
PERIODIC REVIEW REPORT
for the
NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
(SITE NO. C915223)
BUFFALO, NEW YORK

October 2013

0136-013-010

Prepared for:

1093 Group, LLC

Prepared By:



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218

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Niagara Street and Pennsylvania Avenue Site
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1.0 INTRODUCTION

TurnKey Environmental Restoration, LLC (TurnKey), has prepared this Periodic Review Report (PRR), on behalf of 1093 Group, LLC, to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Niagara Street and Pennsylvania Avenue Site (Site) (C915223).

This PRR has been prepared in accordance with the NYSDEC DER-10 *Technical Guidance for Site Investigation and Remediation* (May 2010) and the NYSDEC's Institutional and Engineering Controls(IC/EC) Certification Form has been completed for the Site (see Appendix A).

This PRR and the associated inspections form have been completed for the post-remedial activities at the Site for the June 24, 2012 to June 24, 2013 reporting period.

1.1 Site Background

The Site encompasses approximately 0.27 acres property that was redeveloped as part of a larger commercial retail operation (Family Dollar) in the City of Buffalo, New York (see Figure 1). The Site was formerly comprised of two separate adjoining tax parcels which were historically used as a filling station and automobile service operation. Those historic operations impacted on-Site soil and groundwater.

1.2 Remedial History

1093 Group, LLC a related entity, entered into a Brownfield Cleanup Agreement (BCA) (Index #B9-0759-07-11, Site #C915223) with the New York State Department of Environmental Conservation (NYSDEC) in October 2008. 1093 Group, LLC completed the investigation and remediation of the Site under the supervision of the NYSDEC and NYSDOH.

The Remedial Investigation/Interim Remedial Measures (RI/IRM) Work Plan was approved by the NYSDEC on November 18, 2008. Remedial activities were performed at the Site between February and July 2009. The remedial program was successful in achieving the remedial objectives for the Site, and the Site Management Plan (SMP) and Final

Engineering Report (FER) were approved by the Department in December 2009. The NYSDEC issued a COC for the Site on December 24, 2009.

1.3 Compliance

At the time of the Site inspection, the Site was fully compliant with the Department's approved SMP.

1.4 Recommendations

Based on the post-remedial results for the Site, TurnKey makes the following recommendation for the Site.

- Cessation of groundwater monitoring at the Site. 1093 Group, LLC has completed five rounds of post-remedial groundwater monitoring over the past four (4) years. Remedial excavation activities removed all on-Site material to the property boundary along Niagara and Pennsylvania Avenue. MW-1 and MW-2 were reinstalled after completion of the excavation, in the DEC-approved clean backfill. The detected constituents in MW-1 and MW-2 are likely related to off-site contamination associated with the municipal roadways and subgrade utilities. As such, it is our opinion that continued groundwater monitoring by 1093 Group is unnecessary and should be discontinued.
- Modification of the annual certification reporting requirement from annual to triennial (every three years).

Beyond those changes described above, no modifications to the current SMP are recommended at this time.

2.0 SITE OVERVIEW

The Niagara Street and Pennsylvania Avenue Site (Site) is located in the City of Buffalo, County of Erie, New York and is addressed at 517 Niagara Street (SBL# 110.27-5-1.1) on the Erie County Tax Map. The Site is located on the southeast corner of Niagara Street and Pennsylvania Avenue, and bordered by Reynolds Alley, Pennsylvania Avenue, and Niagara Street.

The remedial activities were completed from February through July 2009. The remedial activities included:

- Demolition of the former service station building and product dispenser canopy;
- Removal of five underground storage tanks (USTs), including associated dispensing units and underground product piping. Extraction and off-site disposal of residual product/water mixture from the USTs and the in-ground lift.
- Excavation of petroleum-impacted soil/fill followed by off-site transportation and disposal at a commercial landfill.
- Excavation and disposal of surface soil/fill with slightly elevated SVOCs (above restricted-residential SCOs) across the southeast portion of the Site. That material was also transported off-Site and disposed of at a commercial landfill.
- Extraction and treatment of groundwater from the excavation during remediation activities.
- Placement and compaction of backfill.

Remedial activities were completed in July 2009. The FER and SMP for the Site were approved by the Department in December 2009. The COC was issued for the Site on December 24, 2009.

3.0 SITE MANAGEMENT PLAN

The Niagara Street and Pennsylvania Avenue Site post-remedial Site Management Plan (SMP) was approved by the NYSDEC in December 2009. This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Institutional Controls; (2) groundwater monitoring; and, (3) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

A brief description of these SMP components is presented below.

3.1 Institutional Control Plan

As a requirement of the SMP a series of Institutional Controls are required to (1) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (2) limit the use and development of the Site to restricted-residential use or more restricted uses (i.e., commercial or industrial).

3.1.1 Excavation Work Plan

The Excavation Work Plan, which is included within the approved-SMP for the Site, provides guidelines for the management of soil and fill material during any future intrusive activities.

No intrusive activities requiring management of on-Site soil or fill material; or the placement of backfill materials occurred during the monitoring period.

3.1.2 Restricted Land Use

The Site is currently utilized as a commercial retail operation, and is in compliance with the Site's land use criteria (restricted-residential use).

3.2 Long-Term Groundwater Monitoring (LTGWM) Plan

As a requirement of the SMPs, long-term groundwater monitoring is being performed at the Site. Annual groundwater monitoring was conducted on October 16, 2013. The annual groundwater monitoring report is included in Appendix C.

3.3 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines the requirements for the Site, to certify and attest that the institutional controls and/or engineering controls employed at the Site are unchanged from the previous certification. The Annual Certification will primarily consist of an annual Site Inspection to complete the auto-generated NYSDEC Institutional and Engineering Controls (IC/EC) Certification Form. The site inspection will verify that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

A Site Inspection of the property was conducted by TurnKey personnel that meet the definition of a Qualified Environmental Professional (QEP) on October 16, 2013. At the time of the inspection, the property was being used as a commercial retail operation (Family Dollar), with surface parking, paved walkways and landscaped areas. No observable indication of intrusive activities was noted during the Site Inspection. The Site is on municipal water supply, and no observable use of groundwater was noted during the site inspection.

The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form is included in Appendix A. A photolog of the site inspection is included in Appendix B.

3.4 Engineering and Institutional Control Requirements and Compliance

As detailed in the Environmental Easements, several Institutional Controls (ICs) need to be maintained as a requirement of the BCA for the Site.

3.4.1 Institutional Controls

- Groundwater-Use Restriction – the use of groundwater for potable and non-potable purposes is prohibited; and
- Land-Use Restriction: The controlled property may be used for restricted-residential, commercial and/or industrial use; and,
- Implementation of the SMP.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations are as follows:

- At the time of the site inspection, the Site was in compliance with the Site Management Plan.

The following modifications are recommended for the Site.

- Cessation of groundwater monitoring at the Site. 1093 Group, LLC has completed five rounds of post-remedial groundwater monitoring over the past four (4) years. Remedial excavation activities removed all on-Site material to the property boundary along Niagara and Pennsylvania Avenue. MW-1 and MW-2 were reinstalled after completion of the excavation, in the DEC-approved clean backfill. The detected constituents in MW-1 and MW-2 are likely related to off-site contamination associated with the municipal roads and subgrade utilities. As such, it is our opinion that continued groundwater monitoring by 1093 Group is unnecessary and should be discontinued.
- Modification of the annual certification reporting requirement from annual to triennial (every three years).

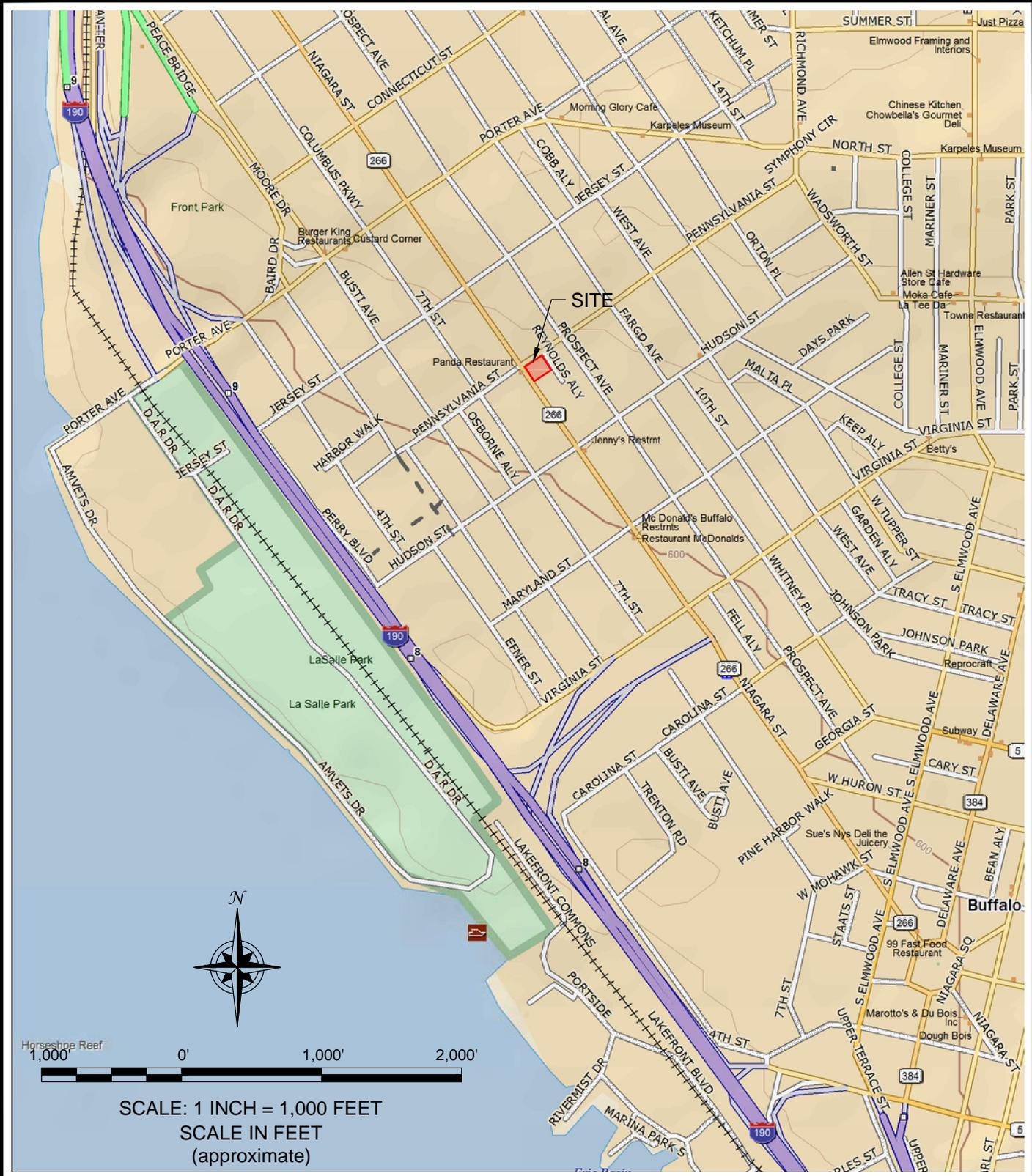
5.0 DECLARATION/LIMITATION

TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering and Science, PLLC, personnel conducted the annual site inspections for Brownfield Cleanup Program Site No. C915223, located in Buffalo, New York, according to generally accepted practices. This report complied with the scope of work provided to 1093 Group, LLC by TurnKey Environmental Restoration, LLC.

This report has been prepared for the exclusive use of 1093 Group, LLC. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of 1093 Group, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

FIGURES

FIGURE 1



SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
 BCP SITE No. C915223
 BUFFALO, NEW YORK

PREPARED FOR
 1093 GROUP, LLC



2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0635

PROJECT NO.: 0136-013-010

DATE: OCTOBER 2013

DRAFTED BY: JGT



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0835

PROJECT NO.: 0136-013-010

DATE: NOVEMBER 2013

DRAFTED BY: JGT

SITE PLAN

PERIODIC REVIEW REPORT

NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
BCP SITE No. C915223
BUFFALO, NEW YORK
PREPARED FOR
1093 GROUP, LLC

FIGURE 2

APPENDIX A

INSTITUTIONAL CONTROLS CERTIFICATION FORM



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 Site Management Periodic Review Report Notice
 Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. C915223		
Site Name Niagara Street and Pennsylvania Avenue Site		
Site Address: 517 Niagara Street	Zip Code: 14201	
City/Town: Buffalo		
County: Erie		
Site Acreage: 0.3		
Reporting Period: June 24, 2012 to June 24, 2013		
		YES NO
1. Is the information above correct?		<input checked="" type="checkbox"/> <input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/> <input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		<input type="checkbox"/> <input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial		<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input checked="" type="checkbox"/> <input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date

Box 2A

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid? YES NO

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? YES NO

(The Qualitative Exposure Assessment must be certified every five years)

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

Box 3

SITE NO. C915223

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
110.27-5-1.1	1093 Group, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

No engineering controls. Institutional controls include an Environmental Easement (EE), and a Site Management Plan, Ground Water Monitoring Plan, and periodic certification. EE restricts site to "restricted residential" use, ground water is prohibited for consumptive use, and SMP is required.

Box 4

Description of Engineering Controls

None Required

Not Applicable/No EC's

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C915223

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I WILLIAM PALADINO at 295 MAIN STREET, SUITE 210, BUFFALO, NY 14203
print name print business address

am certifying as OWNER (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

William L. Paladino
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

12/17/13
Date

APPENDIX B

SITE PHOTOGRAPH LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: Subject Property (Looking north along Niagara Street)

Photo 2: Subject Property (Parking area – looking northeast from Niagara Street)

Photo 3: Subject Property (Rear parking area – looking northeast)

Photo 4: Subject Property (Rear parking Area – looking south from Pennsylvania Avenue)

Niagara Street and Pennsylvania Avenue Site
Buffalo, New York
October 16, 2013



SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 5: Subject Property (looking east along Pennsylvania Avenue)

Photo 6: Subject Property (looking south along Niagara Street)

Niagara Street and Pennsylvania Avenue Site
Buffalo, New York
October 16, 2013



APPENDIX C

ANNUAL GROUNDWATER MONITORING REPORT



October 30, 2013

Mr. David Szymanski
NY State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Ave.
Buffalo, New York 14203

Re: 2013 Annual Groundwater Monitoring Report
BCP Site No. C915223
Buffalo, New York

Dear Mr. Szymanski:

On behalf of our client, 1093 Group, LLC, TurnKey Environmental Restoration, LLC (TurnKey) is herein transmitting the results from the annual ground water monitoring event for the Niagara Street and Pennsylvania Avenue Site, located at 517 Niagara Street, Buffalo, New York (see Figure 1).

The groundwater monitoring was completed on October 16th, 2013 and included sampling and analysis of MW-1 and MW-2. Groundwater samples were analyzed for Target Compound List (TCL) plus CP-51 list volatile organic compounds (VOCs). Field parameters including pH, oxidation-reduction potential (ORP), dissolved oxygen (DO), temperature, turbidity, and specific conductance were measured in each of the sampled monitoring wells. Table 1 summarizes the analytical results from the October 2013 groundwater monitoring event with past sampling results, and provides comparison to NYSDEC Class GA groundwater quality standards (GWQS) as listed in NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1). The laboratory analytical package is included in Attachment 1.

Elevated VOCs exceeding GWQS are likely attributed to off-site sources. MW-1 is located in the western portion of the site, adjacent to the corner of Niagara Street and Pennsylvania Avenue and likely strongly influenced by off-site subgrade utilities.

1093 Group, LLC has completed five rounds of post-remedial groundwater monitoring over the past four (4) years. Remedial excavation activities removed all on-Site material to the property boundary along Niagara and Pennsylvania Avenue and MW-1 and MW-2 were reinstalled after completion of the excavation, in the DEC-approved clean backfill. The detected constituents in MW-1 and MW-2 are likely related to off-site contamination

associated with the municipal roadway and subgrade utilities. As such, it is our opinion that continued groundwater monitoring by 1093 Group is unnecessary and should be discontinued.

Please contact us with any questions or comments.

Sincerely,
TurnKey Environmental Restoration, LLC



Michael Lesakowski
Project Manager

Att.

c: C. Stewart (1093 Group, LLC)

file: 0136-013-010

TABLES



**TABLE 1
GROUNDWATER ANALYTICAL DATA SUMMARY
NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
BUFFALO, NEW YORK**

Parameter ¹	Class GA GWQS ²	Sample Locations																	
		MW-1					MW-2					MW-5				MW-6			
		May-10	Nov-10	May-11	Oct-11	Oct-13	May-10	Nov-10	May-11	Oct-11	Oct-13	May-10	Nov-10	May-11	Oct-11	May-10	Nov-10	May-11	Oct-11
Volatile Organic Compounds (VOCs) - ug/L																			
Benzene	1	560 D	820 D	4.7	21	65	1.1	0.64 J	5	7.6	12	ND							
Ethylbenzene	5	1700 D	1500 D	26	30	140	1.1	ND	ND	ND	1.3	ND							
Isopropylbenzene (Cumene)	5	95	73	15	15	26	ND												
Methyl tert butyl ether (MTBE)	10	ND	49	ND	ND	27	5.1	4.4	ND	ND	0.41 J	ND	ND	ND	ND	ND	0.57 J	ND	ND
Toluene	5	29	20	0.87 J	1.8	2.8	ND	2.2	ND	ND	ND	ND	ND						
Total Xylene	5	1233 D	760 D	56	67	14	ND	ND	ND	ND	4	ND							
n-Butylbenzene	5	12	27	16	ND	2.3	ND	ND	ND	ND	0.65 J	ND							
n-Propylbenzene	5	290 D	190 D	ND	20	53	ND												
p-Cymene (p-isopropyltoluene)	5	9.8	13	ND	5	2.3	ND												
1,2,4-Trimethylbenzene	5	780 D	1000 D	96	61	72	ND	ND	ND	ND	3.9	ND							
1,3,5-Trimethylbenzene	5	83	21	11	2.8	5.7	ND	ND	ND	ND	0.94 J	ND							
sec-Butylbenzene	5	12	12	ND	ND	3.1	ND												
tert-Butylbenzene	5	0.96 J	ND																

Notes:

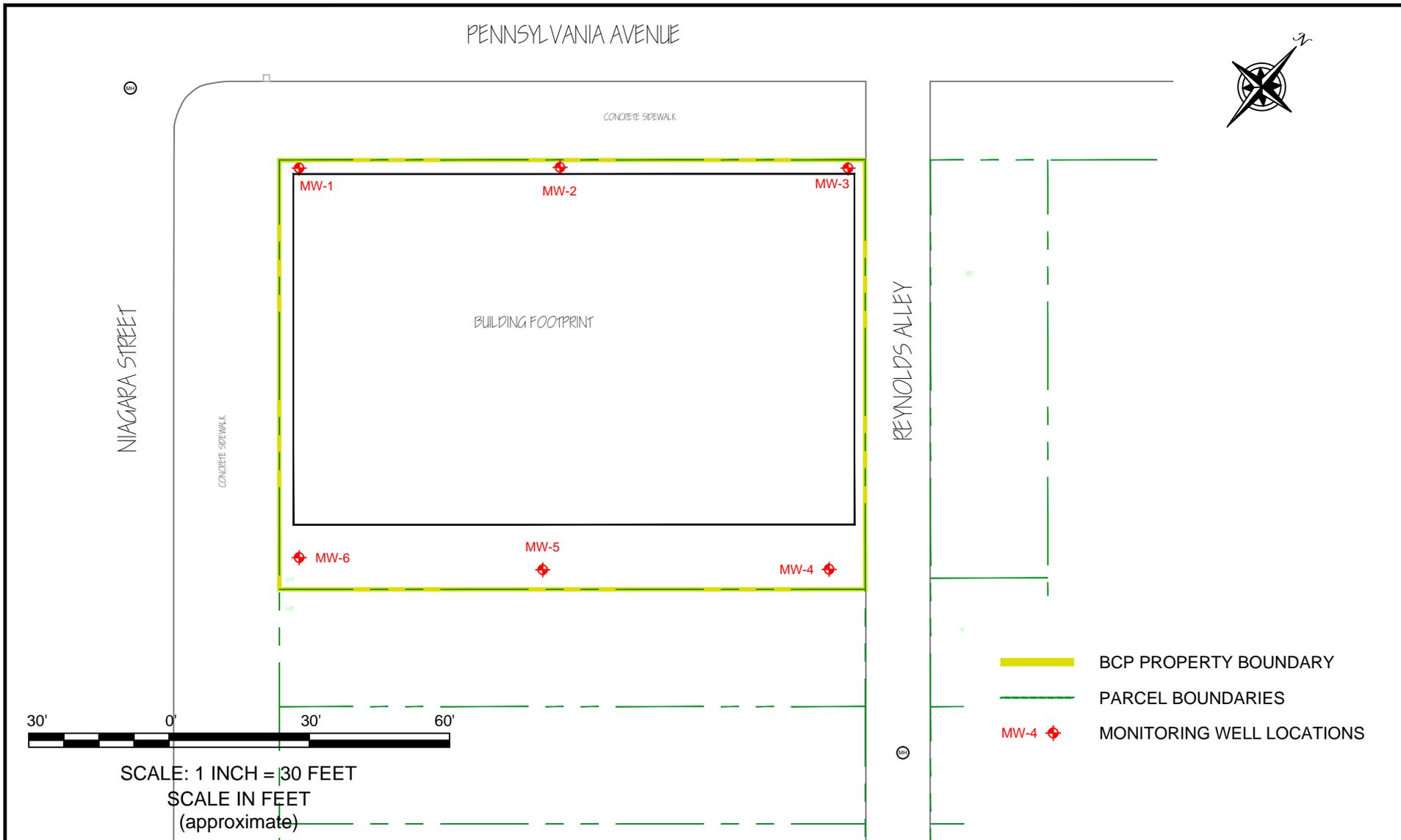
1. Only those parameters detected at a minimum of one sample location are presented in table; all other compounds reported as non-detect.
2. Regulatory limits are NYSDEC Class "GA" Groundwater Quality Standards (GWQS) as published in NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998).

Definitions:

- ND = Parameter not detected above laboratory detection limit.
- "-" = No guidance value available.
- J = Estimated value; result is less than the sample quantitation limit but greater than zero.
- D = All compounds were identified in an analysis at the secondary dilution factor.

BOLD Exceeds NYSDEC Class "GA" Groundwater Quality Standards

FIGURES




2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0835

PROJECT NO.: 0136-013-010

DATE: NOVEMBER 2013

DRAFTED BY: JGT

SAMPLE LOCATIONS

ANNUAL GROUNDWATER MONITORING
NIAGARA STREET AND PENNSYLVANIA AVENUE SITE
BCP SITE No. C915223
BUFFALO, NEW YORK
PREPARED FOR
1093 GROUP, LLC

FIGURE 1

ATTACHMENT 1

LABORATORY ANALYTICAL DATA OCTOBER 2013 SAMPLING EVENTS

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: 480-48168-1

Client Project/Site: Turnkey - 517 Niagara St. site

For:

Turnkey Environmental Restoration, LLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Nate Munley



Authorized for release by:

10/28/2013 12:58:21 PM

Brian Fischer, Project Manager II

(716)504-9835

brian.fischer@testamericainc.com

LINKS

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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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Definitions/Glossary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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.

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
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)

Case Narrative

Client: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Job ID: 480-48168-1

Laboratory: TestAmerica Buffalo

Narrative

**Job Narrative
480-48168-1**

Receipt

The samples were received on 10/17/2013 11:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1 (480-48168-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: Blind Dup (480-48168-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.



Detection Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Client Sample ID: MW-1

Lab Sample ID: 480-48168-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	72		1.0	0.75	ug/L	1		8260C	Total/NA
1,3,5-Trimethylbenzene	5.7		1.0	0.77	ug/L	1		8260C	Total/NA
Benzene	65		1.0	0.41	ug/L	1		8260C	Total/NA
Isopropylbenzene	26		1.0	0.79	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	27		1.0	0.16	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	8.9		2.0	0.66	ug/L	1		8260C	Total/NA
n-Butylbenzene	2.3		1.0	0.64	ug/L	1		8260C	Total/NA
N-Propylbenzene	53		1.0	0.69	ug/L	1		8260C	Total/NA
o-Xylene	5.0		1.0	0.76	ug/L	1		8260C	Total/NA
p-Cymene	2.3		1.0	0.31	ug/L	1		8260C	Total/NA
sec-Butylbenzene	3.1		1.0	0.75	ug/L	1		8260C	Total/NA
Toluene	2.8		1.0	0.51	ug/L	1		8260C	Total/NA
Xylenes, Total	14		2.0	0.66	ug/L	1		8260C	Total/NA
Ethylbenzene - DL	140		2.0	1.5	ug/L	2		8260C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-48168-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	3.9		1.0	0.75	ug/L	1		8260C	Total/NA
1,3,5-Trimethylbenzene	0.94	J	1.0	0.77	ug/L	1		8260C	Total/NA
Benzene	12		1.0	0.41	ug/L	1		8260C	Total/NA
Ethylbenzene	1.3		1.0	0.74	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.41	J	1.0	0.16	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	1.1	J	2.0	0.66	ug/L	1		8260C	Total/NA
n-Butylbenzene	0.65	J	1.0	0.64	ug/L	1		8260C	Total/NA
o-Xylene	2.9		1.0	0.76	ug/L	1		8260C	Total/NA
Xylenes, Total	4.0		2.0	0.66	ug/L	1		8260C	Total/NA

Client Sample ID: Blind Dup

Lab Sample ID: 480-48168-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	71		1.0	0.75	ug/L	1		8260C	Total/NA
Benzene	73		1.0	0.41	ug/L	1		8260C	Total/NA
Isopropylbenzene	25		1.0	0.79	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	28		1.0	0.16	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	7.7		2.0	0.66	ug/L	1		8260C	Total/NA
n-Butylbenzene	2.1		1.0	0.64	ug/L	1		8260C	Total/NA
N-Propylbenzene	52		1.0	0.69	ug/L	1		8260C	Total/NA
o-Xylene	4.5		1.0	0.76	ug/L	1		8260C	Total/NA
p-Cymene	2.3		1.0	0.31	ug/L	1		8260C	Total/NA
sec-Butylbenzene	3.1		1.0	0.75	ug/L	1		8260C	Total/NA
Toluene	2.6		1.0	0.51	ug/L	1		8260C	Total/NA
Xylenes, Total	12		2.0	0.66	ug/L	1		8260C	Total/NA
Ethylbenzene - DL	130		2.0	1.5	ug/L	2		8260C	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 480-48168-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.76	J	1.0	0.74	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Client Sample ID: MW-1

Lab Sample ID: 480-48168-1

Date Collected: 10/16/13 12:52

Matrix: Water

Date Received: 10/17/13 11:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	72		1.0	0.75	ug/L			10/21/13 16:00	1
1,3,5-Trimethylbenzene	5.7		1.0	0.77	ug/L			10/21/13 16:00	1
Benzene	65		1.0	0.41	ug/L			10/21/13 16:00	1
Isopropylbenzene	26		1.0	0.79	ug/L			10/21/13 16:00	1
Methyl tert-butyl ether	27		1.0	0.16	ug/L			10/21/13 16:00	1
m-Xylene & p-Xylene	8.9		2.0	0.66	ug/L			10/21/13 16:00	1
n-Butylbenzene	2.3		1.0	0.64	ug/L			10/21/13 16:00	1
N-Propylbenzene	53		1.0	0.69	ug/L			10/21/13 16:00	1
o-Xylene	5.0		1.0	0.76	ug/L			10/21/13 16:00	1
p-Cymene	2.3		1.0	0.31	ug/L			10/21/13 16:00	1
sec-Butylbenzene	3.1		1.0	0.75	ug/L			10/21/13 16:00	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/21/13 16:00	1
Toluene	2.8		1.0	0.51	ug/L			10/21/13 16:00	1
Xylenes, Total	14		2.0	0.66	ug/L			10/21/13 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		10/21/13 16:00	1
4-Bromofluorobenzene (Surr)	105		73 - 120		10/21/13 16:00	1
Toluene-d8 (Surr)	96		71 - 126		10/21/13 16:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	140		2.0	1.5	ug/L			10/22/13 17:19	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		66 - 137		10/22/13 17:19	2
4-Bromofluorobenzene (Surr)	90		73 - 120		10/22/13 17:19	2
Toluene-d8 (Surr)	93		71 - 126		10/22/13 17:19	2

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Client Sample ID: MW-2

Lab Sample ID: 480-48168-2

Date Collected: 10/16/13 14:06

Matrix: Water

Date Received: 10/17/13 11:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	3.9		1.0	0.75	ug/L			10/21/13 16:28	1
1,3,5-Trimethylbenzene	0.94	J	1.0	0.77	ug/L			10/21/13 16:28	1
Benzene	12		1.0	0.41	ug/L			10/21/13 16:28	1
Ethylbenzene	1.3		1.0	0.74	ug/L			10/21/13 16:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/21/13 16:28	1
Methyl tert-butyl ether	0.41	J	1.0	0.16	ug/L			10/21/13 16:28	1
m-Xylene & p-Xylene	1.1	J	2.0	0.66	ug/L			10/21/13 16:28	1
n-Butylbenzene	0.65	J	1.0	0.64	ug/L			10/21/13 16:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/13 16:28	1
o-Xylene	2.9		1.0	0.76	ug/L			10/21/13 16:28	1
p-Cymene	ND		1.0	0.31	ug/L			10/21/13 16:28	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/21/13 16:28	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/21/13 16:28	1
Toluene	ND		1.0	0.51	ug/L			10/21/13 16:28	1
Xylenes, Total	4.0		2.0	0.66	ug/L			10/21/13 16:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		66 - 137					10/21/13 16:28	1
4-Bromofluorobenzene (Surr)	105		73 - 120					10/21/13 16:28	1
Toluene-d8 (Surr)	99		71 - 126					10/21/13 16:28	1

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Client Sample ID: Blind Dup

Lab Sample ID: 480-48168-3

Date Collected: 10/16/13 13:30

Matrix: Water

Date Received: 10/17/13 11:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	71		1.0	0.75	ug/L			10/21/13 16:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/21/13 16:56	1
Benzene	73		1.0	0.41	ug/L			10/21/13 16:56	1
Isopropylbenzene	25		1.0	0.79	ug/L			10/21/13 16:56	1
Methyl tert-butyl ether	28		1.0	0.16	ug/L			10/21/13 16:56	1
m-Xylene & p-Xylene	7.7		2.0	0.66	ug/L			10/21/13 16:56	1
n-Butylbenzene	2.1		1.0	0.64	ug/L			10/21/13 16:56	1
N-Propylbenzene	52		1.0	0.69	ug/L			10/21/13 16:56	1
o-Xylene	4.5		1.0	0.76	ug/L			10/21/13 16:56	1
p-Cymene	2.3		1.0	0.31	ug/L			10/21/13 16:56	1
sec-Butylbenzene	3.1		1.0	0.75	ug/L			10/21/13 16:56	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/21/13 16:56	1
Toluene	2.6		1.0	0.51	ug/L			10/21/13 16:56	1
Xylenes, Total	12		2.0	0.66	ug/L			10/21/13 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		10/21/13 16:56	1
4-Bromofluorobenzene (Surr)	106		73 - 120		10/21/13 16:56	1
Toluene-d8 (Surr)	99		71 - 126		10/21/13 16:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	130		2.0	1.5	ug/L			10/24/13 11:34	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137		10/24/13 11:34	2
4-Bromofluorobenzene (Surr)	101		73 - 120		10/24/13 11:34	2
Toluene-d8 (Surr)	103		71 - 126		10/24/13 11:34	2

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Client Sample ID: Trip Blank

Lab Sample ID: 480-48168-4

Date Collected: 10/16/13 00:00

Matrix: Water

Date Received: 10/17/13 11:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/21/13 17:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/21/13 17:23	1
Benzene	ND		1.0	0.41	ug/L			10/21/13 17:23	1
Ethylbenzene	0.76	J	1.0	0.74	ug/L			10/21/13 17:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/21/13 17:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/21/13 17:23	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			10/21/13 17:23	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/21/13 17:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/13 17:23	1
o-Xylene	ND		1.0	0.76	ug/L			10/21/13 17:23	1
p-Cymene	ND		1.0	0.31	ug/L			10/21/13 17:23	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/21/13 17:23	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/21/13 17:23	1
Toluene	ND		1.0	0.51	ug/L			10/21/13 17:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/21/13 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137		10/21/13 17:23	1
4-Bromofluorobenzene (Surr)	107		73 - 120		10/21/13 17:23	1
Toluene-d8 (Surr)	101		71 - 126		10/21/13 17:23	1

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (66-137)	BFB (73-120)	TOL (71-126)
480-48168-1	MW-1	97	105	96
480-48168-1 - DL	MW-1	121	90	93
480-48168-2	MW-2	89	105	99
480-48168-3	Blind Dup	97	106	99
480-48168-3 - DL	Blind Dup	105	101	103
480-48168-4	Trip Blank	92	107	101
LCS 480-146241/5	Lab Control Sample	90	104	100
LCS 480-146533/5	Lab Control Sample	108	93	95
LCS 480-147193/4	Lab Control Sample	104	102	100
LCSD 480-147193/26	Lab Control Sample Dup	108	106	105
MB 480-146241/7	Method Blank	94	102	99
MB 480-146533/6	Method Blank	107	88	98
MB 480-147193/5	Method Blank	109	103	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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

Lab Sample ID: MB 480-146241/7

Matrix: Water

Analysis Batch: 146241

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/21/13 11:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/21/13 11:46	1
Benzene	ND		1.0	0.41	ug/L			10/21/13 11:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/21/13 11:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/21/13 11:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/21/13 11:46	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			10/21/13 11:46	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/21/13 11:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/13 11:46	1
o-Xylene	ND		1.0	0.76	ug/L			10/21/13 11:46	1
p-Cymene	ND		1.0	0.31	ug/L			10/21/13 11:46	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/21/13 11:46	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/21/13 11:46	1
Toluene	ND		1.0	0.51	ug/L			10/21/13 11:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/21/13 11:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137		10/21/13 11:46	1
4-Bromofluorobenzene (Surr)	102		73 - 120		10/21/13 11:46	1
Toluene-d8 (Surr)	99		71 - 126		10/21/13 11:46	1

Lab Sample ID: LCS 480-146241/5

Matrix: Water

Analysis Batch: 146241

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	76 - 121
Benzene	25.0	23.8		ug/L		95	71 - 124
Ethylbenzene	25.0	25.4		ug/L		102	77 - 123
Methyl tert-butyl ether	25.0	25.0		ug/L		100	64 - 127
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	76 - 122
o-Xylene	25.0	25.9		ug/L		104	76 - 122
Toluene	25.0	24.5		ug/L		98	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	100		71 - 126

Lab Sample ID: MB 480-146533/6

Matrix: Water

Analysis Batch: 146533

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/22/13 10:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/22/13 10:43	1
Benzene	ND		1.0	0.41	ug/L			10/22/13 10:43	1

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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

Lab Sample ID: MB 480-146533/6

Matrix: Water

Analysis Batch: 146533

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			10/22/13 10:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/22/13 10:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/22/13 10:43	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			10/22/13 10:43	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/22/13 10:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/22/13 10:43	1
o-Xylene	ND		1.0	0.76	ug/L			10/22/13 10:43	1
p-Cymene	ND		1.0	0.31	ug/L			10/22/13 10:43	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/22/13 10:43	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/22/13 10:43	1
Toluene	ND		1.0	0.51	ug/L			10/22/13 10:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/22/13 10:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		10/22/13 10:43	1
4-Bromofluorobenzene (Surr)	88		73 - 120		10/22/13 10:43	1
Toluene-d8 (Surr)	98		71 - 126		10/22/13 10:43	1

Lab Sample ID: LCS 480-146533/5

Matrix: Water

Analysis Batch: 146533

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	76 - 121
Benzene	25.0	27.4		ug/L		109	71 - 124
Ethylbenzene	25.0	26.0		ug/L		104	77 - 123
Methyl tert-butyl ether	25.0	25.2		ug/L		101	64 - 127
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	76 - 122
o-Xylene	25.0	24.7		ug/L		99	76 - 122
Toluene	25.0	24.9		ug/L		100	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		66 - 137
4-Bromofluorobenzene (Surr)	93		73 - 120
Toluene-d8 (Surr)	95		71 - 126

Lab Sample ID: MB 480-147193/5

Matrix: Water

Analysis Batch: 147193

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/24/13 11:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/24/13 11:02	1
Benzene	ND		1.0	0.41	ug/L			10/24/13 11:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/24/13 11:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/24/13 11:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/24/13 11:02	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			10/24/13 11:02	1

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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

Lab Sample ID: MB 480-147193/5

Matrix: Water

Analysis Batch: 147193

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
n-Butylbenzene	ND		1.0	0.64	ug/L			10/24/13 11:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/13 11:02	1
o-Xylene	ND		1.0	0.76	ug/L			10/24/13 11:02	1
p-Cymene	ND		1.0	0.31	ug/L			10/24/13 11:02	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/24/13 11:02	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/24/13 11:02	1
Toluene	ND		1.0	0.51	ug/L			10/24/13 11:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/24/13 11:02	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	109		66 - 137		10/24/13 11:02	1
4-Bromofluorobenzene (Surr)	103		73 - 120		10/24/13 11:02	1
Toluene-d8 (Surr)	104		71 - 126		10/24/13 11:02	1

Lab Sample ID: LCS 480-147193/4

Matrix: Water

Analysis Batch: 147193

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	23.8		ug/L		95	71 - 124
Ethylbenzene	25.0	23.4		ug/L		94	77 - 123
Methyl tert-butyl ether	25.0	26.2		ug/L		105	64 - 127
m-Xylene & p-Xylene	50.0	46.7		ug/L		93	76 - 122
o-Xylene	25.0	23.0		ug/L		92	76 - 122
Toluene	25.0	22.5		ug/L		90	80 - 122

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	100		71 - 126

Lab Sample ID: LCSD 480-147193/26

Matrix: Water

Analysis Batch: 147193

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		95	76 - 121	0	20
Benzene	25.0	23.4		ug/L		94	71 - 124	1	13
Ethylbenzene	25.0	23.1		ug/L		92	77 - 123	1	15
Methyl tert-butyl ether	25.0	25.8		ug/L		103	64 - 127	1	37
m-Xylene & p-Xylene	50.0	46.1		ug/L		92	76 - 122	1	16
o-Xylene	25.0	23.5		ug/L		94	76 - 122	2	16
Toluene	25.0	22.7		ug/L		91	80 - 122	1	15

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	108		66 - 137

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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

Lab Sample ID: LCSD 480-147193/26

Matrix: Water

Analysis Batch: 147193

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	105		71 - 126

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QC Association Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

GC/MS VOA

Analysis Batch: 146241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-48168-1	MW-1	Total/NA	Water	8260C	
480-48168-2	MW-2	Total/NA	Water	8260C	
480-48168-3	Blind Dup	Total/NA	Water	8260C	
480-48168-4	Trip Blank	Total/NA	Water	8260C	
LCS 480-146241/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-146241/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 146533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-48168-1 - DL	MW-1	Total/NA	Water	8260C	
LCS 480-146533/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-146533/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 147193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-48168-3 - DL	Blind Dup	Total/NA	Water	8260C	
LCS 480-147193/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-147193/26	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-147193/5	Method Blank	Total/NA	Water	8260C	

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Client Sample ID: MW-1

Lab Sample ID: 480-48168-1

Date Collected: 10/16/13 12:52

Matrix: Water

Date Received: 10/17/13 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	146241	10/21/13 16:00	NMD1	TAL BUF
Total/NA	Analysis	8260C	DL	2	146533	10/22/13 17:19	NMD1	TAL BUF

Client Sample ID: MW-2

Lab Sample ID: 480-48168-2

Date Collected: 10/16/13 14:06

Matrix: Water

Date Received: 10/17/13 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	146241	10/21/13 16:28	NMD1	TAL BUF

Client Sample ID: Blind Dup

Lab Sample ID: 480-48168-3

Date Collected: 10/16/13 13:30

Matrix: Water

Date Received: 10/17/13 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	146241	10/21/13 16:56	NMD1	TAL BUF
Total/NA	Analysis	8260C	DL	2	147193	10/24/13 11:34	RAL	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 480-48168-4

Date Collected: 10/16/13 00:00

Matrix: Water

Date Received: 10/17/13 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	146241	10/21/13 17:23	NMD1	TAL BUF

Laboratory References:

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

Certification Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

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	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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: Turnkey Environmental Restoration, LLC
Project/Site: Turnkey - 517 Niagara St. site

TestAmerica Job ID: 480-48168-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-48168-1	MW-1	Water	10/16/13 12:52	10/17/13 11:45
480-48168-2	MW-2	Water	10/16/13 14:06	10/17/13 11:45
480-48168-3	Blind Dup	Water	10/16/13 13:30	10/17/13 11:45
480-48168-4	Trip Blank	Water	10/16/13 00:00	10/17/13 11:45

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Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-48168-1

Login Number: 48168

List Source: TestAmerica Buffalo

List Number: 1

Creator: Stau, Brandon M

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	bmtk
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	