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

September 2016

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, 2013 to June 22, 2016 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:

- Cessation of groundwater monitoring at the Site. Completed remedial excavation activities removed on-Site material to the property boundary along Niagara Street and Pennsylvania Avenue, thereby removing on-Site source material. 1093 Group, LLC has completed six (6) rounds of post-remedial groundwater monitoring with results indicating a significant decrease in concentrations and downward trend that is expected to continue via natural attenuation.

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 (5) 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 REMEDY PERFORMANCE

The completed remedial measures, as identified above, and more fully detailed in the FER, removed the former UST system and petroleum impacted on-Site soil/fill to the property boundary along Niagara Street and Pennsylvania Avenue, and/or achieved a Track 2 Restricted Residential Use cleanup. Redevelopment activities included the construction of a new commercial building (see Figure 2 and photolog).

Post-remedial monitoring has been completed at the Site in accordance with the SMP (2009). The Site inspection including a walk-over of the entire BCP Site to visually observe and document the use of the Site, restriction of groundwater use, and conformance with the Site Management Plan (SMP). Groundwater monitoring has been completed in accordance with the SMP and subsequent modifications approved by the Department.

The 2014-2016 site inspections and 2016 groundwater monitoring results indicate that the controls are in-place and functioning as intended in accordance with the SMP. The completed IC/EC Certification form and site photographs are included in Appendix A and Appendix B, respectively.

4.0 SITE MANAGEMENT PLAN

The Niagara Street and Pennsylvania Avenue Site post-remedial SMP was approved by the NYSDEC in December 2009. The 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.

4.1 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).

4.1.1 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 were completed during this reporting period.

4.1.2 Site 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).

4.2 Long-Term Groundwater Monitoring (LTGWM) Plan

As a requirement of the SMPs, long-term groundwater monitoring is being performed at the Site.

Groundwater monitoring was completed on June 22, 2016. Laboratory Analytical results indicate a continued downward trend in residual VOC concentrations. Certain VOCs were detected slightly above their individual Groundwater Quality Standards (GWQS) at

only MW-1 (see Table 1). Groundwater concentrations show a continued downward trend, with significant reduction in concentrations since the completion of remedial measures (2009). The downward trend is expected to continue via natural bio-attenuation.

4.3 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.

The 2016 Site Inspection and Groundwater Monitoring was completed by TurnKey personnel on June 22, 2016. 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.

4.4 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.

4.4.1 Engineering Controls

No engineering controls are required for the Site.

4.4.2 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.

All institutional controls are in-place and the Site is compliant.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations are as follows:

- Based on the site inspections, 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. Completed remedial excavation activities removed on-Site material to the property boundary along Niagara Street and Pennsylvania Avenue and achieved a Track 2 Restricted Residential Use cleanup. Post-remedial groundwater analytical results show a significant decrease in concentrations and downward trend that is expected to continue via natural attenuation.

6.0 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.

TABLE



**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	Jun-16	May-10	Nov-10	May-11	Oct-11	Oct-13	Jun-16	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	7.7	1.1	0.64 J	5	7.6	12	ND								
Ethylbenzene	5	1700 D	1500 D	26	30	140	12	1.1	ND	ND	ND	1.3	ND								
Isopropylbenzene (Cumene)	5	95	73	15	15	26	13	ND													
Methyl tert butyl ether (MTBE)	10	ND	49	ND	ND	27	8.8	5.1	4.4	ND	ND	0.41 J	0.19 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	ND	4	ND								
n-Butylbenzene	5	12	27	16	ND	2.3	6.3	ND	ND	ND	ND	0.65 J	ND								
n-Propylbenzene	5	290 D	190 D	ND	20	53	49	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	ND	3.9	ND								
1,3,5-Trimethylbenzene	5	83	21	11	2.8	5.7	ND	ND	ND	ND	ND	0.94 J	ND								
sec-Butylbenzene	5	12	12	ND	ND	3.1	5.9	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).

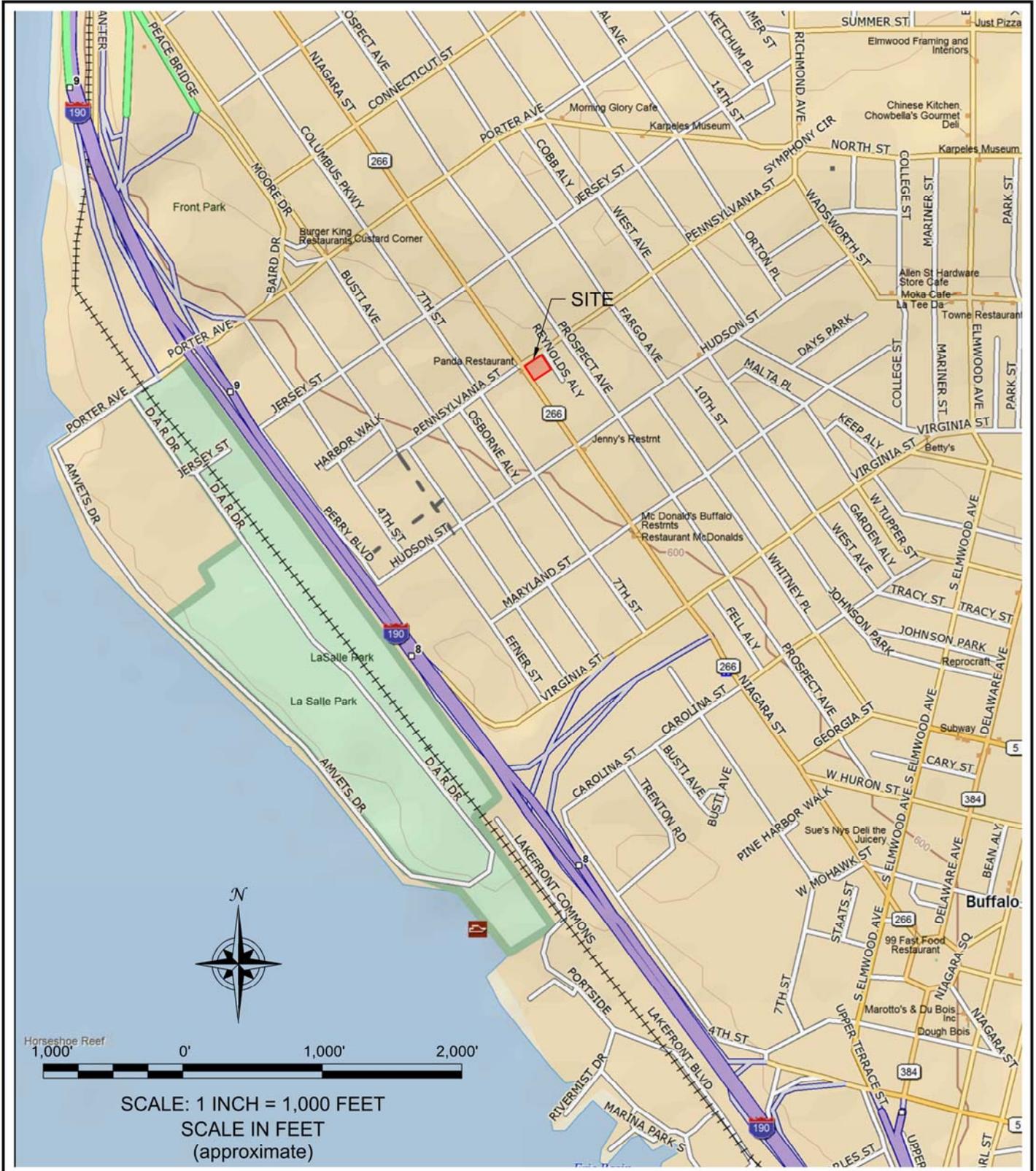
Definitions:

- 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

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

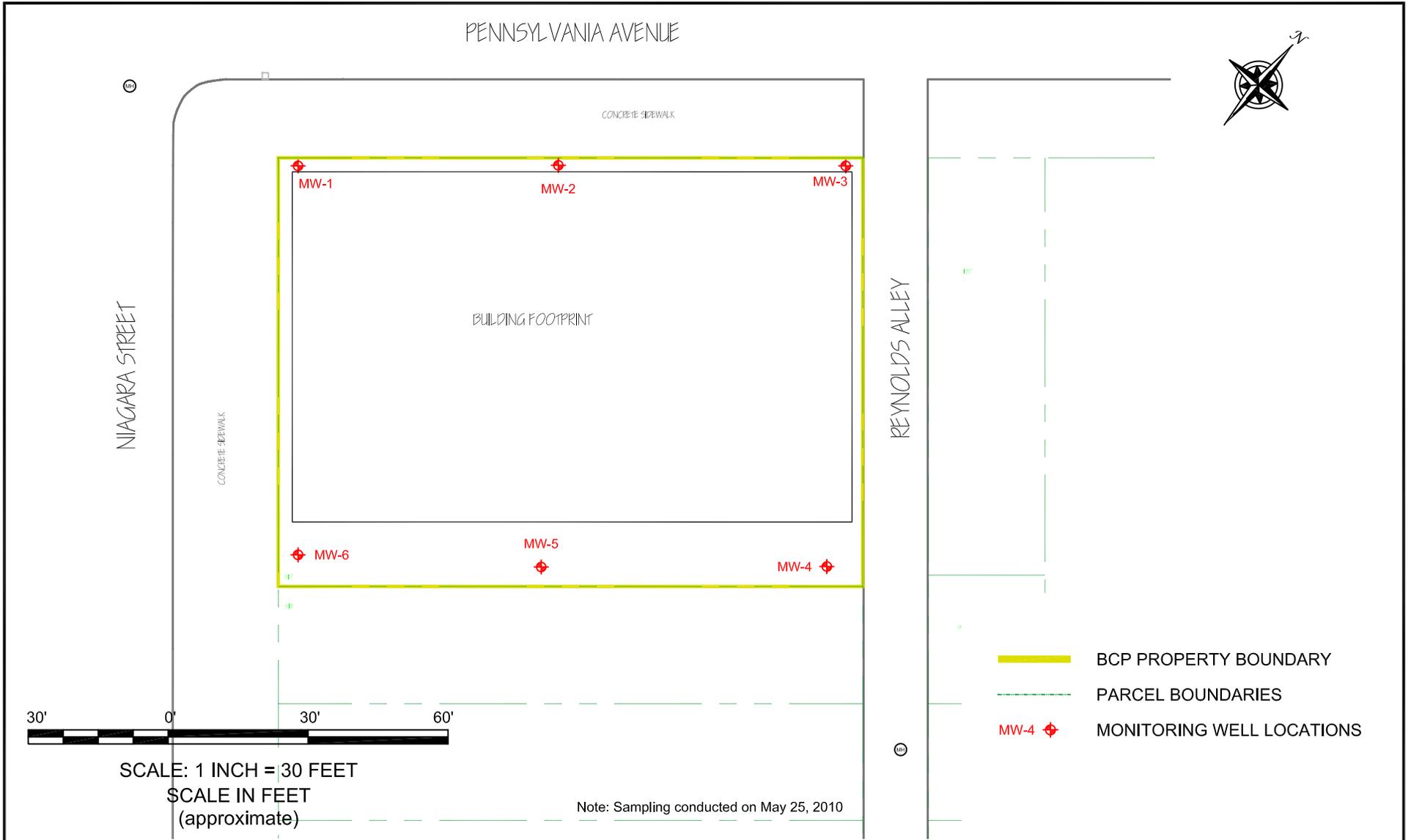


2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0635

PROJECT NO.: 0136-013-010

DATE: JULY 2016

DRAFTED BY: JJR



TURNKEY
ENVIRONMENTAL
RESTORATION, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 858-0635

PROJECT NO.: 0136-002-600

DATE: SEPTEMBER 2016

DRAFTED BY: NTM

SITE PLAN AND GW MONITORING WELL LOCATIONS
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 No. C915223 **Site Details** **Box 1**

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, 2013 to June 24, 2016

- | | 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 <input type="checkbox"/> <input checked="" type="checkbox"/>
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? (The Qualitative Exposure Assessment must be certified every five years)	<input checked="" type="checkbox"/> <input type="checkbox"/>
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C915223	Box 3						
Description of Institutional Controls							
<table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><u>Parcel</u></td> <td style="width: 30%;"><u>Owner</u></td> <td style="width: 40%;"><u>Institutional Control</u></td> </tr> <tr> <td>110.27-5-1.1</td> <td>1093 Group, LLC</td> <td> Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan </td> </tr> </table>	<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	
<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.							

Description of Engineering Controls	Box 4
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

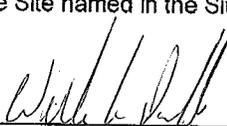
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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 A. Paladino at 245 Main St Suite 210, Buffalo NY
print name print business address

am certifying as _____ (Owner or Remedial Party)

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


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

9/12/16
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
June 22, 2016



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
June 22, 2016



APPENDIX C

LABORATORY ANALYTICAL DATA PACKAGE

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: 480-102080-1

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:

6/28/2016 2:43:21 PM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

LINKS

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results through

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Have a Question?



Visit us at:

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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Definitions/Glossary

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

TestAmerica Job ID: 480-102080-1

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
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)

Case Narrative

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

TestAmerica Job ID: 480-102080-1

Job ID: 480-102080-1

Laboratory: TestAmerica Buffalo

Narrative

**Job Narrative
480-102080-1**

Comments

No additional comments.

Receipt

The samples were received on 6/22/2016 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° 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 (480-102080-1) and BLIND DUP (480-102080-3). Elevated reporting limits (RLs) are provided.

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



Detection Summary

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

TestAmerica Job ID: 480-102080-1

Client Sample ID: MW-1

Lab Sample ID: 480-102080-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.7		2.0	0.82	ug/L	2		8260C	Total/NA
Ethylbenzene	12		2.0	1.5	ug/L	2		8260C	Total/NA
Isopropylbenzene	13		2.0	1.6	ug/L	2		8260C	Total/NA
Methyl tert-butyl ether	8.8		2.0	0.32	ug/L	2		8260C	Total/NA
n-Butylbenzene	6.3		2.0	1.3	ug/L	2		8260C	Total/NA
N-Propylbenzene	49		2.0	1.4	ug/L	2		8260C	Total/NA
sec-Butylbenzene	5.9		2.0	1.5	ug/L	2		8260C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-102080-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.19	J	1.0	0.16	ug/L	1		8260C	Total/NA

Client Sample ID: BLIND DUP

Lab Sample ID: 480-102080-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.2		2.0	0.82	ug/L	2		8260C	Total/NA
Ethylbenzene	21		2.0	1.5	ug/L	2		8260C	Total/NA
Isopropylbenzene	13		2.0	1.6	ug/L	2		8260C	Total/NA
Methyl tert-butyl ether	8.5		2.0	0.32	ug/L	2		8260C	Total/NA
n-Butylbenzene	4.8		2.0	1.3	ug/L	2		8260C	Total/NA
N-Propylbenzene	46		2.0	1.4	ug/L	2		8260C	Total/NA
sec-Butylbenzene	5.5		2.0	1.5	ug/L	2		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: 480-102080-1

Client Sample ID: MW-1

Lab Sample ID: 480-102080-1

Date Collected: 06/22/16 09:00

Matrix: Water

Date Received: 06/22/16 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			06/24/16 17:46	2
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			06/24/16 17:46	2
Benzene	7.7		2.0	0.82	ug/L			06/24/16 17:46	2
Ethylbenzene	12		2.0	1.5	ug/L			06/24/16 17:46	2
Isopropylbenzene	13		2.0	1.6	ug/L			06/24/16 17:46	2
Methyl tert-butyl ether	8.8		2.0	0.32	ug/L			06/24/16 17:46	2
m-Xylene & p-Xylene	ND		4.0	1.3	ug/L			06/24/16 17:46	2
n-Butylbenzene	6.3		2.0	1.3	ug/L			06/24/16 17:46	2
N-Propylbenzene	49		2.0	1.4	ug/L			06/24/16 17:46	2
o-Xylene	ND		2.0	1.5	ug/L			06/24/16 17:46	2
p-Cymene	ND		2.0	0.62	ug/L			06/24/16 17:46	2
sec-Butylbenzene	5.9		2.0	1.5	ug/L			06/24/16 17:46	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			06/24/16 17:46	2
Toluene	ND		2.0	1.0	ug/L			06/24/16 17:46	2
Xylenes, Total	ND		4.0	1.3	ug/L			06/24/16 17:46	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137					06/24/16 17:46	2
4-Bromofluorobenzene (Surr)	111		73 - 120					06/24/16 17:46	2
Toluene-d8 (Surr)	93		71 - 126					06/24/16 17:46	2

Client Sample Results

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

TestAmerica Job ID: 480-102080-1

Client Sample ID: MW-2
Date Collected: 06/22/16 09:27
Date Received: 06/22/16 14:55

Lab Sample ID: 480-102080-2
Matrix: Water

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			06/24/16 18:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			06/24/16 18:13	1
Benzene	ND		1.0	0.41	ug/L			06/24/16 18:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/24/16 18:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/24/16 18:13	1
Methyl tert-butyl ether	0.19	J	1.0	0.16	ug/L			06/24/16 18:13	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			06/24/16 18:13	1
n-Butylbenzene	ND		1.0	0.64	ug/L			06/24/16 18:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			06/24/16 18:13	1
o-Xylene	ND		1.0	0.76	ug/L			06/24/16 18:13	1
p-Cymene	ND		1.0	0.31	ug/L			06/24/16 18:13	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			06/24/16 18:13	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			06/24/16 18:13	1
Toluene	ND		1.0	0.51	ug/L			06/24/16 18:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/24/16 18:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		66 - 137					06/24/16 18:13	1
4-Bromofluorobenzene (Surr)	109		73 - 120					06/24/16 18:13	1
Toluene-d8 (Surr)	95		71 - 126					06/24/16 18:13	1

Client Sample Results

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

TestAmerica Job ID: 480-102080-1

Client Sample ID: BLIND DUP

Lab Sample ID: 480-102080-3

Date Collected: 06/22/16 12:00

Matrix: Water

Date Received: 06/22/16 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			06/24/16 18:40	2
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			06/24/16 18:40	2
Benzene	8.2		2.0	0.82	ug/L			06/24/16 18:40	2
Ethylbenzene	21		2.0	1.5	ug/L			06/24/16 18:40	2
Isopropylbenzene	13		2.0	1.6	ug/L			06/24/16 18:40	2
Methyl tert-butyl ether	8.5		2.0	0.32	ug/L			06/24/16 18:40	2
m-Xylene & p-Xylene	ND		4.0	1.3	ug/L			06/24/16 18:40	2
n-Butylbenzene	4.8		2.0	1.3	ug/L			06/24/16 18:40	2
N-Propylbenzene	46		2.0	1.4	ug/L			06/24/16 18:40	2
o-Xylene	ND		2.0	1.5	ug/L			06/24/16 18:40	2
p-Cymene	ND		2.0	0.62	ug/L			06/24/16 18:40	2
sec-Butylbenzene	5.5		2.0	1.5	ug/L			06/24/16 18:40	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			06/24/16 18:40	2
Toluene	ND		2.0	1.0	ug/L			06/24/16 18:40	2
Xylenes, Total	ND		4.0	1.3	ug/L			06/24/16 18:40	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137		06/24/16 18:40	2
4-Bromofluorobenzene (Surr)	110		73 - 120		06/24/16 18:40	2
Toluene-d8 (Surr)	93		71 - 126		06/24/16 18:40	2

Surrogate Summary

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

TestAmerica Job ID: 480-102080-1

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	BFB	TOL
		(66-137)	(73-120)	(71-126)
480-102080-1	MW-1	94	111	93
480-102080-2	MW-2	93	109	95
480-102080-3	BLIND DUP	94	110	93
LCS 480-308304/4	Lab Control Sample	90	109	95
MB 480-308304/6	Method Blank	93	109	94

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: 480-102080-1

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

Lab Sample ID: MB 480-308304/6

Matrix: Water

Analysis Batch: 308304

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			06/24/16 10:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			06/24/16 10:38	1
Benzene	ND		1.0	0.41	ug/L			06/24/16 10:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/24/16 10:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/24/16 10:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/24/16 10:38	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			06/24/16 10:38	1
n-Butylbenzene	ND		1.0	0.64	ug/L			06/24/16 10:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			06/24/16 10:38	1
o-Xylene	ND		1.0	0.76	ug/L			06/24/16 10:38	1
p-Cymene	ND		1.0	0.31	ug/L			06/24/16 10:38	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			06/24/16 10:38	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			06/24/16 10:38	1
Toluene	ND		1.0	0.51	ug/L			06/24/16 10:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/24/16 10:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		66 - 137		06/24/16 10:38	1
4-Bromofluorobenzene (Surr)	109		73 - 120		06/24/16 10:38	1
Toluene-d8 (Surr)	94		71 - 126		06/24/16 10:38	1

Lab Sample ID: LCS 480-308304/4

Matrix: Water

Analysis Batch: 308304

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	23.7		ug/L		95	76 - 121
1,3,5-Trimethylbenzene	25.0	23.7		ug/L		95	77 - 121
Benzene	25.0	23.5		ug/L		94	71 - 124
Ethylbenzene	25.0	22.9		ug/L		92	77 - 123
Isopropylbenzene	25.0	23.7		ug/L		95	77 - 122
Methyl tert-butyl ether	25.0	22.2		ug/L		89	64 - 127
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	76 - 122
n-Butylbenzene	25.0	23.6		ug/L		95	71 - 128
N-Propylbenzene	25.0	23.5		ug/L		94	75 - 127
o-Xylene	25.0	23.3		ug/L		93	76 - 122
p-Cymene	25.0	24.4		ug/L		98	73 - 120
sec-Butylbenzene	25.0	24.0		ug/L		96	74 - 127
tert-Butylbenzene	25.0	24.6		ug/L		98	75 - 123
Toluene	25.0	23.5		ug/L		94	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	109		73 - 120
Toluene-d8 (Surr)	95		71 - 126

TestAmerica Buffalo

QC Association Summary

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

TestAmerica Job ID: 480-102080-1

GC/MS VOA

Analysis Batch: 308304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102080-1	MW-1	Total/NA	Water	8260C	
480-102080-2	MW-2	Total/NA	Water	8260C	
480-102080-3	BLIND DUP	Total/NA	Water	8260C	
LCS 480-308304/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-308304/6	Method Blank	Total/NA	Water	8260C	

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Lab Chronicle

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

TestAmerica Job ID: 480-102080-1

Client Sample ID: MW-1

Date Collected: 06/22/16 09:00

Date Received: 06/22/16 14:55

Lab Sample ID: 480-102080-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	308304	06/24/16 17:46	GVF	TAL BUF

Client Sample ID: MW-2

Date Collected: 06/22/16 09:27

Date Received: 06/22/16 14:55

Lab Sample ID: 480-102080-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	308304	06/24/16 18:13	GVF	TAL BUF

Client Sample ID: BLIND DUP

Date Collected: 06/22/16 12:00

Date Received: 06/22/16 14:55

Lab Sample ID: 480-102080-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	308304	06/24/16 18:40	GVF	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: 480-102080-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

- 1
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- 14
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Method Summary

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

TestAmerica Job ID: 480-102080-1

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: 480-102080-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-102080-1	MW-1	Water	06/22/16 09:00	06/22/16 14:55
480-102080-2	MW-2	Water	06/22/16 09:27	06/22/16 14:55
480-102080-3	BLIND DUP	Water	06/22/16 12:00	06/22/16 14:55

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____
 Drinking Water? Yes No

Chain of Custody Record

TAL-4124 (1007)

Client Turnkey Environmental Restoration		Project Manager Nate Menley		Date 6/22/16		Chain of Custody Number 1900636	
Address 2558 Hawkey TPE		Telephone Number (Area Code)/Fax Number 716-449-0852		Lab Number		Page 1 of 1	
City Buffalo		Site Contact Josh Robinson		Lab Contact Josh Robinson		Analysis (Attach list if more space is needed)	
State NY		Zip Code 14218		Carrier/Waybill Number		Special Instructions/ Conditions of Receipt	
Project Name and Location (State) 517 Niagara street site		Matrix		Containers & Preservatives		Limited Volume 2 VoAs	
Contract/Purchase Order/Quote No. T0136-013-010		Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Time		Date	
		Mw-1		0900		6/22/16	
		Mw-2		0927		6/22/16	
		Blind Pup		1200		6/22/16	
		Aqueous					
		Sed.					
		Soil					
		Unpres.					
		H2SO4					
		HNO3					
		HCl					
		NaOH					
		ZnAc/NaOH					



Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal
 Return To Client Disposal By Lab Archive For _____ Months

Turn Around Time Required
 24 Hours 48 Hours 7 Days 14 Days 21 Days Other Standard

1. Relinquished By
 Date: 6/22/16 Time: 1100
 Signature: [Signature]

2. Relinquished By
 Date: 6/22/16 Time: 1455
 Signature: [Signature]

3. Relinquished By
 Date: 6/22/16 Time: 1425
 Signature: [Signature]

Comments
 7.0 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-102080-1

Login Number: 102080

List Number: 1

Creator: Janish, Carl 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.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	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	