OBG

REPORT

Former IRM Systems Abandonment and Decommissioning Report

GE Aviation

612/60834

September 2015

612 | 60834

Former IRM Systems Abandonment and Decommissioning Report

Evendale, Ohio

Prepared for:
GE Aviation

612/60834

SCOTT L. CORMIER, PE – VICE PRESIDENT
O'Brien & Gere Engineers, Inc.

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1. INTRODUCTION

This report documents the recovery well abandonment and air stripper (AS) system decommissioning activities conducted in February 2015 and April 2015 at the General Electric (GE) Aviation facility (Facility) located in Evendale, Ohio (Figure 1). In the 1990s, several former soil vapor extraction (SVE) and groundwater pump and treat interim remedial measures (IRMs) associated with the Resource Conservation and Recovery Act (RCRA) Corrective Action program were installed at the Facility. The operation of these IRMs was discontinued, as approved by United States Environmental Protection Agency (USEPA); however, the units remained in place.

1.1 IRM SYSTEM DESCRIPTIONS

The AFP36 IRM system consisted of a packed tower AS unit that treated groundwater pumped from recovery well, AF-INT-1. This IRM system was installed in 1995 and operated for approximately three years until 1998. The location of the IRM system is shown on Figure 2.

The Building 800 IRM system consisted of a shallow tray air stripper unit that treated groundwater pumped from recovery well RW-800. The air stripper unit operated between 1996 and 2005. The air stripper unit was previously removed and disposed off-site during a building demolition project in 2014, as previously reported to USEPA. The location of this IRM system is also shown on Figure 2.

The North End IRM systems, previously referenced as Buildings 301/306, consisted of one air stripper treating groundwater from two recovery wells (RW-301 and RW-306) and one soil vapor extraction system installed to treat impacted vadose zone soil. The Building 301 SVE system operated from 1993 to 1994 and the Building 306 SVE system operated intermittently between 1993 and 2004. The groundwater pump and treat system operated from 1993 to 2005. The locations of these North End (301/306) IRM systems are shown on Figure 2.

2. RECOVERY WELL ABANDONMENT ACTIVITIES

Field work associated with the well abandonment was initiated on February 22, 2015 and was completed on March 5, 2015. Well abandonment activities included the decommissioning and plugging of groundwater wells AF-INT-1 (of the AFP36 IRM system), RW-301, and RW-306 (both of the North End IRM systems). A fourth recovery well, associated with the Building 800 IRM system, will be decommissioned in the future. The recovery well decommissioning was conducted in accordance with the Ohio Environmental Protection Agency (OEPA) Technical Guidance Manual for Ground Water Investigations, Chapter 9, Sealing Abandoned Monitoring Wells and Boreholes (OEPA, 2009), Ohio Administrative Code (OAC) 3701-28-07, OAC 3745-9-10, American Society for Testing and Materials (ASTM) standard C150 and National Science Foundation (NSF) standard 60.

2.1 DRILLING ACTIVITIES

Recovery well abandonment work began at RW-306 on February 24, 2015 with the cutting and removal of above-ground groundwater discharge piping and appurtenances from the well to the former AS treatment system. The overdrilling, casing removal, and grouting activities at recovery well RW-306 were completed on February 25, 2015.

Using a rotosonic drilling rig, twelve-inch inside-diameter steel drilling casings were used in five-foot sections to overdrill the 8-in recovery well to a total depth of approximately 37 feet (i.e., just below the bottom of RW-306), at which point, the well casing and screen were removed. A tremie pipe was inserted to the bottom of the borehole and was used to tremie approximately 260 gallons of cement/bentonite grout into the borehole to backfill the borehole. The grout consisted of Type 1 Portland cement mixed with 5% CETCO brand PureGold® Gel, which is NSF/ANSI Standard 60 certified, at a ratio of one 94-pound bag of cement to approximately 6 gallons of water. After undiluted grout returned to the ground surface, 10 ft. of the drill casing was removed and the grout level within the remaining casing was topped off. This process was repeated until the casing was completely removed from the borehole. The equipment was decontaminated between recovery wells and prior to leaving the Facility using steam cleaning techniques. A plastic containment tub was placed beneath the drill rig to capture drilling and decontamination fluids during and after drilling.

On February 26, 2015, the drilling crew relocated the drilling rig to the AFP-36 AS system recovery well, AF-INT-1. Overdrilling activities began on February 27, 2015 at AF-INT-1 and were completed on March 3, 2015. The total depth of AF-INT-1 was approximately 62 feet. Approximately 360 gallons of cement/bentonite grout was used to backfill the twelve-inch boring in a manner similar to the previous well. The drilling fluids and decontamination water was pumped into five 55-gallon drums for waste characterization, pending disposal.

Following rig-tear-down, the drilling rig and equipment were mobilized to the RW-301 (North End) area. Overdrilling and abandonment activities at RW-301 were completed on March 4, 2015. The total depth of RW-301 was approximately 35 feet. Backfilling was accomplished in the same manner as the previous two wells, using approximately 200 gallons of cement/bentonite grout. Three additional drums of drilling fluids and decontamination water were collected from this drilling location, as well as a single drum of solids (soil), which were contained in 55-gallon drums for waste characterization and disposal.

Borings were topped off with bentonite chips to backfill settling of the cement/bentonite grout.

2.2 WASTE CHARACTERIZATION AND DISPOSAL

Drummed waste materials were sampled and characterized by TestAmerica Laboratories. The laboratory report is included in Appendix A. Based on a review of the analytical data, the waste materials were deemed to be non-hazardous and were removed from the site on April 16, 2015 by Rumpke Waste & Recycling (Rumpke) for disposal at their solid waste facility. Above-ground piping and materials, as well as recovery well materials, such as inoperable pumps, well casing, etc., were also collected in roll-off boxes and removed for transportation and disposal by Rumpke under an existing non-hazardous construction and demolition debris (C&D) profile on record with GE's on-site waste contractor, Clean Harbors (see discussion of drum handling in Section 3.1).

2.3 WELL SEALING REPORTS

Well sealing reports were filed with the Ohio Department of Natural Resources (ODNR) by Cascade Drilling. The ODNR has also been contacted about removal of the recovery wells from their water withdrawal registry, pending formal written request from GE. Well sealing reports for the three abandoned wells are included in Appendix B.

3. AFP36 AIR STRIPPER DECOMMISSIONING ACTIVITIES

Field work associated with the decommissioning of the AFP36 AS system was initiated on April 6, 2015 and was completed on April 10, 2015, leaving only the capped underground pipelines, as described in this report. Above-ground piping associated with the Building 800 IRM system was also removed during this activity. The SVE and air stripper treatment units associated with the North End IRM systems currently remain and will be removed/disposed during a future construction project.

3.1 DECOMMISSIONING ACTIVITIES

Decommissioning work began on the AFP36 AS system on April 7, 2015, with the cutting and removal of the above grade piping and conduits, which were disposed in one of the non-hazardous roll-off containers. In addition, the above grade equipment from the Building 800 AS system recovery well (RW-800) was also cut, removed and disposed in the non-hazardous roll-off container.

A lift and rigging plan for stripper removal was developed and reviewed with the decommissioning crew. Once the lift plan was finalized and signed, the AFP36 AS tower was laid down on the ground surface adjacent to its original vertical location. A sample of air stripper packing material was then collected for waste characterization. The concrete pad that formerly housed the stripper tower was removed and disposed of in the non-hazardous roll off container. The first non-hazardous roll-off container was swapped out for a new 20-yard roll off container from Rumpke and the first non-hazardous container was removed offsite through GE scale house under the existing non-hazardous C&D profile.

On April 8, 2015, the AFP36 AS tower and packing material were placed in the second non-hazardous roll-off container pending the results of the waste characterization sampling conducted on the AS packing material. The above grade equipment from North End AS system recovery wells (RW-301 and RW-306) abandonment activities were disposed in the non-hazardous roll-off container. A total of twelve drums, including eight drums of water and one drum of soil from AFP36 AS and North End AS areas were relocated into the AFP36 AS work area.

The excavation of the subgrade piping from AFP36 recovery well, AF-INT-1, directed toward the former location of the AFP36 AS tower revealed that the subgrade piping was encased in concrete. In consultation with GE, it was decided that the ends of the piping would be exposed and severed below grade, and the remaining concrete encased piping left in place (photo documentation is provided in Appendix C). After severing the ends of the concrete encased piping, the excavation was backfilled with the soil removed from the excavation.

On April 9, 2015, the water from the eight drilling fluid and decontamination water filled drums were consolidated to generate six drums of water waste and five partially filled drums with solids resulting from the settlement of sediments out of the drilling and decontamination fluids. Well abandonment waste materials also included the one soil filled drum from the drilling cuttings. The six water-filled drums were placed on three pallets for disposal by Clean Harbors based on the waste characterization samples collected during the recovery well abandonment activities. The remaining drums of drilling cuttings (solids) were emptied into the non-hazardous waste roll off container for offsite disposal by Rumpke, based on the waste characterization samples collected during the recovery well abandonment activities. The six drums were cleaned and disposed with the AS housing, North End AS system piping and equipment, and the above grade equipment from recovery well RW-800 via the existing profile on record with Clean Harbors.

The heavy equipment used in decommissioning was decontaminated and staged by the IRM building for pickup by the rental company.

3.2 DEMOBILIZATION

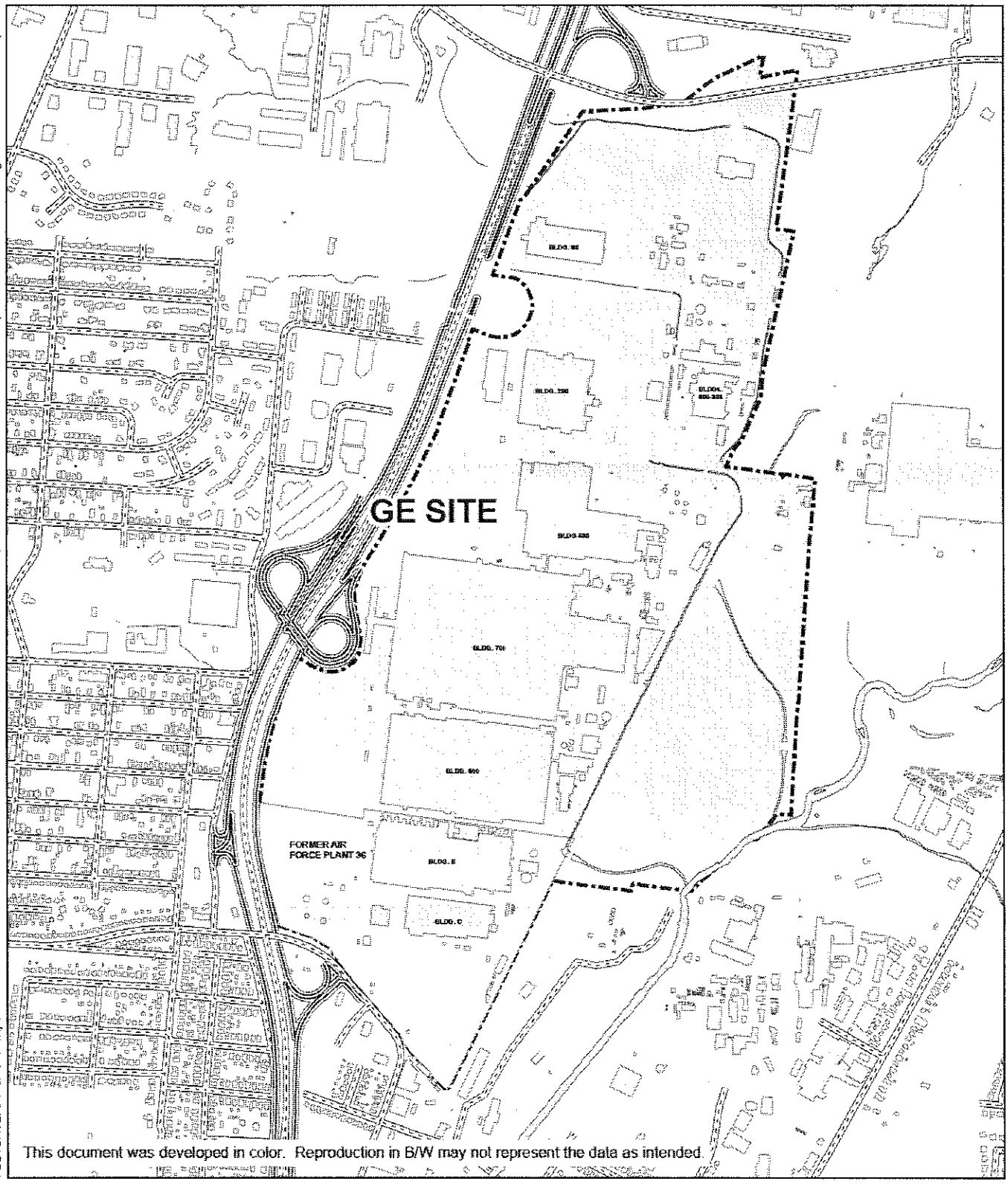
On April 10, 2015, the heavy equipment was removed from site and the OBG vehicles were packed safely and demobilized from the site.

3.3 WASTE CHARACTERIZATION AND DISPOSAL

The AS packing material was sampled and characterized by TestAmerica laboratories. The sample was analyzed for TCLP VOCs, PCBs, TPH (as GRO and DRO) and RCRA metals. Based on a review of the analytical data (Appendix A), the waste materials were deemed to be non-hazardous and were removed from the site on May 6, 2015 by Rumpke for disposal at their solid waste facility.

Figures

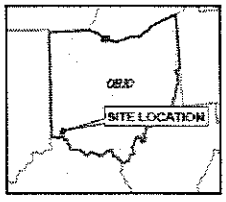
FIGURE 1



PLOTDATE: 07/10/15 onellijm

I:\Ge-Cep.612\51731.2014-Rcra-Ca-En\N-D\Recovery Well Abandonment\001 - Figure 1 - Site Location map.mxd

GE
EVENDALE, OHIO

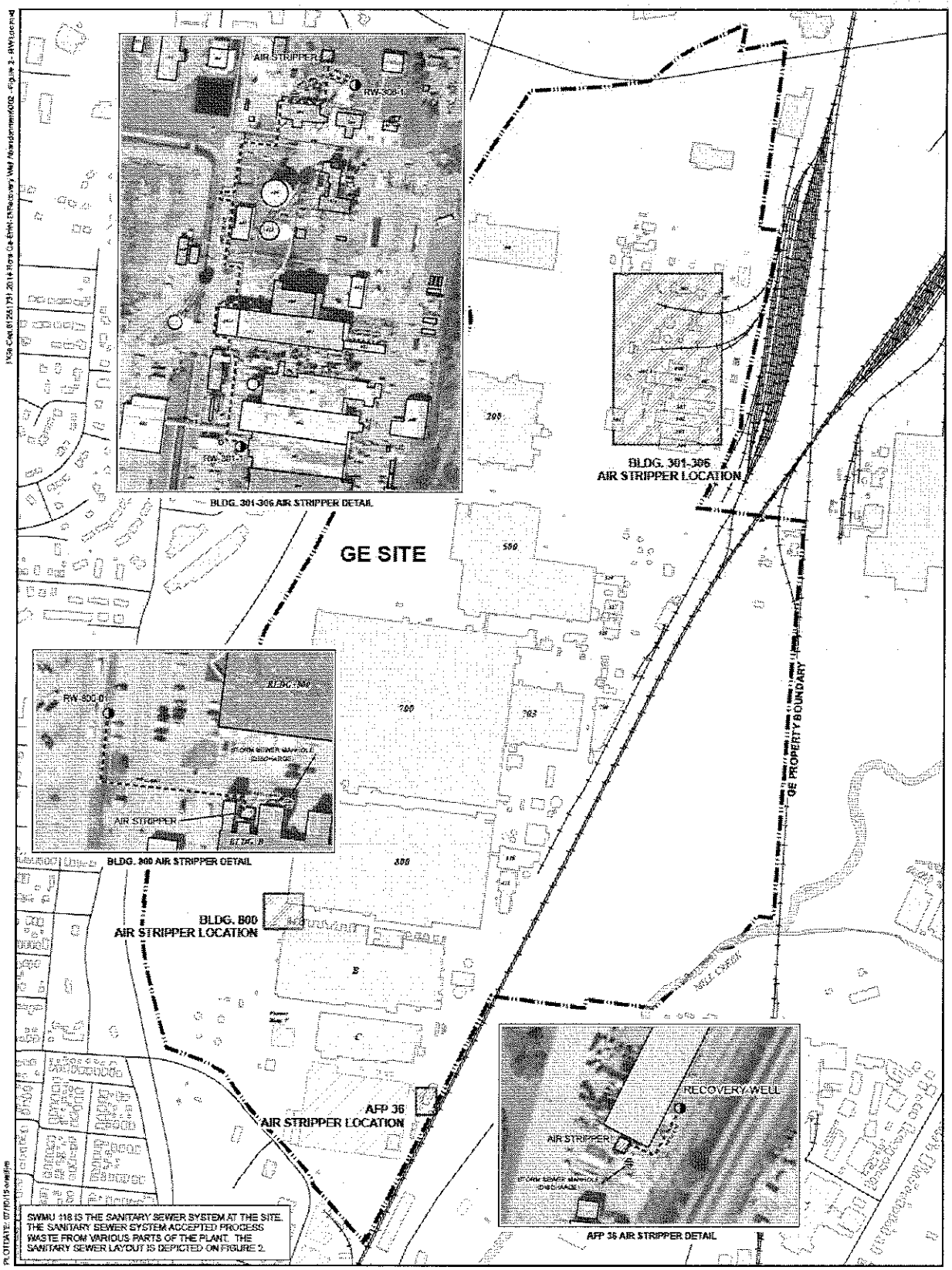


SITE LOCATION MAP

0 500 1,000 1,500 2,000
Feet

O'BRIEN & GERE
July 2015
612/51731

FIGURE 2



LEGEND

- RECOVERY WELL
- AIR STRIPPER SYSTEM AREA
- EXISTING BUILDING
- FORMER BUILDING
- 300 BUILDING ID

GE AVIATION
EVENDALE, OHIO

RECOVERY WELL AND AIR STRIPPER LOCATION MAP

0 200 400 600 1,200 1,800
Feet

N

O'BRIEN & GERE

JULY 2015

Appendix A

Analytical Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-76659-1
TestAmerica Sample Delivery Group: 480-76659-1
Client Project/Site: Well Abandonment

For:
O'Brien & Gere Inc of North America
8805 Governor's Hill Dr.
Ste. 164
Cincinnati, Ohio 45249

Attn: Terra Dalton

Authorized for release by:
3/27/2015 12:24:29 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters. exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
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
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: instrument related QC exceeds the control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)

Job ID: 480-76659-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-76659-1

Comments
No additional comments.

Receipt
The samples were received on 3/14/2015 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.7° C and 2.6° C.

Except:

The container matrix for the following samples did not match the information listed on the Chain-of-Custody (COC): AFP-36-W-5 (480-76659-3), RW-301-S-1 (480-76659-1). The container matrix of 480-76659-1 is a solid while the COC lists sample as a water. The container matrix of 480-76659-3 is a water while the COC lists sample as a soil.

GC/MS VOA
Method(s) 8260C: The following sample(s) was diluted due to the nature of the TCLP matrix: (LB 480-230602/1-A), RW-301-S-1 (480-76659-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 231171 recovered above the upper control limit for Several Analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-231171/2).

Method(s) 8260C: Surrogate recovery for the following sample was outside control limits: RW-301-S-1 (480-76659-1). Re-extraction and re-analysis was performed with concurring results. The re-analysis has been reported.

Method(s) 8260C: Reported analyte concentrations in the following sample(s) are below 200ug/kg and may be biased low due to the sample(s) not being collected according to 5035-L/5035A-L low-level specifications: RW-301-S-1 (480-76659-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010C: The TCLP Extractor Blank, LB 480-230707, contained total barium above the reporting limit (RL). The associated sample RW-301-S-1 (480-76659-1) contained a detect for this analyte at a concentration greater than 10X the value found in the TCLP Extractor Blank; therefore, re-extraction and/or re-analysis of the sample was not performed.

Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-231008/28) contained total barium outside the control limits. All reported samples (480-76659-1 MS), (480-76659-1 MSD), (480-76659-1 PDS) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6010C: The TCLP Leachate Blank, LB2 480-230707 for preparation batch 480-230754 contained cadmium above the reporting limit (RL). None of the samples associated with this TCLP Leachate Blank contained the target compound; therefore, re-extraction and/or re-analysis of sample RW-301-S-1 (480-76659-1) were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Job ID: 480-76659-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 1311: Due to the sample matrix and associated reaction to the extraction fluid, the laboratory was unable to perform the leaching procedure with the required 100g for the following sample: RW-301-S-1 (480-76659-1). The volume of leaching fluid was adjusted proportionally to maintain a 20:1 ratio of leaching fluid to weight of sample. Reporting limits (RLs) are not affected.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 230815.

Method(s) 3550C: The following sample: RW-301-S-1 (480-76659-1) was decanted prior to preparation.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: RW-301-S-1 — Lab Sample ID: 480-76659-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
GRO (C6-C10)	7.7		2.6	0.68	mg/Kg	1	☼	8015D	Total/NA
Diesel Range Organics (C10-C20)	62		35	10	mg/Kg	1	☼	8015D	Total/NA
Oil Range Organics (C20-C34)	33	J	35	10	mg/Kg	1	☼	8015D	Total/NA
Barium	0.95	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Chromium	0.036		0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.0039	J	0.010	0.0030	mg/L	1		6010C	TCLP
Selenium	0.013	J B	0.025	0.0087	mg/L	1		6010C	TCLP

Client Sample ID: RW-301-W-3 — Lab Sample ID: 480-76659-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.00068	J	0.0010	0.00034	mg/L	1		8260C	TCLP
GRO (C6-C10)	29		25	4.2	ug/L	1		8015D	Total/NA
Barium	0.32		0.0020	0.00070	mg/L	1		6010C	TCLP
Chromium	0.32		0.0040	0.0010	mg/L	1		6010C	TCLP

Client Sample ID: AFP-36-W-5 — Lab Sample ID: 480-76659-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0041	J	0.0050	0.0013	mg/L	1		8260C	TCLP
Chloroform	0.00089	J	0.0010	0.00034	mg/L	1		8260C	TCLP
Trichloroethene	0.0014		0.0010	0.00046	mg/L	1		8260C	TCLP
GRO (C6-C10)	120		25	4.2	ug/L	1		8015D	Total/NA
Barium	0.35		0.0020	0.00070	mg/L	1		6010C	TCLP
Chromium	2.5		0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.0053	J	0.010	0.0030	mg/L	1		6010C	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: RW-301-S-1

Lab Sample ID: 480-76659-1

Date Collected: 03/13/15 14:06
Date Received: 03/14/15 09:10

Matrix: Solid
Percent Solids: 47.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		8.0	0.39	ug/Kg	☼	03/22/15 22:59	03/23/15 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		64 - 126	03/22/15 22:59	03/23/15 01:19	1
4-Bromofluorobenzene (Surr)	91		72 - 126	03/22/15 22:59	03/23/15 01:19	1
Toluene-d8 (Surr)	95		71 - 125	03/22/15 22:59	03/23/15 01:19	1
Dibromofluoromethane (Surr)	21	X	60 - 140	03/22/15 22:59	03/23/15 01:19	1

Method: 8260C - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			03/18/15 07:13	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			03/18/15 07:13	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			03/18/15 07:13	10
Benzene	ND		0.010	0.0041	mg/L			03/18/15 07:13	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			03/18/15 07:13	10
Chlorobenzene	ND		0.010	0.0075	mg/L			03/18/15 07:13	10
Chloroform	ND		0.010	0.0034	mg/L			03/18/15 07:13	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			03/18/15 07:13	10
Trichloroethene	ND		0.010	0.0046	mg/L			03/18/15 07:13	10
Vinyl chloride	ND		0.010	0.0090	mg/L			03/18/15 07:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		03/18/15 07:13	10
4-Bromofluorobenzene (Surr)	104		73 - 120		03/18/15 07:13	10
Dibromofluoromethane (Surr)	107		60 - 140		03/18/15 07:13	10
Toluene-d8 (Surr)	101		71 - 126		03/18/15 07:13	10

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	7.7		2.6	0.68	mg/Kg	☼	03/16/15 08:16	03/16/15 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	52		46 - 156	03/16/15 08:16	03/16/15 19:04	1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C20)	62		35	10	mg/Kg	☼	03/16/15 08:25	03/16/15 22:34	1
Oil Range Organics (C20-C34)	33	J	35	10	mg/Kg	☼	03/16/15 08:25	03/16/15 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	79		48 - 125	03/16/15 08:25	03/16/15 22:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		430	84	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1221	ND		430	84	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1232	ND		430	84	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1242	ND		430	84	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1248	ND		430	84	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1254	ND		430	200	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1260	ND		430	200	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: RW-301-S-1

Date Collected: 03/13/15 14:06
Date Received: 03/14/15 09:10

Lab Sample ID: 480-76659-1

Matrix: Solid
Percent Solids: 47.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		430	200	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1
PCB-1268	ND		430	200	ug/Kg	☼	03/16/15 19:23	03/17/15 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*108*		*47 - 176*	*03/16/15 19:23*	*03/17/15 17:22*	*1*
Tetrachloro-m-xylene	*96*		*46 - 175*	*03/16/15 19:23*	*03/17/15 17:22*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/17/15 10:04	03/18/15 11:42	1
Barium	**0.95**	**B**	0.0020	0.00070	mg/L		03/17/15 10:04	03/18/15 11:42	1
Cadmium	ND		0.0020	0.00050	mg/L		03/17/15 10:04	03/18/15 11:42	1
Chromium	**0.036**		0.0040	0.0010	mg/L		03/17/15 10:04	03/18/15 11:42	1
Lead	**0.0039**	**J**	0.010	0.0030	mg/L		03/17/15 10:04	03/18/15 11:42	1
Selenium	**0.013**	**J B**	0.025	0.0087	mg/L		03/17/15 10:04	03/18/15 11:42	1
Silver	ND		0.0060	0.0017	mg/L		03/17/15 10:04	03/18/15 11:42	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		03/17/15 11:10	03/17/15 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	47		0.10	0.10	%			03/14/15 17:30	1

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: RW-301-W-3

Lab Sample ID: 480-76659-2

Date Collected: 03/13/15 13:27
Matrix: Water
Date Received: 03/14/15 09:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			03/21/15 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*66 - 137*		*03/21/15 04:15*	*1*
Dibromofluoromethane (Surr)	*117*		*60 - 140*		*03/21/15 04:15*	*1*
Toluene-d8 (Surr)	*108*		*71 - 126*		*03/21/15 04:15*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*03/21/15 04:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			03/19/15 20:48	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			03/19/15 20:48	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			03/19/15 20:48	1
Benzene	ND		0.0010	0.00041	mg/L			03/19/15 20:48	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			03/19/15 20:48	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			03/19/15 20:48	1
Chloroform	**0.00068**	J	0.0010	0.00034	mg/L			03/19/15 20:48	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			03/19/15 20:48	1
Trichloroethene	ND		0.0010	0.00046	mg/L			03/19/15 20:48	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			03/19/15 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*66 - 137*		*03/19/15 20:48*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*03/19/15 20:48*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*		*03/19/15 20:48*	*1*
Toluene-d8 (Surr)	*90*		*71 - 126*		*03/19/15 20:48*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	**29**		25	4.2	ug/L			03/17/15 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*120*		*61 - 125*		*03/17/15 11:43*	*1*

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.46	0.29	mg/L		03/17/15 14:18	03/20/15 13:56	1
Oil Range Organics (C28-C40)	ND		0.46	0.29	mg/L		03/17/15 14:18	03/20/15 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*79*		*29 - 136*	*03/17/15 14:18*	*03/20/15 13:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49	0.17	ug/L		03/17/15 08:47	03/17/15 19:24	1
PCB-1221	ND		0.49	0.17	ug/L		03/17/15 08:47	03/17/15 19:24	1
PCB-1232	ND		0.49	0.17	ug/L		03/17/15 08:47	03/17/15 19:24	1
PCB-1242	ND		0.49	0.17	ug/L		03/17/15 08:47	03/17/15 19:24	1
PCB-1248	ND		0.49	0.17	ug/L		03/17/15 08:47	03/17/15 19:24	1
PCB-1254	ND		0.49	0.24	ug/L		03/17/15 08:47	03/17/15 19:24	1
PCB-1260	ND		0.49	0.24	ug/L		03/17/15 08:47	03/17/15 19:24	1

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: RW-301-W-3

Lab Sample ID: 480-76659-2

Date Collected: 03/13/15 13:27
Date Received: 03/14/15 09:10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*23 - 127*	*03/17/15 08:47*	*03/17/15 19:24*	*1*
DCB Decachlorobiphenyl	*29*		*19 - 126*	*03/17/15 08:47*	*03/17/15 19:24*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/18/15 10:46	03/20/15 12:48	1
Barium	**0.32**		0.0020	0.00070	mg/L		03/18/15 10:46	03/20/15 12:48	1
Cadmium	ND		0.0020	0.00050	mg/L		03/18/15 10:46	03/19/15 12:34	1
Chromium	**0.32**		0.0040	0.0010	mg/L		03/18/15 10:46	03/19/15 12:34	1
Lead	ND		0.010	0.0030	mg/L		03/18/15 10:46	03/19/15 12:34	1
Selenium	ND		0.025	0.0087	mg/L		03/18/15 10:46	03/19/15 12:34	1
Silver	ND		0.0060	0.0017	mg/L		03/18/15 10:46	03/19/15 12:34	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		03/18/15 11:15	03/18/15 15:01	1

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: AFP-36-W-5

Lab Sample ID: 480-76659-3

Date Collected: 03/13/15 12:58
Date Received: 03/14/15 09:10

Matrix: Ground Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			03/24/15 02:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		66 - 137		03/24/15 02:33	1
Dibromofluoromethane (Surr)	80		60 - 140		03/24/15 02:33	1
Toluene-d8 (Surr)	100		71 - 126		03/24/15 02:33	1
4-Bromofluorobenzene (Surr)	91		73 - 120		03/24/15 02:33	1

Method: 8260C - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			03/19/15 21:16	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			03/19/15 21:16	1
2-Butanone (MEK)	**0.0041**	J	0.0050	0.0013	mg/L			03/19/15 21:16	1
Benzene	ND		0.0010	0.00041	mg/L			03/19/15 21:16	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			03/19/15 21:16	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			03/19/15 21:16	1
Chloroform	**0.00089**	J	0.0010	0.00034	mg/L			03/19/15 21:16	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			03/19/15 21:16	1
Trichloroethene	**0.0014**		0.0010	0.00046	mg/L			03/19/15 21:16	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			03/19/15 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		66 - 137		03/19/15 21:16	1
4-Bromofluorobenzene (Surr)	96		73 - 120		03/19/15 21:16	1
Dibromofluoromethane (Surr)	60		60 - 140		03/19/15 21:16	1
Toluene-d8 (Surr)	91		71 - 126		03/19/15 21:16	1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	**120**		25	4.2	ug/L			03/17/15 12:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	122		61 - 125		03/17/15 12:19	1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.46	0.28	mg/L		03/17/15 14:18	03/20/15 14:56	1
Oil Range Organics (C28-C40)	ND		0.46	0.28	mg/L		03/17/15 14:18	03/20/15 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	77		29 - 136	03/17/15 14:18	03/20/15 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47	0.17	ug/L		03/17/15 08:47	03/17/15 19:40	1
PCB-1221	ND		0.47	0.17	ug/L		03/17/15 08:47	03/17/15 19:40	1
PCB-1232	ND		0.47	0.17	ug/L		03/17/15 08:47	03/17/15 19:40	1
PCB-1242	ND		0.47	0.17	ug/L		03/17/15 08:47	03/17/15 19:40	1
PCB-1248	ND		0.47	0.17	ug/L		03/17/15 08:47	03/17/15 19:40	1
PCB-1254	ND		0.47	0.24	ug/L		03/17/15 08:47	03/17/15 19:40	1
PCB-1260	ND		0.47	0.24	ug/L		03/17/15 08:47	03/17/15 19:40	1

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: AFP-36-W-5

Date Collected: 03/13/15 12:58
Date Received: 03/14/15 09:10

Lab Sample ID: 480-76659-3

Matrix: Ground Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*23 - 127*	*03/17/15 08:47*	*03/17/15 19:40*	*1*
DCB Decachlorobiphenyl	*24*		*19 - 126*	*03/17/15 08:47*	*03/17/15 19:40*	*1*

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/18/15 10:46	03/20/15 12:51	1
Barium	**0.35**		0.0020	0.00070	mg/L		03/18/15 10:46	03/20/15 12:51	1
Cadmium	ND		0.0020	0.00050	mg/L		03/18/15 10:46	03/19/15 12:37	1
Chromium	**2.5**		0.0040	0.0010	mg/L		03/18/15 10:46	03/19/15 12:37	1
Lead	**0.0053**	J	0.010	0.0030	mg/L		03/18/15 10:46	03/19/15 12:37	1
Selenium	ND		0.025	0.0087	mg/L		03/18/15 10:46	03/19/15 12:37	1
Silver	ND		0.0060	0.0017	mg/L		03/18/15 10:46	03/19/15 12:37	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		03/18/15 11:15	03/18/15 15:02	1

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (66-137)	DBFM (60-140)	TOL (71-126)	BFB (73-120)
480-76659-3	AFP-36-W-5	110	80	100	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (66-137)	BFB (73-120)	DBFM (60-140)	TOL (71-126)
480-76659-3	AFP-36-W-5	115	96	60	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (64-126)	BFB (72-126)	TOL (71-125)	DBFM (60-140)
480-76659-1	RW-301-S-1	107	91	95	21 X
LCS 480-231657/1-A	Lab Control Sample	91	98	99	99
MB 480-231657/2-A	Method Blank	95	92	97	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DBFM (60-140)	12DCE (66-137)	BFB (73-120)	TOL (71-126)
LCS 480-230864/4	Lab Control Sample	102	102	107	105
MB 480-230864/6	Method Blank	107	106	105	102

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (66-137)	BFB (73-120)	DBFM (60-140)	TOL (71-126)
480-76659-1	RW-301-S-1	106	104	107	101
LB 480-230602/1-A	Method Blank	107	103	107	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (66-137)	DBFM (60-140)	TOL (71-126)	BFB (73-120)
480-76659-2	RW-301-W-3	118	117	108	104
LCS 480-231171/4	Lab Control Sample	124	109	91	93
LCS 480-231558/4	Lab Control Sample	114	110	108	101
LCS 480-231813/5	Lab Control Sample	105	104	100	95
MB 480-231171/6	Method Blank	110	101	89	87
MB 480-231558/6	Method Blank	116	114	108	101
MB 480-231813/7	Method Blank	110	112	98	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (66-137)	BFB (73-120)	DBFM (60-140)	TOL (71-126)
480-76659-2	RW-301-W-3	119	97	105	90

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Ground Water — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	TFT2 (61-125)
480-76659-3	AFP-36-W-5	122

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Solid — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	TFT2 (46-156)
480-76659-1	RW-301-S-1	52
LCS 480-230558/2-A	Lab Control Sample	63
MB 480-230558/1-A	Method Blank	70

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Water — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	TFT2 (61-125)
480-76659-2	RW-301-W-3	120
LCS 480-230702/4	Lab Control Sample	119
MB 480-230702/3	Method Blank	119

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Ground Water — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	OTPH (29-136)
480-76659-3	AFP-36-W-5	77

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

OTPH = o-Terphenyl

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Solid — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	OTPH (48-125)
480-76659-1	RW-301-S-1	79
LCS 480-230562/2-A	Lab Control Sample	90
LCSD 480-230562/3-A	Lab Control Sample Dup	90

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	OTPH (48-125)
MB 480-230562/1-A	Method Blank	76

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

OTPH = o-Terphenyl

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Water — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	OTPH (29-136)
480-76659-2	RW-301-W-3	79
LCS 480-230815/2-A	Lab Control Sample	90
LCSD 480-230815/3-A	Lab Control Sample Dup	89
MB 480-230815/1-A	Method Blank	78

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

OTPH = o-Terphenyl

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

Matrix: Ground Water — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	TCX1 (23-127)	DCB1 (19-126)
480-76659-3	AFP-36-W-5	74	24

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

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

Matrix: Solid — Prep Type: Total/NA

Lab Sample ID	Client Sample ID	DCB2 (47-176)	TCX2 (46-175)
480-76659-1	RW-301-S-1	108	96
LCS 480-230668/2-A	Lab Control Sample	123	103
MB 480-230668/1-A	Method Blank	106	91

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(23-127)	(19-126)
480-76659-2	RW-301-W-3	76	29
LCS 480-230725/2-A	Lab Control Sample	85	55
MB 480-230725/1-A	Method Blank	80	67

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-230864/6
Matrix: Solid
Analysis Batch: 230864

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			03/17/15 23:40	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			03/17/15 23:40	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			03/17/15 23:40	1
Benzene	ND		0.0010	0.00041	mg/L			03/17/15 23:40	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			03/17/15 23:40	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			03/17/15 23:40	1
Chloroform	ND		0.0010	0.00034	mg/L			03/17/15 23:40	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			03/17/15 23:40	1
Trichloroethene	ND		0.0010	0.00046	mg/L			03/17/15 23:40	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			03/17/15 23:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*03/17/15 23:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*03/17/15 23:40*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*		*03/17/15 23:40*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*03/17/15 23:40*	*1*

Lab Sample ID: LCS 480-230864/4
Matrix: Solid
Analysis Batch: 230864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.0250	0.0256		mg/L		102	58 - 121
1,2-Dichloroethane	0.0250	0.0242		mg/L		97	75 - 127
Benzene	0.0250	0.0236		mg/L		94	71 - 124
Chlorobenzene	0.0250	0.0250		mg/L		100	72 - 120
Tetrachloroethene	0.0250	0.0250		mg/L		100	74 - 122
Trichloroethene	0.0250	0.0232		mg/L		93	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*60 - 140*
Toluene-d8 (Surr)	*105*		*71 - 126*

Lab Sample ID: MB 480-231171/6
Matrix: Water
Analysis Batch: 231171

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			03/19/15 13:26	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			03/19/15 13:26	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			03/19/15 13:26	1
Benzene	ND		0.0010	0.00041	mg/L			03/19/15 13:26	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			03/19/15 13:26	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			03/19/15 13:26	1
Chloroform	ND		0.0010	0.00034	mg/L			03/19/15 13:26	1

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

Lab Sample ID: MB 480-231171/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231171

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.0010	0.00036	mg/L			03/19/15 13:26	1
Trichloroethene	ND		0.0010	0.00046	mg/L			03/19/15 13:26	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			03/19/15 13:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		66 - 137		03/19/15 13:26	1
4-Bromofluorobenzene (Surr)	87		73 - 120		03/19/15 13:26	1
Dibromofluoromethane (Surr)	101		60 - 140		03/19/15 13:26	1
Toluene-d8 (Surr)	89		71 - 126		03/19/15 13:26	1

Lab Sample ID: LCS 480-231171/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.0250	0.0257		mg/L		103	58 - 121
1,2-Dichloroethane	0.0250	0.0316		mg/L		126	75 - 127
Benzene	0.0250	0.0272		mg/L		109	71 - 124
Chlorobenzene	0.0250	0.0212		mg/L		85	72 - 120
Tetrachloroethene	0.0250	0.0219		mg/L		88	74 - 122
Trichloroethene	0.0250	0.0284		mg/L		113	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	124		66 - 137
4-Bromofluorobenzene (Surr)	93		73 - 120
Dibromofluoromethane (Surr)	109		60 - 140
Toluene-d8 (Surr)	91		71 - 126

Lab Sample ID: MB 480-231558/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			03/20/15 23:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		66 - 137		03/20/15 23:06	1
4-Bromofluorobenzene (Surr)	101		73 - 120		03/20/15 23:06	1
Dibromofluoromethane (Surr)	114		60 - 140		03/20/15 23:06	1
Toluene-d8 (Surr)	108		71 - 126		03/20/15 23:06	1

Lab Sample ID: LCS 480-231558/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231558

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	24.7		ug/L		99	71 - 124

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

Lab Sample ID: LCS 480-231558/4
Matrix: Water
Analysis Batch: 231558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	114		66 - 137
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	110		60 - 140
Toluene-d8 (Surr)	108		71 - 126

Lab Sample ID: MB 480-231657/2-A
Matrix: Solid
Analysis Batch: 231650

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 231657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.9	0.24	ug/Kg		03/22/15 22:59	03/23/15 00:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		64 - 126	03/22/15 22:59	03/23/15 00:10	1
4-Bromofluorobenzene (Surr)	92		72 - 126	03/22/15 22:59	03/23/15 00:10	1
Dibromofluoromethane (Surr)	98		60 - 140	03/22/15 22:59	03/23/15 00:10	1
Toluene-d8 (Surr)	97		71 - 125	03/22/15 22:59	03/23/15 00:10	1

Lab Sample ID: LCS 480-231657/1-A
Matrix: Solid
Analysis Batch: 231650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 231657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	48.9	48.6		ug/Kg		99	79 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		64 - 126
4-Bromofluorobenzene (Surr)	98		72 - 126
Dibromofluoromethane (Surr)	99		60 - 140
Toluene-d8 (Surr)	99		71 - 125

Lab Sample ID: MB 480-231813/7
Matrix: Water
Analysis Batch: 231813

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			03/24/15 00:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		66 - 137		03/24/15 00:00	1
4-Bromofluorobenzene (Surr)	91		73 - 120		03/24/15 00:00	1
Dibromofluoromethane (Surr)	112		60 - 140		03/24/15 00:00	1
Toluene-d8 (Surr)	98		71 - 126		03/24/15 00:00	1

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

Lab Sample ID: LCS 480-231813/5
Matrix: Water
Analysis Batch: 231813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			25.0	23.6		ug/L		95	71 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*100*		*71 - 126*

Lab Sample ID: LB 480-230602/1-A
Matrix: Solid
Analysis Batch: 230864

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			03/18/15 03:25	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			03/18/15 03:25	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			03/18/15 03:25	10
Benzene	ND		0.010	0.0041	mg/L			03/18/15 03:25	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			03/18/15 03:25	10
Chlorobenzene	ND		0.010	0.0075	mg/L			03/18/15 03:25	10
Chloroform	ND		0.010	0.0034	mg/L			03/18/15 03:25	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			03/18/15 03:25	10
Trichloroethene	ND		0.010	0.0046	mg/L			03/18/15 03:25	10
Vinyl chloride	ND		0.010	0.0090	mg/L			03/18/15 03:25	10

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*03/18/15 03:25*	*10*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*03/18/15 03:25*	*10*
Dibromofluoromethane (Surr)	*107*		*60 - 140*		*03/18/15 03:25*	*10*
Toluene-d8 (Surr)	*103*		*71 - 126*		*03/18/15 03:25*	*10*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 480-230558/1-A
Matrix: Solid
Analysis Batch: 230573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	ND		1.2	0.30	mg/Kg		03/16/15 08:16	03/16/15 10:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*70*		*46 - 156*	*03/16/15 08:16*	*03/16/15 10:05*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 480-230558/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230573 — **Prep Batch: 230558**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	9.38	7.28		mg/Kg		78	64 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	63		46 - 156

Lab Sample ID: MB 480-230702/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 230702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	ND		25	4.2	ug/L			03/17/15 09:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	119		61 - 125		03/17/15 09:31	1

Lab Sample ID: LCS 480-230702/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 230702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	200	160		ug/L		80	61 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	119		61 - 125

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 480-230562/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230563 — **Prep Batch: 230562**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C20)	ND		17	5.0	mg/Kg		03/16/15 08:25	03/16/15 19:33	1
Oil Range Organics (C20-C34)	ND		17	5.0	mg/Kg		03/16/15 08:25	03/16/15 19:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	76		48 - 125	03/16/15 08:25	03/16/15 19:33	1

Lab Sample ID: LCS 480-230562/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230563 — **Prep Batch: 230562**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	90		48 - 125

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 480-230562/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230563 — **Prep Batch: 230562**

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*90*		*48 - 125*

Lab Sample ID: MB 480-230815/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231425 — **Prep Batch: 230815**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.50	0.31	mg/L		03/17/15 14:18	03/20/15 10:56	1
Oil Range Organics (C28-C40)	ND		0.50	0.31	mg/L		03/17/15 14:18	03/20/15 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*29 - 136*	*03/17/15 14:18*	*03/20/15 10:56*	*1*

Lab Sample ID: LCS 480-230815/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231425 — **Prep Batch: 230815**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	1.50	1.28		mg/L		85	42 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*90*		*29 - 136*

Lab Sample ID: LCSD 480-230815/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231425 — **Prep Batch: 230815**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	1.50	1.21		mg/L		81	42 - 120	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*89*		*29 - 136*

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

Lab Sample ID: MB 480-230668/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230782 — **Prep Batch: 230668**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		210	42	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1221	ND		210	42	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1232	ND		210	42	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1242	ND		210	42	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1248	ND		210	42	ug/Kg		03/16/15 19:23	03/17/15 11:11	1

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

Lab Sample ID: MB 480-230668/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230782 — **Prep Batch: 230668**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		210	100	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1260	ND		210	100	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1262	ND		210	100	ug/Kg		03/16/15 19:23	03/17/15 11:11	1
PCB-1268	ND		210	100	ug/Kg		03/16/15 19:23	03/17/15 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*47 - 176*	*03/16/15 19:23*	*03/17/15 11:11*	*1*
Tetrachloro-m-xylene	*91*		*46 - 175*	*03/16/15 19:23*	*03/17/15 11:11*	*1*

Lab Sample ID: LCS 480-230668/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230782 — **Prep Batch: 230668**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2300	2640		ug/Kg		115	51 - 185
PCB-1260	2300	3010		ug/Kg		131	61 - 184

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*123*		*47 - 176*
Tetrachloro-m-xylene	*103*		*46 - 175*

Lab Sample ID: MB 480-230725/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 230841 — **Prep Batch: 230725**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		03/17/15 08:47	03/17/15 17:49	1
PCB-1221	ND		0.50	0.18	ug/L		03/17/15 08:47	03/17/15 17:49	1
PCB-1232	ND		0.50	0.18	ug/L		03/17/15 08:47	03/17/15 17:49	1
PCB-1242	ND		0.50	0.18	ug/L		03/17/15 08:47	03/17/15 17:49	1
PCB-1248	ND		0.50	0.18	ug/L		03/17/15 08:47	03/17/15 17:49	1
PCB-1254	ND		0.50	0.25	ug/L		03/17/15 08:47	03/17/15 17:49	1
PCB-1260	ND		0.50	0.25	ug/L		03/17/15 08:47	03/17/15 17:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*67*		*19 - 126*	*03/17/15 08:47*	*03/17/15 17:49*	*1*
Tetrachloro-m-xylene	*80*		*23 - 127*	*03/17/15 08:47*	*03/17/15 17:49*	*1*

Lab Sample ID: LCS 480-230725/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 230841 — **Prep Batch: 230725**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.03		ug/L		76	51 - 137
PCB-1260	4.00	2.62		ug/L		66	45 - 139

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

Lab Sample ID: LCS 480-230725/2-A
Matrix: Water
Analysis Batch: 230841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230725

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*55*		*19 - 126*
Tetrachloro-m-xylene	*85*		*23 - 127*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-230754/2-A
Matrix: Solid
Analysis Batch: 231008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230754

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/17/15 10:04	03/18/15 11:37	1
Barium	ND		0.0020	0.00070	mg/L		03/17/15 10:04	03/18/15 11:37	1
Cadmium	ND		0.0020	0.00050	mg/L		03/17/15 10:04	03/18/15 11:37	1
Chromium	ND		0.0040	0.0010	mg/L		03/17/15 10:04	03/18/15 11:37	1
Lead	ND		0.010	0.0030	mg/L		03/17/15 10:04	03/18/15 11:37	1
Selenium	ND		0.025	0.0087	mg/L		03/17/15 10:04	03/18/15 11:37	1
Silver	ND		0.0060	0.0017	mg/L		03/17/15 10:04	03/18/15 11:37	1

Lab Sample ID: LCS 480-230754/3-A
Matrix: Solid
Analysis Batch: 231008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230754

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.930		mg/L		93	80 - 120
Barium	1.00	1.01		mg/L		101	80 - 120
Cadmium	1.00	0.947		mg/L		95	80 - 120
Chromium	1.00	0.907		mg/L		91	80 - 120
Lead	1.00	0.939		mg/L		94	80 - 120
Selenium	1.00	1.05		mg/L		105	80 - 120
Silver	1.00	1.03		mg/L		103	80 - 120

Lab Sample ID: MB 480-230954/1-A
Matrix: Water
Analysis Batch: 231401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020	0.00050	mg/L		03/18/15 10:46	03/19/15 12:20	1
Chromium	ND		0.0040	0.0010	mg/L		03/18/15 10:46	03/19/15 12:20	1
Lead	ND		0.010	0.0030	mg/L		03/18/15 10:46	03/19/15 12:20	1
Selenium	ND		0.025	0.0087	mg/L		03/18/15 10:46	03/19/15 12:20	1
Silver	ND		0.0060	0.0017	mg/L		03/18/15 10:46	03/19/15 12:20	1

Lab Sample ID: MB 480-230954/1-A
Matrix: Water
Analysis Batch: 231500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/18/15 10:46	03/20/15 12:42	1

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

Lab Sample ID: MB 480-230954/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231500 — **Prep Batch: 230954**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		03/18/15 10:46	03/20/15 12:42	1

Lab Sample ID: LCS 480-230954/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231401 — **Prep Batch: 230954**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	1.00	0.995		mg/L		99	80 - 120
Chromium	1.00	1.00		mg/L		100	80 - 120
Lead	1.00	0.992		mg/L		99	80 - 120
Selenium	1.00	1.00		mg/L		100	80 - 120
Silver	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: LCS 480-230954/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231500 — **Prep Batch: 230954**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.01		mg/L		101	80 - 120
Barium	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: LB2 480-230707/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 231008 — **Prep Batch: 230754**

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		03/17/15 10:04	03/18/15 11:34	1
Barium	0.0118		0.0020	0.00070	mg/L		03/17/15 10:04	03/18/15 11:34	1
Cadmium	0.00202		0.0020	0.00050	mg/L		03/17/15 10:04	03/18/15 11:34	1
Chromium	ND		0.0040	0.0010	mg/L		03/17/15 10:04	03/18/15 11:34	1
Lead	ND		0.010	0.0030	mg/L		03/17/15 10:04	03/18/15 11:34	1
Selenium	0.00941	J	0.025	0.0087	mg/L		03/17/15 10:04	03/18/15 11:34	1
Silver	ND		0.0060	0.0017	mg/L		03/17/15 10:04	03/18/15 11:34	1

Lab Sample ID: 480-76659-1 MS — **Client Sample ID: RW-301-S-1**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 231008 — **Prep Batch: 230754**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		1.00	1.03		mg/L		103	75 - 125
Barium	0.95	B	1.00	1.91	^	mg/L		96	75 - 125
Cadmium	ND		1.00	1.03		mg/L		103	75 - 125
Chromium	0.036		1.00	0.901		mg/L		86	75 - 125
Lead	0.0039	J	1.00	0.973		mg/L		97	75 - 125
Selenium	0.013	J B	1.00	1.15		mg/L		114	75 - 125
Silver	ND		1.00	1.15		mg/L		115	75 - 125

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

Lab Sample ID: 480-76659-1 MSD — **Client Sample ID: RW-301-S-1**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 231008 — **Prep Batch: 230754**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.05		mg/L		105	75 - 125	2	20
Barium	0.95	B	1.00	1.94	^	mg/L		99	75 - 125	1	20
Cadmium	ND		1.00	1.05		mg/L		105	75 - 125	2	20
Chromium	0.036		1.00	0.909		mg/L		87	75 - 125	1	20
Lead	0.0039	J	1.00	0.991		mg/L		99	75 - 125	2	20
Selenium	0.013	J B	1.00	1.17		mg/L		116	75 - 125	2	20
Silver	ND		1.00	1.18		mg/L		118	75 - 125	2	20

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-230770/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230839 — **Prep Batch: 230770**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		03/17/15 11:10	03/17/15 15:00	1

Lab Sample ID: LCS 480-230770/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 230839 — **Prep Batch: 230770**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00668	0.00617		mg/L		92	80 - 120

Lab Sample ID: MB 480-230975/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231038 — **Prep Batch: 230975**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		03/18/15 11:15	03/18/15 14:58	1

Lab Sample ID: LCS 480-230975/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 231038 — **Prep Batch: 230975**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00665		mg/L		100	80 - 120

Lab Sample ID: LB2 480-230707/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 230839 — **Prep Batch: 230770**

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		03/17/15 11:10	03/17/15 14:58	1

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: 480-76659-1 MS
Matrix: Solid
Analysis Batch: 230839

Client Sample ID: RW-301-S-1
Prep Type: TCLP
Prep Batch: 230770

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00668	0.00563		mg/L		84	80 - 120

Lab Sample ID: 480-76659-1 MSD
Matrix: Solid
Analysis Batch: 230839

Client Sample ID: RW-301-S-1
Prep Type: TCLP
Prep Batch: 230770

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00668	0.00555		mg/L		83	80 - 120	1	20

QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

GC/MS VOA

Leach Batch: 230602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	1311	
LB 480-230602/1-A	Method Blank	TCLP	Solid	1311	

Leach Batch: 230858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	1311	
480-76659-3	AFP-36-W-5	TCLP	Ground Water	1311	

Analysis Batch: 230864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	8260C	230602
LB 480-230602/1-A	Method Blank	TCLP	Solid	8260C	230602
LCS 480-230864/4	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-230864/6	Method Blank	Total/NA	Solid	8260C	

Analysis Batch: 231171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	8260C	230858
480-76659-3	AFP-36-W-5	TCLP	Ground Water	8260C	230858
LCS 480-231171/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-231171/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 231558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	Total/NA	Water	8260C	
LCS 480-231558/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-231558/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 231650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	8260C	231657
LCS 480-231657/1-A	Lab Control Sample	Total/NA	Solid	8260C	231657
MB 480-231657/2-A	Method Blank	Total/NA	Solid	8260C	231657

Prep Batch: 231657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	5035	
LCS 480-231657/1-A	Lab Control Sample	Total/NA	Solid	5035	
MB 480-231657/2-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 231813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-3	AFP-36-W-5	Total/NA	Ground Water	8260C	
LCS 480-231813/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-231813/7	Method Blank	Total/NA	Water	8260C	

QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

GC VOA

Prep Batch: 230558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	5030C	
LCS 480-230558/2-A	Lab Control Sample	Total/NA	Solid	5030C	
MB 480-230558/1-A	Method Blank	Total/NA	Solid	5030C	

Analysis Batch: 230573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	8015D	230558
LCS 480-230558/2-A	Lab Control Sample	Total/NA	Solid	8015D	230558
MB 480-230558/1-A	Method Blank	Total/NA	Solid	8015D	230558

Analysis Batch: 230702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	Total/NA	Water	8015D	
480-76659-3	AFP-36-W-5	Total/NA	Ground Water	8015D	
LCS 480-230702/4	Lab Control Sample	Total/NA	Water	8015D	
MB 480-230702/3	Method Blank	Total/NA	Water	8015D	

GC Semi VOA

Prep Batch: 230562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	3550C	
LCS 480-230562/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 480-230562/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
MB 480-230562/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 230563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	8015D	230562
LCS 480-230562/2-A	Lab Control Sample	Total/NA	Solid	8015D	230562
LCSD 480-230562/3-A	Lab Control Sample Dup	Total/NA	Solid	8015D	230562
MB 480-230562/1-A	Method Blank	Total/NA	Solid	8015D	230562

Prep Batch: 230668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	3550C	
LCS 480-230668/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-230668/1-A	Method Blank	Total/NA	Solid	3550C	

Prep Batch: 230725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	Total/NA	Water	3510C	
480-76659-3	AFP-36-W-5	Total/NA	Ground Water	3510C	
LCS 480-230725/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-230725/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 230782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	8082A	230668
LCS 480-230668/2-A	Lab Control Sample	Total/NA	Solid	8082A	230668

GC Semi VOA (Continued)

Analysis Batch: 230782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-230668/1-A	Method Blank	Total/NA	Solid	8082A	230668

Prep Batch: 230815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	Total/NA	Water	3510C	
480-76659-3	AFP-36-W-5	Total/NA	Ground Water	3510C	
LCS 480-230815/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-230815/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-230815/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 230841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	Total/NA	Water	8082A	230725
480-76659-3	AFP-36-W-5	Total/NA	Ground Water	8082A	230725
LCS 480-230725/2-A	Lab Control Sample	Total/NA	Water	8082A	230725
MB 480-230725/1-A	Method Blank	Total/NA	Water	8082A	230725

Analysis Batch: 231425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	Total/NA	Water	8015D	230815
480-76659-3	AFP-36-W-5	Total/NA	Ground Water	8015D	230815
LCS 480-230815/2-A	Lab Control Sample	Total/NA	Water	8015D	230815
LCSD 480-230815/3-A	Lab Control Sample Dup	Total/NA	Water	8015D	230815
MB 480-230815/1-A	Method Blank	Total/NA	Water	8015D	230815

Metals

Leach Batch: 230707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	1311	
480-76659-1 MS	RW-301-S-1	TCLP	Solid	1311	
480-76659-1 MSD	RW-301-S-1	TCLP	Solid	1311	
LB2 480-230707/1-B	Method Blank	TCLP	Solid	1311	
LB2 480-230707/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 230754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	3010A	230707
480-76659-1 MS	RW-301-S-1	TCLP	Solid	3010A	230707
480-76659-1 MSD	RW-301-S-1	TCLP	Solid	3010A	230707
LB2 480-230707/1-B	Method Blank	TCLP	Solid	3010A	230707
LCS 480-230754/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-230754/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 230770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	7470A	230707
480-76659-1 MS	RW-301-S-1	TCLP	Solid	7470A	230707
480-76659-1 MSD	RW-301-S-1	TCLP	Solid	7470A	230707
LB2 480-230707/1-C	Method Blank	TCLP	Solid	7470A	230707

Metals (Continued)

Prep Batch: 230770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-230770/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 480-230770/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 230839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	7470A	230770
480-76659-1 MS	RW-301-S-1	TCLP	Solid	7470A	230770
480-76659-1 MSD	RW-301-S-1	TCLP	Solid	7470A	230770
LB2 480-230707/1-C	Method Blank	TCLP	Solid	7470A	230770
LCS 480-230770/3-A	Lab Control Sample	Total/NA	Solid	7470A	230770
MB 480-230770/2-A	Method Blank	Total/NA	Solid	7470A	230770

Leach Batch: 230903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	1311	
480-76659-3	AFP-36-W-5	TCLP	Ground Water	1311	

Prep Batch: 230954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	3010A	230903
480-76659-3	AFP-36-W-5	TCLP	Ground Water	3010A	230903
LCS 480-230954/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 480-230954/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 230975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	7470A	230903
480-76659-3	AFP-36-W-5	TCLP	Ground Water	7470A	230903
LCS 480-230975/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-230975/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 231008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	TCLP	Solid	6010C	230754
480-76659-1 MS	RW-301-S-1	TCLP	Solid	6010C	230754
480-76659-1 MSD	RW-301-S-1	TCLP	Solid	6010C	230754
LB2 480-230707/1-B	Method Blank	TCLP	Solid	6010C	230754
LCS 480-230754/3-A	Lab Control Sample	Total/NA	Solid	6010C	230754
MB 480-230754/2-A	Method Blank	Total/NA	Solid	6010C	230754

Analysis Batch: 231038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	7470A	230975
480-76659-3	AFP-36-W-5	TCLP	Ground Water	7470A	230975
LCS 480-230975/2-A	Lab Control Sample	Total/NA	Water	7470A	230975
MB 480-230975/1-A	Method Blank	Total/NA	Water	7470A	230975

Analysis Batch: 231401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	6010C	230954
480-76659-3	AFP-36-W-5	TCLP	Ground Water	6010C	230954

QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Metals (Continued)

Analysis Batch: 231401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-230954/2-A	Lab Control Sample	Total/NA	Water	6010C	230954
MB 480-230954/1-A	Method Blank	Total/NA	Water	6010C	230954

Analysis Batch: 231500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-2	RW-301-W-3	TCLP	Water	6010C	230954
480-76659-3	AFP-36-W-5	TCLP	Ground Water	6010C	230954
LCS 480-230954/2-A	Lab Control Sample	Total/NA	Water	6010C	230954
MB 480-230954/1-A	Method Blank	Total/NA	Water	6010C	230954

General Chemistry

Analysis Batch: 230529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-76659-1	RW-301-S-1	Total/NA	Solid	Moisture	

Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: RW-301-S-1

Lab Sample ID: 480-76659-1

Date Collected: 03/13/15 14:06
Date Received: 03/14/15 09:10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			230602	03/16/15 11:01	MRB	TAL BUF
TCLP	Analysis	8260C		10	230864	03/18/15 07:13	LJF	TAL BUF
Total/NA	Prep	5035			231657	03/22/15 22:59	CDC	TAL BUF
Total/NA	Analysis	8260C		1	231650	03/23/15 01:19	RAS	TAL BUF
Total/NA	Prep	5030C			230558	03/16/15 08:16	MAN	TAL BUF
Total/NA	Analysis	8015D		1	230573	03/16/15 19:04	MAN	TAL BUF
Total/NA	Prep	3550C			230562	03/16/15 08:25	TRG	TAL BUF
Total/NA	Analysis	8015D		1	230563	03/16/15 22:34	JMO	TAL BUF
Total/NA	Prep	3550C			230668	03/16/15 19:23	CPH	TAL BUF
Total/NA	Analysis	8082A		1	230782	03/17/15 17:22	KS	TAL BUF
TCLP	Leach	1311			230707	03/16/15 10:55	MRB	TAL BUF
TCLP	Prep	3010A			230754	03/17/15 10:04	TAS	TAL BUF
TCLP	Analysis	6010C		1	231008	03/18/15 11:42	LMH	TAL BUF
TCLP	Leach	1311			230707	03/16/15 10:55	MRB	TAL BUF
TCLP	Prep	7470A			230770	03/17/15 11:10	LRK	TAL BUF
TCLP	Analysis	7470A		1	230839	03/17/15 15:03	LRK	TAL BUF
Total/NA	Analysis	Moisture		1	230529	03/14/15 17:30	CMK	TAL BUF

Client Sample ID: RW-301-W-3

Lab Sample ID: 480-76659-2

Date Collected: 03/13/15 13:27
Date Received: 03/14/15 09:10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			230858	03/17/15 16:53	MRB	TAL BUF
TCLP	Analysis	8260C		1	231171	03/19/15 20:48	GTG	TAL BUF
Total/NA	Analysis	8260C		1	231558	03/21/15 04:15	RAS	TAL BUF
Total/NA	Analysis	8015D		1	230702	03/17/15 11:43	MAN	TAL BUF
Total/NA	Prep	3510C			230815	03/17/15 14:18	CPH	TAL BUF
Total/NA	Analysis	8015D		1	231425	03/20/15 13:56	JMO	TAL BUF
Total/NA	Prep	3510C			230725	03/17/15 08:47	TRG	TAL BUF
Total/NA	Analysis	8082A		1	230841	03/17/15 19:24	KS	TAL BUF
TCLP	Leach	1311			230903	03/18/15 08:12	MRB	TAL BUF
TCLP	Prep	3010A			230954	03/18/15 10:46	KJ1	TAL BUF
TCLP	Analysis	6010C		1	231401	03/19/15 12:34	AMH	TAL BUF
TCLP	Leach	1311			230903	03/18/15 08:12	MRB	TAL BUF
TCLP	Prep	3010A			230954	03/18/15 10:46	KJ1	TAL BUF
TCLP	Analysis	6010C		1	231500	03/20/15 12:48	AMH	TAL BUF
TCLP	Leach	1311			230903	03/18/15 08:12	MRB	TAL BUF
TCLP	Prep	7470A			230975	03/18/15 11:15	LRK	TAL BUF
TCLP	Analysis	7470A		1	231038	03/18/15 15:01	LRK	TAL BUF

Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Client Sample ID: AFP-36-W-5

Date Collected: 03/13/15 12:58
Date Received: 03/14/15 09:10

Lab Sample ID: 480-76659-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			230858	03/17/15 16:53	MRB	TAL BUF
TCLP	Analysis	8260C		1	231171	03/19/15 21:16	GTG	TAL BUF
Total/NA	Analysis	8260C		1	231813	03/24/15 02:33	LJF	TAL BUF
Total/NA	Analysis	8015D		1	230702	03/17/15 12:19	MAN	TAL BUF
Total/NA	Prep	3510C			230815	03/17/15 14:18	CPH	TAL BUF
Total/NA	Analysis	8015D		1	231425	03/20/15 14:56	JMO	TAL BUF
Total/NA	Prep	3510C			230725	03/17/15 08:47	TRG	TAL BUF
Total/NA	Analysis	8082A		1	230841	03/17/15 19:40	KS	TAL BUF
TCLP	Leach	1311			230903	03/18/15 08:12	MRB	TAL BUF
TCLP	Prep	3010A			230954	03/18/15 10:46	KJ1	TAL BUF
TCLP	Analysis	6010C		1	231401	03/19/15 12:37	AMH	TAL BUF
TCLP	Leach	1311			230903	03/18/15 08:12	MRB	TAL BUF
TCLP	Prep	3010A			230954	03/18/15 10:46	KJ1	TAL BUF
TCLP	Analysis	6010C		1	231500	03/20/15 12:51	AMH	TAL BUF
TCLP	Leach	1311			230903	03/18/15 08:12	MRB	TAL BUF
TCLP	Prep	7470A			230975	03/18/15 11:15	LRK	TAL BUF
TCLP	Analysis	7470A		1	231038	03/18/15 15:02	LRK	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Laboratory: TestAmerica Buffalo

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	88-0686	07-06-15
California	State Program	9	1169CA	09-30-15
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-15
Georgia	State Program	4	N/A	03-31-15 *
Georgia	State Program	4	956	03-31-15 *
Illinois	NELAP	5	200003	09-30-15
Iowa	State Program	7	374	03-01-15 *
Kansas	NELAP	7	E-10187	03-31-15 *
Kentucky (DW)	State Program	4	90029	12-31-15
Kentucky (UST)	State Program	4	30	03-31-15 *
Kentucky (WW)	State Program	4	90029	12-31-15
Louisiana	NELAP	6	02031	06-30-15
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-15 *
Massachusetts	State Program	1	M-NY044	06-30-15
Michigan	State Program	5	9937	03-31-15 *
Minnesota	NELAP	5	036-999-337	12-31-15
New Hampshire	NELAP	1	2337	11-17-15
New Jersey	NELAP	2	NY455	06-30-15
New York	NELAP	2	10026	03-31-15 *
North Dakota	State Program	8	R-176	03-31-15 *
Oklahoma	State Program	6	9421	08-31-15
Oregon	NELAP	10	NY200003	06-09-15
Pennsylvania	NELAP	3	68-00281	07-31-15
Rhode Island	State Program	1	LAO00328	12-30-15
Tennessee	State Program	4	TN02970	03-31-15 *
Texas	NELAP	6	T104704412-11-2	07-31-15
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-15
Washington	State Program	10	C784	02-10-16
West Virginia DEP	State Program	3	252	09-30-15
Wisconsin	State Program	5	998310390	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8015D	Gasoline Range Organics (GRO) (GC)	SW846	TAL BUF
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Well Abandonment

TestAmerica Job ID: 480-76659-1
SDG: 480-76659-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-76659-1	RW-301-S-1	Solid	03/13/15 14:06	03/14/15 09:10
480-76659-2	RW-301-W-3	Water	03/13/15 13:27	03/14/15 09:10
480-76659-3	AFP-36-W-5	Ground Water	03/13/15 12:58	03/14/15 09:10

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TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Terra Dalton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-64718-16385.1
Client Contact: Chase Forman	Phone: 513 697 2020	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: O'Brien & Gere Inc of North America				Job #:
Address: 8805 Governor's Hill Dr. Ste. 164	Due Date Requested:			
City: Cincinnati	TAT Requested (days): 14			
State, Zip: OH, 45249				
Phone: 513-697-2020	PO #: 11412400			
Email: chase.forman@obg.com	WO #: 51503-2			
Project Name: GE - Evendale, OH site	Project #: 48003453			
Site: Ohio	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wastewater, Seawater, Drinking/Wastewater, Soil, Sediment, Air, Water, Solid, Oil, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8082A - TCL PCBs - OLM04.2	8015D_GRO - Gasoline Range Range Organics	8260C - Benzene	8010C - TCLP Metals ICP	7470A - TCLP Mercury	8260C - TCLP Volatiles	8015D_DRO - Diesel Range Range Organics	8260C - Benzene	8010C, 7470A	8015D_DRO, 8082A	8015D_GRO - Gasoline Range Range Organics			Total Number of containers	Special Instructions/Note:
			Preservation Code		X	X	N	A	A	N	N	N	S	N	N	N	N			X	
RW-301-S-1	3/13/15	1406	G	Water	N	N						X		X	X	X	X				
RW-301-W-3	3/13/15	1327	G	Water	N	N	X	X	X	X	X	X	X								
AFP-36-W-5	3/13/15	1258	G	Solid	N	N	X	X	X	X	X	X	X								

480-76659 Chain of Custody

Cincinnati

210501

Ref:
Dep:
Date: 13Mar15
Wgt: 35.00 LBS
DV: 0.00
SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00
Svcs: PRIORITY OVERNIGHT Master 7003 1336 3732 TRCK: 7003 1336 3732

Ref:
Dep:
Date: 13Mar15
Wgt: 35.00 LBS
DV: 0.00
SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00
Svcs: PRIORITY OVERNIGHT Master 7003 1336 3732 TRCK: 7003 1336 3743

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Terra Dalton O'BRIEN & GERE	3/13/15 1542		[signature]	3/13/15 1545	TAI
[signature]	3/13/15 1545		[signature]	03/14/15 0910	TA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.6 1.7 #1

3/27/2015

Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-76659-1
SDG Number: 480-76659-1

Login Number: 76659
List Number: 1
Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers and the COC.	False	matrix on sample 01 and 03 are different than COC
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	True	terra core 03/14/15 @ 1200
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	obg
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-78365-1
Client Project/Site: Waste Characterization

For:
O'Brien & Gere Inc of North America
8805 Governor's Hill Dr.
Ste. 164
Cincinnati, Ohio 45249

Attn: Chase Forman

Authorized for release by:
4/24/2015 12:45:02 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II
(716)504-9838
john.schove@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters. exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Qualifiers

GC/MS 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 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.
*	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)

Job ID: 480-78365-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-78365-1

Comments
No additional comments.

Receipt
The sample was received on 4/14/2015 8:45 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

GC/MS VOA
Method(s) 8260C: Reported analyte concentrations in the following samples are below 200ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: AS-01-041315 (480-78365-1).

Method(s) 8260C: The following samples were diluted due to the nature of the TCLP matrix: AS-01-041315 (480-78365-1) and (LB 480-236287/1-A). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 236682 recovered outside acceptance criteria, low biased, for Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015D: Reported analyte concentrations in the following samples are below 200ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: AS-01-041315 (480-78365-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010C: The low level continuing calibration verification (CCVL 480-236883/21 and 480-236883/31) recovered above the upper control limit for total chromium. The sample AS-01-041315 (480-78365-1) associated with this CCVL were either ND or less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6010C: The TCLP leachate blank 480-236286 for batch 236552 contained total barium above the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated sample was also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed. AS-01-041315 (480-78365-1)

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-236883/21 and 480-236883/31) recovered above the upper control limit for total chromium. The samples (LB 480-236286/1-B), (LCS 480-236552/3-A) and (MB 480-236552/2-A) associated with this CCVL were either ND or less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Client Sample ID: AS-01-041315 — Lab Sample ID: 480-78365-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.0043	J	0.010	0.0041	mg/L	10		8260C	TCLP
Arsenic	0.0068	J	0.015	0.0056	mg/L	1		6010C	TCLP
Barium	0.25	B	0.0020	0.00070	mg/L	1		6010C	TCLP
Chromium	0.0016	J B ^	0.0040	0.0010	mg/L	1		6010C	TCLP
Lead	0.0073	J B	0.010	0.0030	mg/L	1		6010C	TCLP
Silver	0.0084		0.0060	0.0017	mg/L	1		6010C	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Client Sample ID: AS-01-041315

Lab Sample ID: 480-78365-1
Matrix: Solid

Date Collected: 04/13/15 09:05
Date Received: 04/14/15 08:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.9	0.24	ug/Kg		04/15/15 15:30	04/16/15 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*64 - 126*	*04/15/15 15:30*	*04/16/15 03:08*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*04/15/15 15:30*	*04/16/15 03:08*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*	*04/15/15 15:30*	*04/16/15 03:08*	*1*
Dibromofluoromethane (Surr)	*88*		*60 - 140*	*04/15/15 15:30*	*04/16/15 03:08*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			04/17/15 03:55	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			04/17/15 03:55	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			04/17/15 03:55	10
Benzene	**0.0043**	J	0.010	0.0041	mg/L			04/17/15 03:55	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			04/17/15 03:55	10
Chlorobenzene	ND		0.010	0.0075	mg/L			04/17/15 03:55	10
Chloroform	ND		0.010	0.0034	mg/L			04/17/15 03:55	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			04/17/15 03:55	10
Trichloroethene	ND		0.010	0.0046	mg/L			04/17/15 03:55	10
Vinyl chloride	ND		0.010	0.0090	mg/L			04/17/15 03:55	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*04/17/15 03:55*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*04/17/15 03:55*	*10*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*04/17/15 03:55*	*10*
Toluene-d8 (Surr)	*94*		*71 - 126*		*04/17/15 03:55*	*10*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	ND		1.3	0.33	mg/Kg		04/22/15 10:17	04/22/15 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*79*		*45 - 156*	*04/22/15 10:17*	*04/22/15 17:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	47	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1221	ND		240	47	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1232	ND		240	47	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1242	ND		240	47	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1248	ND		240	47	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1254	ND		240	110	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1260	ND		240	110	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1262	ND		240	110	ug/Kg		04/15/15 13:11	04/16/15 21:03	1
PCB-1268	ND		240	110	ug/Kg		04/15/15 13:11	04/16/15 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*128*		*65 - 174*	*04/15/15 13:11*	*04/16/15 21:03*	*1*
Tetrachloro-m-xylene	*101*		*60 - 154*	*04/15/15 13:11*	*04/16/15 21:03*	*1*

Client Sample Results

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Client Sample ID: AS-01-041315

Lab Sample ID: 480-78365-1

Date Collected: 04/13/15 09:05
Date Received: 04/14/15 08:45

Matrix: Solid

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0068	J	0.015	0.0056	mg/L		04/16/15 12:00	04/17/15 12:21	1
Barium	0.25	B	0.0020	0.00070	mg/L		04/16/15 12:00	04/17/15 12:21	1
Cadmium	ND		0.0020	0.00050	mg/L		04/16/15 12:00	04/17/15 12:21	1
Chromium	0.0016	J B ^	0.0040	0.0010	mg/L		04/16/15 12:00	04/17/15 12:21	1
Lead	0.0073	J B	0.010	0.0030	mg/L		04/16/15 12:00	04/17/15 12:21	1
Selenium	ND		0.025	0.0087	mg/L		04/16/15 12:00	04/17/15 12:21	1
Silver	0.0084		0.0060	0.0017	mg/L		04/16/15 12:00	04/17/15 12:21	1

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		04/16/15 12:30	04/16/15 16:32	1

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(71-125)	(60-140)
480-78365-1	AS-01-041315	75	95	104	88
LCS 480-236438/1-A	Lab Control Sample	83	101	97	90
MB 480-236438/2-A	Method Blank	83	98	99	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	BFB	TOL
Lab Sample ID	Client Sample ID	(66-137)	(60-140)	(73-120)	(71-126)
LCS 480-236682/6	Lab Control Sample	91	95	95	96
MB 480-236682/8	Method Blank	95	97	98	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(66-137)	(73-120)	(60-140)	(71-126)
480-78365-1	AS-01-041315	95	97	99	94
LB 480-236287/1-A	Method Blank	97	99	100	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Solid — Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(46-156)
480-78365-1	AS-01-041315	79
LCS 480-237796/2-A	Lab Control Sample	84
MB 480-237796/1-A	Method Blank	83

Surrogate Legend

Surrogate Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

TFT = a,a,a-Trifluorotoluene

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	DCB2 (65-174)	TCX2 (60-154)							
480-78365-1	AS-01-041315	128	101							
LCS 480-236327/2-A	Lab Control Sample	132	107							
MB 480-236327/1-A	Method Blank	117	90							

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-236438/2-A
Matrix: Solid
Analysis Batch: 236432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.9	0.24	ug/Kg		04/15/15 15:30	04/16/15 01:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		64 - 126	04/15/15 15:30	04/16/15 01:12	1
4-Bromofluorobenzene (Surr)	98		72 - 126	04/15/15 15:30	04/16/15 01:12	1
Dibromofluoromethane (Surr)	91		60 - 140	04/15/15 15:30	04/16/15 01:12	1
Toluene-d8 (Surr)	99		71 - 125	04/15/15 15:30	04/16/15 01:12	1

Lab Sample ID: LCS 480-236438/1-A
Matrix: Solid
Analysis Batch: 236432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	49.1	44.8		ug/Kg		91	79 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	83		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	90		60 - 140
Toluene-d8 (Surr)	97		71 - 125

Lab Sample ID: MB 480-236682/8
Matrix: Solid
Analysis Batch: 236682

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			04/16/15 21:49	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			04/16/15 21:49	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			04/16/15 21:49	1
Benzene	ND		0.0010	0.00041	mg/L			04/16/15 21:49	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			04/16/15 21:49	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			04/16/15 21:49	1
Chloroform	ND		0.0010	0.00034	mg/L			04/16/15 21:49	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			04/16/15 21:49	1
Trichloroethene	ND		0.0010	0.00046	mg/L			04/16/15 21:49	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			04/16/15 21:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		66 - 137		04/16/15 21:49	1
4-Bromofluorobenzene (Surr)	98		73 - 120		04/16/15 21:49	1
Dibromofluoromethane (Surr)	97		60 - 140		04/16/15 21:49	1
Toluene-d8 (Surr)	95		71 - 126		04/16/15 21:49	1

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

Lab Sample ID: LCS 480-236682/6
Matrix: Solid
Analysis Batch: 236682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	0.0250	0.0201		mg/L		80	58 - 121
1,2-Dichloroethane	0.0250	0.0210		mg/L		84	75 - 127
Benzene	0.0250	0.0210		mg/L		84	71 - 124
Chlorobenzene	0.0250	0.0219		mg/L		88	72 - 120
Tetrachloroethene	0.0250	0.0210		mg/L		84	74 - 122
Trichloroethene	0.0250	0.0211		mg/L		84	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 137*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*96*		*71 - 126*

Lab Sample ID: LB 480-236287/1-A
Matrix: Solid
Analysis Batch: 236682

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			04/16/15 22:23	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			04/16/15 22:23	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			04/16/15 22:23	10
Benzene	ND		0.010	0.0041	mg/L			04/16/15 22:23	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			04/16/15 22:23	10
Chlorobenzene	ND		0.010	0.0075	mg/L			04/16/15 22:23	10
Chloroform	ND		0.010	0.0034	mg/L			04/16/15 22:23	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			04/16/15 22:23	10
Trichloroethene	ND		0.010	0.0046	mg/L			04/16/15 22:23	10
Vinyl chloride	ND		0.010	0.0090	mg/L			04/16/15 22:23	10

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*04/16/15 22:23*	*10*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*04/16/15 22:23*	*10*
Dibromofluoromethane (Surr)	*100*		*60 - 140*		*04/16/15 22:23*	*10*
Toluene-d8 (Surr)	*95*		*71 - 126*		*04/16/15 22:23*	*10*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 480-237796/1-A
Matrix: Solid
Analysis Batch: 237817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	0.524	J	1.2	0.32	mg/Kg		04/22/15 10:17	04/22/15 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*83*		*46 - 156*	*04/22/15 10:17*	*04/22/15 11:58*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 480-237796/2-A
Matrix: Solid
Analysis Batch: 237817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	9.78	9.20		mg/Kg		94	64 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	84		46 - 156

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

Lab Sample ID: MB 480-236327/1-A
Matrix: Solid
Analysis Batch: 236548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		230	46	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1221	ND		230	46	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1232	ND		230	46	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1242	ND		230	46	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1248	ND		230	46	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1254	ND		230	110	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1260	ND		230	110	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1262	ND		230	110	ug/Kg		04/15/15 13:11	04/16/15 18:50	1
PCB-1268	ND		230	110	ug/Kg		04/15/15 13:11	04/16/15 18:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	117		65 - 174	04/15/15 13:11	04/16/15 18:50	1
Tetrachloro-m-xylene	90		60 - 154	04/15/15 13:11	04/16/15 18:50	1

Lab Sample ID: LCS 480-236327/2-A
Matrix: Solid
Analysis Batch: 236548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236327

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2370	2730		ug/Kg		115	51 - 185
PCB-1260	2370	3150		ug/Kg		133	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	132		65 - 174
Tetrachloro-m-xylene	107		60 - 154

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-236552/2-A
Matrix: Solid
Analysis Batch: 236883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236552

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		04/16/15 12:00	04/17/15 12:07	1
Barium	ND		0.0020	0.00070	mg/L		04/16/15 12:00	04/17/15 12:07	1

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

Lab Sample ID: MB 480-236552/2-A
Matrix: Solid
Analysis Batch: 236883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236552

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020	0.00050	mg/L		04/16/15 12:00	04/17/15 12:07	1
Chromium	ND	^	0.0040	0.0010	mg/L		04/16/15 12:00	04/17/15 12:07	1
Lead	ND		0.010	0.0030	mg/L		04/16/15 12:00	04/17/15 12:07	1
Selenium	ND		0.025	0.0087	mg/L		04/16/15 12:00	04/17/15 12:07	1
Silver	ND		0.0060	0.0017	mg/L		04/16/15 12:00	04/17/15 12:07	1

Lab Sample ID: LCS 480-236552/3-A
Matrix: Solid
Analysis Batch: 236883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236552

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.10		mg/L		110	80 - 120
Barium	1.00	1.07		mg/L		107	80 - 120
Cadmium	1.00	1.08		mg/L		108	80 - 120
Chromium	1.00	1.02	^	mg/L		102	80 - 120
Lead	1.00	1.03		mg/L		103	80 - 120
Selenium	1.00	1.17		mg/L		117	80 - 120
Silver	1.00	1.17		mg/L		117	80 - 120

Lab Sample ID: LB 480-236286/1-B
Matrix: Solid
Analysis Batch: 236883

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 236552

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		04/16/15 12:00	04/17/15 12:04	1
Barium	0.0561		0.0020	0.00070	mg/L		04/16/15 12:00	04/17/15 12:04	1
Cadmium	ND		0.0020	0.00050	mg/L		04/16/15 12:00	04/17/15 12:04	1
Chromium	0.00313	J ^	0.0040	0.0010	mg/L		04/16/15 12:00	04/17/15 12:04	1
Lead	0.00318	J	0.010	0.0030	mg/L		04/16/15 12:00	04/17/15 12:04	1
Selenium	ND		0.025	0.0087	mg/L		04/16/15 12:00	04/17/15 12:04	1
Silver	ND		0.0060	0.0017	mg/L		04/16/15 12:00	04/17/15 12:04	1

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-236589/2-A
Matrix: Solid
Analysis Batch: 236692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		04/16/15 12:30	04/16/15 16:29	1

Lab Sample ID: LCS 480-236589/3-A
Matrix: Solid
Analysis Batch: 236692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236589

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00666	0.00652		mg/L		98	80 - 120

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LB 480-236286/1-C
Matrix: Solid
Analysis Batch: 236692

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 236589

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		04/16/15 12:30	04/16/15 16:27	1

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QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

GC/MS VOA

Leach Batch: 236287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	1311	
LB 480-236287/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 236432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	Total/NA	Solid	8260C	236438
LCS 480-236438/1-A	Lab Control Sample	Total/NA	Solid	8260C	236438
MB 480-236438/2-A	Method Blank	Total/NA	Solid	8260C	236438

Prep Batch: 236438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	Total/NA	Solid	5035	
LCS 480-236438/1-A	Lab Control Sample	Total/NA	Solid	5035	
MB 480-236438/2-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 236682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	8260C	236287
LB 480-236287/1-A	Method Blank	TCLP	Solid	8260C	236287
LCS 480-236682/6	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-236682/8	Method Blank	Total/NA	Solid	8260C	

GC VOA

Prep Batch: 237796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	Total/NA	Solid	5035	
LCS 480-237796/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 480-237796/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 237817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	Total/NA	Solid	8015D	237796
LCS 480-237796/2-A	Lab Control Sample	Total/NA	Solid	8015D	237796
MB 480-237796/1-A	Method Blank	Total/NA	Solid	8015D	237796

GC Semi VOA

Prep Batch: 236327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	Total/NA	Solid	3550C	
LCS 480-236327/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-236327/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 236548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	Total/NA	Solid	8082A	236327
LCS 480-236327/2-A	Lab Control Sample	Total/NA	Solid	8082A	236327
MB 480-236327/1-A	Method Blank	Total/NA	Solid	8082A	236327

QC Association Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Metals

Leach Batch: 236286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	1311	
LB 480-236286/1-B	Method Blank	TCLP	Solid	1311	
LB 480-236286/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 236552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	3010A	236286
LB 480-236286/1-B	Method Blank	TCLP	Solid	3010A	236286
LCS 480-236552/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-236552/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 236589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	7470A	236286
LB 480-236286/1-C	Method Blank	TCLP	Solid	7470A	236286
LCS 480-236589/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 480-236589/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 236692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	7470A	236589
LB 480-236286/1-C	Method Blank	TCLP	Solid	7470A	236589
LCS 480-236589/3-A	Lab Control Sample	Total/NA	Solid	7470A	236589
MB 480-236589/2-A	Method Blank	Total/NA	Solid	7470A	236589

Analysis Batch: 236883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-78365-1	AS-01-041315	TCLP	Solid	6010C	236552
LB 480-236286/1-B	Method Blank	TCLP	Solid	6010C	236552
LCS 480-236552/3-A	Lab Control Sample	Total/NA	Solid	6010C	236552
MB 480-236552/2-A	Method Blank	Total/NA	Solid	6010C	236552

Lab Chronicle

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Client Sample ID: AS-01-041315

Lab Sample ID: 480-78365-1

Date Collected: 04/13/15 09:05
Date Received: 04/14/15 08:45

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			236287	04/15/15 10:47	JLS	TAL BUF
TCLP	Analysis	8260C		10	236582	04/17/15 03:55	RAS	TAL BUF
Total/NA	Prep	5035			236438	04/15/15 15:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	236432	04/16/15 03:08	RAS	TAL BUF
Total/NA	Prep	5035			237796	04/22/15 10:17	MRB	TAL BUF
Total/NA	Analysis	8015D		1	237817	04/22/15 17:54	MRB	TAL BUF
Total/NA	Prep	3550C			236327	04/15/15 13:11	CAM	TAL BUF
Total/NA	Analysis	8082A		1	236548	04/16/15 21:03	KS	TAL BUF
TCLP	Leach	1311			236286	04/15/15 10:46	JLS	TAL BUF
TCLP	Prep	3010A			236552	04/16/15 12:00	TAS	TAL BUF
TCLP	Analysis	6010C		1	236883	04/17/15 12:21	SLB	TAL BUF
TCLP	Leach	1311			236286	04/15/15 10:46	JLS	TAL BUF
TCLP	Prep	7470A			236589	04/16/15 12:30	LRK	TAL BUF
TCLP	Analysis	7470A		1	236592	04/16/15 16:32	LRK	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Laboratory: TestAmerica Buffalo

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	88-0686	07-06-15
California	State Program	9	1169CA	09-30-15
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-15
Georgia	State Program	4	N/A	03-31-16
Illinois	NELAP	5	200003	09-30-15
Iowa	State Program	7	374	03-01-15 *
Kansas	NELAP	7	E-10187	04-30-15 *
Kentucky (DW)	State Program	4	90029	12-31-15
Kentucky (UST)	State Program	4	30	03-31-16
Kentucky (WW)	State Program	4	90029	12-31-15
Louisiana	NELAP	6	02031	06-30-15
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-16
Massachusetts	State Program	1	M-NY044	06-30-15
Michigan	State Program	5	9937	03-31-15 *
Minnesota	NELAP	5	036-999-337	12-31-15
New Hampshire	NELAP	1	2337	11-17-15
New Jersey	NELAP	2	NY455	06-30-15
New York	NELAP	2	10026	03-31-16
North Dakota	State Program	8	R-176	03-31-15 *
Oklahoma	State Program	6	9421	08-31-15
Oregon	NELAP	10	NY200003	06-09-15
Pennsylvania	NELAP	3	68-00281	07-31-15
Rhode Island	State Program	1	LAO00328	12-30-15
Tennessee	State Program	4	TN02970	03-31-16
Texas	NELAP	6	T104704412-11-2	07-31-15
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-15
Washington	State Program	10	C784	02-10-16
West Virginia DEP	State Program	3	252	09-30-15
Wisconsin	State Program	5	998310390	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8015D	Gasoline Range Organics (GRO) (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Waste Characterization

TestAmerica Job ID: 480-78365-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-78365-1	AS-01-041315	Solid	04/13/15 09:05	04/14/15 08:45

13

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Tera Dalton	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-66347-16859.1
Client Contact: Chase Forman	Phone: 513-697-2020	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 1
Company: O'Brien & Gere Inc of North America				Job #:
Address: 8805 Governor's Hill Dr. Ste. 164	Due Date Requested: 4/27/2015			
City: Cincinnati	TAT Requested (days): 14 days			
State, Zip: OH, 45249				
Phone: 513-697-2035(Tel) 513-697-2040(Fax)	PO #: 11510297			
Email: chase.forman@obg.com	WO #: 60968			
Project Name: GE - Evendale, OH site	Project #: 48003453			
Site: Ohio	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil/Waste, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - 8260 - Benzene	6010C, 7470A	8260C - TCLP Volatiles	8082A - TCL PCBs - OLM04.2	8015D_GRO - 8015 GRO	8015D_DRO - 8015 DRO & ORO Range							Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N							X	
AS-01-041315	4/13/15	0905	G	Solid	N	N	X	X	X	X	X	X								

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

480-78365 Chain of Custody

Cincinnati
210501

Page 21 of 22

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): [ ] Return To Client [X] Disposal By Lab [ ] Archive For Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Tera Dalton	4/13/15 1015	OBG	[signature]	4/13/15 1015	TestAmerica
[signature]	4/13/15 1025	TestAmerica	Cameron Wallace	4/14/15 8:45	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #1 2.5

4/24/2015

Login Sample Receipt Checklist

Client: O'Brien & Gere Inc of North America

Job Number: 480-78365-1

Login Number: 78365

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robison, Zachary J

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	
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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	OBG
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix B

Recovery Well Logs and Abandonment Logs

County Permit No. _____

NO CARBON PAPER NECESSARY - SELF-TRANSCRIBING

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

ORIGINAL

577836

COUNTY Hamilton TOWNSHIP N/A (Sycamore) SECTION OF TOWNSHIP _____

OWNER GE Aircraft Engines ADDRESS Evendale, OH

LOCATION OF PROPERTY East of I-75 between Shepard Ave and Rt 126

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 35'

Type of screen 8" ps ss 304 Length of screen 15'

Type of pump N/A

Capacity of pump _____

Depth of pump setting _____

Date of completion _____

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 198 gpm Duration of test 24 hrs

Drawdown 11 ft Date Sept 1991

Static level (depth to water) 17' ft

Quality (clear, cloudy, taste, odor) _____

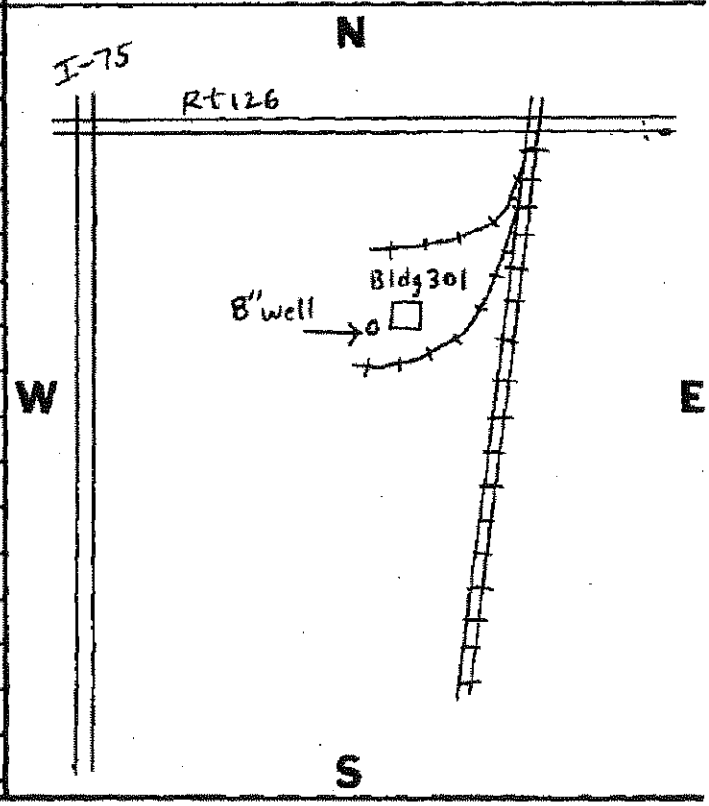
Pump installed by _____

WELL LOG* #301

Formations: sandstone, shale, limestone, gravel, clay	From	To
	0 ft	ft
Yellow silty clay	0	12
Fine to coarse sands and silt	10	32
Silty sands and clay	32	36
WELL CONSTRUCTION		
+ 1½' - 15' - 8" riser		
15½ - 30½ - 8" PS SS 304 screen .080" slot		
30½ - 35½ - 8" sump		
Parry gravel 3/16 x No. 10		

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM MOODY'S OF DAYTON, INC. DATE 9/27/91

ADDRESS 4359 Infirmary Road, Miamisburg, OH 45342 SIGNED Douglas F. Wagner

*If additional space is needed to complete well log, use next consecutive numbered form.

County Permit No. _____

NO CARBON PAPER NECESSARY – SELF-TRANSCRIBING

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

ORIGINAL

577837

COUNTY Hamilton TOWNSHIP N/A Sycamore SECTION OF TOWNSHIP _____

OWNER G. E Aircraft Engines ADDRESS Evendal, OH

LOCATION OF PROPERTY East of I-75 between Shepard Ave. and Rt 126

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 40'

Type of screen 8" PS SS 304 Length of screen 15'

Type of pump N/A

Capacity of pump _____

Depth of pump setting _____

Date of completion _____

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 195 gpm Duration of test 24 hrs

Drawdown 12' ft Date Sept 1991

Static level (depth to water) 19' ft

Quality (clear, cloudy, taste, odor) _____

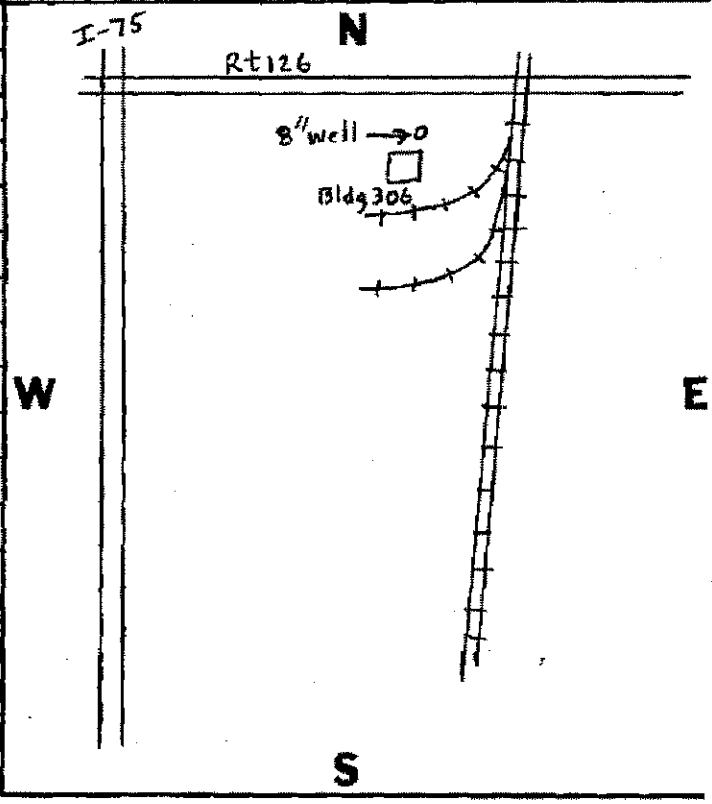
Pump installed by _____

WELL LOG* #306

Formations: sandstone, shale, limestone, gravel, clay	From	To
Yellow silty clay	0 ft	8 ft
Sandy silty gray till	8	44
Gray clay and fine sand	44	
WELL CONSTRUCTION:		
+ 1'2" – 20' – 8" riser		
20' – 35' – 8" PS SS 304	screen .100" slot	
35' – 40' – 8" sump		
Parry gravel 3/16 x No.10		

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM MOODY'S OF DAYTON, INC. DATE 9/27/91

ADDRESS 4359 Infirmary Rd. Miamisburg, OH 45343 SIGNED Douglas F. Wagner

*If additional space is needed to complete well log, use next consecutive numbered form.

County Permit No.

NO CARBON PAPER NECESSARY - SELF-TRANSCRIBING

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

577838

COUNTY Hamilton TOWNSHIP N/A Sycamore SECTION OF TOWNSHIP

OWNER GE Aircraft Engines ADDRESS Evendale, oH

LOCATION OF PROPERTY East of I-75 between Shepard Ave and Rt 126

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 66'

Type of screen 8" PS SS 304 Length of screen 15'

Type of pump N/A

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 90 gpm Duration of test 24 hrs

Drawdown 17 ft Date Sept 1991

Static level (depth to water) 43' ft

Quality (clear, cloudy, taste, odor)

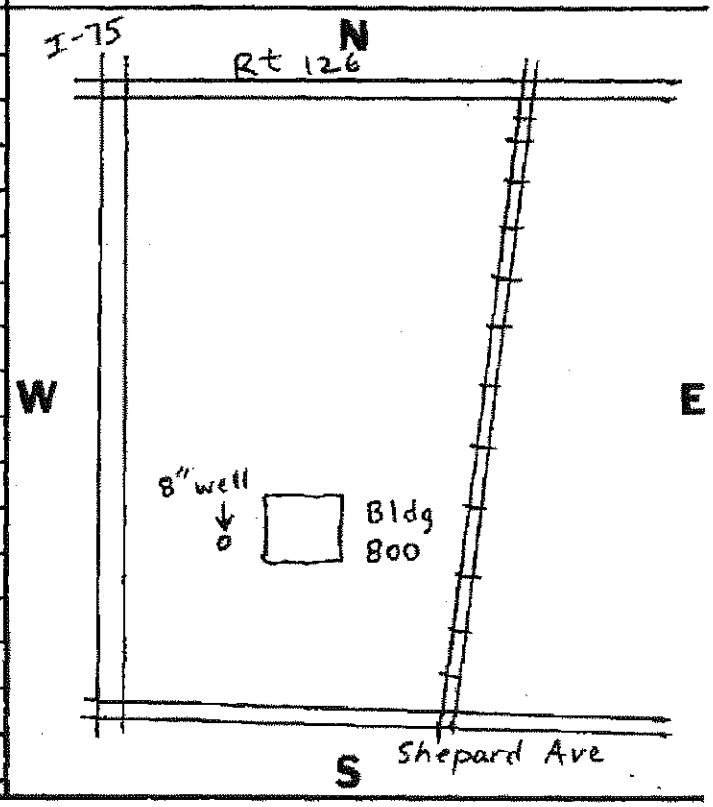
Pump installed by

WELL LOG* #800

Formations: sandstone, shale, limestone, gravel, clay	From	To
Yellow Clay	0 ft	8 ft
Gray till	8	44
Silty gray till	44	48
Fine gray sand & gray clay	48	54
Very dirty sand & silt	54	66
WELL CONSTRUCTION:		
+ 1'2" - 46' - 8" riser		
46' - 61' - PS SS 304 screen .060' slot		
61' - 66' - 8" sump		
Parry gravel #4		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM MOODY'S OF DAYTON, INC. DATE 9/27/91

ADDRESS 4359 Infirmary Road, Miamisburg, OH 45343 SIGNED Douglas F. Wagner

*If additional space is needed to complete well log, use next consecutive numbered form.

DNR 7810.04

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Water
2045 Morse Rd., Bldg B
Columbus, OH 43229-6605
Voice: (614) 265-6740 Fax: (614) 265-6767

0160553

LOCATION

County Hamilton/Butler Township Westchester Section/Lot Number (Circle One or Both)

Owner/Builder (Circle One or Both) GE/Evendale

Address of Well Location 1 (Number) Neumann Way (Street Name)

City Cincinnati Zip Code 45241

Property Location Description: 1/2 miles S/E (n, e, s, w) of Magnolia Dr & Evendale Drive (nearest intersection)

on the North (n, e, s, w) side of Evendale Drive (road name)

Location of Well in either: State Plane N ☐ S ☐ X ____ +/- ____ ft. or m Y ____ +/- ____ ft. or m

OR Latitude/Longitude: Check ONE ☒ In Decimal Degrees ☐ Degrees Minutes ☐ Degrees Min. Sec.

Latitude 39.247392 Longitude 84.430539

Elevation of Well 171.00 +/- m ft. or m Datum Plain: ☐ NAD27 ☐ NAD83

Source of Coordinates: ☒ GPS ☐ Survey ☐ Other

ORIGINAL WELL ODNR Well Log Number 577836 Copy attached? Yes or No (circle one)

MEASURED CONSTRUCTION DETAILS Date of measurements

Depth of Well 35 Ft Static Water Level 20 FT

Size of Casing 8 inch Length of casing 21 FT

Well Condition Fair to good

SEALING PROCEDURE

Method of Placement Over Drill Remove Casing / Bentonite Cement (Sealing Material) 200 (Volume)

Placement: From 35 To 0

From ____ To ____

From ____ To ____

(RW-301) August 7th 1991 Drill Date

Was Casing Removed? Yes or No (circle one)

Condition of Casing Fair to good

Perforations: From ____ To ____

From ____ To ____

Date Sealing Performed 3-4-15

Reason(s) for Sealing Decommissioning

(Note submitted online also 3/20/15)

CONTRACTOR

Name Cascade Drilling ODH Registration # 4249

Address 6215 Lehman Drive

City/State/Zip Fairfield, OH 45507

Signature [signature]

I hereby certify the information given is accurate and correct to the best of my knowledge.

Completion of this form is required by section 1521.05 (B) (9), Ohio Revised Code - file within 30 days after completion of sealing.

ORIGINAL COPY TO - ODNR, DIVISION OF WATER, 2045 MORSE ROAD, COLS., OHIO 43229-6605

Blue - Customer's copy Pink - Driller's copy Green - Local Health Dept. copy

DNR 7810.04

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Water
2045 Morse Rd., Bldg B
Columbus, OH 43229-6605
Voice: (614) 265-6740 Fax: (614) 265-6767

0160551

LOCATION

County Hamilton/Butler Township West Chester Section/Lot Number (Circle One or Both)

Owner/Builder (Circle One or Both) GE / Evendale

Address of Well Location 325A Evendale Drive, Cincinnati, OH (Number / Street Name)

City Cincinnati Zip Code 45241

Property Location Description: 1 miles S (n, e, s, w) of Glendale Milford Rd & Evendale Dr (nearest intersection)

on the N.W. Corner of Building (n, e, s, w) side of 325 Building Evendale Dr. (road name)

Location of Well in either: State Plane N ☐ S ☐ X ____ +/- ____ ft. or m Y ____ +/- ____ ft. or m

OR Latitude/Longitude: Check ONE ☒ In Decimal Degrees ☐ Degrees Minutes ☐ Degrees Min. Sec. Latitude 39.25005 Longitude 84.438524

Elevation of Well 1172.00 +/- m ft. or m Datum Plain: ☐ NAD27 ☐ NAD83

Source of Coordinates: ☒ GPS ☐ Survey ☐ Other

ORIGINAL WELL ODNR Well Log Number 577837 Copy attached? (circle one) Yes or No

MEASURED CONSTRUCTION DETAILS Date of measurements

Depth of Well 40 Ft Static Water Level 15 Ft

Size of Casing 8 inch Length of casing 21 Ft

Well Condition Drop pipe and Pump Look to be in Fair Condition

SEALING PROCEDURE

Method of Placement Tremie Bentonite/Cement (Sealing Material) 200 Gal (Volume)

Placement: From 35 Ft To D

From ____ To ____

From ____ To ____

Was Casing Removed? Yes or No (circle one) (Rule 306) August 19th 21st, 1991

Condition of Casing Fair Condition / 2 Small Holes

Perforations: From ____ To ____

From ____ To ____

Date Sealing Performed 2/25/15

Reason(s) for Sealing Decommissioning

(Note: Submitted Online Also 3/20/15)

CONTRACTOR

Name Cascade Drilling ODH Registration # 4249

Address 6215 Lehman Drive

City/State/Zip Flint, MI 48507

Signature [signature]

I hereby certify the information given is accurate and correct to the best of my knowledge.

Completion of this form is required by section 1521.05 (B) (9), Ohio Revised Code - file within 30 days after completion of sealing.

ORIGINAL COPY TO - ODNR, DIVISION OF WATER, 2045 MORSE ROAD, COLS., OHIO 43229-6605

Blue - Customer's copy Pink - Driller's copy Green - Local Health Dept. copy

DNR 7810.04

WATER WELL SEALING REPORT
OHIO DEPARTMENT OF NATURAL RESOURCES
Division of Water
2045 Morse Rd., Bldg B
Columbus, OH 43229-6605
Voice: (614) 265-6740 Fax: (614) 265-6767

0160552

LOCATION

County Hamilton/Butler Township Westchester Circle One or Both Section/Lot Number

Owner/Builder Cat/Fernwade
Circle One or Both

Address of Well Location 1 Neumann Way (Number) Neumann Way (Street Name)

City Cincinnati Zip Code 45241

Property Location Description 0 miles n, e, s, w of Snellman Ave / Smellen Rd (nearest intersection)

on the S/E n, e, s, w side of Storage Shed (road name)

Location of Well in either: State Plane N ☐ S ☐ X ___ +/- ___ ft. or m Y ___ +/- ___ ft. or m
OR
Latitude/Longitude (Check ONE ☐ In Decimal Degrees ☐ Degrees Minutes ☐ Degrees Min. Sec.) Latitude 39.235932 Longitude 84.444258

Elevation of Well 600.00 +/- ___ ft. or m Datum Plain: ☐ NAD27 ☐ NAD83

Source of Coordinates: ☑ GPS ☐ Survey ☐ Other (734176)

ORIGINAL WELL ODNR Well Log Number ~~577833~~ Copy attached? Yes or No (circle one)

MEASURED CONSTRUCTION DETAILS Date of measurements

Depth of Well 62 Static Water Level 20 Ft
Size of Casing 5 inch Length of casing 42 Ft
Well Condition Well Casing & screen good condition, drop pipe and pump look to be in good condition

SEALING PROCEDURE

Method of Placement	Sealing Material	Volume
Tremmie pipe /	Bentonite/Cement	360 gallons

Placement:	From	To	Material	Volume
	62	0	Bentonite Cement	360 gallons

Was Casing Removed? Yes or No (circle one) (ASR-36)

Condition of Casing Good Condition
Perforations: From ___ To ___
From ___ To ___

Date Sealing Performed ~~[illegible]~~ 3-3-15
Reason(s) for Sealing Decommissioning
(NOTE: Sealed Also 3/20/15)

CONTRACTOR
Name Cascade Drilling ODH Registration # 4249
Address 6215 Hamilton Dr
City/State/Zip Fort Ark 48507

Signature [signature]
I hereby certify the information given is accurate and correct to the best of my knowledge.

Completion of this form is required by section 1521.05 (B) (9), Ohio Revised Code - file within 30 days after completion of sealing.
ORIGINAL COPY TO - ODNR, DIVISION OF WATER, 2045 MORSE ROAD, COLS., OHIO 43229-6605
Blue - Customer's copy Pink - Driller's copy Green - Local Health Dept. copy

Appendix C

AFP36 Air Stripper System Piping Decommissioning Photolog

Picture 1 – AFP 36 Recovery well conduit and process piping stub up

Picture 2 – AFP 36 Recovery well conduit and process piping encased in concrete

Picture 3 – AFP 36 Recovery well conduit and process piping severed

Picture 4 – AFP 36 Stripper conduit and process piping stub up

Picture 5 – AFP 36 Stripper conduit and process piping severed