lab File ID: V062605.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
1,1-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
1,1-Dichloropropene	1.0	U	1.0
2,2-Dichloropropane	1.0	U	1.0
2-Hexanone	1.0	U	1.0
3-Chloropropene	1.0	U	1.0
Bromodichloromethane	1.0	U	1.0
Dichlorodifluoromethane	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
Hexachlorobutadiene	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Tetrachloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
Vinyl chloride	1.0	U	1.0
Vinyl acetate	1.0	U	1.0
2-Butanone (MEK)	1.0	U	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0
Methyl tert-butyl ether	1.0	U	1.0
Acetone	5.0	U	5.0
Acetonitrile	2.0	U	2.0
m-Xylene & p-Xylene	2.0	U	2.0
o-Xylene	2.0	U	2.0
1,2-Dibromoethane	1.0	U	1.0
1,2-Dichloroethene, Total	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	100	72 - 143
4-Bromofluorobenzene	93	49 - 138
1,2-Dichloroethane-d4 (Surr)	97	80 - 136

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Lab Control Spike - Batch: 420-66976**

**Method: 8260C**

**Preparation: N/A**

Lab Sample ID: LCS 420-66976/1  
 Client Matrix: Solid  
 Dilution: 1.0  
 Date Analyzed: 06/26/2013 1029  
 Date Prepared: N/A

Analysis Batch: 420-66976  
 Prep Batch: N/A  
 Units: ug/Kg Dry

Instrument ID: HP  
 Lab File ID: V062603.D  
 Initial Weight/Volume: 5 mL  
 Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acrolein	40.0	44	110	70 - 130	
Acrylonitrile	20.0	22	111	70 - 130	
Ethyl methacrylate	20.0	21	103	70 - 130	
Methyl methacrylate	100	110	107	70 - 130	
1,2,4-Trichlorobenzene	20.0	19	94	70 - 130	
1,2,4-Trimethylbenzene	20.0	21	105	70 - 130	
1,2-Dichlorobenzene	20.0	21	105	70 - 130	
1,2-Dichloroethane	20.0	20	98	70 - 130	
1,2-Dichloropropane	20.0	21	105	70 - 130	
1,2-Dibromo-3-Chloropropane	20.0	18	92	70 - 130	
1,3,5-Trimethylbenzene	20.0	21	103	70 - 130	
1,3-Dichlorobenzene	20.0	21	104	70 - 130	
1,3-Dichloropropane	20.0	20	102	70 - 130	
1,4-Dichlorobenzene	20.0	21	104	70 - 130	
1,4-Dioxane	200	200	99	70 - 130	
2-Chlorotoluene	20.0	20	102	70 - 130	
2-Chloroethyl vinyl ether	20.0	19	93	70 - 130	
4-Chlorotoluene	20.0	21	106	70 - 130	
Benzene	20.0	21	104	70 - 130	
Bromobenzene	20.0	21	105	70 - 130	
Bromoform	20.0	20	99	70 - 130	
Bromomethane	20.0	21	106	70 - 130	
Chlorobenzene	20.0	21	103	70 - 130	
Chloroform	20.0	21	104	70 - 130	
Chloromethane	20.0	21	104	70 - 130	
Chloroethane	20.0	22	109	70 - 130	
Chlorodibromomethane	20.0	20	98	70 - 130	
Chlorobromomethane	20.0	21	105	70 - 130	
Ethylbenzene	20.0	20	102	70 - 130	
Isopropylbenzene	20.0	20	101	70 - 130	
Naphthalene	20.0	19	94	70 - 130	
n-Butylbenzene	20.0	21	105	70 - 130	
N-Propylbenzene	20.0	21	106	70 - 130	
p-Isopropyltoluene	20.0	21	103	70 - 130	
sec-Butylbenzene	20.0	21	103	70 - 130	
Styrene	20.0	22	108	70 - 130	
tert-Butylbenzene	20.0	21	104	70 - 130	
Toluene	20.0	21	104	70 - 130	
Xylenes, Total	60.0	62	103	70 - 130	
Benzyl chloride	20.0	15	77	70 - 130	
1,1,1,2-Tetrachloroethane	20.0	20	100	70 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Quality Control Results**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Lab Control Spike - Batch: 420-66976**

**Method: 8260C  
Preparation: N/A**

Lab Sample ID: LCS 420-66976/1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1029  
Date Prepared: N/A

Analysis Batch: 420-66976  
Prep Batch: N/A  
Units: ug/Kg Dry

Instrument ID: HP  
Lab File ID: V062603.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	20.0	19	94	70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17	83	70 - 130	
1,1,2-Trichloroethane	20.0	21	105	70 - 130	
1,1-Dichloroethane	20.0	21	105	70 - 130	
1,1-Dichloroethene	20.0	19	94	70 - 130	
1,1-Dichloropropene	20.0	21	104	70 - 130	
2,2-Dichloropropane	20.0	16	82	70 - 130	
2-Hexanone	20.0	20	100	70 - 130	
3-Chloropropene	20.0	21	104	70 - 130	
Bromodichloromethane	20.0	20	98	70 - 130	
Dichlorodifluoromethane	20.0	16	81	70 - 130	
Carbon tetrachloride	20.0	20	98	70 - 130	
Carbon disulfide	20.0	19	95	70 - 130	
cis-1,2-Dichloroethene	20.0	21	106	70 - 130	
cis-1,3-Dichloropropene	20.0	20	100	70 - 130	
Hexachlorobutadiene	20.0	20	102	70 - 130	
Dibromomethane	20.0	20	98	70 - 130	
Methylene Chloride	20.0	21	104	70 - 130	
Tetrachloroethene	20.0	20	98	70 - 130	
trans-1,2-Dichloroethene	20.0	21	104	70 - 130	
trans-1,3-Dichloropropene	20.0	17	86	70 - 130	
trans-1,4-Dichloro-2-butene	20.0	18	90	70 - 130	
Trichloroethene	20.0	21	106	70 - 130	
Trichlorofluoromethane	20.0	19	96	70 - 130	
Vinyl chloride	20.0	20	99	70 - 130	
Vinyl acetate	20.0	22	112	70 - 130	
2-Butanone (MEK)	20.0	24	118	70 - 130	
4-Methyl-2-pentanone (MIBK)	20.0	21	104	70 - 130	
Methyl tert-butyl ether	20.0	17	83	70 - 130	
Acetone	20.0	20	100	70 - 130	
Acetonitrile	20.0	21	104	70 - 130	
m-Xylene & p-Xylene	40.0	41	103	70 - 130	
o-Xylene	20.0	20	102	70 - 130	
1,2-Dibromoethane	20.0	20	102	70 - 130	
1,2-Dichloroethene, Total	40.0	42	105	70 - 130	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	102	72 - 143
4-Bromofluorobenzene	98	49 - 138
1,2-Dichloroethane-d4 (Surr)	99	80 - 136

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Method Blank - Batch: 420-66977**

**Method: 8260C**

**Preparation: 5035-L**

Lab Sample ID: MB 420-66977/2  
 Client Matrix: Solid  
 Dilution: 1.0  
 Date Analyzed: 06/26/2013 1244  
 Date Prepared: 06/26/2013 1244

Analysis Batch: 420-66977  
 Prep Batch: N/A  
 Units: ug/Kg Dry

Instrument ID: Agilent 7890A/5975C GC-MS  
 Lab File ID: X062605.D  
 Initial Weight/Volume: 5 g  
 Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Acrolein	1.0	U	1.0
Acrylonitrile	5.0	U	5.0
Ethyl methacrylate	1.0	U	1.0
Methyl methacrylate	10	U	10
1,2,4-Trichlorobenzene	1.0	U	1.0
1,2,4-Trimethylbenzene	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
1,3,5-Trimethylbenzene	1.0	U	1.0
1,3-Dichlorobenzene	1.0	U	1.0
1,3-Dichloropropane	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
1,4-Dioxane	1.0	U	1.0
2-Chlorotoluene	1.0	U	1.0
2-Chloroethyl vinyl ether	1.0	U	1.0
4-Chlorotoluene	1.0	U	1.0
Benzene	1.0	U	1.0
Bromobenzene	1.0	U	1.0
Bromoform	1.0	U	1.0
Bromomethane	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroform	1.0	U	1.0
Chloromethane	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
Isopropylbenzene	1.0	U	1.0
Naphthalene	1.0	U	1.0
n-Butylbenzene	1.0	U	1.0
N-Propylbenzene	1.0	U	1.0
p-Isopropyltoluene	1.0	U	1.0
sec-Butylbenzene	1.0	U	1.0
Styrene	1.0	U	1.0
tert-Butylbenzene	1.0	U	1.0
Toluene	1.0	U	1.0
Xylenes, Total	2.0	U	2.0
Benzyl chloride	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Method Blank - Batch: 420-66977

Method: 8260C  
Preparation: 5035-L

Lab Sample ID: MB 420-66977/2  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1244  
Date Prepared: 06/26/2013 1244

Analysis Batch: 420-66977  
Prep Batch: N/A  
Units: ug/Kg Dry

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062605.D  
Initial Weight/Volume: 5 g  
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
1,1-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
1,1-Dichloropropene	1.0	U	1.0
2,2-Dichloropropane	1.0	U	1.0
2-Hexanone	1.0	U	1.0
3-Chloropropene	1.0	U	1.0
Bromodichloromethane	1.0	U	1.0
Dichlorodifluoromethane	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
Hexachlorobutadiene	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Tetrachloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
Vinyl chloride	1.0	U	1.0
Vinyl acetate	1.0	U	1.0
2-Butanone (MEK)	1.0	U	1.0
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0
Methyl tert-butyl ether	1.0	U	1.0
Acetone	5.0	U	5.0
Acetonitrile	2.0	U	2.0
m-Xylene & p-Xylene	2.0	U	2.0
o-Xylene	2.0	U	2.0
1,2-Dibromoethane	1.0	U	1.0
1,2-Dichloroethene, Total	1.0	U	1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	79	72 - 143
4-Bromofluorobenzene	81	49 - 138
1,2-Dichloroethane-d4 (Surr)	89	80 - 136

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Lab Control Spike - Batch: 420-66977

Method: 8260C  
Preparation: 5035-L

Lab Sample ID: LCS 420-66977/1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1147  
Date Prepared: 06/26/2013 1147

Analysis Batch: 420-66977  
Prep Batch: N/A  
Units: ug/Kg Dry

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062603.D  
Initial Weight/Volume: 5 g  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acrolein	40.0	33	82	70 - 130	
Acrylonitrile	20.0	18	89	70 - 130	
Ethyl methacrylate	20.0	20	100	70 - 130	
Methyl methacrylate	100	92	92	70 - 130	
1,2,4-Trichlorobenzene	20.0	17	87	70 - 130	
1,2,4-Trimethylbenzene	20.0	19	96	70 - 130	
1,2-Dichlorobenzene	20.0	18	90	70 - 130	
1,2-Dichloroethane	20.0	22	110	70 - 130	
1,2-Dichloropropane	20.0	20	100	70 - 130	
1,2-Dibromo-3-Chloropropane	20.0	16	82	70 - 130	
1,3,5-Trimethylbenzene	20.0	19	97	70 - 130	
1,3-Dichlorobenzene	20.0	18	90	70 - 130	
1,3-Dichloropropane	20.0	22	110	70 - 130	
1,4-Dichlorobenzene	20.0	18	90	70 - 130	
1,4-Dioxane	200	190	94	70 - 130	
2-Chlorotoluene	20.0	19	94	70 - 130	
2-Chloroethyl vinyl ether	20.0	18	92	70 - 130	
4-Chlorotoluene	20.0	19	95	70 - 130	
Benzene	20.0	20	99	70 - 130	
Bromobenzene	20.0	19	93	70 - 130	
Bromoform	20.0	23	116	70 - 130	
Bromomethane	20.0	20	100	70 - 130	
Chlorobenzene	20.0	19	93	70 - 130	
Chloroform	20.0	22	108	70 - 130	
Chloromethane	20.0	17	84	70 - 130	
Chloroethane	20.0	19	96	70 - 130	
Chlorodibromomethane	20.0	22	110	70 - 130	
Chlorobromomethane	20.0	21	107	70 - 130	
Ethylbenzene	20.0	18	91	70 - 130	
Isopropylbenzene	20.0	19	97	70 - 130	
Naphthalene	20.0	17	85	70 - 130	
n-Butylbenzene	20.0	18	89	70 - 130	
N-Propylbenzene	20.0	20	99	70 - 130	
p-Isopropyltoluene	20.0	18	89	70 - 130	
sec-Butylbenzene	20.0	18	90	70 - 130	
Styrene	20.0	19	95	70 - 130	
tert-Butylbenzene	20.0	20	98	70 - 130	
Toluene	20.0	16	79	70 - 130	
Xylenes, Total	60.0	53	88	70 - 130	
Benzyl chloride	20.0	16	80	70 - 130	
1,1,1,2-Tetrachloroethane	20.0	19	97	70 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Lab Control Spike - Batch: 420-66977**

**Method: 8260C**  
**Preparation: 5035-L**

Lab Sample ID: LCS 420-66977/1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1147  
Date Prepared: 06/26/2013 1147

Analysis Batch: 420-66977  
Prep Batch: N/A  
Units: ug/Kg Dry

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062603.D  
Initial Weight/Volume: 5 g  
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	20.0	23	113	70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20	100	70 - 130	
1,1,2-Trichloroethane	20.0	22	109	70 - 130	
1,1-Dichloroethane	20.0	20	98	70 - 130	
1,1-Dichloroethene	20.0	19	97	70 - 130	
1,1-Dichloropropene	20.0	21	103	70 - 130	
2,2-Dichloropropane	20.0	20	98	70 - 130	
2-Hexanone	20.0	17	85	70 - 130	
3-Chloropropene	20.0	19	93	70 - 130	
Bromodichloromethane	20.0	22	109	70 - 130	
Dichlorodifluoromethane	20.0	17	84	70 - 130	
Carbon tetrachloride	20.0	24	118	70 - 130	
Carbon disulfide	20.0	21	103	70 - 130	
cis-1,2-Dichloroethene	20.0	20	100	70 - 130	
cis-1,3-Dichloropropene	20.0	20	98	70 - 130	
Hexachlorobutadiene	20.0	19	96	70 - 130	
Dibromomethane	20.0	20	102	70 - 130	
Methylene Chloride	20.0	19	95	70 - 130	
Tetrachloroethene	20.0	18	89	70 - 130	
trans-1,2-Dichloroethene	20.0	20	98	70 - 130	
trans-1,3-Dichloropropene	20.0	20	102	70 - 130	
trans-1,4-Dichloro-2-butene	20.0	18	92	70 - 130	
Trichloroethene	20.0	22	108	70 - 130	
Trichlorofluoromethane	20.0	22	112	70 - 130	
Vinyl chloride	20.0	20	100	70 - 130	
Vinyl acetate	20.0	15	77	70 - 130	
2-Butanone (MEK)	20.0	18	88	70 - 130	
4-Methyl-2-pentanone (MIBK)	20.0	20	101	70 - 130	
Methyl tert-butyl ether	20.0	20	99	70 - 130	
Acetone	20.0	18	88	70 - 130	
Acetonitrile	20.0	22	109	70 - 130	
m-Xylene & p-Xylene	40.0	35	87	70 - 130	
o-Xylene	20.0	18	90	70 - 130	
1,2-Dibromoethane	20.0	21	107	70 - 130	
1,2-Dichloroethene, Total	40.0	40	99	70 - 130	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	72	72 - 143
4-Bromofluorobenzene	87	49 - 138
1,2-Dichloroethane-d4 (Surr)	86	80 - 136

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 420-66977**

**Method: 8260C  
Preparation: 5035-L**

MS Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1545  
Date Prepared: 06/26/2013 1545

Analysis Batch: 420-66977  
Prep Batch: N/A

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062611.D  
Initial Weight/Volume: 4.61 g  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1614  
Date Prepared: 06/26/2013 1614

Analysis Batch: 420-66977  
Prep Batch: N/A

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062612.D  
Initial Weight/Volume: 4.48 g  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acrolein	65	50	70 - 130	24	20	F	F
Acrylonitrile	98	95	70 - 130	0	20		
Ethyl methacrylate	106	96	70 - 130	7	20		
Methyl methacrylate	111	105	70 - 130	3	20		
1,2,4-Trichlorobenzene	56	51	70 - 130	6	20	F	F
1,2,4-Trimethylbenzene	83	74	70 - 130	6	20		
1,2-Dichlorobenzene	76	68	70 - 130	8	20		F
1,2-Dichloroethane	116	110	70 - 130	2	20		
1,2-Dichloropropane	109	107	70 - 130	1	20		
1,2-Dibromo-3-Chloropropane	93	99	70 - 130	9	20		
1,3,5-Trimethylbenzene	85	78	70 - 130	4	20		
1,3-Dichlorobenzene	67	57	70 - 130	13	20	F	F
1,3-Dichloropropane	113	106	70 - 130	4	20		
1,4-Dichlorobenzene	62	54	70 - 130	12	20	F	F
1,4-Dioxane	127	124	70 - 130	0	20		
2-Chlorotoluene	87	76	70 - 130	11	20		
2-Chloroethyl vinyl ether	111	101	70 - 130	6	20		
4-Chlorotoluene	76	64	70 - 130	14	20		F
Benzene	105	102	70 - 130	0	20		
Bromobenzene	87	76	70 - 130	11	20		
Bromoform	110	99	70 - 130	7	20		
Bromomethane	99	95	70 - 130	1	20		
Chlorobenzene	92	80	70 - 130	11	20		
Chloroform	110	107	70 - 130	0	20		
Chloromethane	86	88	70 - 130	5	20		
Chloroethane	99	97	70 - 130	1	20		
Chlorodibromomethane	111	101	70 - 130	7	20		
Chlorobromomethane	101	97	70 - 130	1	20		
Ethylbenzene	97	86	70 - 130	9	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 420-66977**

**Method: 8260C  
Preparation: 5035-L**

MS Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1545  
Date Prepared: 06/26/2013 1545

Analysis Batch: 420-66977  
Prep Batch: N/A

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062611.D  
Initial Weight/Volume: 4.61 g  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1614  
Date Prepared: 06/26/2013 1614

Analysis Batch: 420-66977  
Prep Batch: N/A

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062612.D  
Initial Weight/Volume: 4.48 g  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Isopropylbenzene	97	88	70 - 130	7	20		
Naphthalene	57	46	70 - 130	9	20	F	F
n-Butylbenzene	50	45	70 - 130	7	20	F	F
N-Propylbenzene	86	74	70 - 130	12	20		
p-Isopropyltoluene	59	55	70 - 130	4	20	F	F
sec-Butylbenzene	60	56	70 - 130	5	20	F	F
Styrene	86	73	70 - 130	13	20		
tert-Butylbenzene	87	77	70 - 130	9	20		
Toluene	97	86	70 - 130	9	20		
Xylenes, Total	91	81	70 - 130	8	20		
Benzyl chloride	72	68	70 - 130	4	20		F
1,1,1,2-Tetrachloroethane	121	112	70 - 130	5	20		
1,1,1-Trichloroethane	115	117	70 - 130	4	20		
1,1,2-Trichloro-1,2,2-trifluoroethane	98	98	70 - 130	2	20		
1,1,2-Trichloroethane	127	116	70 - 130	6	20		
1,1-Dichloroethane	101	101	70 - 130	3	20		
1,1-Dichloroethene	92	89	70 - 130	1	20		
1,1-Dichloropropene	90	85	70 - 130	3	20		
2,2-Dichloropropane	98	100	70 - 130	5	20		
2-Hexanone	122	115	70 - 130	3	20		
3-Chloropropene	83	79	70 - 130	2	20		
Bromodichloromethane	113	106	70 - 130	4	20		
Dichlorodifluoromethane	88	88	70 - 130	3	20		
Carbon tetrachloride	117	108	70 - 130	5	20		
Carbon disulfide	46	60	70 - 130	26	20	F	F
cis-1,2-Dichloroethene	87	84	70 - 130	0	20		
cis-1,3-Dichloropropene	84	78	70 - 130	4	20		
Hexachlorobutadiene	46	40	70 - 130	10	20	F	F
Dibromomethane	94	90	70 - 130	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Quality Control Results**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 420-66977**

**Method: 8260C  
Preparation: 5035-L**

MS Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1545  
Date Prepared: 06/26/2013 1545

Analysis Batch: 420-66977  
Prep Batch: N/A

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062611.D  
Initial Weight/Volume: 4.61 g  
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1614  
Date Prepared: 06/26/2013 1614

Analysis Batch: 420-66977  
Prep Batch: N/A

Instrument ID: Agilent 7890A/5975C GC-MS  
Lab File ID: X062612.D  
Initial Weight/Volume: 4.48 g  
Final Weight/Volume: 5 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methylene Chloride	97	92	70 - 130	3	20		
Tetrachloroethene	100	89	70 - 130	8	20		
trans-1,2-Dichloroethene	65	69	70 - 130	7	20	F	F
trans-1,3-Dichloropropene	70	65	70 - 130	4	20		F
trans-1,4-Dichloro-2-butene	72	64	70 - 130	9	20		F
Trichloroethene	94	87	70 - 130	5	20		
Trichlorofluoromethane	121	115	70 - 130	2	20		
Vinyl chloride	93	90	70 - 130	0	20		
Vinyl acetate	80	72	70 - 130	7	20		
2-Butanone (MEK)	131	137	70 - 130	7	20	F	F
4-Methyl-2-pentanone (MIBK)	118	118	70 - 130	3	20		
Methyl tert-butyl ether	115	122	70 - 130	8	20		
Acetone	50	58	70 - 130	4	20	F	F
Acetonitrile	57	75	70 - 130	30	20	F	F
m-Xylene & p-Xylene	88	78	70 - 130	9	20		
o-Xylene	105	96	70 - 130	6	20		
1,2-Dibromoethane	98	88	70 - 130	7	20		
1,2-Dichloroethene, Total							

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	91	85	72 - 143
4-Bromofluorobenzene	78	78	49 - 138
1,2-Dichloroethane-d4 (Surr)	97	96	80 - 136

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Method Blank - Batch: 420-67054**

**Method: 8270D**  
**Preparation: 3546**

Lab Sample ID: MB 420-67054/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/27/2013 1622  
Date Prepared: 06/27/2013 0930

Analysis Batch: 420-67055  
Prep Batch: 420-67054  
Units: ug/Kg Dry

Instrument ID: 2012 Agilent 5975C MSD and  
Lab File ID: 06271304.D  
Initial Weight/Volume: 15.06 g  
Final Weight/Volume: 1 mL  
Injection Volume:

Analyte	Result	Qual	RL
1,2,4-Trichlorobenzene	330	U	330
2,4,5-Trichlorophenol	330	U	330
2,4,6-Trichlorophenol	330	U	330
2,4-Dichlorophenol	330	U	330
2,4-Dimethylphenol	330	U	330
2,4-Dinitrophenol	330	U	330
2,4-Dinitrotoluene	330	U	330
2,6-Dinitrotoluene	330	U	330
2-Chloronaphthalene	330	U	330
2-Chlorophenol	330	U	330
2-Methylnaphthalene	330	U	330
2-Methylphenol	330	U	330
2-Nitroaniline	330	U	330
2-Nitrophenol	330	U	330
3,3'-Dichlorobenzidine	330	U	330
3 & 4 Methylphenol	330	U	330
3-Nitroaniline	330	U	330
4,6-Dinitro-2-methylphenol	330	U	330
4-Bromophenyl phenyl ether	330	U	330
4-Chloroaniline	330	U	330
4-Chlorophenyl phenyl ether	330	U	330
4-Nitrophenol	330	U	330
Acenaphthene	330	U	330
Acenaphthylene	330	U	330
Aniline	330	U	330
Anthracene	330	U	330
Benzidine	2500	U	2500
Benzo[a]anthracene	330	U	330
Benzo[a]pyrene	330	U	330
Benzo[b]fluoranthene	330	U	330
Benzo[g,h,i]perylene	330	U	330
Benzo[k]fluoranthene	330	U	330
Benzyl alcohol	330	U	330
Bis(2-chloroethoxy)methane	330	U	330
Bis(2-chloroethyl)ether	330	U	330
Bis(2-ethylhexyl) phthalate	330	U	330
bis(chloroisopropyl) ether	330	U	330
Butyl benzyl phthalate	330	U	330
Carbazole	330	U	330
Chrysene	330	U	330
Dibenz(a,h)anthracene	330	U	330

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

Method Blank - Batch: 420-67054

Method: 8270D  
Preparation: 3546

Lab Sample ID: MB 420-67054/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/27/2013 1622  
Date Prepared: 06/27/2013 0930

Analysis Batch: 420-67055  
Prep Batch: 420-67054  
Units: ug/Kg Dry

Instrument ID: 2012 Agilent 5975C MSD and  
Lab File ID: 06271304.D  
Initial Weight/Volume: 15.06 g  
Final Weight/Volume: 1 mL  
Injection Volume:

Analyte	Result	Qual	RL
Dibenzofuran	330	U	330
Diethyl phthalate	330	U	330
Dimethyl phthalate	330	U	330
Di-n-butyl phthalate	330	U	330
Di-n-octyl phthalate	330	U	330
Fluoranthene	330	U	330
Fluorene	330	U	330
Hexachlorobenzene	330	U	330
Hexachlorobutadiene	330	U	330
Hexachlorocyclopentadiene	330	U	330
Hexachloroethane	330	U	330
Indeno[1,2,3-cd]pyrene	330	U	330
Isophorone	330	U	330
Naphthalene	330	U	330
N-Nitrosodi-n-propylamine	330	U	330
Nitrobenzene	330	U	330
N-Nitrosodimethylamine	330	U	330
N-Nitrosodiphenylamine	330	U	330
Pentachlorophenol	2500	U	2500
Phenol	330	U	330
Phenanthrene	330	U	330
Pyrene	330	U	330
Pyridine	1000	U	1000
4-Chloro-3-methylphenol	330	U	330
1,3-Dinitrobenzene	330	U	330
1,1'-Biphenyl	330	U	330
2-Picoline	330	U	330
Acetophenone	330	U	330
Benzoic acid	1000	U	1000
N-Nitrosodiethylamine	330	U	330
N-Nitrosopyrrolidine	330	U	330
1,2,4,5-Tetrachlorobenzene	330	U	330

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	44	10 - 120
Nitrobenzene-d5	41	10 - 120
Phenol-d5	46	10 - 120
Terphenyl-d14	103	10 - 120
2-Fluorobiphenyl	38	10 - 120
2,4,6 - Tribromophenol	47	10 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Lab Control Spike - Batch: 420-67054**

**Method: 8270D**

**Preparation: 3546**

Lab Sample ID: LCS 420-67054/2-A  
 Client Matrix: Solid  
 Dilution: 1.0  
 Date Analyzed: 06/27/2013 1923  
 Date Prepared: 06/27/2013 0930

Analysis Batch: 420-67055  
 Prep Batch: 420-67054  
 Units: ug/Kg Dry

Instrument ID: 2012 Agilent 5975C MSD and  
 Lab File ID: 06271310.D  
 Initial Weight/Volume: 15.26 g  
 Final Weight/Volume: 1 mL  
 Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,2,4-Trichlorobenzene	3280	2000	62	20 - 160	
2,4,5-Trichlorophenol	3280	2500	75	20 - 160	
2,4,6-Trichlorophenol	3280	2400	73	20 - 160	
2,4-Dichlorophenol	3280	2400	73	20 - 160	
2,4-Dimethylphenol	3280	2500	77	20 - 160	
2,4-Dinitrophenol	3280	1000	31	20 - 160	
2,4-Dinitrotoluene	3280	2900	88	20 - 160	
2,6-Dinitrotoluene	3280	2300	71	20 - 160	
2-Chloronaphthalene	3280	2300	71	20 - 160	
2-Chlorophenol	3280	2400	72	20 - 160	
2-Methylnaphthalene	3280	2300	71	20 - 160	
2-Methylphenol	3280	2600	79	20 - 160	
2-Nitroaniline	3280	2800	84	20 - 160	
2-Nitrophenol	3280	2400	73	20 - 160	
3,3'-Dichlorobenzidine	6550	5800	88	20 - 160	
3 & 4 Methylphenol	3280	2600	80	20 - 160	
3-Nitroaniline	3280	2700	82	20 - 160	
4,6-Dinitro-2-methylphenol	3280	2000	62	20 - 160	
4-Bromophenyl phenyl ether	3280	2600	80	20 - 160	
4-Chloroaniline	3280	2500	75	20 - 160	
4-Chlorophenyl phenyl ether	3280	2300	70	20 - 160	
4-Nitrophenol	3280	3900	118	20 - 160	
Acenaphthene	3280	2300	69	20 - 160	
Acenaphthylene	3280	2300	69	20 - 160	
Aniline	3280	2200	68	20 - 160	
Anthracene	3280	2900	89	20 - 160	
Benzidine	6550	4300	66	20 - 160	
Benzo[a]anthracene	3280	3100	94	20 - 160	
Benzo[a]pyrene	3280	3100	96	20 - 160	
Benzo[b]fluoranthene	3280	3700	112	20 - 160	
Benzo[g,h,i]perylene	3280	2100	63	20 - 160	
Benzo[k]fluoranthene	3280	2600	81	20 - 160	
Benzyl alcohol	3280	2700	83	20 - 160	
Bis(2-chloroethoxy)methane	3280	2500	77	20 - 160	
Bis(2-chloroethyl)ether	3280	2400	74	20 - 160	
Bis(2-ethylhexyl) phthalate	3280	3300	101	20 - 160	
bis(chloroisopropyl) ether	3280	2400	72	20 - 160	
Butyl benzyl phthalate	3280	3300	102	20 - 160	
Carbazole	3280	3100	95	20 - 160	
Chrysene	3280	3000	91	20 - 160	
Dibenz(a,h)anthracene	3280	2400	73	20 - 160	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Lab Control Spike - Batch: 420-67054**

**Method: 8270D**  
**Preparation: 3546**

Lab Sample ID: LCS 420-67054/2-A  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/27/2013 1923  
Date Prepared: 06/27/2013 0930

Analysis Batch: 420-67055  
Prep Batch: 420-67054  
Units: ug/Kg Dry

Instrument ID: 2012 Agilent 5975C MSD and  
Lab File ID: 06271310.D  
Initial Weight/Volume: 15.26 g  
Final Weight/Volume: 1 mL  
Injection Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dibenzofuran	3280	2500	75	20 - 160	
Diethyl phthalate	3280	2700	83	20 - 160	
Dimethyl phthalate	3280	2600	81	20 - 160	
Di-n-butyl phthalate	3280	3400	104	20 - 160	
Di-n-octyl phthalate	3280	3800	116	20 - 160	
Fluoranthene	3280	2900	89	20 - 160	
Fluorene	3280	2500	76	20 - 160	
Hexachlorobenzene	3280	2500	76	20 - 160	
Hexachlorobutadiene	3280	1800	56	20 - 160	
Hexachlorocyclopentadiene	3280	740	23	20 - 160	
Hexachloroethane	3280	1800	53	20 - 160	
Indeno[1,2,3-cd]pyrene	3280	2500	77	20 - 160	
Isophorone	3280	2600	78	20 - 160	
Naphthalene	3280	2100	65	20 - 160	
N-Nitrosodi-n-propylamine	3280	2700	82	20 - 160	
Nitrobenzene	3280	2300	71	20 - 160	
N-Nitrosodimethylamine	3280	2600	78	20 - 160	
N-Nitrosodiphenylamine	3280	3000	91	20 - 160	
Pentachlorophenol	3280	2500	76	20 - 160	
Phenol	3280	2700	83	20 - 160	
Phenanthrene	3280	3100	93	20 - 160	
Pyrene	3280	3100	94	20 - 160	
Pyridine	3280	2200	68	20 - 160	
4-Chloro-3-methylphenol	3280	2600	80	20 - 160	
1,3-Dinitrobenzene	3280	2500	76	20 - 160	
2-Picoline	3280	1900	59	20 - 160	
Acetophenone	3280	2500	77	20 - 160	
Benzoic acid	3280	570	17	20 - 160	*
N-Nitrosodiethylamine	3280	2400	74	20 - 160	
N-Nitrosopyrrolidine	3280	2500	77	20 - 160	
1,2,4,5-Tetrachlorobenzene	3280	2000	60	20 - 160	

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	66	10 - 120
Nitrobenzene-d5	68	10 - 120
Phenol-d5	73	10 - 120
Terphenyl-d14	115	10 - 120
2-Fluorobiphenyl	63	10 - 120
2,4,6 - Tribromophenol	67	10 - 120

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Matrix Spike - Batch: 420-67054**

**Method: 8270D**  
**Preparation: 3546**

Lab Sample ID: 420-67423-4  
Client Matrix: Solid  
Dilution: 10  
Date Analyzed: 06/28/2013 1554  
Date Prepared: 06/27/2013 0930

Analysis Batch: 420-67056  
Prep Batch: 420-67054  
Units: ug/Kg Dry

Instrument ID: 2012 Agilent 5975C MSD and  
Lab File ID: 06281307.D  
Initial Weight/Volume: 15.36 g  
Final Weight/Volume: 1 mL  
Injection Volume:

Analyte	Sample	Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
1,2,4-Trichlorobenzene	3900	U	3730	1700	46	20 - 160	U
2,4,5-Trichlorophenol	3900	U	3730	2000	53	20 - 160	U
2,4,6-Trichlorophenol	3900	U	3730	2100	55	20 - 160	U
2,4-Dichlorophenol	3900	U	3730	1900	52	20 - 160	U
2,4-Dimethylphenol	3900	U	3730	2200	60	20 - 160	U
2,4-Dinitrophenol	3900	U	3730	0	0	20 - 160	U F
2,4-Dinitrotoluene	3900	U	3730	1400	37	20 - 160	U
2,6-Dinitrotoluene	3900	U	3730	1700	46	20 - 160	U
2-Chloronaphthalene	3900	U	3730	2300	62	20 - 160	U
2-Chlorophenol	3900	U	3730	1600	42	20 - 160	U
2-Methylnaphthalene	3900	U	3730	4100	53	20 - 160	
2-Methylphenol	3900	U	3730	1900	50	20 - 160	U
2-Nitroaniline	3900	U	3730	3100	83	20 - 160	U
2-Nitrophenol	3900	U	3730	420	11	20 - 160	U F
3,3'-Dichlorobenzidine	3900	U	7460	3700	49	20 - 160	U
3 & 4 Methylphenol	3900	U	3730	2300	62	20 - 160	U
3-Nitroaniline	3900	U	3730	2700	72	20 - 160	U
4,6-Dinitro-2-methylphenol	3900	U	3730	0	0	20 - 160	U F
4-Bromophenyl phenyl ether	3900	U	3730	2000	54	20 - 160	U
4-Chloroaniline	3900	U	3730	1900	52	20 - 160	U
4-Chlorophenyl phenyl ether	3900	U	3730	2000	53	20 - 160	U
4-Nitrophenol	3900	U	3730	1200	33	20 - 160	U
Acenaphthene	4000		3730	7500	94	20 - 160	
Acenaphthylene	3900	U	3730	2400	63	20 - 160	U
Aniline	3900	U	3730	1700	44	20 - 160	U
Anthracene	4700		3730	9100	118	20 - 160	
Benzidine	29000	U	7460	2100	28	20 - 160	U
Benzo[a]anthracene	7100		3730	13000	169	20 - 160	F
Benzo[a]pyrene	6100		3730	12000	160	20 - 160	
Benzo[b]fluoranthene	5500		3730	12000	179	20 - 160	F
Benzo[g,h,i]perylene	3900	U	3730	6600	80	20 - 160	
Benzo[k]fluoranthene	5800		3730	11000	129	20 - 160	
Benzyl alcohol	3900	U	3730	1700	46	20 - 160	U
Bis(2-chloroethoxy)methane	3900	U	3730	2000	53	20 - 160	U
Bis(2-chloroethyl)ether	3900	U	3730	1800	48	20 - 160	U
Bis(2-ethylhexyl) phthalate	3900	U	3730	2700	72	20 - 160	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Matrix Spike - Batch: 420-67054**

**Method: 8270D**  
**Preparation: 3546**

Lab Sample ID: 420-67423-4  
Client Matrix: Solid  
Dilution: 10  
Date Analyzed: 06/28/2013 1554  
Date Prepared: 06/27/2013 0930

Analysis Batch: 420-67056  
Prep Batch: 420-67054  
Units: ug/Kg Dry

Instrument ID: 2012 Agilent 5975C MSD and  
Lab File ID: 06281307.D  
Initial Weight/Volume: 15.36 g  
Final Weight/Volume: 1 mL  
Injection Volume:

Analyte	Sample	Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
bis(chloroisopropyl) ether	3900	U	3730	1800	47	20 - 160	U
Butyl benzyl phthalate	3900	U	3730	2700	73	20 - 160	U
Carbazole	4100		3730	7300	85	20 - 160	
Chrysene	7900		3730	14000	169	20 - 160	F
Dibenz(a,h)anthracene	3900	U	3730	420	11	20 - 160	U F
Dibenzofuran	3900	U	3730	5500	64	20 - 160	
Diethyl phthalate	3900	U	3730	2300	61	20 - 160	U
Dimethyl phthalate	3900	U	3730	2400	65	20 - 160	U
Di-n-butyl phthalate	3900	U	3730	2500	68	20 - 160	U
Di-n-octyl phthalate	3900	U	3730	3200	86	20 - 160	U
Fluoranthene	17000		3730	29000	323	20 - 160	4
Fluorene	3900	U	3730	6800	82	20 - 160	
Hexachlorobenzene	3900	U	3730	1900	50	20 - 160	U
Hexachlorobutadiene	3900	U	3730	1600	42	20 - 160	U
Hexachlorocyclopentadiene	3900	U	3730	7.4	0	20 - 160	U F
Hexachloroethane	3900	U	3730	370	10	20 - 160	U F
Indeno[1,2,3-cd]pyrene	3900	U	3730	7200	97	20 - 160	
Isophorone	3900	U	3730	2100	55	20 - 160	U
Naphthalene	7500		3730	9000	39	20 - 160	
N-Nitrosodi-n-propylamine	3900	U	3730	1900	51	20 - 160	U
Nitrobenzene	3900	U	3730	1600	43	20 - 160	U
N-Nitrosodimethylamine	3900	U	3730	1500	41	20 - 160	U
N-Nitrosodiphenylamine	3900	U	3730	2500	67	20 - 160	U
Pentachlorophenol	29000	U	3730	2500	66	20 - 160	U
Phenol	3900	U	3730	2000	55	20 - 160	U
Phenanthrene	19000		3730	30000	276	20 - 160	4
Pyrene	14000		3730	24000	285	20 - 160	F
Pyridine	12000	U	3730	1400	37	20 - 160	U
4-Chloro-3-methylphenol	3900	U	3730	2300	61	20 - 160	U
1,3-Dinitrobenzene	3900	U	3730	780	21	20 - 160	U
2-Picoline	3900	U	3730	1300	34	20 - 160	U
Acetophenone	3900	U	3730	1900	50	20 - 160	U
Benzoic acid	12000	U	3730	7600	204	20 - 160	U F
N-Nitrosodiethylamine	3900	U	3730	1500	40	20 - 160	U
N-Nitrosopyrrolidine	3900	U	3730	1900	50	20 - 160	U
1,2,4,5-Tetrachlorobenzene	3900	U	3730	1800	49	20 - 160	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Method Blank - Batch: 420-67039**

**Method: 6010B**  
**Preparation: 3010A**

Lab Sample ID: MB 420-67039/2-A  
Client Matrix: Water  
Dilution: 2.0  
Date Analyzed: 07/01/2013 1444  
Date Prepared: 06/28/2013 1045

Analysis Batch: 420-67105  
Prep Batch: 420-67039  
Units: ug/L

Instrument ID: Thermo ICP  
Lab File ID: N/A  
Initial Weight/Volume: 50 mL  
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Ag	20	U	20
As	200	U	200
Ba	400	U	400
Cd	20	U	20
Cr	20	U	20
Pb	100	U	100
Se	50	U	50

**Lab Control Spike - Batch: 420-67039**

**Method: 6010B**  
**Preparation: 3010A**

Lab Sample ID: LCS 420-67039/3-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 07/01/2013 1448  
Date Prepared: 06/28/2013 1045

Analysis Batch: 420-67105  
Prep Batch: 420-67039  
Units: ug/L

Instrument ID: Thermo ICP  
Lab File ID: N/A  
Initial Weight/Volume: 50 mL  
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ag	50.0	43	86	80 - 120	
As	2000	1900	94	80 - 120	
Ba	1000	920	92	80 - 120	
Cd	1000	920	92	80 - 120	
Cr	500	460	92	80 - 120	
Pb	2000	1800	92	80 - 120	
Se	2000	2100	104	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Quality Control Results**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Matrix Spike - Batch: 420-67039**

**Method: 6010B**  
**Preparation: 3010A**  
**TCLP**

Lab Sample ID: 420-67423-4  
 Client Matrix: Solid  
 Dilution: 2.0  
 Date Analyzed: 07/01/2013 1515  
 Date Prepared: 06/28/2013 1045

Analysis Batch: 420-67105  
 Prep Batch: 420-67039  
 Units: ug/L

Instrument ID: Thermo ICP  
 Lab File ID: N/A  
 Initial Weight/Volume: 50 mL  
 Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Ag	20 U	250	230	93	50 - 150	
As	200 U	250	280	110	50 - 150	
Ba	450	5000	5000	92	50 - 150	
Cd	20 U	50.0	48	96	50 - 150	
Cr	20 U	250	230	92	50 - 150	
Pb	100 U	250	230	92	50 - 150	
Se	50 U	50.0	52	104	50 - 150	

**Duplicate - Batch: 420-67039**

**Method: 6010B**  
**Preparation: 3010A**  
**TCLP**

Lab Sample ID: 420-67423-4  
 Client Matrix: Solid  
 Dilution: 2.0  
 Date Analyzed: 07/01/2013 1510  
 Date Prepared: 06/28/2013 1045

Analysis Batch: 420-67105  
 Prep Batch: 420-67039  
 Units: ug/L

Instrument ID: Thermo ICP  
 Lab File ID: N/A  
 Initial Weight/Volume: 50 mL  
 Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Ag	20 U	0.18	NC	20	U
As	200 U	16	NC	20	U
Ba	450	450	0	20	
Cd	20 U	2.4	NC	20	U
Cr	20 U	0.88	NC	20	U
Pb	100 U	7.3	NC	20	U
Se	50 U	-5.3	NC	20	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Quality Control Results**

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Method Blank - Batch: 420-67074**

**Method: 7470A**  
**Preparation: 7470A**

Lab Sample ID: MB 420-67074/1-A  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 07/01/2013 1546  
Date Prepared: 07/01/2013 1037

Analysis Batch: 420-67106  
Prep Batch: 420-67074  
Units: ug/L

Instrument ID: Perkin Elmer FIMS  
Lab File ID: N/A  
Initial Weight/Volume: 25 mL  
Final Weight/Volume: 25 mL

Analyte	Result	Qual	RL
Hg	0.50	U	0.50

**Matrix Spike - Batch: 420-67074**

**Method: 7470A**  
**Preparation: 7470A**  
**TCLP**

Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 07/01/2013 1553  
Date Prepared: 07/01/2013 1037

Analysis Batch: 420-67106  
Prep Batch: 420-67074  
Units: ug/L

Instrument ID: Perkin Elmer FIMS  
Lab File ID: N/A  
Initial Weight/Volume: 25 mL  
Final Weight/Volume: 25 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Hg	0.50 U	1.00	0.92	92	75 - 125	

**Duplicate - Batch: 420-67074**

**Method: 7470A**  
**Preparation: 7470A**  
**TCLP**

Lab Sample ID: 420-67423-1  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 07/01/2013 1551  
Date Prepared: 07/01/2013 1037

Analysis Batch: 420-67106  
Prep Batch: 420-67074  
Units: ug/L

Instrument ID: Perkin Elmer FIMS  
Lab File ID: N/A  
Initial Weight/Volume: 25 mL  
Final Weight/Volume: 25 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Hg	0.50 U	-0.019	NC	20	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

## Quality Control Results

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Duplicate - Batch: 420-66975**

**Method: PercentMoisture**

**Preparation: N/A**

Lab Sample ID: 420-67423-4  
Client Matrix: Solid  
Dilution: 1.0  
Date Analyzed: 06/26/2013 1220  
Date Prepared: N/A

Analysis Batch: 420-66975  
Prep Batch: N/A  
Units: %

Instrument ID: No Equipment Assigned  
Lab File ID: N/A  
Initial Weight/Volume:  
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	87	87	0	30	

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LOGIN SAMPLE RECEIPT CHECK LIST

Client: Fluor Industrial Services, Inc.

Job Number: 420-67423-1

**Login Number: 67423**

Question	T/F/NA	Comment
Samples were collected by ETL employee as per SOP-SAM-1	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is recorded.	True	3.8 C
Cooler Temp. is within method specified range.(0-6 C PW, 0-8 C NPW, or BAC <10 C	True	
If false, was sample received on ice within 6 hours of collection.	NA	
Based on above criteria cooler temperature is acceptable.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	