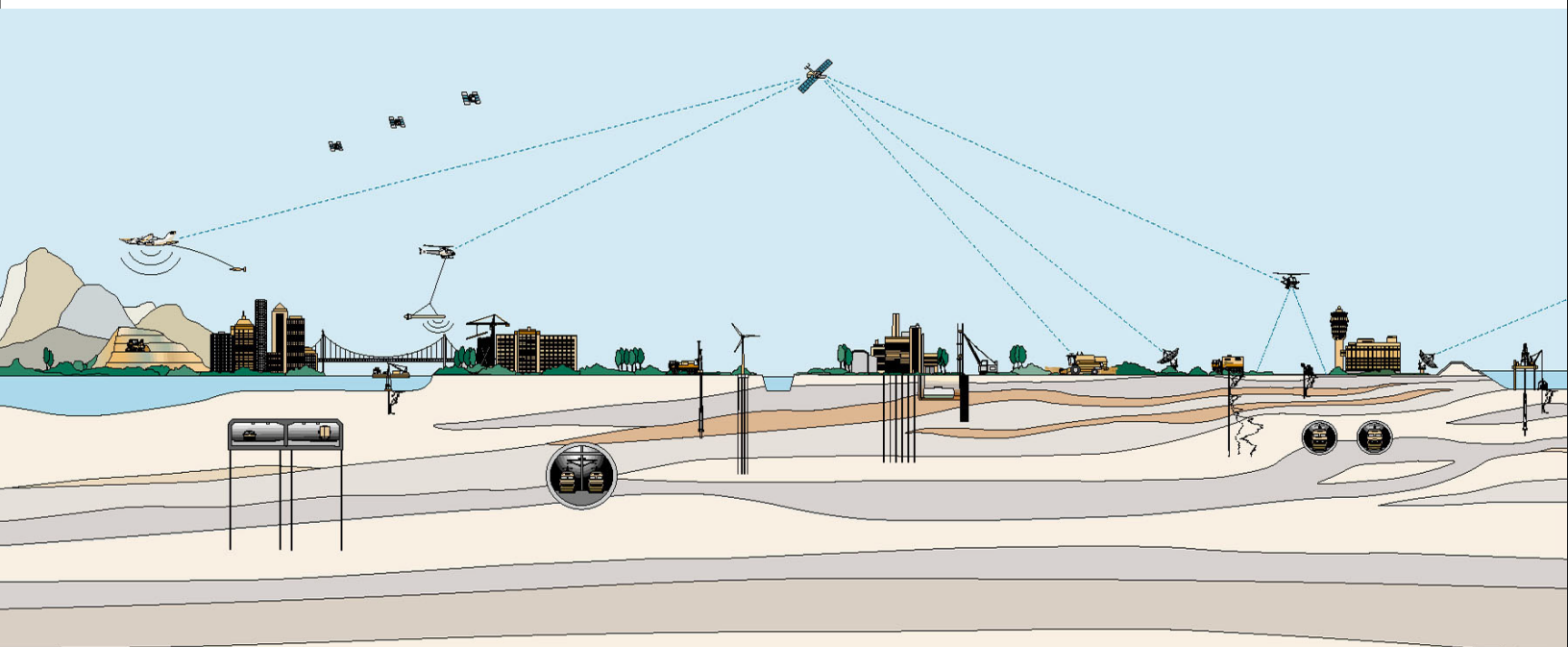




GEOTECHNICAL DATA REPORT MASON CREEK SEDIMENT SAMPLING NORFOLK, VIRGINIA

Prepared for:
Moffatt & Nichol / City of Norfolk

October 2013
Fugro Project No. 04.81130011



October 4, 2013 (rev. 0)
Project No. 04.81130011

Moffatt & Nichol
800 World Trade Center
Norfolk, Virginia 23510

Attention: Mr. Brian Joyner

Subject: Geotechnical Data Report, Mason Creek Site, Norfolk, Virginia

Dear Mr. Joyner:

Fugro Consultants, Inc. (Fugro) has completed the subsurface and laboratory testing program in support of the proposed Mason Creek dredge evaluation. These services were performed in accordance with the scope of work developed in meetings between Moffatt & Nichol and Fugro, and the scope of work described in your Task Order No. 01, M&N Job No. 7970-05, commencement date May 20, 2013.

This report summarizes the data obtained during the site investigation and are presented in the form of boring logs, as well as a summary of laboratory test results. In addition, a discussion of the methods, equipment, and procedures used during the site investigation, as well as tables summarizing the pertinent data, are provided.

It has been a pleasure working with you through this phase of the project. We look forward to the opportunity to provide continued support as the project progresses.

Sincerely,

FUGRO CONSULTANTS, INC.

A handwritten signature in blue ink, appearing to read "W. R. Mack".

William R. Mack, P.E.
Senior Engineer

Copies Submitted: (1) Addressee, via E-Mail (PDF)

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1.0 INTRODUCTION

Mason Creek is a water body about 160 acres in area located in Norfolk, Virginia east of Naval Station Norfolk. About 3520 acres drain into Mason Creek from surrounding residential developments and the Naval Station. A tide gate exists at the northwest extent of the creek, which allows the creek to be influenced by tidal flow in Willoughby Bay. The water depth within Mason Creek generally ranges from 1 to 4 feet at low tide.

The City of Norfolk has retained Moffatt & Nichol to provide planning, engineering and permitting for the dredging of Mason Creek, to improve storm water storage capacity, water quality, and recreational boating access. Dredging depths currently being considered are about 2 to 4 feet below existing mudline. This sediment sampling and analysis program will be used to support the activities associated with the planning and permitting of this project.

2.0 SCOPE OF SERVICES

The Mason Creek Sediment Characterization consisted of three components: 1) sediment sampling, 2) compositing grouped samples for environmental analyses, and 3) selecting discrete samples for physical analyses.

Two changes were made to the Scope of Services after the May 20, 2013 Task Order, in the form of an email request from Moffatt & Nichol on June 10, 2013. Of the 15 originally proposed locations, one sample location in the middle of the creek was split into two locations, for a total of 16 locations. In addition, the three composite groups originally proposed for environmental analyses were increased to four composite samples, plus one discrete sample for environmental analyses.

The sampling component consisted of 16 locations throughout the creek, as shown on Chart 1. Sample locations and composite groups were provided by Moffatt & Nichol via email on June 10, 2013 in the form of a shapefile. The horizontal project datum is Virginia State Plane NAD 1983 coordinate system, revised 8/1990, feet. Elevations listed in this report are North American Vertical Datum (NAVD) 1988 (feet) unless otherwise stated.

The physical analyses included moisture content, organic content, sieve analysis on selected coarse-grained samples, percent finer than #200 sieve on apparent fine-grained samples, Atterberg limits on a few representative fine-grained samples.

The environmental analyses were performed by TestAmerica on samples composited by Fugro. The samples were composited by mixing equal volumes of the upper three feet from each sample in the group. The four composite environmental samples and the sample collected from location GS-15 analyzed as a discrete sample were analyzed for hazardous waste characteristics as defined by 40CFR261.20 and included Reactivity, Ignitibility, Corrosivity (RCI), and Toxicity, including RCRA Metals, pesticides, herbicides, volatiles and semi-volatiles. The four composite samples were also tested for Total Petroleum Hydrocarbons (TPH), Extractable Organic Halides (EOX), and Polychlorinated Biphenyls (PCBs).

3.0 SAMPLING PROGRAM

Sampling was conducted on July 16 and 17, 2013. A handheld Differential GPS pre-programmed with target coordinates was used to navigate to sample locations via canoes. Time and water depth were recorded at each position prior to sampling.

A 4-foot long AMS sediment sampler containing a single-use clear butyrate liner was used to collect the samples. Figure 1 to the right shows a typical sampler and capped liner in a one-foot-long configuration. A flap valve on top of the sampler maintains a vacuum to hold in the sediment. The four-foot length is the maximum depth of this sampler and was considered an adequate depth to evaluate without advancing multiple stages, casing, or mobilizing more expensive and heavy equipment. The sampler was lowered to the creek bottom and either pushed or driven into the sediment. Most locations penetrated the target depth pushing by hand; only location GS-15 required a moderate amount of driving with a slide hammer.



Figure 1 - AMS Sediment Sampler

After penetrating to the 4-foot target depth, the sampler was retrieved and liner with the sample was capped and labeled. The sampler was then cleaned and loaded with a new liner. This process was repeated for each of the 16 sample locations. Chart 1 shows the sample locations and lists the coordinates for each location.

In general, the soils encountered were high-plasticity organic clays, well above their liquid limit. The exception was location GS-15, which consisted of relatively clean fine to medium sand.

3.1 SAMPLE PROCESSING

Collected samples were transported to the local Fugro office for extrusion and processing. A Fugro engineer described the soil per the Unified Soil Classification System, selected discrete samples for laboratory classification, and composited grouped samples for chemical analysis. Descriptions of the soil encountered at each of the sample locations are presented in Figure A-1 in Appendix A.

4.0 LABORATORY TESTING PROGRAM

Selected samples were sent to *engineering and testing consultants, Inc.* for physical testing in Virginia Beach, Virginia. Table 4-1 summarizes the quantities of tests that were performed. Descriptions of the test methods are provided below.

Table 4-1 - Summary of Laboratory Tests

Laboratory Test	Quantity
Moisture Content	15
Grain Size Distribution	2
Percent Fines (finer than 0.075mm)	13
Atterberg Limits	4
Organic Matter	13

4.1 MOISTURE CONTENT

Moisture contents were determined in general accordance with ASTM D 2216 for selected recovered samples. The specimen is first weighed, and then oven-dried to constant mass maintained at approximately 110 degrees Celsius. The specimen is then re-weighed to determine the mass of oven-dried soil, and moisture contents are calculated as a ratio of the weight of water to the weight of solids. The majority of soils ranged from 111 to well over 200 percent and above the materials' liquid limit (described further in Section 4.3). Sample GS-15 was 19 to 20 percent, typical for a saturated sandy soil. Moisture content results are presented on the Summary of Laboratory Test Results (Figure A-2). Theoretical Saturated Unit Weight is also presented in Figure A-2, derived from the moisture content results and assuming 100% saturation and specific gravity of 2.60.

4.2 PARTICLE SIZE ANALYSES

Most of the samples were tested only for fines content (percent passing the #200 sieve), which distinguishes the proportion of coarse-grained material (sand, gravel) from fine-grained material (silt, clay). The samples ranged from having 84 to 99 percent fines. Those samples having less than 90 percent fines also had over 10% organic matter (section 4.4), so it is likely, given the test method, that the material retained was more plant matter versus sand. The percent fines results are presented on the Summary of Laboratory Test Results (Figure A-2).

Particle Size Analyses were performed on two samples of coarse-grained material in general accordance with ASTM D 422. The two samples tested at GS-15 contained only 1 to 2 percent fines (clean sand). Grain size curves are presented on Figures A-3 and A-4.

4.3 ATTERBERG LIMITS

Liquid and plastic limits, collectively termed Atterberg Limits, were determined for selected fine-grained samples in general accordance with ASTM D 4318. This test determines the moisture contents at which a soil behaves as a liquid or a plastic, and this relationship in turn establishes whether the soil would be considered silty or clayey, high or low plasticity. Samples were prepared using the air-dried method. An oven-dried liquid limit test was performed on a representative clay sample for comparison with the air-dried result, to confirm the material acted as organic clay, high plasticity. Most samples were considered organic clay, with the exception of sample GS-15 being sand (non-plastic). Atterberg Limits test results are presented the Summary of Laboratory Test Results (Figure A-2).

4.4 ORGANIC MATTER

The percentage of organic matter was determined by igniting an oven-dried sample from the moisture content determination in a furnace at 440°C in general accordance with ASTM D 2974. Organic content ranged from 2 to 14% in the samples tested. Organic matter within the samples was predominantly reed-grass roots, decayed leaves and small twigs. Organic matter test results are presented the Summary of Laboratory Test Results (Figure A-2).

5.0 ENVIRONMENTAL LABORATORY TESTS

Samples for chemical analysis were delivered to TestAmerica in Virginia Beach. The samples were found inert (non-reactive, noncorrosive, nonignitable), and to be below the detection limit for the constituents tested, with the following exceptions:

Table 5-1 - Summary of Detected Analytes and Concentrations

Analyte	Concentration*	Sample No.					Regulatory Level (mg/L) 40CFR261.20
		1A	2B	3C	4D	5	
PCB-1260	mg/Kg	0.031	0.043	0.061	0.060	NT	NR
Arsenic	mg/L	0.034	0.012	0.012	0.022	ND	5
Barium	mg/L	0.037	0.048	0.04	0.045	0.05	100
Cadmium	mg/L	0.00063	ND	ND	ND	0.0063	1
Chromium	mg/L	0.0021	0.013	0.0042	0.0031	0.0042	5
Lead	mg/L	0.033	0.0086	0.0052	0.012	0.021	5
Selenium	mg/L	0.0051	0.0045	0.0043	0.0046	0.0061	1
Silver	mg/L	0.00073	ND	ND	ND	0.0007	5
Mercury	mg/L	ND	ND	ND	0.000057	ND	0.2
EOX	mg/Kg	ND	ND	85	ND	NT	NR
Sulfide	mg/Kg	28	ND	72	45	ND	NR
SGT-HEM	mg/Kg	370	250	350	260	NT	NR

*Concentration units 'mg/Kg' are total, 'mg/L' are TCLP

ND – Below Method Detection Level

NR – No Regulatory Level Listed

SGT-HEM – Silica Gel Treated n-Hexane Extractable Material, e.g., relatively non-volatile hydrocarbons, vegetable oils,

animal fats, waxes, soaps, greases and related materials.

A full list of the results of the chemical tests as described in Section 2.0 are attached in Appendix B. According to 40CFR261.20 Subpart C, "Characteristics of Hazardous Waste", the samples tested would not be considered hazardous waste.

6.0 LIMITATIONS

6.1 REPORT USE

This report has been prepared for the exclusive use of Moffatt & Nichol, the City of Norfolk, and their agents for the specific application to the Mason Creek Project, located in Norfolk, Virginia. In our opinion, the data and findings recommendations presented herein were prepared in accordance with generally accepted geotechnical engineering practices of the project region.

Although information contained in this report may be of some use for other purposes, it may not contain sufficient information for other parties or uses. If any changes are made to the project as described in this report, the conclusions and recommendations in this report shall not be considered valid unless the changes are reviewed and the conclusions and recommendations of this report are modified or validated in writing by Fugro. This report and the figures contained in this report are intended for input to project design; they are not intended to act as construction drawings or specifications.

6.2 POTENTIAL VARIATIONS IN SUBSURFACE CONDITIONS

Earth materials can vary in type, strength, and other geotechnical and chemical properties between points of observation and exploration. Therefore, we do not and cannot have a complete knowledge of the subsurface conditions underlying the site. The data in this report are based on the findings at the points of exploration. Interpretation of information between and beyond the points of observation is subject to confirmation (to the extent possible) based on the conditions revealed during construction.

6.3 LOCAL PRACTICE

In performing our professional services, in our opinion, we have used generally accepted geologic and geotechnical engineering principles and have applied that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers currently practicing in this or similar localities. No other warranty, express or implied, is made as to the professional advice included in this report.

7.0 REFERENCES

American Society for Testing and Materials (ASTM), Volume 4.08, *Soils and Rock*.

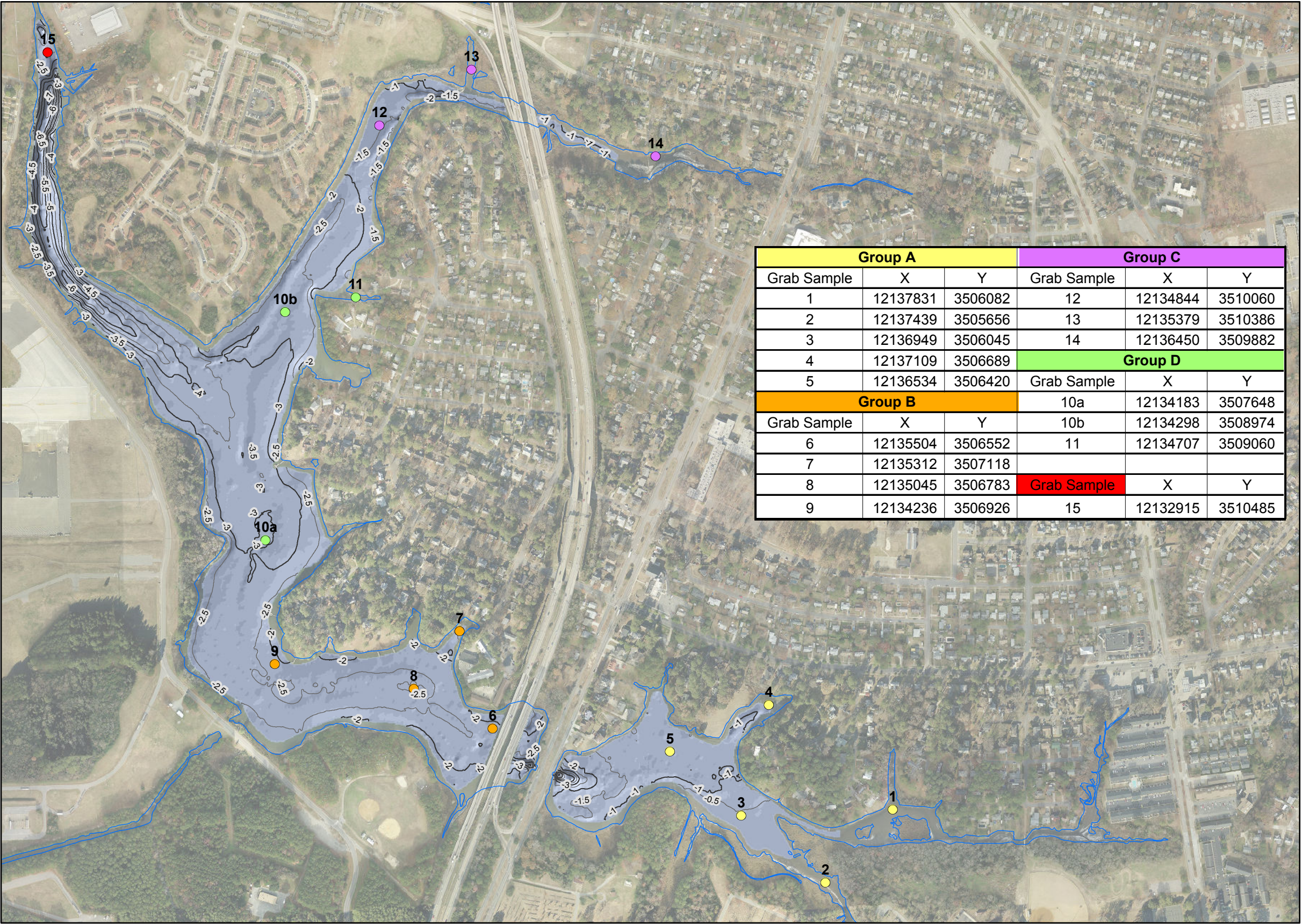
Moffatt & Nichol (2010), *Flood Mitigation Alternatives Evaluation – Mason Creek*, dated April 29.

Electronic Code of Federal Regulations, 40CFR261.20, Subpart C - "Characteristics of Hazardous Waste". <http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=38655c1e951c8053e3cad07ad30d352&n=40y27.0.1.1.2.3&r=SUBPART&ty=HTML>

Material Safety Data Sheet for Polychlorinated Biphenyls (PCBs):
<http://www.nttworldwide.com/docs/PCBsMonsanto-MSDS.pdf>

United States Environmental Protection Agency (2010) - Method 1664:
<http://water.epa.gov/scitech/methods/cwa/upload/Method-1664-Revision-B-n-Hexane-Extractable-Material-HEM-Oil-and-Grease-and-Silica-Gel-Treated-n-Hexane-Extractable-Material-SGT-HEM-Non-polar-Material-by-Extraction-and-Gravimetry.pdf>

CHARTS



LEGEND

Grab Sample Locations

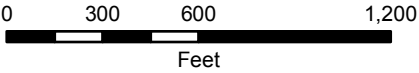
- Group A
- Group B
- Group C
- Group D
- Navy Base
- Mason Creek Shoreline

Bathymetric Contours (Feet, NAVD 88)

Source: Geodynamics, LLC (2013)

- Major contour interval is 1 foot
- Minor contour interval is 0.5 foot

Group A			Group C		
Grab Sample	X	Y	Grab Sample	X	Y
1	12137831	3506082	12	12134844	3510060
2	12137439	3505656	13	12135379	3510386
3	12136949	3506045	14	12136450	3509882
4	12137109	3506689	Group D		
5	12136534	3506420	Grab Sample	X	Y
Group B			10a	12134183	3507648
Grab Sample	X	Y	10b	12134298	3508974
6	12135504	3506552	11	12134707	3509060
7	12135312	3507118			
8	12135045	3506783	Grab Sample	X	Y
9	12134236	3506926	15	12132915	3510485



SAMPLE LOCATIONS
Mason Creek Sediment Sampling
Norfolk, Virginia

APPENDIX A
PHYSICAL LABORATORY TEST RESULTS

LOCATION	DESCRIPTION
GS-1	0-22 in.: Organic CLAY (OH), Very Soft, Very Dark Greenish Gray, with plant matter 22-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-2	0-16 in.: Organic CLAY (OH), Very Soft, Very Dark Greenish Gray, with plant matter 16-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-3	0-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-4	0-4 in.: Root mat 4-12 in.: Medium SAND with silt (SP-SM) 12-48 in.: Organic CLAY (OH), Very Soft, Very Dark Greenish Gray, with trace roots
GS-5	0-27 in.: Organic CLAY (OH), Very Soft, Very Dark Greenish Gray, with roots 27-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-6	0-23 in.: Organic CLAY (OH), Very Soft, Very Dark Greenish Gray, with roots 23-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-7	0-21 in.: Organic CLAY (OH), Very Soft, Greenish Black, with plant matter 21-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-8	0-14 in.: Organic CLAY (OH), Very Soft, Greenish Black, with plant matter 14-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-9	0-25 in.: Organic CLAY (OH), Very Soft, Greenish Black, with plant matter 25-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-10A	0-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-10B	0-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-11	0-12 in.: Organic CLAY (OH), Very Soft, Greenish Black, with plant matter 12-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-12	0-16 in.: Organic CLAY (OH), Very Soft, Greenish Black, with plant matter 16-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-13	0-16 in.: Organic CLAY (OH), Very Soft, Greenish Black, with plant matter 16-48 in.: Organic CLAY (OH), Very Soft, Dark Greenish Gray
GS-14	0-48in.: Organic CLAY (OH), Dark Gray, Very Soft -with roots, from 0-6in., at 12in., at 24in.
GS-15	0-11 in.: SAND (SP), Fine to Medium, Gray -with trace fine gravel and shell fragments, 7 to 11 in. 11-48 in.: SAND (SP), Fine to Medium, Light Gray

SEDIMENT DESCRIPTIONS
Mason Creek Sediment Sampling
Norfolk, Virginia



SAMPLE NUMBER	SAMPLE DATE	SAMPLE TIME	WATER DEPTH (feet)	SAMPLE DEPTH (Inches)	USCS CLASS.	MOISTURE CONTENT (%)	Theoretical SUW (pcf)	% FINES	ORGANIC MATTER (%)	LIQUID LIMIT	PLASTICITY INDEX	OTHER TESTS
GS-1	17-Jul	12:15	0.7	0 to 12	OH	281.5	74.4	85	13.1			-
GS-2	17-Jul	11:45	0.9	16 to 24	OH	156.4	82.1	95.9	4.9			-
GS-3	17-Jul	11:20	1.2	6 to 18	OH	171.8	80.7	98.9	5.5	121	87	-
GS-4	17-Jul	10:30	0.5		CH/OH							
GS-5	17-Jul	10:00	2.1	0 to 12	OH	204	78.2	97.2	5.3			-
GS-6	17-Jul	13:30	2.1	12 to 24	OH	134.8	84.6	94.9	3.6			-
GS-7	17-Jul	9:15	0.0	0 to 12	OH	197.3	78.7	92.1	7.6			-
GS-8	17-Jul	8:45	2.2	24 to 30	OH	111.8	88.0	96.5	2.1	112	80	-
GS-9	18-Jul	17:00	2.7	0 to 12	OH	151.9	82.6	93.9	3.6			-
GS-10a	18-Jul	12:00	2.7	12 to 18	OH	118.9	86.8	98.8	4.8			-
GS-10b	18-Jul	12:30	2.2		CH/OH							
GS-11	18-Jul	16:10	0.5	0 to 8	OH	196	78.8	84.4	14.4	128	90	L _{oven} =61
GS-12	18-Jul	15:40	1.3	30 to 34	OH	113.7	87.6	98.2	5.1			-
GS-13	18-Jul	15:00	1.0	0 to 8	OH	226	76.9	83.9	10.2			-
GS-14	18-Jul	14:15	0.5	0 to 18	OH	197.6	78.7	88.4	14.2			-
GS-15	18-Jul	13:12	1.3	0 to 7	SP	19	129.2	2	-			SIEVE
GS-15	18-Jul	13:12	1.3	18 to 22	SP	19.7	128.4	1	-			SIEVE

Note: No laboratory tests performed on GS-4 or GS-10b; visual classification only

SUMMARY OF PHYSICAL LABORATORY TEST RESULTS
With Sampling Time and Uncorrected Water Depths
Mason Creek Sediment Sampling
Norfolk, Virginia

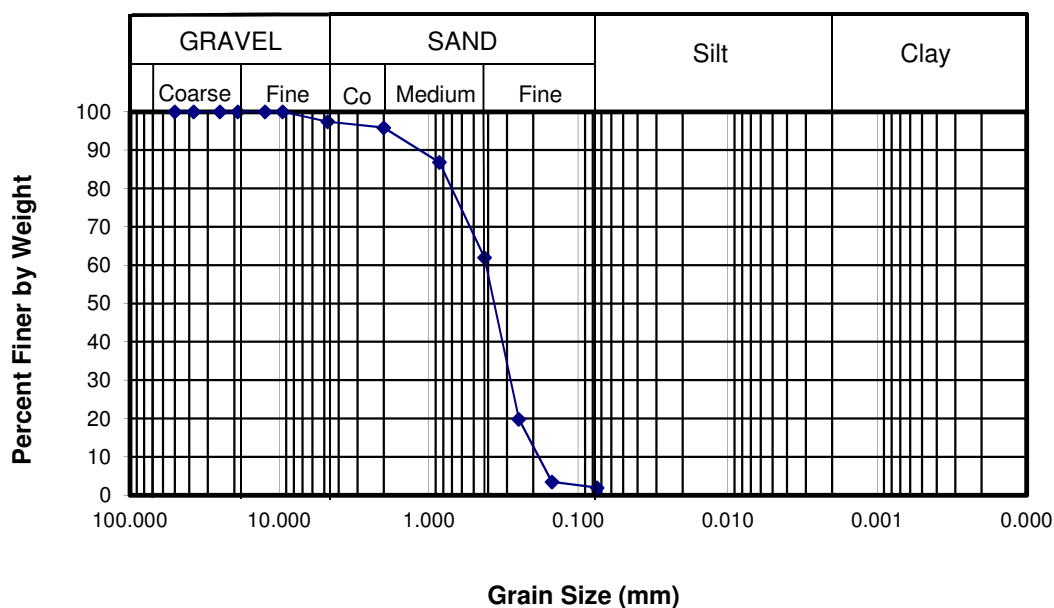
Engineering and Testing Consultants, Inc.

SIEVE ANALYSIS

Project Name: **Mason Creek**
 Client: **Fugro**
 Project Number: 5616-110
 Sample Number: GS-15
 Sample Depth: 0 to 7 Inches
 Sample Description: SAND (SP), Gray, Fine to Medium, Trace Silt,
 Trace Fine Gravel and Shell Fragments
 Test Method: ASTM D 422

Sieve Analysis Data

SIEVE NO.	PERCENT PASSING
2 Inch	100.0
1 1/2 Inch	100.0
1 Inch	100.0
3/4 Inch	100.0
1/2 Inch	100.0
3/8 Inch	100.0
4	97.4
10	95.8
20	86.9
40	61.9
60	19.8
100	3.5
200	2.0



SIEVE ANALYSIS
 Mason Creek Sediment Sampling
 Norfolk, Virginia

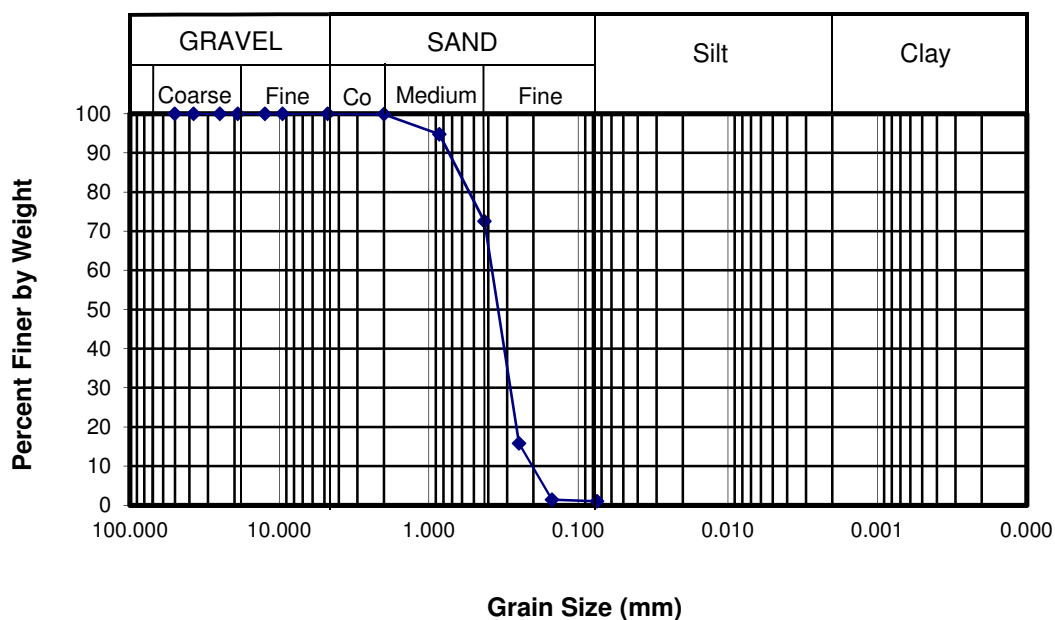
Engineering and Testing Consultants, Inc.

SIEVE ANALYSIS

Project Name: **Mason Creek**
Client: **Fugro**
Project Number: 5616-110
Sample Number: GS-15
Sample Depth: 20 Inches
Sample Description: SAND (SP), Light Gray, Fine to Medium, Trace Silt
Test Method: ASTM D 422

Sieve Analysis Data

SIEVE NO.	PERCENT PASSING
2 Inch	100.0
1 1/2 Inch	100.0
1 Inch	100.0
3/4 Inch	100.0
1/2 Inch	100.0
3/8 Inch	100.0
4	100.0
10	99.9
20	94.7
40	72.5
60	15.8
100	1.4
200	1.0



APPENDIX B
ENVIRONMENTAL LABORATORY TEST RESULTS

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pittsburgh

301 Alpha Drive

RIDC Park

Pittsburgh, PA 15238

Tel: (412)963-7058

TestAmerica Job ID: 180-23331-1

Client Project/Site: Mason Creek, 04.8113.0011

For:

Fugro Consultants Inc

101 West Main Street

Suite 350

Norfolk, Virginia 23510

Attn: Bill Mack



Authorized for release by:

8/9/2013 3:59:39 PM

David Dunlap, Laboratory Technical Director

dave.dunlap@testamericainc.com

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Job ID: 180-23331-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative 180-23331-1

Receipt

The samples were received on 7/20/2013 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

The sample collection times were not listed on the COC.

GC/MS VOA

No analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

GC Semi VOA

Method(s) 8081A: The ending continuing calibration verification standard was below criteria (+/-15% difference) at (-20.1%) for methoxychlor. The samples were analyzed twice with similar effect on the calibration verification.

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.

Definitions/Glossary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14 *
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-13 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	05-23-16 *
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-13 *

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13 *
New Hampshire	NELAP	1	2963	10-10-13
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pittsburgh

Certification Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Laboratory: TestAmerica Nashville (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

Sample Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-23331-1	1A	Solid	07/18/13 00:00	07/20/13 10:00
180-23331-2	2B	Solid	07/18/13 00:00	07/20/13 10:00
180-23331-3	3C	Solid	07/18/13 00:00	07/20/13 10:00
180-23331-4	4D	Solid	07/18/13 00:00	07/20/13 10:00
180-23331-5	5	Solid	07/18/13 00:00	07/20/13 10:00

Method Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
8081A	Organochlorine Pesticides (GC)	SW846	TAL PIT
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
8151A	Herbicides (GC)	SW846	TAL PIT
6010B	Metals (ICP)	SW846	TAL PIT
7470A	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
7.1.2	Ignitability, Solids	SW846	TAL PIT
9012A	Total Cyanide (Automated Colorimetric)	SW846	TAL PIT
9023	Organic Halides, Extractable (EOX)	SW846	TAL NSH
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL PIT
9045C	pH	SW846	TAL PIT
9071B	HEM and SGT-HEM	SW846	TAL PIT
9095A	Paint Filter	SW846	TAL PIT

Protocol References:

SM22 = SM22

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 1A

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25 g	500 mL	78610	07/26/13 17:30	SWP	TAL PIT
TCLP	Analysis	8260B		40	5 mL	5 mL	78979	07/31/13 04:39	MAZ	TAL PIT
		Instrument ID: HP4								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	78208	07/23/13 14:10	CBY	TAL PIT
TCLP	Analysis	8270C		1			78364	07/24/13 09:57	FBB	TAL PIT
		Instrument ID: 722								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Analysis	8081A		1			78430	07/24/13 19:35	DFE	TAL PIT
		Instrument ID: GC15								
TCLP	Prep	3510C			100 mL	40.0 mL	78201	07/23/13 14:00	CBY	TAL PIT
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	78223	07/23/13 15:20	CBY	TAL PIT
TCLP	Analysis	8151A		20			78694	07/27/13 18:20	DFE	TAL PIT
		Instrument ID: GC1								
Total/NA	Prep	3541			15.1 g	20.0 mL	78100	07/23/13 05:43	KLG	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	78176	07/23/13 12:34	AKG	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	78177	07/23/13 12:36	AKG	TAL PIT
Total/NA	Analysis	8082		1			78939	07/25/13 06:36	AKG	TAL PIT
		Instrument ID: GC10								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	7470A			50.0 mL	50.0 mL	78427	07/25/13 09:48	JWS	TAL PIT
TCLP	Analysis	7470A		1			78489	07/25/13 14:44	JWS	TAL PIT
		Instrument ID: G								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3010A			50 mL	50 mL	78281	07/24/13 10:07	CEH	TAL PIT
TCLP	Analysis	6010B		1			78976	07/30/13 16:40	RJG	TAL PIT
		Instrument ID: T								
Total/NA	Analysis	7.1.2		1			78044	07/22/13 12:44	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	2540G		1			78047	07/22/13 13:15	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9071B			30.1 g	30.0 g	77985	07/22/13 06:15	KLG	TAL PIT
Total/NA	Analysis	9071B		1			78069	07/22/13 06:15	JWM	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9095A		1		100.15 g	78131	07/23/13 09:48	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9030B			5.02 g	50 mL	78444	07/25/13 11:40	JWM	TAL PIT
Total/NA	Analysis	9034		1			78495	07/25/13 15:40	CMR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045C		1	20 g	20 mL	78784	07/30/13 09:24	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9012A			1.03 g	50 mL	78893	07/30/13 09:55	PGJ	TAL PIT
Total/NA	Analysis	9012A		1			78934	07/30/13 12:38	PGJ	TAL PIT
		Instrument ID: KONELAB1								

TestAmerica Pittsburgh

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 1A

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-1

Matrix: Solid

Percent Solids: 43.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9023			1 g	1 mL	95561	08/01/13 13:54	CLJ	TAL NSH
Total/NA	Analysis	9023		1			95740	08/07/13 16:00	JKF	TAL NSH
Instrument ID: NOEQUIP										

Client Sample ID: 2B

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25 g	500 mL	78610	07/26/13 17:30	SWP	TAL PIT
TCLP	Analysis	8260B		40	5 mL	5 mL	78979	07/31/13 06:55	MAZ	TAL PIT
Instrument ID: HP4										
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	78208	07/23/13 14:10	CBY	TAL PIT
TCLP	Analysis	8270C		1			78364	07/24/13 10:24	FBB	TAL PIT
Instrument ID: 722										
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			100 mL	40.0 mL	78201	07/23/13 14:00	CBY	TAL PIT
TCLP	Analysis	8081A		1			78430	07/24/13 19:51	DFE	TAL PIT
Instrument ID: GC15										
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	78223	07/23/13 15:20	CBY	TAL PIT
TCLP	Analysis	8151A		20			78694	07/27/13 20:45	DFE	TAL PIT
Instrument ID: GC1										
Total/NA	Prep	3541			15.2 g	20.0 mL	78100	07/23/13 05:43	KLG	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	78176	07/23/13 12:34	AKG	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	78177	07/23/13 12:36	AKG	TAL PIT
Total/NA	Analysis	8082		1			78939	07/25/13 07:08	AKG	TAL PIT
Instrument ID: GC10										
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	7470A			50.0 mL	50.0 mL	78427	07/25/13 09:48	JWS	TAL PIT
TCLP	Analysis	7470A		1			78489	07/25/13 14:50	JWS	TAL PIT
Instrument ID: G										
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3010A			50 mL	50 mL	78281	07/24/13 10:07	CEH	TAL PIT
TCLP	Analysis	6010B		1			78976	07/30/13 17:23	RJG	TAL PIT
Instrument ID: T										
Total/NA	Analysis	7.1.2		1			78044	07/22/13 12:44	SJK	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	2540G		1			78047	07/22/13 13:15	HRA	TAL PIT
Instrument ID: NOEQUIP										
Total/NA	Prep	9071B			30.1 g	30.0 g	77985	07/22/13 06:15	KLG	TAL PIT
Total/NA	Analysis	9071B		1			78069	07/22/13 06:15	JWM	TAL PIT
Instrument ID: NOEQUIP										

TestAmerica Pittsburgh

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 2B

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9095A		1		99.58 g	78131	07/23/13 09:50	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045C		1	20 g	20 mL	78261	07/25/13 09:04	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9030B			4.96 g	50 mL	78444	07/25/13 11:40	JWM	TAL PIT
Total/NA	Analysis	9034		1			78495	07/25/13 15:41	CMR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9012A			1.00 g	50 mL	78893	07/30/13 09:55	PGJ	TAL PIT
Total/NA	Analysis	9012A		1			78934	07/30/13 12:38	PGJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9023			1 g	1 mL	95561	08/01/13 13:54	CLJ	TAL NSH
Total/NA	Analysis	9023		1			95740	08/07/13 16:00	JKF	TAL NSH
		Instrument ID: NOEQUIP								

Client Sample ID: 3C

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25 g	500 mL	78610	07/26/13 17:30	SWP	TAL PIT
TCLP	Analysis	8260B		40	5 mL	5 mL	78979	07/31/13 07:20	MAZ	TAL PIT
		Instrument ID: HP4								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	78208	07/23/13 14:10	CBY	TAL PIT
TCLP	Analysis	8270C		1			78364	07/24/13 11:46	FBB	TAL PIT
		Instrument ID: 722								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			100 mL	40.0 mL	78201	07/23/13 14:00	CBY	TAL PIT
TCLP	Analysis	8081A		1			78430	07/24/13 20:06	DFE	TAL PIT
		Instrument ID: GC15								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	78223	07/23/13 15:20	CBY	TAL PIT
TCLP	Analysis	8151A		20			78694	07/27/13 21:09	DFE	TAL PIT
		Instrument ID: GC1								
Total/NA	Prep	3541			15.1 g	20.0 mL	78100	07/23/13 05:43	KLG	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	78176	07/23/13 12:34	AKG	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	78177	07/23/13 12:36	AKG	TAL PIT
Total/NA	Analysis	8082		1			78939	07/25/13 07:40	AKG	TAL PIT
		Instrument ID: GC10								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	7470A			50.0 mL	50.0 mL	78427	07/25/13 09:48	JWS	TAL PIT
TCLP	Analysis	7470A		1			78489	07/25/13 14:56	JWS	TAL PIT
		Instrument ID: G								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3010A			50 mL	50 mL	78281	07/24/13 10:07	CEH	TAL PIT

TestAmerica Pittsburgh

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 3C

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	6010B		1			78976	07/30/13 17:28	RJG	TAL PIT
		Instrument ID: T								
Total/NA	Analysis	7.1.2		1			78044	07/22/13 12:44	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	2540G		1			78047	07/22/13 13:15	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9071B			30.0 g	30.0 g	77985	07/22/13 06:15	KLG	TAL PIT
Total/NA	Analysis	9071B		1			78069	07/22/13 06:15	JWM	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9095A		1		100.02 g	78131	07/23/13 09:51	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045C		1	20 g	20 mL	78261	07/25/13 09:12	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9030B			5.03 g	50 mL	78444	07/25/13 11:40	JWM	TAL PIT
Total/NA	Analysis	9034		1			78495	07/25/13 15:42	CMR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9012A			1.00 g	50 mL	78893	07/30/13 09:55	PGJ	TAL PIT
Total/NA	Analysis	9012A		1			78934	07/30/13 12:38	PGJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9023			1 g	1 mL	95561	08/01/13 19:04	CLJ	TAL NSH
Total/NA	Analysis	9023		1			95740	08/07/13 16:00	JKF	TAL NSH
		Instrument ID: NOEQUIP								

Client Sample ID: 4D

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25 g	500 mL	78610	07/26/13 17:30	SWP	TAL PIT
TCLP	Analysis	8260B		40	5 mL	5 mL	78979	07/31/13 07:43	MAZ	TAL PIT
		Instrument ID: HP4								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	78208	07/23/13 14:10	CBY	TAL PIT
TCLP	Analysis	8270C		1			78364	07/24/13 11:19	FBB	TAL PIT
		Instrument ID: 722								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			100 mL	40.0 mL	78201	07/23/13 14:00	CBY	TAL PIT
TCLP	Analysis	8081A		1			78430	07/24/13 20:22	DFE	TAL PIT
		Instrument ID: GC15								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	78223	07/23/13 15:20	CBY	TAL PIT
TCLP	Analysis	8151A		20			78694	07/27/13 21:33	DFE	TAL PIT
		Instrument ID: GC1								
Total/NA	Prep	3541			15.1 g	20.0 mL	78100	07/23/13 05:43	KLG	TAL PIT

TestAmerica Pittsburgh

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 4D

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-4

Matrix: Solid

Percent Solids: 43.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Cleanup	3665A			2 mL	2 mL	78176	07/23/13 12:34	AKG	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	78177	07/23/13 12:36	AKG	TAL PIT
Total/NA	Analysis	8082		1			78939	07/25/13 08:11	AKG	TAL PIT
		Instrument ID: GC10								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	7470A			50.0 mL	50.0 mL	78427	07/25/13 09:48	JWS	TAL PIT
TCLP	Analysis	7470A		1			78489	07/25/13 14:58	JWS	TAL PIT
		Instrument ID: G								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3010A			50 mL	50 mL	78281	07/24/13 10:07	CEH	TAL PIT
TCLP	Analysis	6010B		1			78976	07/30/13 17:33	RJG	TAL PIT
		Instrument ID: T								
Total/NA	Analysis	7.1.2		1			78044	07/22/13 12:45	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	2540G		1			78047	07/22/13 13:15	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9071B			30.1 g	30.0 g	77985	07/22/13 06:15	KLG	TAL PIT
Total/NA	Analysis	9071B		1			78069	07/22/13 06:15	JWM	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9095A		1		100.06 g	78131	07/23/13 09:53	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045C		1	20 g	20 mL	78261	07/25/13 09:16	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9030B			5.02 g	50 mL	78444	07/25/13 11:40	JWM	TAL PIT
Total/NA	Analysis	9034		1			78495	07/25/13 15:43	CMR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9012A			1.00 g	50 mL	78893	07/30/13 09:55	PGJ	TAL PIT
Total/NA	Analysis	9012A		1			78934	07/30/13 12:44	PGJ	TAL PIT
		Instrument ID: KONELAB1								
Total/NA	Prep	9023			1 g	1 mL	95561	08/01/13 19:04	CLJ	TAL NSH
Total/NA	Analysis	9023		1			95740	08/07/13 16:00	JKF	TAL NSH
		Instrument ID: NOEQUIP								

Client Sample ID: 5

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25 g	500 mL	78610	07/26/13 17:30	SWP	TAL PIT
TCLP	Analysis	8260B		40	5 mL	5 mL	78979	07/31/13 08:07	MAZ	TAL PIT
		Instrument ID: HP4								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	78208	07/23/13 14:10	CBY	TAL PIT
TCLP	Analysis	8270C		1			78364	07/24/13 10:52	FBB	TAL PIT
		Instrument ID: 722								

TestAmerica Pittsburgh

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 5

Lab Sample ID: 180-23331-5

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	8081A		1			78430	07/24/13 20:37	DFE	TAL PIT
		Instrument ID: GC15								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3510C			100 mL	40.0 mL	78201	07/23/13 14:00	CBY	TAL PIT
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	78223	07/23/13 15:20	CBY	TAL PIT
TCLP	Analysis	8151A		20			78694	07/27/13 21:57	DFE	TAL PIT
		Instrument ID: GC1								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	7470A			50.0 mL	50.0 mL	78427	07/25/13 09:48	JWS	TAL PIT
TCLP	Analysis	7470A		1			78489	07/25/13 15:02	JWS	TAL PIT
		Instrument ID: G								
TCLP	Leach	1311			100 g	2000 mL	78076	07/22/13 16:08	SWP	TAL PIT
TCLP	Prep	3010A			50 mL	50 mL	78281	07/24/13 10:07	CEH	TAL PIT
TCLP	Analysis	6010B		1			78976	07/30/13 17:39	RJG	TAL PIT
		Instrument ID: T								
Total/NA	Analysis	7.1.2		1			78044	07/22/13 12:45	SJK	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	2540G		1			78047	07/22/13 13:15	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045C		1	20 g	20 mL	78261	07/25/13 09:20	HRA	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9030B			4.97 g	50 mL	78444	07/25/13 11:40	JWM	TAL PIT
Total/NA	Analysis	9034		1			78495	07/25/13 15:47	CMR	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Prep	9012A			1.03 g	50 mL	78893	07/30/13 09:55	PGJ	TAL PIT
Total/NA	Analysis	9012A		1			78934	07/30/13 12:44	PGJ	TAL PIT
		Instrument ID: KONELAB1								

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica Pittsburgh

Lab Chronicle

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Analyst References:

Lab: TAL NSH

Batch Type: Prep

CLJ = Cynthia Johnson

Batch Type: Analysis

JKF = Julie Frankenfield

Lab: TAL PIT

Batch Type: Cleanup

AKG = Ashok Gupta

SWP = Sean Payton

Batch Type: Prep

CBY = Charles Yushinski

CEH = Caitlyn Haluck

JWM = Jeremiah McLaughlin

JWS = Jim Swanson

KLK = Kevin Geehring

PGJ = Paul Johnson

Batch Type: Analysis

AKG = Ashok Gupta

CMR = Carl Reagle

DFE = David Eppinger

FBB = Frank Bungard

HRA = Hannah Anderson

JWM = Jeremiah McLaughlin

JWS = Jim Swanson

MAZ = Mike Zukowski

PGJ = Paul Johnson

RJG = Rob Good

SJK = Sarah Kunkle

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 1A

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-1

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20	0.040	mg/L			07/31/13 04:39	40
2-Butanone (MEK)	ND		0.20	0.043	mg/L			07/31/13 04:39	40
Carbon tetrachloride	ND		0.20	0.043	mg/L			07/31/13 04:39	40
Chlorobenzene	ND		0.20	0.021	mg/L			07/31/13 04:39	40
Chloroform	ND		0.20	0.040	mg/L			07/31/13 04:39	40
1,2-Dichloroethane	ND		0.20	0.038	mg/L			07/31/13 04:39	40
1,1-Dichloroethene	ND		0.20	0.043	mg/L			07/31/13 04:39	40
Tetrachloroethene	ND		0.20	0.033	mg/L			07/31/13 04:39	40
Trichloroethene	ND		0.20	0.032	mg/L			07/31/13 04:39	40
Vinyl chloride	ND		0.20	0.052	mg/L			07/31/13 04:39	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 120		07/31/13 04:39	40
Dibromofluoromethane (Surr)	100		80 - 120		07/31/13 04:39	40
1,2-Dichloroethane-d4 (Surr)	100		62 - 123		07/31/13 04:39	40
Toluene-d8 (Surr)	106		80 - 120		07/31/13 04:39	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 09:57	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 09:57	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 09:57	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 09:57	1
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 09:57	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 09:57	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 09:57	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 09:57	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 09:57	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 09:57	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 09:57	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 09:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		35 - 115	07/23/13 14:10	07/24/13 09:57	1
2-Fluorophenol	89		20 - 110	07/23/13 14:10	07/24/13 09:57	1
Nitrobenzene-d5	93		39 - 115	07/23/13 14:10	07/24/13 09:57	1
Phenol-d5	84		30 - 118	07/23/13 14:10	07/24/13 09:57	1
Terphenyl-d14	89		30 - 143	07/23/13 14:10	07/24/13 09:57	1
2,4,6-Tribromophenol	74		19 - 138	07/23/13 14:10	07/24/13 09:57	1

Method: 8081A - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 19:35	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 19:35	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 19:35	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 19:35	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 19:35	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 19:35	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 19:35	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 1A

Lab Sample ID: 180-23331-1

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	79		45 - 140	07/23/13 14:00	07/24/13 19:35	1
DCB Decachlorobiphenyl (Surr)	78		45 - 140	07/23/13 14:00	07/24/13 19:35	1
Tetrachloro-m-xylene	91		45 - 140	07/23/13 14:00	07/24/13 19:35	1
Tetrachloro-m-xylene	92		45 - 140	07/23/13 14:00	07/24/13 19:35	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		38	5.7	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1
PCB-1221	ND		38	7.3	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1
PCB-1232	ND		38	6.6	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1
PCB-1242	ND		38	6.2	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1
PCB-1248	ND		38	3.6	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1
PCB-1254	ND		38	5.5	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1
PCB-1260	31	J	38	5.4	ug/Kg	☼	07/23/13 05:43	07/25/13 06:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	80		35 - 140	07/23/13 05:43	07/25/13 06:36	1
Tetrachloro-m-xylene	82		35 - 140	07/23/13 05:43	07/25/13 06:36	1

Method: 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 18:20	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 18:20	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	78		32 - 140				07/23/13 15:20	07/27/13 18:20	20

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.034	J	0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 16:40	1
Barium	0.037	J B	0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 16:40	1
Cadmium	0.00063	J	0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 16:40	1
Chromium	0.0021	J B	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 16:40	1
Lead	0.033	J	0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 16:40	1
Selenium	0.0051	J B	0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 16:40	1
Silver	0.00073	J	0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 16:40	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	57		0.10	0.10	%			07/22/13 13:15	1
Percent Solids	43		0.10	0.10	%			07/22/13 13:15	1
Ignitability	NO		1.0	1.0	No Unit			07/22/13 12:44	1
Cyanide, Total	ND		1.1	0.22	mg/Kg	☼	07/30/13 09:55	07/30/13 12:38	1
Halogens, Extractable Organic	ND		120	58	mg/Kg	☼	08/01/13 13:54	08/07/13 16:00	1
Sulfide	28	J	69	14	mg/Kg	☼	07/25/13 11:40	07/25/13 15:40	1
pH	7.40		0.100	0.100	SU			07/30/13 09:24	1
SGT-HEM	370	J	380	93	mg/Kg	☼	07/22/13 06:15	07/22/13 06:15	1
Free Liquid	CNF				NONE			07/23/13 09:48	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 2B

Lab Sample ID: 180-23331-2

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20	0.040	mg/L			07/31/13 06:55	40
2-Butanone (MEK)	ND		0.20	0.043	mg/L			07/31/13 06:55	40
Carbon tetrachloride	ND		0.20	0.043	mg/L			07/31/13 06:55	40
Chlorobenzene	ND		0.20	0.021	mg/L			07/31/13 06:55	40
Chloroform	ND		0.20	0.040	mg/L			07/31/13 06:55	40
1,2-Dichloroethane	ND		0.20	0.038	mg/L			07/31/13 06:55	40
1,1-Dichloroethene	ND		0.20	0.043	mg/L			07/31/13 06:55	40
Tetrachloroethene	ND		0.20	0.033	mg/L			07/31/13 06:55	40
Trichloroethene	ND		0.20	0.032	mg/L			07/31/13 06:55	40
Vinyl chloride	ND		0.20	0.052	mg/L			07/31/13 06:55	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 120		07/31/13 06:55	40
Dibromofluoromethane (Surr)	98		80 - 120		07/31/13 06:55	40
1,2-Dichloroethane-d4 (Surr)	104		62 - 123		07/31/13 06:55	40
Toluene-d8 (Surr)	107		80 - 120		07/31/13 06:55	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 10:24	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 10:24	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 10:24	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:24	1
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:24	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 10:24	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 10:24	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:24	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 10:24	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 10:24	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:24	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 10:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	76		35 - 115	07/23/13 14:10	07/24/13 10:24	1
2-Fluorophenol	78		20 - 110	07/23/13 14:10	07/24/13 10:24	1
Nitrobenzene-d5	81		39 - 115	07/23/13 14:10	07/24/13 10:24	1
Phenol-d5	76		30 - 118	07/23/13 14:10	07/24/13 10:24	1
Terphenyl-d14	79		30 - 143	07/23/13 14:10	07/24/13 10:24	1
2,4,6-Tribromophenol	71		19 - 138	07/23/13 14:10	07/24/13 10:24	1

Method: 8081A - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 19:51	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 19:51	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 19:51	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 19:51	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 19:51	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 19:51	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 19:51	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 2B

Lab Sample ID: 180-23331-2

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	80		45 - 140	07/23/13 14:00	07/24/13 19:51	1
DCB Decachlorobiphenyl (Surr)	83		45 - 140	07/23/13 14:00	07/24/13 19:51	1
Tetrachloro-m-xylene	92		45 - 140	07/23/13 14:00	07/24/13 19:51	1
Tetrachloro-m-xylene	94		45 - 140	07/23/13 14:00	07/24/13 19:51	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		40	5.9	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1
PCB-1221	ND		40	7.6	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1
PCB-1232	ND		40	6.8	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1
PCB-1242	ND		40	6.5	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1
PCB-1248	ND		40	3.8	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1
PCB-1254	ND		40	5.7	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1
PCB-1260	43		40	5.7	ug/Kg	☼	07/23/13 05:43	07/25/13 07:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	89		35 - 140	07/23/13 05:43	07/25/13 07:08	1
Tetrachloro-m-xylene	92		35 - 140	07/23/13 05:43	07/25/13 07:08	1

Method: 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 20:45	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 20:45	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	78		32 - 140				07/23/13 15:20	07/27/13 20:45	20

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012	J	0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 17:23	1
Barium	0.048	J B	0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 17:23	1
Cadmium	ND		0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 17:23	1
Chromium	0.013	J B	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 17:23	1
Lead	0.0086	J	0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 17:23	1
Selenium	0.0045	J B	0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 17:23	1
Silver	ND		0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 17:23	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 14:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	59		0.10	0.10	%			07/22/13 13:15	1
Percent Solids	41		0.10	0.10	%			07/22/13 13:15	1
Ignitability	NO		1.0	1.0	No Unit			07/22/13 12:44	1
Cyanide, Total	ND		1.2	0.23	mg/Kg	☼	07/30/13 09:55	07/30/13 12:38	1
Halogens, Extractable Organic	ND		120	61	mg/Kg	☼	08/01/13 13:54	08/07/13 16:00	1
Sulfide	ND		73	15	mg/Kg	☼	07/25/13 11:40	07/25/13 15:41	1
pH	7.98		0.100	0.100	SU			07/25/13 09:04	1
SGT-HEM	250	J	400	97	mg/Kg	☼	07/22/13 06:15	07/22/13 06:15	1
Free Liquid	CNF				NONE			07/23/13 09:50	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 3C

Lab Sample ID: 180-23331-3

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20	0.040	mg/L			07/31/13 07:20	40
2-Butanone (MEK)	ND		0.20	0.043	mg/L			07/31/13 07:20	40
Carbon tetrachloride	ND		0.20	0.043	mg/L			07/31/13 07:20	40
Chlorobenzene	ND		0.20	0.021	mg/L			07/31/13 07:20	40
Chloroform	ND		0.20	0.040	mg/L			07/31/13 07:20	40
1,2-Dichloroethane	ND		0.20	0.038	mg/L			07/31/13 07:20	40
1,1-Dichloroethene	ND		0.20	0.043	mg/L			07/31/13 07:20	40
Tetrachloroethene	ND		0.20	0.033	mg/L			07/31/13 07:20	40
Trichloroethene	ND		0.20	0.032	mg/L			07/31/13 07:20	40
Vinyl chloride	ND		0.20	0.052	mg/L			07/31/13 07:20	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		75 - 120		07/31/13 07:20	40
Dibromofluoromethane (Surr)	100		80 - 120		07/31/13 07:20	40
1,2-Dichloroethane-d4 (Surr)	100		62 - 123		07/31/13 07:20	40
Toluene-d8 (Surr)	104		80 - 120		07/31/13 07:20	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 11:46	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 11:46	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 11:46	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:46	1
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:46	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 11:46	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 11:46	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:46	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 11:46	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 11:46	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:46	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 11:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	67		35 - 115	07/23/13 14:10	07/24/13 11:46	1
2-Fluorophenol	67		20 - 110	07/23/13 14:10	07/24/13 11:46	1
Nitrobenzene-d5	70		39 - 115	07/23/13 14:10	07/24/13 11:46	1
Phenol-d5	66		30 - 118	07/23/13 14:10	07/24/13 11:46	1
Terphenyl-d14	70		30 - 143	07/23/13 14:10	07/24/13 11:46	1
2,4,6-Tribromophenol	50		19 - 138	07/23/13 14:10	07/24/13 11:46	1

Method: 8081A - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 20:06	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:06	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 20:06	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 20:06	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:06	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 20:06	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 20:06	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 3C

Lab Sample ID: 180-23331-3

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		45 - 140	07/23/13 14:00	07/24/13 20:06	1
DCB Decachlorobiphenyl (Surr)	82		45 - 140	07/23/13 14:00	07/24/13 20:06	1
Tetrachloro-m-xylene	91		45 - 140	07/23/13 14:00	07/24/13 20:06	1
Tetrachloro-m-xylene	94		45 - 140	07/23/13 14:00	07/24/13 20:06	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		41	6.1	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1
PCB-1221	ND		41	7.9	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1
PCB-1232	ND		41	7.1	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1
PCB-1242	ND		41	6.7	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1
PCB-1248	ND		41	3.9	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1
PCB-1254	ND		41	5.9	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1
PCB-1260	61		41	5.9	ug/Kg	☼	07/23/13 05:43	07/25/13 07:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	79		35 - 140	07/23/13 05:43	07/25/13 07:40	1
Tetrachloro-m-xylene	83		35 - 140	07/23/13 05:43	07/25/13 07:40	1

Method: 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 21:09	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 21:09	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	74		32 - 140				07/23/13 15:20	07/27/13 21:09	20

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012	J	0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 17:28	1
Barium	0.040	J B	0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 17:28	1
Cadmium	ND		0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 17:28	1
Chromium	0.0042	J B	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 17:28	1
Lead	0.0052	J	0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 17:28	1
Selenium	0.0043	J B	0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 17:28	1
Silver	ND		0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 17:28	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 14:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	60		0.10	0.10	%			07/22/13 13:15	1
Percent Solids	40		0.10	0.10	%			07/22/13 13:15	1
Ignitability	NO		1.0	1.0	No Unit			07/22/13 12:44	1
Cyanide, Total	ND		1.2	0.24	mg/Kg	☼	07/30/13 09:55	07/30/13 12:38	1
Halogens, Extractable Organic	85	J	120	62	mg/Kg	☼	08/01/13 19:04	08/07/13 16:00	1
Sulfide	72	J	74	15	mg/Kg	☼	07/25/13 11:40	07/25/13 15:42	1
pH	7.99		0.100	0.100	SU			07/25/13 09:12	1
SGT-HEM	350	J	420	100	mg/Kg	☼	07/22/13 06:15	07/22/13 06:15	1
Free Liquid	CNF				NONE			07/23/13 09:51	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 4D

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-4

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20	0.040	mg/L			07/31/13 07:43	40
2-Butanone (MEK)	ND		0.20	0.043	mg/L			07/31/13 07:43	40
Carbon tetrachloride	ND		0.20	0.043	mg/L			07/31/13 07:43	40
Chlorobenzene	ND		0.20	0.021	mg/L			07/31/13 07:43	40
Chloroform	ND		0.20	0.040	mg/L			07/31/13 07:43	40
1,2-Dichloroethane	ND		0.20	0.038	mg/L			07/31/13 07:43	40
1,1-Dichloroethene	ND		0.20	0.043	mg/L			07/31/13 07:43	40
Tetrachloroethene	ND		0.20	0.033	mg/L			07/31/13 07:43	40
Trichloroethene	ND		0.20	0.032	mg/L			07/31/13 07:43	40
Vinyl chloride	ND		0.20	0.052	mg/L			07/31/13 07:43	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		75 - 120		07/31/13 07:43	40
Dibromofluoromethane (Surr)	92		80 - 120		07/31/13 07:43	40
1,2-Dichloroethane-d4 (Surr)	93		62 - 123		07/31/13 07:43	40
Toluene-d8 (Surr)	108		80 - 120		07/31/13 07:43	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 11:19	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 11:19	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 11:19	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:19	1
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:19	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 11:19	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 11:19	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:19	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 11:19	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 11:19	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 11:19	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 11:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	70		35 - 115	07/23/13 14:10	07/24/13 11:19	1
2-Fluorophenol	72		20 - 110	07/23/13 14:10	07/24/13 11:19	1
Nitrobenzene-d5	74		39 - 115	07/23/13 14:10	07/24/13 11:19	1
Phenol-d5	67		30 - 118	07/23/13 14:10	07/24/13 11:19	1
Terphenyl-d14	81		30 - 143	07/23/13 14:10	07/24/13 11:19	1
2,4,6-Tribromophenol	44		19 - 138	07/23/13 14:10	07/24/13 11:19	1

Method: 8081A - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 20:22	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:22	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 20:22	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 20:22	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:22	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 20:22	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 20:22	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 4D

Lab Sample ID: 180-23331-4

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	76		45 - 140	07/23/13 14:00	07/24/13 20:22	1
DCB Decachlorobiphenyl (Surr)	80		45 - 140	07/23/13 14:00	07/24/13 20:22	1
Tetrachloro-m-xylene	88		45 - 140	07/23/13 14:00	07/24/13 20:22	1
Tetrachloro-m-xylene	90		45 - 140	07/23/13 14:00	07/24/13 20:22	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		38	5.7	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1
PCB-1221	ND		38	7.3	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1
PCB-1232	ND		38	6.5	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1
PCB-1242	ND		38	6.2	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1
PCB-1248	ND		38	3.6	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1
PCB-1254	ND		38	5.4	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1
PCB-1260	60		38	5.4	ug/Kg	☼	07/23/13 05:43	07/25/13 08:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	87		35 - 140	07/23/13 05:43	07/25/13 08:11	1
Tetrachloro-m-xylene	93		35 - 140	07/23/13 05:43	07/25/13 08:11	1

Method: 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 21:33	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 21:33	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	83		32 - 140				07/23/13 15:20	07/27/13 21:33	20

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.022	J	0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 17:33	1
Barium	0.045	J B	0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 17:33	1
Cadmium	ND		0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 17:33	1
Chromium	0.0031	J B	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 17:33	1
Lead	0.012	J	0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 17:33	1
Selenium	0.0046	J B	0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 17:33	1
Silver	ND		0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 17:33	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000057	J	0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	57		0.10	0.10	%			07/22/13 13:15	1
Percent Solids	43		0.10	0.10	%			07/22/13 13:15	1
Ignitability	NO		1.0	1.0	No Unit			07/22/13 12:45	1
Cyanide, Total	ND		1.2	0.22	mg/Kg	☼	07/30/13 09:55	07/30/13 12:44	1
Halogens, Extractable Organic	ND		120	58	mg/Kg	☼	08/01/13 19:04	08/07/13 16:00	1
Sulfide	45	J	69	14	mg/Kg	☼	07/25/13 11:40	07/25/13 15:43	1
pH	7.54		0.100	0.100	SU			07/25/13 09:16	1
SGT-HEM	260	J	380	93	mg/Kg	☼	07/22/13 06:15	07/22/13 06:15	1
Free Liquid	CNF				NONE			07/23/13 09:53	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 5

Date Collected: 07/18/13 00:00

Date Received: 07/20/13 10:00

Lab Sample ID: 180-23331-5

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.20	0.040	mg/L			07/31/13 08:07	40
2-Butanone (MEK)	ND		0.20	0.043	mg/L			07/31/13 08:07	40
Carbon tetrachloride	ND		0.20	0.043	mg/L			07/31/13 08:07	40
Chlorobenzene	ND		0.20	0.021	mg/L			07/31/13 08:07	40
Chloroform	ND		0.20	0.040	mg/L			07/31/13 08:07	40
1,2-Dichloroethane	ND		0.20	0.038	mg/L			07/31/13 08:07	40
1,1-Dichloroethene	ND		0.20	0.043	mg/L			07/31/13 08:07	40
Tetrachloroethene	ND		0.20	0.033	mg/L			07/31/13 08:07	40
Trichloroethene	ND		0.20	0.032	mg/L			07/31/13 08:07	40
Vinyl chloride	ND		0.20	0.052	mg/L			07/31/13 08:07	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		75 - 120		07/31/13 08:07	40
Dibromofluoromethane (Surr)	96		80 - 120		07/31/13 08:07	40
1,2-Dichloroethane-d4 (Surr)	98		62 - 123		07/31/13 08:07	40
Toluene-d8 (Surr)	101		80 - 120		07/31/13 08:07	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 10:52	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 10:52	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 10:52	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:52	1
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:52	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 10:52	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 10:52	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:52	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 10:52	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 10:52	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 10:52	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 10:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	67		35 - 115	07/23/13 14:10	07/24/13 10:52	1
2-Fluorophenol	69		20 - 110	07/23/13 14:10	07/24/13 10:52	1
Nitrobenzene-d5	71		39 - 115	07/23/13 14:10	07/24/13 10:52	1
Phenol-d5	65		30 - 118	07/23/13 14:10	07/24/13 10:52	1
Terphenyl-d14	81		30 - 143	07/23/13 14:10	07/24/13 10:52	1
2,4,6-Tribromophenol	55		19 - 138	07/23/13 14:10	07/24/13 10:52	1

Method: 8081A - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 20:37	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:37	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 20:37	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 20:37	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:37	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 20:37	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 20:37	1

TestAmerica Pittsburgh

Client Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Client Sample ID: 5

Lab Sample ID: 180-23331-5

Date Collected: 07/18/13 00:00

Matrix: Solid

Date Received: 07/20/13 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	81		45 - 140	07/23/13 14:00	07/24/13 20:37	1
DCB Decachlorobiphenyl (Surr)	85		45 - 140	07/23/13 14:00	07/24/13 20:37	1
Tetrachloro-m-xylene	92		45 - 140	07/23/13 14:00	07/24/13 20:37	1
Tetrachloro-m-xylene	94		45 - 140	07/23/13 14:00	07/24/13 20:37	1

Method: 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 21:57	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 21:57	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	77		32 - 140	07/23/13 15:20	07/27/13 21:57	20

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 17:39	1
Barium	0.050	J B	0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 17:39	1
Cadmium	0.0063	J	0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 17:39	1
Chromium	0.0042	J B	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 17:39	1
Lead	0.021	J	0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 17:39	1
Selenium	0.0061	J B	0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 17:39	1
Silver	0.00070	J	0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 17:39	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		0.10	0.10	%			07/22/13 13:15	1
Percent Solids	83		0.10	0.10	%			07/22/13 13:15	1
Ignitability	NO		1.0	1.0	No Unit			07/22/13 12:45	1
Cyanide, Total	ND		0.58	0.11	mg/Kg	☼	07/30/13 09:55	07/30/13 12:44	1
Sulfide	ND		36	7.3	mg/Kg	☼	07/25/13 11:40	07/25/13 15:47	1
pH	7.58		0.100	0.100	SU			07/25/13 09:20	1

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 180-78979/5

Matrix: Solid

Analysis Batch: 78979

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.400	0.416		mg/L		104	80 - 120
2-Butanone (MEK)	0.400	0.318		mg/L		80	31 - 139
Carbon tetrachloride	0.400	0.400		mg/L		100	63 - 139
Chlorobenzene	0.400	0.417		mg/L		104	83 - 120
Chloroform	0.400	0.417		mg/L		104	77 - 119
1,2-Dichloroethane	0.400	0.402		mg/L		100	63 - 140
1,1-Dichloroethene	0.400	0.411		mg/L		103	69 - 127
Tetrachloroethene	0.400	0.399		mg/L		100	78 - 126
Trichloroethene	0.400	0.402		mg/L		100	80 - 120
Vinyl chloride	0.400	0.363		mg/L		91	57 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		75 - 120
Dibromofluoromethane (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		62 - 123
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LB 180-78610/10-A LB

Matrix: Solid

Analysis Batch: 78979

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.050	0.0099	mg/L			07/31/13 04:12	10
2-Butanone (MEK)	ND		0.050	0.011	mg/L			07/31/13 04:12	10
Carbon tetrachloride	ND		0.050	0.011	mg/L			07/31/13 04:12	10
Chlorobenzene	ND		0.050	0.0053	mg/L			07/31/13 04:12	10
Chloroform	ND		0.050	0.010	mg/L			07/31/13 04:12	10
1,2-Dichloroethane	ND		0.050	0.0096	mg/L			07/31/13 04:12	10
1,1-Dichloroethene	ND		0.050	0.011	mg/L			07/31/13 04:12	10
Tetrachloroethene	ND		0.050	0.0082	mg/L			07/31/13 04:12	10
Trichloroethene	ND		0.050	0.0080	mg/L			07/31/13 04:12	10
Vinyl chloride	ND		0.050	0.013	mg/L			07/31/13 04:12	10

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		75 - 120		07/31/13 04:12	10
Dibromofluoromethane (Surr)	98		80 - 120		07/31/13 04:12	10
1,2-Dichloroethane-d4 (Surr)	103		62 - 123		07/31/13 04:12	10
Toluene-d8 (Surr)	100		80 - 120		07/31/13 04:12	10

Lab Sample ID: 180-23331-1 MS

Matrix: Solid

Analysis Batch: 78979

Client Sample ID: 1A

Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		1.60	1.64		mg/L		102	80 - 120
2-Butanone (MEK)	ND		1.60	1.67		mg/L		104	31 - 139
Carbon tetrachloride	ND		1.60	1.56		mg/L		98	63 - 139

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-23331-1 MS

Matrix: Solid

Analysis Batch: 78979

Client Sample ID: 1A

Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	ND		1.60	1.62		mg/L		101	83 - 120
Chloroform	ND		1.60	1.65		mg/L		103	77 - 119
1,2-Dichloroethane	ND		1.60	1.62		mg/L		101	63 - 140
1,1-Dichloroethene	ND		1.60	1.64		mg/L		102	69 - 127
Tetrachloroethene	ND		1.60	1.51		mg/L		95	78 - 126
Trichloroethene	ND		1.60	1.59		mg/L		99	80 - 120
Vinyl chloride	ND		1.60	1.39		mg/L		87	57 - 128
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		75 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
1,2-Dichloroethane-d4 (Surr)	97		62 - 123						
Toluene-d8 (Surr)	97		80 - 120						

Lab Sample ID: 180-23331-1 MSD

Matrix: Solid

Analysis Batch: 78979

Client Sample ID: 1A

Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		1.60	1.67		mg/L		105	80 - 120	2	20
2-Butanone (MEK)	ND		1.60	1.45		mg/L		91	31 - 139	14	35
Carbon tetrachloride	ND		1.60	1.61		mg/L		101	63 - 139	3	25
Chlorobenzene	ND		1.60	1.66		mg/L		104	83 - 120	2	20
Chloroform	ND		1.60	1.67		mg/L		104	77 - 119	1	20
1,2-Dichloroethane	ND		1.60	1.66		mg/L		104	63 - 140	3	25
1,1-Dichloroethene	ND		1.60	1.59		mg/L		100	69 - 127	3	20
Tetrachloroethene	ND		1.60	1.59		mg/L		99	78 - 126	5	25
Trichloroethene	ND		1.60	1.64		mg/L		103	80 - 120	3	20
Vinyl chloride	ND		1.60	1.37		mg/L		85	57 - 128	2	26
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	103		75 - 120								
Dibromofluoromethane (Surr)	99		80 - 120								
1,2-Dichloroethane-d4 (Surr)	100		62 - 123								
Toluene-d8 (Surr)	100		80 - 120								

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-78208/1-A

Matrix: Solid

Analysis Batch: 78364

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 06:46	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 06:46	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 06:46	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 06:46	1

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-78208/1-A

Matrix: Solid

Analysis Batch: 78364

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 06:46	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 06:46	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 06:46	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 06:46	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 06:46	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 06:46	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 06:46	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 06:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	74		35 - 115	07/23/13 14:10	07/24/13 06:46	1
2-Fluorophenol	77		20 - 110	07/23/13 14:10	07/24/13 06:46	1
Nitrobenzene-d5	75		39 - 115	07/23/13 14:10	07/24/13 06:46	1
Phenol-d5	76		30 - 118	07/23/13 14:10	07/24/13 06:46	1
Terphenyl-d14	85		30 - 143	07/23/13 14:10	07/24/13 06:46	1
2,4,6-Tribromophenol	66		19 - 138	07/23/13 14:10	07/24/13 06:46	1

Lab Sample ID: LCS 180-78208/2-A

Matrix: Solid

Analysis Batch: 78364

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78208

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.250	0.176		mg/L		71	37 - 115
2,4-Dinitrotoluene	0.250	0.132		mg/L		53	40 - 115
Hexachlorobenzene	0.250	0.191		mg/L		77	45 - 115
Hexachlorobutadiene	0.250	0.186		mg/L		74	42 - 115
Hexachloroethane	0.250	0.154		mg/L		62	25 - 106
2-Methylphenol	0.250	0.183		mg/L		73	43 - 115
Methylphenol, 3 & 4	0.500	0.366		mg/L		73	30 - 121
Nitrobenzene	0.250	0.178		mg/L		71	40 - 115
Pentachlorophenol	0.250	0.186	J	mg/L		74	16 - 140
Pyridine	0.250	0.178		mg/L		71	22 - 105
2,4,5-Trichlorophenol	0.250	0.141		mg/L		56	35 - 115
2,4,6-Trichlorophenol	0.250	0.144		mg/L		58	40 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	72		35 - 115
2-Fluorophenol	75		20 - 110
Nitrobenzene-d5	75		39 - 115
Phenol-d5	74		30 - 118
Terphenyl-d14	84		30 - 143
2,4,6-Tribromophenol	64		19 - 138

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-78208/3-A

Matrix: Solid

Analysis Batch: 78364

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 78208

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.250	0.190		mg/L		76	37 - 115	7	35
2,4-Dinitrotoluene	0.250	0.126		mg/L		50	40 - 115	5	42
Hexachlorobenzene	0.250	0.193		mg/L		77	45 - 115	1	22
Hexachlorobutadiene	0.250	0.187		mg/L		75	42 - 115	1	28
Hexachloroethane	0.250	0.161		mg/L		65	25 - 106	5	38
2-Methylphenol	0.250	0.181		mg/L		72	43 - 115	1	47
Methylphenol, 3 & 4	0.500	0.365		mg/L		73	30 - 121	0	35
Nitrobenzene	0.250	0.182		mg/L		73	40 - 115	2	26
Pentachlorophenol	0.250	0.197	J	mg/L		79	16 - 140	6	40
Pyridine	0.250	0.190		mg/L		76	22 - 105	7	40
2,4,5-Trichlorophenol	0.250	0.145		mg/L		58	35 - 115	3	40
2,4,6-Trichlorophenol	0.250	0.148		mg/L		59	40 - 115	2	37

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	72		35 - 115
2-Fluorophenol	77		20 - 110
Nitrobenzene-d5	74		39 - 115
Phenol-d5	73		30 - 118
Terphenyl-d14	83		30 - 143
2,4,6-Tribromophenol	63		19 - 138

Lab Sample ID: LB 180-78076/14-C LB

Matrix: Solid

Analysis Batch: 78364

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 78208

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0012	mg/L		07/23/13 14:10	07/24/13 07:13	1
2,4-Dinitrotoluene	ND		0.050	0.0010	mg/L		07/23/13 14:10	07/24/13 07:13	1
Hexachlorobenzene	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 07:13	1
Hexachlorobutadiene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 07:13	1
Hexachloroethane	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 07:13	1
2-Methylphenol	ND		0.050	0.0014	mg/L		07/23/13 14:10	07/24/13 07:13	1
Methylphenol, 3 & 4	ND		0.050	0.0027	mg/L		07/23/13 14:10	07/24/13 07:13	1
Nitrobenzene	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 07:13	1
Pentachlorophenol	ND		0.25	0.0022	mg/L		07/23/13 14:10	07/24/13 07:13	1
Pyridine	ND		0.10	0.00083	mg/L		07/23/13 14:10	07/24/13 07:13	1
2,4,5-Trichlorophenol	ND		0.050	0.0013	mg/L		07/23/13 14:10	07/24/13 07:13	1
2,4,6-Trichlorophenol	ND		0.050	0.0011	mg/L		07/23/13 14:10	07/24/13 07:13	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	71		35 - 115	07/23/13 14:10	07/24/13 07:13	1
2-Fluorophenol	77		20 - 110	07/23/13 14:10	07/24/13 07:13	1
Nitrobenzene-d5	75		39 - 115	07/23/13 14:10	07/24/13 07:13	1
Phenol-d5	76		30 - 118	07/23/13 14:10	07/24/13 07:13	1
Terphenyl-d14	86		30 - 143	07/23/13 14:10	07/24/13 07:13	1
2,4,6-Tribromophenol	63		19 - 138	07/23/13 14:10	07/24/13 07:13	1

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-78201/1-A

Matrix: Solid

Analysis Batch: 78430

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 20:53	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:53	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 20:53	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 20:53	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 20:53	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 20:53	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 20:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	82		45 - 140	07/23/13 14:00	07/24/13 20:53	1
DCB Decachlorobiphenyl (Surr)	88		45 - 140	07/23/13 14:00	07/24/13 20:53	1
Tetrachloro-m-xylene	93		45 - 140	07/23/13 14:00	07/24/13 20:53	1
Tetrachloro-m-xylene	96		45 - 140	07/23/13 14:00	07/24/13 20:53	1

Lab Sample ID: LCS 180-78201/2-A

Matrix: Solid

Analysis Batch: 78430

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin	0.0100	0.00951		mg/L		95	46 - 137
gamma-BHC (Lindane)	0.0100	0.00958		mg/L		96	55 - 137
Heptachlor	0.0100	0.00985		mg/L		98	57 - 124
Heptachlor epoxide	0.0100	0.00946		mg/L		95	53 - 135
Methoxychlor	0.0100	0.00919		mg/L		92	30 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	82		45 - 140
DCB Decachlorobiphenyl (Surr)	84		45 - 140
Tetrachloro-m-xylene	93		45 - 140
Tetrachloro-m-xylene	95		45 - 140

Lab Sample ID: LCSD 180-78201/3-A

Matrix: Solid

Analysis Batch: 78430

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 78201

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endrin	0.0100	0.00991		mg/L		99	46 - 137	4	30
gamma-BHC (Lindane)	0.0100	0.00972		mg/L		97	55 - 137	2	22
Heptachlor	0.0100	0.0101		mg/L		101	57 - 124	2	32
Heptachlor epoxide	0.0100	0.00981		mg/L		98	53 - 135	4	31
Methoxychlor	0.0100	0.00954		mg/L		95	30 - 150	4	29

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	81		45 - 140
DCB Decachlorobiphenyl (Surr)	85		45 - 140
Tetrachloro-m-xylene	93		45 - 140
Tetrachloro-m-xylene	94		45 - 140

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LB 180-78076/14-B LB

Matrix: Solid

Analysis Batch: 78430

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 78201

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.00066	mg/L		07/23/13 14:00	07/24/13 21:09	1
Endrin	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 21:09	1
gamma-BHC (Lindane)	ND		0.00050	0.00032	mg/L		07/23/13 14:00	07/24/13 21:09	1
Heptachlor	ND		0.00050	0.00040	mg/L		07/23/13 14:00	07/24/13 21:09	1
Heptachlor epoxide	ND		0.00050	0.00039	mg/L		07/23/13 14:00	07/24/13 21:09	1
Methoxychlor	ND		0.0010	0.00037	mg/L		07/23/13 14:00	07/24/13 21:09	1
Toxaphene	ND		0.020	0.0074	mg/L		07/23/13 14:00	07/24/13 21:09	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	81		45 - 140	07/23/13 14:00	07/24/13 21:09	1
DCB Decachlorobiphenyl (Surr)	86		45 - 140	07/23/13 14:00	07/24/13 21:09	1
Tetrachloro-m-xylene	93		45 - 140	07/23/13 14:00	07/24/13 21:09	1
Tetrachloro-m-xylene	95		45 - 140	07/23/13 14:00	07/24/13 21:09	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-78100/1-C

Matrix: Solid

Analysis Batch: 78939

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17	2.5	ug/Kg		07/23/13 05:43	07/25/13 08:43	1
PCB-1221	ND		17	3.2	ug/Kg		07/23/13 05:43	07/25/13 08:43	1
PCB-1232	ND		17	2.9	ug/Kg		07/23/13 05:43	07/25/13 08:43	1
PCB-1242	ND		17	2.7	ug/Kg		07/23/13 05:43	07/25/13 08:43	1
PCB-1248	ND		17	1.6	ug/Kg		07/23/13 05:43	07/25/13 08:43	1
PCB-1254	ND		17	2.4	ug/Kg		07/23/13 05:43	07/25/13 08:43	1
PCB-1260	ND		17	2.4	ug/Kg		07/23/13 05:43	07/25/13 08:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	95		35 - 140	07/23/13 05:43	07/25/13 08:43	1
Tetrachloro-m-xylene	98		35 - 140	07/23/13 05:43	07/25/13 08:43	1

Lab Sample ID: LCS 180-78100/2-C

Matrix: Solid

Analysis Batch: 78939

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1330	1180		ug/Kg		89	55 - 130
PCB-1260	1330	1130		ug/Kg		85	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	94		35 - 140
Tetrachloro-m-xylene	96		35 - 140

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-78223/1-A

Matrix: Solid

Analysis Batch: 78694

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 18:44	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 18:44	20
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	71		32 - 140				07/23/13 15:20	07/27/13 18:44	20

Lab Sample ID: LCS 180-78223/2-A

Matrix: Solid

Analysis Batch: 78694

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2,4-D	0.0800	0.0501		mg/L		63	32 - 140		
Silvex (2,4,5-TP)	0.0800	0.0515		mg/L		64	32 - 140		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
2,4-Dichlorophenylacetic acid	80		32 - 140						

Lab Sample ID: LCSD 180-78223/3-A

Matrix: Solid

Analysis Batch: 78694

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 78223

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
2,4-D	0.0800	0.0488		mg/L		61	32 - 140	3	30
Silvex (2,4,5-TP)	0.0800	0.0544		mg/L		68	32 - 140	6	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,4-Dichlorophenylacetic acid	77		32 - 140						

Lab Sample ID: LB 180-78076/14-D LB

Matrix: Solid

Analysis Batch: 78694

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 78223

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.0045	mg/L		07/23/13 15:20	07/27/13 19:09	20
Silvex (2,4,5-TP)	ND		0.010	0.0011	mg/L		07/23/13 15:20	07/27/13 19:09	20
Surrogate	LB %Recovery	LB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	56		32 - 140				07/23/13 15:20	07/27/13 19:09	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 180-78281/1-A

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78281

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 16:03	1

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 180-78281/1-A

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78281

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 16:03	1
Cadmium	ND		0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 16:03	1
Chromium	0.000590	J	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 16:03	1
Lead	ND		0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 16:03	1
Selenium	ND		0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 16:03	1
Silver	ND		0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 16:03	1

Lab Sample ID: LCS 180-78281/2-A

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.518		mg/L		104	80 - 120
Barium	2.00	1.98		mg/L		99	80 - 120
Cadmium	0.0500	0.0479	J	mg/L		96	80 - 120
Chromium	0.200	0.194		mg/L		97	80 - 120
Lead	0.500	0.479		mg/L		96	80 - 120
Selenium	0.500	0.537		mg/L		107	80 - 120
Silver	0.0500	0.0528		mg/L		106	80 - 120

Lab Sample ID: LB 180-78076/14-E LB

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 78281

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.0027	mg/L		07/24/13 10:07	07/30/13 16:08	1
Barium	0.000810	J	0.20	0.00062	mg/L		07/24/13 10:07	07/30/13 16:08	1
Cadmium	ND		0.050	0.00013	mg/L		07/24/13 10:07	07/30/13 16:08	1
Chromium	0.00165	J	0.050	0.00057	mg/L		07/24/13 10:07	07/30/13 16:08	1
Lead	ND		0.050	0.0013	mg/L		07/24/13 10:07	07/30/13 16:08	1
Selenium	0.00796	J	0.050	0.0030	mg/L		07/24/13 10:07	07/30/13 16:08	1
Silver	ND		0.050	0.00068	mg/L		07/24/13 10:07	07/30/13 16:08	1

Lab Sample ID: 180-23331-1 MS

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: 1A

Prep Type: TCLP

Prep Batch: 78281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.034	J	5.00	5.29		mg/L		105	75 - 125
Cadmium	0.00063	J	1.00	0.993		mg/L		99	75 - 125
Chromium	0.0021	J B	5.00	4.92		mg/L		98	75 - 125
Selenium	0.0051	J B	1.00	1.08		mg/L		108	75 - 125
Silver	0.00073	J	1.00	1.03		mg/L		103	75 - 125

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 180-23331-1 MS

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: 1A

Prep Type: TCLP

Prep Batch: 78281

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.037	J B	50.0	48.6		mg/L		97	75 - 125
Lead	0.033	J	5.00	4.96		mg/L		98	75 - 125

Lab Sample ID: 180-23331-1 MSD

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: 1A

Prep Type: TCLP

Prep Batch: 78281

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.034	J	5.00	5.40		mg/L		107	75 - 125	2	20
Cadmium	0.00063	J	1.00	1.02		mg/L		101	75 - 125	2	20
Chromium	0.0021	J B	5.00	4.99		mg/L		100	75 - 125	1	20
Selenium	0.0051	J B	1.00	1.12		mg/L		111	75 - 125	3	20
Silver	0.00073	J	1.00	1.04		mg/L		104	75 - 125	1	20

Lab Sample ID: 180-23331-1 MSD

Matrix: Solid

Analysis Batch: 78976

Client Sample ID: 1A

Prep Type: TCLP

Prep Batch: 78281

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	0.037	J B	50.0	48.4		mg/L		97	75 - 125	0	20
Lead	0.033	J	5.00	5.05		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-78427/1-A

Matrix: Solid

Analysis Batch: 78489

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78427

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 14:27	1

Lab Sample ID: LCS 180-78427/2-A

Matrix: Solid

Analysis Batch: 78489

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00251		mg/L		100	80 - 120

Lab Sample ID: LB 180-78076/14-F LB

Matrix: Solid

Analysis Batch: 78489

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 78427

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000038	mg/L		07/25/13 09:48	07/25/13 14:35	1

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 180-23331-1 MS

Matrix: Solid

Analysis Batch: 78489

Client Sample ID: 1A

Prep Type: TCLP

Prep Batch: 78427

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00500	0.00505		mg/L		101	75 - 125

Lab Sample ID: 180-23331-1 MSD

Matrix: Solid

Analysis Batch: 78489

Client Sample ID: 1A

Prep Type: TCLP

Prep Batch: 78427

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00489		mg/L		98	75 - 125	3	20

Method: 9012A - Total Cyanide (Automated Colorimetric)

Lab Sample ID: MB 180-78893/4-A

Matrix: Solid

Analysis Batch: 78934

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78893

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.097	mg/Kg		07/30/13 09:55	07/30/13 12:38	1

Lab Sample ID: HLCS 180-78893/2-A

Matrix: Solid

Analysis Batch: 78934

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78893

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.235		mg/Kg		94	90 - 110

Lab Sample ID: LCS 180-78893/3-A

Matrix: Solid

Analysis Batch: 78934

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78893

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	59.3	59.9		mg/Kg		101	38 - 162

Lab Sample ID: LLCS 180-78893/1-A

Matrix: Solid

Analysis Batch: 78934

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78893

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0456		mg/Kg		91	90 - 110

Lab Sample ID: 180-23331-1 MS

Matrix: Solid

Analysis Batch: 78934

Client Sample ID: 1A

Prep Type: Total/NA

Prep Batch: 78893

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		11.3	10.4		mg/Kg	☼	92	75 - 125

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 9012A - Total Cyanide (Automated Colorimetric) (Continued)

Lab Sample ID: 180-23331-1 MSD

Matrix: Solid

Analysis Batch: 78934

Client Sample ID: 1A

Prep Type: Total/NA

Prep Batch: 78893

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Cyanide, Total	ND		11.2	10.1		mg/Kg	✱	89	75 - 125	4	20

Method: 9023 - Organic Halides, Extractable (EOX)

Lab Sample ID: MB 490-95561/1-A

Matrix: Solid

Analysis Batch: 95740

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 95561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Extractable Organic	ND		50	25	mg/Kg		07/25/13 11:00	07/25/13 12:00	1

Lab Sample ID: LCS 490-95561/2-A

Matrix: Solid

Analysis Batch: 95740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 95561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Halogens, Extractable Organic	1040	1050		mg/Kg		101	80 - 120

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-78444/1-A

Matrix: Solid

Analysis Batch: 78495

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 78444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		30	6.0	mg/Kg		07/25/13 11:40	07/25/13 15:32	1

Lab Sample ID: LCS 180-78444/2-A

Matrix: Solid

Analysis Batch: 78495

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 78444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	192	183		mg/Kg		95	85 - 115

Method: 9045C - pH

Lab Sample ID: LCS 180-78261/1

Matrix: Solid

Analysis Batch: 78261

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.020		SU		100	99 - 101

TestAmerica Pittsburgh

QC Sample Results

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Method: 9045C - pH (Continued)

Lab Sample ID: 180-23331-2 DU

Matrix: Solid

Analysis Batch: 78261

Client Sample ID: 2B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.98		7.970		SU		0.1	2

Lab Sample ID: LCS 180-78784/1

Matrix: Solid

Analysis Batch: 78784

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.970		SU		100	99 - 101

Method: 9071B - HEM and SGT-HEM

Lab Sample ID: MB 180-77985/1-A

Matrix: Solid

Analysis Batch: 78069

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 77985

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SGT-HEM	ND		170	40	mg/Kg		07/22/13 06:15	07/22/13 06:15	1

Lab Sample ID: LCS 180-77985/2-A

Matrix: Solid

Analysis Batch: 78069

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 77985

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
SGT-HEM	667	480		mg/Kg		72	64 - 132

Method: 9095A - Paint Filter

Lab Sample ID: 180-23331-3 DU

Matrix: Solid

Analysis Batch: 78131

Client Sample ID: 3C

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Free Liquid	CNF		CNF		NONE		NC	20

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

GC/MS VOA

Leach Batch: 78610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	1311	
180-23331-1 MS	1A	TCLP	Solid	1311	
180-23331-1 MSD	1A	TCLP	Solid	1311	
180-23331-2	2B	TCLP	Solid	1311	
180-23331-3	3C	TCLP	Solid	1311	
180-23331-4	4D	TCLP	Solid	1311	
180-23331-5	5	TCLP	Solid	1311	
LB 180-78610/10-A LB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 78979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	8260B	78610
180-23331-1 MS	1A	TCLP	Solid	8260B	78610
180-23331-1 MSD	1A	TCLP	Solid	8260B	78610
180-23331-2	2B	TCLP	Solid	8260B	78610
180-23331-3	3C	TCLP	Solid	8260B	78610
180-23331-4	4D	TCLP	Solid	8260B	78610
180-23331-5	5	TCLP	Solid	8260B	78610
LB 180-78610/10-A LB	Method Blank	TCLP	Solid	8260B	78610
LCS 180-78979/5	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 78076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	1311	
180-23331-2	2B	TCLP	Solid	1311	
180-23331-3	3C	TCLP	Solid	1311	
180-23331-4	4D	TCLP	Solid	1311	
180-23331-5	5	TCLP	Solid	1311	
LB 180-78076/14-C LB	Method Blank	TCLP	Solid	1311	

Prep Batch: 78208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	3510C	78076
180-23331-2	2B	TCLP	Solid	3510C	78076
180-23331-3	3C	TCLP	Solid	3510C	78076
180-23331-4	4D	TCLP	Solid	3510C	78076
180-23331-5	5	TCLP	Solid	3510C	78076
LB 180-78076/14-C LB	Method Blank	TCLP	Solid	3510C	78076
LCS 180-78208/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-78208/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 180-78208/1-A	Method Blank	Total/NA	Solid	3510C	

Analysis Batch: 78364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	8270C	78208
180-23331-2	2B	TCLP	Solid	8270C	78208
180-23331-3	3C	TCLP	Solid	8270C	78208
180-23331-4	4D	TCLP	Solid	8270C	78208

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

GC/MS Semi VOA (Continued)

Analysis Batch: 78364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-5	5	TCLP	Solid	8270C	78208
LB 180-78076/14-C LB	Method Blank	TCLP	Solid	8270C	78208
LCS 180-78208/2-A	Lab Control Sample	Total/NA	Solid	8270C	78208
LCSD 180-78208/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	78208
MB 180-78208/1-A	Method Blank	Total/NA	Solid	8270C	78208

GC Semi VOA

Leach Batch: 78076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	1311	
180-23331-2	2B	TCLP	Solid	1311	
180-23331-3	3C	TCLP	Solid	1311	
180-23331-4	4D	TCLP	Solid	1311	
180-23331-5	5	TCLP	Solid	1311	
LB 180-78076/14-B LB	Method Blank	TCLP	Solid	1311	
LB 180-78076/14-D LB	Method Blank	TCLP	Solid	1311	

Prep Batch: 78100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	3541	
180-23331-2	2B	Total/NA	Solid	3541	
180-23331-3	3C	Total/NA	Solid	3541	
180-23331-4	4D	Total/NA	Solid	3541	
LCS 180-78100/2-C	Lab Control Sample	Total/NA	Solid	3541	
MB 180-78100/1-C	Method Blank	Total/NA	Solid	3541	

Cleanup Batch: 78176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	3665A	78100
180-23331-2	2B	Total/NA	Solid	3665A	78100
180-23331-3	3C	Total/NA	Solid	3665A	78100
180-23331-4	4D	Total/NA	Solid	3665A	78100
LCS 180-78100/2-C	Lab Control Sample	Total/NA	Solid	3665A	78100
MB 180-78100/1-C	Method Blank	Total/NA	Solid	3665A	78100

Cleanup Batch: 78177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	3660B	78176
180-23331-2	2B	Total/NA	Solid	3660B	78176
180-23331-3	3C	Total/NA	Solid	3660B	78176
180-23331-4	4D	Total/NA	Solid	3660B	78176
LCS 180-78100/2-C	Lab Control Sample	Total/NA	Solid	3660B	78176
MB 180-78100/1-C	Method Blank	Total/NA	Solid	3660B	78176

Prep Batch: 78201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	3510C	78076
180-23331-2	2B	TCLP	Solid	3510C	78076
180-23331-3	3C	TCLP	Solid	3510C	78076

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

GC Semi VOA (Continued)

Prep Batch: 78201 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-4	4D	TCLP	Solid	3510C	78076
180-23331-5	5	TCLP	Solid	3510C	78076
LB 180-78076/14-B LB	Method Blank	TCLP	Solid	3510C	78076
LCS 180-78201/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-78201/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 180-78201/1-A	Method Blank	Total/NA	Solid	3510C	

Prep Batch: 78223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	8151A	78076
180-23331-2	2B	TCLP	Solid	8151A	78076
180-23331-3	3C	TCLP	Solid	8151A	78076
180-23331-4	4D	TCLP	Solid	8151A	78076
180-23331-5	5	TCLP	Solid	8151A	78076
LB 180-78076/14-D LB	Method Blank	TCLP	Solid	8151A	78076
LCS 180-78223/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-78223/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
MB 180-78223/1-A	Method Blank	Total/NA	Solid	8151A	

Analysis Batch: 78430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	8081A	78201
180-23331-2	2B	TCLP	Solid	8081A	78201
180-23331-3	3C	TCLP	Solid	8081A	78201
180-23331-4	4D	TCLP	Solid	8081A	78201
180-23331-5	5	TCLP	Solid	8081A	78201
LB 180-78076/14-B LB	Method Blank	TCLP	Solid	8081A	78201
LCS 180-78201/2-A	Lab Control Sample	Total/NA	Solid	8081A	78201
LCSD 180-78201/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	78201
MB 180-78201/1-A	Method Blank	Total/NA	Solid	8081A	78201

Analysis Batch: 78694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	8151A	78223
180-23331-2	2B	TCLP	Solid	8151A	78223
180-23331-3	3C	TCLP	Solid	8151A	78223
180-23331-4	4D	TCLP	Solid	8151A	78223
180-23331-5	5	TCLP	Solid	8151A	78223
LB 180-78076/14-D LB	Method Blank	TCLP	Solid	8151A	78223
LCS 180-78223/2-A	Lab Control Sample	Total/NA	Solid	8151A	78223
LCSD 180-78223/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	78223
MB 180-78223/1-A	Method Blank	Total/NA	Solid	8151A	78223

Analysis Batch: 78939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	8082	78177
180-23331-2	2B	Total/NA	Solid	8082	78177
180-23331-3	3C	Total/NA	Solid	8082	78177
180-23331-4	4D	Total/NA	Solid	8082	78177
LCS 180-78100/2-C	Lab Control Sample	Total/NA	Solid	8082	78177
MB 180-78100/1-C	Method Blank	Total/NA	Solid	8082	78177

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Metals

Leach Batch: 78076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	1311	
180-23331-1 MS	1A	TCLP	Solid	1311	
180-23331-1 MSD	1A	TCLP	Solid	1311	
180-23331-1 MSD	1A	TCLP	Solid	1311	
180-23331-2	2B	TCLP	Solid	1311	
180-23331-3	3C	TCLP	Solid	1311	
180-23331-4	4D	TCLP	Solid	1311	
180-23331-5	5	TCLP	Solid	1311	
LB 180-78076/14-E LB	Method Blank	TCLP	Solid	1311	
LB 180-78076/14-F LB	Method Blank	TCLP	Solid	1311	

Prep Batch: 78281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	3010A	78076
180-23331-1 MS	1A	TCLP	Solid	3010A	78076
180-23331-1 MSD	1A	TCLP	Solid	3010A	78076
180-23331-2	2B	TCLP	Solid	3010A	78076
180-23331-3	3C	TCLP	Solid	3010A	78076
180-23331-4	4D	TCLP	Solid	3010A	78076
180-23331-5	5	TCLP	Solid	3010A	78076
LB 180-78076/14-E LB	Method Blank	TCLP	Solid	3010A	78076
LCS 180-78281/2-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 180-78281/1-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 78427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	7470A	78076
180-23331-1 MS	1A	TCLP	Solid	7470A	78076
180-23331-1 MSD	1A	TCLP	Solid	7470A	78076
180-23331-2	2B	TCLP	Solid	7470A	78076
180-23331-3	3C	TCLP	Solid	7470A	78076
180-23331-4	4D	TCLP	Solid	7470A	78076
180-23331-5	5	TCLP	Solid	7470A	78076
LB 180-78076/14-F LB	Method Blank	TCLP	Solid	7470A	78076
LCS 180-78427/2-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 180-78427/1-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 78489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	7470A	78427
180-23331-1 MS	1A	TCLP	Solid	7470A	78427
180-23331-1 MSD	1A	TCLP	Solid	7470A	78427
180-23331-2	2B	TCLP	Solid	7470A	78427
180-23331-3	3C	TCLP	Solid	7470A	78427
180-23331-4	4D	TCLP	Solid	7470A	78427
180-23331-5	5	TCLP	Solid	7470A	78427
LB 180-78076/14-F LB	Method Blank	TCLP	Solid	7470A	78427
LCS 180-78427/2-A	Lab Control Sample	Total/NA	Solid	7470A	78427
MB 180-78427/1-A	Method Blank	Total/NA	Solid	7470A	78427

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

Metals (Continued)

Analysis Batch: 78976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	TCLP	Solid	6010B	78281
180-23331-1 MS	1A	TCLP	Solid	6010B	78281
180-23331-1 MS	1A	TCLP	Solid	6010B	78281
180-23331-1 MSD	1A	TCLP	Solid	6010B	78281
180-23331-1 MSD	1A	TCLP	Solid	6010B	78281
180-23331-2	2B	TCLP	Solid	6010B	78281
180-23331-3	3C	TCLP	Solid	6010B	78281
180-23331-4	4D	TCLP	Solid	6010B	78281
180-23331-5	5	TCLP	Solid	6010B	78281
LB 180-78076/14-E LB	Method Blank	TCLP	Solid	6010B	78281
LCS 180-78281/2-A	Lab Control Sample	Total/NA	Solid	6010B	78281
MB 180-78281/1-A	Method Blank	Total/NA	Solid	6010B	78281

General Chemistry

Prep Batch: 77985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9071B	
180-23331-2	2B	Total/NA	Solid	9071B	
180-23331-3	3C	Total/NA	Solid	9071B	
180-23331-4	4D	Total/NA	Solid	9071B	
LCS 180-77985/2-A	Lab Control Sample	Total/NA	Solid	9071B	
MB 180-77985/1-A	Method Blank	Total/NA	Solid	9071B	

Analysis Batch: 78044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	7.1.2	
180-23331-2	2B	Total/NA	Solid	7.1.2	
180-23331-3	3C	Total/NA	Solid	7.1.2	
180-23331-4	4D	Total/NA	Solid	7.1.2	
180-23331-5	5	Total/NA	Solid	7.1.2	

Analysis Batch: 78047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	2540G	
180-23331-2	2B	Total/NA	Solid	2540G	
180-23331-3	3C	Total/NA	Solid	2540G	
180-23331-4	4D	Total/NA	Solid	2540G	
180-23331-5	5	Total/NA	Solid	2540G	

Analysis Batch: 78069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9071B	77985
180-23331-2	2B	Total/NA	Solid	9071B	77985
180-23331-3	3C	Total/NA	Solid	9071B	77985
180-23331-4	4D	Total/NA	Solid	9071B	77985
LCS 180-77985/2-A	Lab Control Sample	Total/NA	Solid	9071B	77985
MB 180-77985/1-A	Method Blank	Total/NA	Solid	9071B	77985

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

General Chemistry (Continued)

Analysis Batch: 78131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9095A	
180-23331-2	2B	Total/NA	Solid	9095A	
180-23331-3	3C	Total/NA	Solid	9095A	
180-23331-3 DU	3C	Total/NA	Solid	9095A	
180-23331-4	4D	Total/NA	Solid	9095A	

Analysis Batch: 78261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-2	2B	Total/NA	Solid	9045C	
180-23331-2 DU	2B	Total/NA	Solid	9045C	
180-23331-3	3C	Total/NA	Solid	9045C	
180-23331-4	4D	Total/NA	Solid	9045C	
180-23331-5	5	Total/NA	Solid	9045C	
LCS 180-78261/1	Lab Control Sample	Total/NA	Solid	9045C	

Prep Batch: 78444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9030B	
180-23331-2	2B	Total/NA	Solid	9030B	
180-23331-3	3C	Total/NA	Solid	9030B	
180-23331-4	4D	Total/NA	Solid	9030B	
180-23331-5	5	Total/NA	Solid	9030B	
LCS 180-78444/2-A	Lab Control Sample	Total/NA	Solid	9030B	
MB 180-78444/1-A	Method Blank	Total/NA	Solid	9030B	

Analysis Batch: 78495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9034	78444
180-23331-2	2B	Total/NA	Solid	9034	78444
180-23331-3	3C	Total/NA	Solid	9034	78444
180-23331-4	4D	Total/NA	Solid	9034	78444
180-23331-5	5	Total/NA	Solid	9034	78444
LCS 180-78444/2-A	Lab Control Sample	Total/NA	Solid	9034	78444
MB 180-78444/1-A	Method Blank	Total/NA	Solid	9034	78444

Analysis Batch: 78784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9045C	
LCS 180-78784/1	Lab Control Sample	Total/NA	Solid	9045C	

Prep Batch: 78893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9012A	
180-23331-1 MS	1A	Total/NA	Solid	9012A	
180-23331-1 MSD	1A	Total/NA	Solid	9012A	
180-23331-2	2B	Total/NA	Solid	9012A	
180-23331-3	3C	Total/NA	Solid	9012A	
180-23331-4	4D	Total/NA	Solid	9012A	
180-23331-5	5	Total/NA	Solid	9012A	
HLCS 180-78893/2-A	Lab Control Sample	Total/NA	Solid	9012A	
LCS 180-78893/3-A	Lab Control Sample	Total/NA	Solid	9012A	

TestAmerica Pittsburgh

QC Association Summary

Client: Fugro Consultants Inc
Project/Site: Mason Creek, 04.8113.0011

TestAmerica Job ID: 180-23331-1

General Chemistry (Continued)

Prep Batch: 78893 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-78893/1-A	Lab Control Sample	Total/NA	Solid	9012A	
MB 180-78893/4-A	Method Blank	Total/NA	Solid	9012A	

Analysis Batch: 78934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9012A	78893
180-23331-1 MS	1A	Total/NA	Solid	9012A	78893
180-23331-1 MSD	1A	Total/NA	Solid	9012A	78893
180-23331-2	2B	Total/NA	Solid	9012A	78893
180-23331-3	3C	Total/NA	Solid	9012A	78893
180-23331-4	4D	Total/NA	Solid	9012A	78893
180-23331-5	5	Total/NA	Solid	9012A	78893
HLCS 180-78893/2-A	Lab Control Sample	Total/NA	Solid	9012A	78893
LCS 180-78893/3-A	Lab Control Sample	Total/NA	Solid	9012A	78893
LLCS 180-78893/1-A	Lab Control Sample	Total/NA	Solid	9012A	78893
MB 180-78893/4-A	Method Blank	Total/NA	Solid	9012A	78893

Prep Batch: 95561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9023	
180-23331-2	2B	Total/NA	Solid	9023	
180-23331-3	3C	Total/NA	Solid	9023	
180-23331-4	4D	Total/NA	Solid	9023	
LCS 490-95561/2-A	Lab Control Sample	Total/NA	Solid	9023	
MB 490-95561/1-A	Method Blank	Total/NA	Solid	9023	

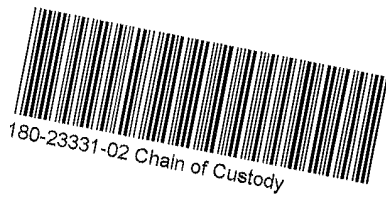
Analysis Batch: 95740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-23331-1	1A	Total/NA	Solid	9023	95561
180-23331-2	2B	Total/NA	Solid	9023	95561
180-23331-3	3C	Total/NA	Solid	9023	95561
180-23331-4	4D	Total/NA	Solid	9023	95561
LCS 490-95561/2-A	Lab Control Sample	Total/NA	Solid	9023	95561
MB 490-95561/1-A	Method Blank	Total/NA	Solid	9023	95561

COOLER TEMPERATURE

Thermometer Number : 9

Correction Factor : 0.0



2.9

Login Sample Receipt Checklist

Client: Fugro Consultants Inc

Job Number: 180-23331-1

Login Number: 23331

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Skowronek, Elyse N

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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.	False	No time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Fugro Consultants Inc

Job Number: 180-23331-1

Login Number: 23331

List Source: TestAmerica Nashville

List Number: 1

List Creation: 07/23/13 02:07 PM

Creator: Huskey, Adam

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	