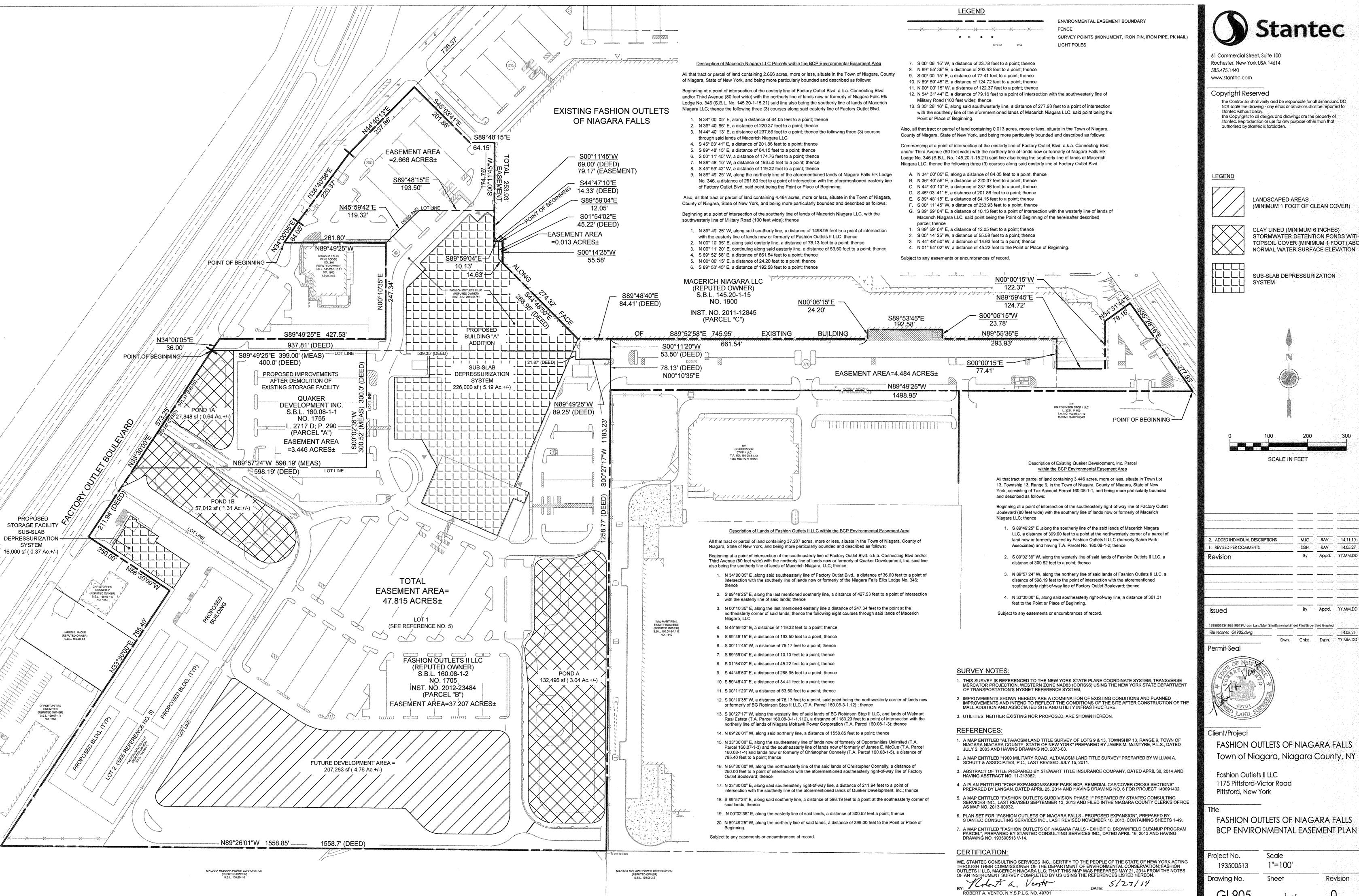
APPENDIX A

Survey Map, Metes and Bounds



ORIGINAL SHEET - ARCH D

(MINIMUM 1 FOOT OF CLEAN COVER)

STORMWATER DETENTION PONDS WITH TOPSOIL COVER (MINIMUM 1 FOOT) ABOVE NORMAL WATER SURFACE ELEVATION

RAV 14.11.10 14.05.27 Appd. YY.MM.DD

Town of Niagara, Niagara County, NY

BCP ENVIRONMENTAL EASEMENT PLAN

APPENDIX B

Digital Copy of the Final Engineering Report (Provided on CD)

APPENDIX C

Digital Copy of the Site Management Plan (Provided on CD)

APPENDIX D

Environmental Easement



NIAGARA COUNTY CLERK WAYNE F. JAGOW

RECEIPT

** Reprint **

Receipt Date: 10/30/2014 11:11:26 AM

RECEIPT # 2014216492

Recording Clerk: BH Cash Drawer: CASH3 Rec'd Frm: BOB/STEWART

Rec'd In Person

Instr#: 2014-18632

DOC: EASEMENT
DEED STAMP: 1836

OR Party: FASHION OUTLETS II LLC

EE Party: PEOPLE OF THE STATE OF NEW

YORK

Recording Fees

 Cover Page
 \$8.00

 Recording Fee
 \$38.00

 Cultural Ed
 \$14.25

 Records Management - County
 \$1.00

 Records Management - State
 \$4.75

 TP584
 \$5.00

Transfer Tax

Transfer Tax \$0.00

DOCUMENT TOTAL: ---> \$71.00

Instr#: 2014-18633

DOC: EASEMENT
DEED STAMP: 1837

OR Party: MACERICH NIAGARA LLC

EE Party: PEOPLE OF THE STATE OF NEW

YORK

Recording Fees

Cover Page \$8.00
Recording Fee \$38.00
Cultural Ed \$14.25
Records Management - County \$1.00
Records Management - State \$4.75
TP584 \$5.00

Transfer Tax

Transfer Tax \$0.00

DOCUMENT TOTAL: ---->

\$71.00

Instr#: 2014-18634

DOC: EASEMENT
DEED STAMP: 1838

OR Party: QUAKER DEVELOPMENT INC EE Party: PEOPLE OF THE STATE OF NEW

YORK

Recording Fees

Cover Page \$8.00
Recording Fee \$32.00
Cultural Ed \$14.25
Records Management - County \$1.00
Records Management - State \$4.75
TP584 \$5.00

Transfer Tax

Transfer Tax \$0.00

DOCUMENT TOTAL: ---> \$65.00

Misc Fees

Overpayment \$6.00

Receipt Summary

TOTAL RECEIPT: ---> \$213.00

TOTAL RECEIVED: ---> \$213.00

CASH BACK: ---> \$0.00

PAYMENTS

Check # 72655 -> \$213.00

HARRIS BEACH LLP

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

SHA

THIS INDENTURE made this 21% day of August, 2014, between Quaker Development, Inc., a New York corporation, dba Secure Storage having an office at 124 Meadow Road, Orchard Park, NY 14127, County of Erie, State of New York (the "Grantor") and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 1755 Factory Outlet Boulevard in the Town of Niagara, County of Niagara and State of New York, known and designated on the tax map of the County Clerk of Niagara as tax map parcel number: Section 160.08, Block 1, Lot 1, being the same as that property conveyed to Grantor by deed dated January 31, 1997 and recorded in the Niagara County Clerk's Office in Liber 2717 of Deeds at Page 290.

WHEREAS, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 3.446+/- acres, which is a portion of the 47.815 +/acre parcel that represents the real property which is the subject of the Brownfield Cleanup Agreement Index Number C932162-06-13, and is hereinafter more fully set forth in the Land Title Survey dated May 21, 2014, Drawing Number GI 905, prepared by Stantec Consulting Services Inc., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

ORIGINAL FILED

OCT 30 2014

WAYNE F. JAGOW NIAGARA COUNTY CLERK

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C932162-06-13, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

- 1. <u>Purposes.</u> Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls.</u> The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
 - A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

- (2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Niagara County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, New York 12233 Phone: (518) 402-9553

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

- F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
 - (2) the institutional controls and/or engineering controls employed at such site:
 - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her 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
 - (7) the information presented is accurate and complete.
- 3. <u>Right to Enter and Inspect.</u> Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights.</u> Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

- A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.
- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice.</u> Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C932162

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to:

Site Control Section

Division of Environmental Remediation

NYSDEC 625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

- 7. <u>Recordation.</u> Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 8. <u>Amendment.</u> Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

[SIGNATURE PAGE FOLLOWS]

QUAKER DEVELOPMENT, INC. DBA SECURE STORAGE

By: ____/ Print Name:

Maritza B. Ruh

Title:

President)

Date:

Quaker Development, Inc. Acknowledgment

STATE OF NEW YORK) ss:

COUNTY OF ERIE

On the day of August, in the year 2014, before me, the undersigned, personally appeared Maritza B. Ruh, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity, and that by his/her/their signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public - State of New York

FAYDA HATHAWAY
No. 01HA6210137
Notary Public, State of New York
Qualified in Erie County
My Commission Expires Aug. 10,

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

obert W. Schick, Director

Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)

(STATE OF NEW YORK)

(STATE OF NEW YORK)

On the day of da

Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 20 10

SCHEDULE "A" PROPERTY DESCRIPTION

All that tract or parcel of land containing 3.446 acres, more or less, situate in Town Lot 13, Township 13, Range 9, in the Town of Niagara, County of Niagara, State of New York, consisting of Tax Account Parcel 160.08-1-1, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the southeasterly right-of-way line of Factory Outlet Boulevard (80 feet wide) with the southerly line of lands now or formerly of Macerich Niagara LLC; thence

- 1. S 89°49'25" E ,along the southerly line of the said lands of Macerich Niagara LLC, a distance of 399.00 feet to a point at the northwesterly corner of a parcel of land now or formerly owned by Fashion Outlets II LLC (formerly Sabre Park Associates) and having T.A. Parcel No. 160.08-1-2; thence
- 2. S 00°02'36" W, along the westerly line of said lands of Fashion Outlets II LLC, a distance of 300.52 feet to a point; thence
- 3. N 89°57'24" W, along the northerly line of said lands of Fashion Outlets II LLC, a distance of 598.19 feet to the point of intersection with the aforementioned southeasterly right-of-way line of Factory Outlet Boulevard; thence
- 4. N 33°30'00" E, along said southeasterly right-of-way line, a distance of 361.31 feet to the Point or Place of Beginning.

Subject to any easements or encumbrances of record.

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 21st day of August, 2014, between Macerich Niagara LLC, a Delaware limited liability company, having an office at 401 Wilshire Blvd., Suite 700, Santa Monica, CA 90401, County of Los Angeles, State of California (the "Grantor") and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 1900 Military Road in the Town of Niagara, County of Niagara and State of New York, known and designated on the tax map of the County Clerk of Niagara as part of tax map parcel numbers: Section 145.20, Block 1, Lot 14 and Section 145.20, Block 1, Lot 15 being the same as that property conveyed to Grantor by deed dated as of July 22, 2011 and recorded in the Niagara County Clerk's Office as Instrument Number 2011-12845, excepting therefrom that property conveyed by Grantor to Fashion Outlets II LLC by deed dated October 31, 2013 and recorded on February 6, 2014 in the Niagara County Clerk's Office as Instrument No. 2014-01741.

WHEREAS, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 7.163+/- acres, which is a portion of the 47.815 +/acre parcel that represents the real property which is the subject of the Brownfield Cleanup Agreement Index Number C932162-06-13, and is hereinafter more fully set forth in the Land Title Survey dated May 21, 2014, Drawing Number GI 905, prepared by Mante Consulting Services Inc., which will

OCT 30 2014

be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C932162-06-13, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

- 1. <u>Purposes.</u> Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls.</u> The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
 - A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

- (2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Niagara County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

- F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
 - (2) the institutional controls and/or engineering controls employed at such site:
 - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her 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
 - (7) the information presented is accurate and complete.
- 3. <u>Right to Enter and Inspect.</u> Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights.</u> Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

- A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.
- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice.</u> Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C932162

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to:

Site Control Section

Division of Environmental Remediation

NYSDEC

625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

- 7. <u>Recordation.</u> Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 8. <u>Amendment.</u> Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

[SIGNATURE PAGE FOLLOWS]

MACERICH NIAGARA LLC

BY: MACERICH SCG/LIMITED PARTNERSHIP, its sole member

BY: MACERICH/SC/G AP LLC, its general partner

By:

Print Name:

Chet A. Cramin

Title:

Senior Vice President
Associate General Counsel

Date:

8/21/14

[Macerich Niagara LLC Acknowledgment continues on following page]

State of California)
County of Los Angeles On Spilly before me, Lice personally appeared Chet A. Cu	}
County or Les 1 to the s	
On 5 21 19 before me, Li	LE RENE PENA. Here Insert Name and Title of the Officer.
personally appeared Chet A. Cu	amin
	Name(s) of Signer(s)
	who proved to me on the basis of satisfactory
	evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged
	to me that he/she/they executed the same in
LISA RENE PENA	his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
Commission # 1957263 Notary Public - California	person(s), or the entity upon behalf of which the
Los Angeles County My Comm. Expires Nov 17, 2015	person(s) acted, executed the instrument.
	I certify under PENALTY OF PERJURY under the
	laws of the State of California that the foregoing
	paragraph is true and correct.
	WITNESS my hand and official seal.
	<u> </u>
Place Notary Seal Above	Signature:Signature of Notary Public
Though the information below is not required by la	ONAL w, it may prove valuable to persons relying on the document
and could prevent fraudulent removal an	nd reattachment of this form to another document.
Description of Attached Document Title or Type of Document: Ehinoment	Easement
	Number of Pages:
Signer(s) Other Than Named Above:	
Capacity(ies) Claimed by Signer(s)	
Signer's Name:	Signer's Name:
☐ Corporate Officer — Title(s):	
	NT ☐ Individual RIGHT THUMBPRINT OF SIGNER
OF SIGNER	
☐ Partner — ☐ Limited ☐ General Top of thumb here	e ☐ Partner — ☐ Limited ☐ General Top of thumb here
☐ Partner —☐ Limited ☐ General Top of thumb here ☐ Attorney in Fact	☐ Partner — ☐ Limited ☐ General Top of thumb here ☐ Attorney in Fact
☐ Partner —☐ Limited ☐ General Top of thumb her	e ☐ Partner — ☐ Limited ☐ General Top of thumb here
 □ Partner — □ Limited □ General Top of thumb her □ Attorney in Fact □ Trustee 	☐ Partner — ☐ Limited ☐ General Top of thumb here ☐ Attorney in Fact ☐ Trustee
☐ Partner — ☐ Limited ☐ General Top of thumb here ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator ☐ Other:	☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator ☐ Other:
☐ Partner — ☐ Limited ☐ General Top of thumb here ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator ☐ Other:	☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator ☐ Other:

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

Robert W. Schick, Director

Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the day of da

Notary Public - State of New York

Notary Public, State of New York
No. 01CH5082146
Qualified in Schenectady County
Commission Expires August 22, 20

SCHEDULE "A" PROPERTY DESCRIPTION

All that tract or parcel of land containing 2.666 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the easterly line of Factory Outlet Blvd. a.k.a. Connecting Blvd and/or Third Avenue (80 feet wide) with the northerly line of lands now or formerly of Niagara Falls Elk Lodge No. 346 (S.B.L. No. 145.20-1-15.21) said line also being the southerly line of lands of Macerich Niagara LLC; thence the following three (3) courses along said easterly line of Factory Outlet Blvd.

- 1. N 34° 00' 05" E, along a distance of 64.05 feet to a point; thence
- 2. N 36° 40′ 56" E, a distance of 220.37 feet to a point; thence
- 3. N 44° 40′ 13" E, a distance of 237.86 feet to a point; thence the following three (3) courses through said lands of Macerich Niagara LLC
- 4. S 45° 03' 41" E, a distance of 201.86 feet to a point; thence
- 5. S 89° 48' 15" E, a distance of 64.15 feet to a point; thence
- 6. S 00° 11' 45" W, a distance of 174.76 feet to a point; thence
- 7. N 89° 48' 15" W, a distance of 193.50 feet to a point; thence
- 8. S 45° 59' 42" W, a distance of 119.32 feet to a point; thence
- 9. N 89° 49' 25" W, along the northerly line of the aforementioned lands of Niagara Falls Elk Lodge No. 346, a distance of 261.80 feet to a point of intersection with the aforementioned easterly line of Factory Outlet Blvd. said point being the Point or Place of Beginning.

Also, all that tract or parcel of land containing 4.484 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the southerly line of lands of Macerich Niagara LLC, with the southwesterly line of Military Road (100 feet wide); thence

- 1. N 89° 49' 25" W, along said southerly line, a distance of 1498.95 feet to a point of intersection with the easterly line of lands now or formerly of Fashion Outlets II LLC; thence
- 2. N 00° 10' 35" E, along said easterly line, a distance of 78.13 feet to a point; thence
- 3. N 00° 11' 20" E, continuing along said easterly line, a distance of 53.50 feet to a point; thence
- 4. S 89° 52' 58" E, a distance of 661.54 feet to a point; thence
- 5. N 00° 06' 15" E, a distance of 24.20 feet to a point; thence
- 6. S 890 53' 45" E, a distance of 192.58 feet to a point; thence
- 7. S 00° 06' 15" W, a distance of 23.78 feet to a point; thence
- 8. N 89° 55' 36" E, a distance of 293.93 feet to a point; thence
- 9. S 00° 00' 15" E, a distance of 77.41 feet to a point; thence
- 10. N 89° 59' 45" E, a distance of 124.72 feet to a point; thence
- 11. N 00° 00' 15" W, a distance of 122.37 feet to a point; thence
- 12. N 54° 31' 44" E, a distance of 79.16 feet to a point of intersection with the southwesterly line of Military Road (100 feet wide); thence
- 13. S 35° 28' 16" E, along said southwesterly line, a distance of 277.93 feet to a point of intersection with the southerly line of the aforementioned lands of Macerich Niagara LLC, said point being the Point or Place of Beginning.

Also, all that tract or parcel of land containing 0.013 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Commencing at a point of intersection of the easterly line of Factory Outlet Blvd. a.k.a. Connecting Blvd and/or Third Avenue (80 feet wide) with the northerly line of lands now or formerly of Niagara Falls Elk Lodge No. 346 (S.B.L. No. 145.20-1-15.21) said line also being the southerly line of lands of Macerich Niagara LLC; thence the following three (3) courses along said easterly line of Factory Outlet Blvd.

- A. N 34° 00' 05" E, along a distance of 64.05 feet to a point; thence
- B. N 36° 40' 56" E, a distance of 220.37 feet to a point; thence
- C. N 44^o 40' 13" E, a distance of 237.86 feet to a point; thence
- D. S 45° 03' 41" E, a distance of 201.86 feet to a point; thence
- E. S 89^o 48' 15" E, a distance of 64.15 feet to a point; thence
- F. S 00° 11' 45" W, a distance of 253.93 feet to a point; thence
- G. S 89° 59' 04" E, a distance of 10.13 feet to a point of intersection with the westerly line of lands of Macerich Niagara LLC, said point being the Point of Beginning of the hereinafter described parcel; thence
- 1. S 89° 59' 04" E, a distance of 12.05 feet to a point; thence
- 2. S 00° 14' 25" W, a distance of 55.58 feet to a point; thence
- 3. N 44° 48' 50" W, a distance of 14.63 feet to a point; thence
- 4. N 01° 54' 02" W, a distance of 45.22 feet to the Point or Place of Beginning.

Subject to any easements or encumbrances of record.

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

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All-THIS INDENTURE made this 21st day of August, 2014, between Fashion Outlets II LLC, a Delaware limited liability company, having an office c/o The Macerich Company, at 401 Wilshire Blvd., Suite 700, Santa Monica, CA 90401, County of Los Angeles, State of California (the "Grantor") and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 1705 Factory Outlet Boulevard in the Town of Niagara, County of Niagara and State of New York, known and designated on the tax map of the County Clerk of Niagara as tax map parcel numbers: Section 160.08, Block 1, Lot 2 and Section 160.08, Block 1, Lot 6 being the same as that property conveyed to Grantor by deed dated October 23, 2012 and recorded in the Niagara County Clerk's Office as Instrument Number 2012-23484 and by deed dated October 31, 2103 and recorded on February 6, 2014 in the Niagara County Clerk's Office as Instrument No. 2014-01741.

WHEREAS, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 37.207+/- acres, which is a portion of the 47.815 +/acre parcel that represents the real property which is the subject of the Brownfield Cleanup Agreement Index Number C932162-06-13, and is hereinafter more fully set forth in the Land Title Survey dated May 21, 2014, Drawing Number GI 905, prepared by Stantec Consulting Services Inc., which will

ORIGINAL FILED

OCT 30 2014

be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C932162-06-13, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

- 1. <u>Purposes.</u> Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls.</u> The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
 - A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

- (2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Niagara County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

- F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
 - (2) the institutional controls and/or engineering controls employed at such site:
 - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her 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
 - (7) the information presented is accurate and complete.
- 3. <u>Right to Enter and Inspect.</u> Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights.</u> Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

- A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.
- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice.</u> Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C932162

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to:

Site Control Section

Division of Environmental Remediation

NYSDEC

625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

- 7. <u>Recordation.</u> Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 8. <u>Amendment.</u> Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

[SIGNATURE PAGE FOLLOWS]

FASHION OUTLETS II LLC

BY: THE MACERICAL PARTNERSHIP, L.P., its sole member

BY: THE MACERIAL COMPANY, its general partner

By:

Print Name

Chet A. Cramin

Title: Senior Vice President

Date:

8/21/14

Associate General Counsel

[Fashion Outlets II LLC Acknowledgment continues on following page]

State of California	1
State of California County of Los Angeles On 8 21 14 before me, _ personally appeared Chrt A.	}
County or Pas 1. July 3	
On 6 21 14 before me, _	LISE Kene Pena
personally appeared Chrt A.	Here Insert Name and Title of the Officer
policinally appeared	Name(s) of Signer(s)
	who proved to me on the basis of satisfacto
	evidence to be the person(s) whose name(s) is/a subscribed to the within instrument and acknowledge
ety (to me that he/she/they executed the same
	his/her/their authorized capacity(ies), and that I
Jacobson	his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the
LISA RENE PENA Commission # 1957263	person(s) acted, executed the instrument.
Notary Public - California	I certify under PENALTY OF PERJURY under the
Los Angeles County My Comm. Expires Nov 17, 2015	laws of the State of California that the foregoin
	paragraph is true and correct.
	WITNESS my hand and official seal.
	<u>.</u>
Place Notary Seal Above	Signature:Signature of Notary Public
	OPTIONAL ———————
and could prevent fraudulent rem	d by law, it may prove valuable to persons relying on the document noval and reattachment of this form to another document.
Description of Attached Document Title or Type of Document: Ehippin Me	tal Easenna t
•	
	Number of Pages:
Capacity(ies) Claimed by Signer(s)	
Signer's Name:	Signer's Name:
☐ Corporate Officer — Title(s):	
OF SI	UMBPRINT ☐ Individual RIGHT THUMBPRINGNER OF SIGNER
	umb here ☐ Partner — ☐ Limited ☐ General Top of thumb here
☐ Attorney in Fact☐ Trustee	☐ Attorney in Fact☐ Trustee
☐ Guardian or Conservator	☐ Guardian or Conservator
□ Other:	☐ Other:
Signer Is Representing:	Signer Is Representing:

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

Robert W. Schick, Director

Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)

(STATE OF NEW YORK)

(STATE OF NEW YORK)

On the day of day of day, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 20

SCHEDULE "A" PROPERTY DESCRIPTION

All that tract or parcel of land containing 37.207 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the southeasterly line of Factory Outlet Blvd. a.k.a. Connecting Blvd and/or Third Avenue (80 feet wide) with the northerly line of lands now or formerly of Quaker Development, Inc. said line also being the southerly line of lands of Macerich Niagara, LLC; thence

- N 34°00'05" E ,along said southeasterly line of Factory Outlet Blvd., a distance of 36.00 feet to a
 point of intersection with the southerly line of lands now or formerly of the Niagara Falls Elks
 Lodge No. 346; thence
- 2. S 89°49'25" E, along the last mentioned southerly line, a distance of 427.53 feet to a point of intersection with the easterly line of said lands; thence
- 3. N 00°10'35" E, along the last mentioned easterly line a distance of 247.34 feet to the point at the northeasterly corner of said lands; thence the following eight courses through said lands of Macerich Niagara, LLC
- 4. N 45°59'42" E, a distance of 119.32 feet to a point; thence
- S 89°48'15" E, a distance of 193.50 feet to a point; thence
- 6. S 00°11'45" W, a distance of 79.17 feet to a point; thence
- 7. S 89°59'04" E, a distance of 10.13 feet to a point; thence
- 8. S 01°54'02" E, a distance of 45.22 feet to a point; thence
- 9. S 44°48'50" E, a distance of 288.95 feet to a point; thence
- 10. S 89°48'40" E, a distance of 84.41 feet to a point; thence
- 11. S 00°11'20" W, a distance of 53.50 feet to a point; thence
- 12. S 00°10'35" W, a distance of 78.13 feet to a point, said point being the northwesterly corner of lands now or formerly of BG Robinson Stop II LLC, (T.A. Parcel 160.08-3-1.12); thence
- 13. S 00°27'17" W, along the westerly line of said lands of BG Robinson Stop II LLC, and lands of Walmart Real Estate (T.A. Parcel 160.08-3-1-1.112), a distance of 1183.23 feet to a point of intersection with the northerly line of lands of Niagara Mohawk Power Corporation (T.A. Parcel 160.08-1-3); thence
- 14. N 89°26'01" W, along said northerly line, a distance of 1558.85 feet to a point; thence

- 15. N 33°30′00″ E, along the southeasterly line of lands now of formerly of Opportunities Unlimited (T.A. Parcel 160.07-1-3) and the southeasterly line of lands now of formerly of James E. McCue (T.A. Parcel 160.08-1-4) and lands now or formerly of Christopher Connelly (T.A. Parcel 160.08-1-5), a distance of 785.40 feet to a point; thence
- 16. N 56°30'00" W, along the northeasterly line of the said lands of Christopher Connelly, a distance of 250.00 feet to a point of intersection with the aforementioned southeasterly right-of-way line of Factory Outlet Boulevard; thence
- 17. N 33°30'00" E, along said southeasterly right-of-way line, a distance of 211.94 feet to a point of intersection with the southerly line of the aforementioned lands of Quaker Development, Inc.; thence
- 18. S 89°57'24" E, along said southerly line, a distance of 598.19 feet to a point at the southeasterly corner of said lands; thence
- 19. N 00°02'36" E, along the easterly line of said lands, a distance of 300.52 feet a point; thence
- 20. N 89°49'25" W, along the northerly line of said lands, a distance of 399.00 feet to the Point or Place of Beginning.

Subject to any easements or encumbrances of record.



PROPOSED DECISION DOCUMENT

Fashion Outlets of Niagara Falls Expansion Brownfield Cleanup Program Niagara, Niagara County Site No. C932162 October 2013



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

PROPOSED DECISION DOCUMENT

Fashion Outlets of Niagara Falls Expansion Niagara, Niagara County Site No. C932162 October 2013

SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Decision Document (PDD). The disposal or release of contaminants at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all Proposed Decision Documents. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

Niagara Town Hall 7105 Lockport Road Niagara Falls, NY 14305 Phone: 716-297-2150

A public comment period has been set from: November 6th to December 20th, 2013

Written comments may be sent through to:

Glenn May NYS Department of Environmental Conservation Division of Environmental Remediation 270 Michigan Ave Buffalo, NY 14203-2915 gmmay@gw.dec.state.ny.us

The proposed remedy may be modified based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The site is located in an urban area in the Town of Niagara. The site is bordered by Factory Outlet Boulevard and Route 190 to the west, the existing Fashion Outlets of Niagara Falls Mall to the north, Wal-Mart to the east, and National Grid power lines, vacant land and the City of Niagara Falls to the south.

Site Features:

The site encompasses approximately 48.6-acres and includes the 34-acre former Sabre Park Mobile Home Community located at 1705 Factory Outlet Boulevard, a 10.35-acre parcel located on the southern portion of the Fashion Outlets of Niagara Falls property, and a 3.45-acre parcel on the western side of the site located at 1755 Factory Outlet Boulevard. The majority of the Sabre Park property consists of asphalt/gravel parking areas, asphalt driveways, and vegetated areas. The Fashion Outlets parcel consists of an asphalt parking lot and associated roadways. The 1755 Factory Outlet Boulevard parcel is improved with a Secure Storage facility and associated asphalt parking.

Current Zoning and Land Use:

All three parcels are currently zoned for commercial use. The Fashion Outlets of Niagara Falls property is currently improved with an asphalt parking lot, the 1755 Factory Outlet Boulevard property is currently improved with a Secure Storage facility and associated asphalt parking, and the Sabre Park property is currently vacant.

Past Use of the Site:

Sabre Park Property: This property was owned by the Union Carbide Corporation from 1949 until 1969. The exact use of this property by Union Carbide is unknown. Use of the property for a mobile home community began in 1972. During an expansion to the south in 1978, fill material with elevated levels of chlorinated solvents, mercury and heating oil was discovered. The fill material was subsequently excavated by the Hooker Chemical Company and disposed off-site at a permitted facility.

Soil sampling by the United States Environmental Protection Agency (USEPA) in November 1986 and May 1988 identified the presence of elevated concentrations of mercury. As a result, a portion of the property was listed in the NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites (Registry) in 1989 (Site No. 932104). Also in 1989, the USEPA excavated approximately 1,200 cubic-yards of mercury contaminated fill from the southern portion of the property and disposed of the material as hazardous waste (D009-mercury) at an off-site permitted facility. The site was delisted from the NYSDEC's Registry in 1995.

Fashion Outlets of Niagara Falls Property: During construction of a mall expansion in November 1994, a white powder waste was encountered while drilling caissons for the mall's foundation. A sample of the waste was collected for analysis and found to exceed the TCLP regulatory limit for vinyl chloride. In February 1995 approximately 3,037 cubic yards of material was excavated and staged on-site. This material was subsequently screened on-site to separate drums, wood and other debris. The drums and debris were disposed off-site at permitted facilities. Analysis of the screened soils did not exceed TCLP limits for vinyl chloride, so the soils were backfilled on-site and covered with an asphalt parking lot. The backfill area is within the BCP site.

1755 Factory Outlet Boulevard Property: This property was owned by the Union Carbide Corporation from 1949 until 1969. The exact use of this property by Union Carbide is unknown.

Site Geology and Hydrogeology:

The geology of the site consists of fill material underlain by native silty sand and clay. The fill material, ranging to 15 feet depth, consists of reworked soil with varying amounts of silt, clay, gravel, roots, brick, concrete, wood, glass, rubber, slag, plastic and metal. The underlying native soils are continuous across the site. Bedrock was encountered from 10.5 to 16 feet below grade.

Shallow overburden groundwater is located within the fill material at the site, and ranges in depth from 1.80 to 4.39 feet below ground surface. This water is perched (located) on top of the native silty sand and clay deposit because of this unit's low permeability and flows generally to the north. Bedrock groundwater was not evaluated during the Remedial Investigation.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) are/is being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the Remedial Investigation (RI) Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions:
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil

- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

POLYCHLORINATED BIPHENYLS (PCB) CHROMIUM Polycyclic Aromatic Hydrocarbons (PAHs), Total

DICHLOROETHYLENE TRICHLOROETHENE (TCE) TETRACHLOROETHYLENE (PCE) VINYL CHLORIDE

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil
- soil vapor intrusion

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure

pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

The remedial investigation determined that the primary contaminants of concern include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and chromium. These contaminants were detected in soil, fill, groundwater and/or soil vapor.

PAHs were detected in 16 of 295 soil and fill samples at concentrations exceeding the commercial soil cleanup objectives (SCOs). PCBs were detected in 5 samples at concentrations (1.07 to 23.0 ppm) exceeding the commercial SCO of 1 ppm. Total chromium was detected in 20 samples at concentrations (1,500 to 6,560 ppm) exceeding the commercial SCO of 1,500 ppm, while hexavalent chromium exceeded the commercial SCO of 400 ppm in 2 samples (486 and 506 ppm).

Slag was observed in the historic fill at many locations throughout the site, but did not exhibit radioactivity.

Total chromium was detected in four groundwater samples at concentrations (884 to 1,260 ppb) exceeding the groundwater standard of 50 ppb, while hexavalent chromium was detected in four samples at concentrations (818 to 1,230 ppb) exceeding the groundwater standard of 50 ppb. Chlorinated solvents were detected in one groundwater sample at concentrations exceeding groundwater standards. These compounds included (cis) 1,2-dichloroethylene (59 ppb; standard 5 ppb), trichloroethylene (19 ppb; standard 5 ppb) and vinyl chloride (13 ppb; standard 2 ppb). Groundwater pH ranged from 6.29 to 12.2. Contaminated overburden groundwater is not migrating from the site.

Soil vapor contained VOCs at elevated concentrations.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

The site is not fenced and persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. People are not expected to come into direct contact with contaminated groundwater unless they dig below the ground surface, and the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Sampling indicates soil vapor intrusion is not a concern for offsite buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE PROPOSED REMEDY

The alternatives developed for the site and evaluation of the remedial criteria are presented in the alternative analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The remedy proposed is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The proposed remedy is referred to as the Hot-Spot Removal, Cover System, and Vapor Mitigation remedy.

The elements of the proposed remedy, as shown in Figure 2, are as follows:

- 1. Remedial Design A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:
- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 2. Excavation Excavation and off-site disposal of contaminant source areas, including:
- Soil exceeding 6NYCRR Part 371 hazardous criterion for chromium; and
- An area of PCB-impacted soils that exceed the Track 4 SCO of 1 ppm at the surface and 10 ppm in the subsurface.

Approximately 9,500 cubic yards of soil will be removed from the site. On-site soil that does not exceed commercial SCOs may be used to backfill the excavations to the extent that a sufficient volume of on-site soil is available to establish the designed grades at the site below the cover system described in remedy element 3. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavations and to establish the designed grades at the site. Site soils excavated from the detention ponds may also be used for backfilling and regrading if they meet the requirements of 6 NYCRR Part 375-6.7(d). The site will be re-graded to accommodate installation of the cover system described in remedy element 3 below. Soil derived from the re-grading may be used to backfill the excavations.

3. Cover System - A site cover will be required to allow for commercial use of the site. The cover will consist of structures, such as buildings, pavement, and sidewalks comprising the site development; a soil cover in landscaped areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs); and three, clay lined detention ponds required for storm water management. Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d)

for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

- 4. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
- Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- Requires compliance with the Department approved Site Management Plan.
- 6. Site Management Plan A Site Management Plan is required, which includes the following:
- An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and engineering controls remain in place and effective:
- (a) Institutional Controls: The environmental easement discussed in remedy element 4; and
- (b) Engineering Controls: The cover system discussed in remedy element 3 and vapor mitigation systems installed in any buildings constructed within the boundaries of the BCP site to prevent the migration of vapors into the building from soil and/or groundwater.

This plan includes, but may not be limited to:

- (a) An Excavation Plan that details the provisions for management of future excavations in areas of remaining contamination;
- (b) Descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;
- (c) A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- (d) Provisions for the management and inspection of the identified engineering controls;
 - (e) Maintaining site access controls and Department notification; and
- (f) The steps necessary for the periodic reviews and certification of the institutional and engineering controls.
- A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- (a) Monitoring of soil vapor to assess the performance and effectiveness of the remedy;
 - (b) A schedule of monitoring and frequency of submittals to the Department; and
- (c) Monitoring for vapor intrusion for any buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

New York State Department of Environmental Conservation

Division of Environmental Remediation

Remedial Bureau E, 12th Floor

625 Broadway, Albany, New York 12233-7017 **Phone:** (518) 402-9814 • **Fax:** (518) 402-9819

Website: www.dec.ny.gov



January 17, 2014

Macerich Niagara LLC Aladdin Ghafari 401 Wilshire Boulevard, Suite 700 Santa Monica, CA 90401

Fashion Outlets II LLC Aladdin Ghafari 401 Wilshire Boulevard, Suite 700 Santa Monica, CA 90401

RE: Fashion Outlets of Niagara Falls Expansion BCP

Site, Site No. C932162

Town of Niagara, Niagara County, New York Remedial Work Plan & Decision Document

Dear Mr. Ghafari:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Alternative Analysis Report (AAR) for the Fashion Outlets of Niagara Falls Expansion BCP Site dated October 2013 and prepared by Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., on behalf of Macerich Niagara LLC and Fashion Outlets II LLC. The AAR is hereby approved. Please ensure that a copy of the approved AAR is placed in the document repository and the draft report should be removed.

Enclosed is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is also placed in the document repository.

Please contact the Department's Project Manager, Glenn M. May, at 716-851-7220 at your earliest convenience to discuss next steps. Please recall that the Department requires seven days notice prior to the start of field work.

Sincerely,

Michael Cruden, P.E.

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Director

Remedial Bureau E

Division of Environmental Remediation

Enclosure

ec: w/Enc. Robert Schick, Division Director

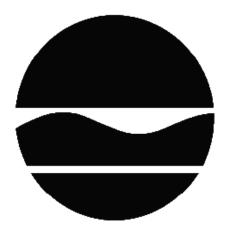
Gregory Sutton, NYSDEC, Region 9 Deanna Ripstein, NYSDOH, Albany Matthew Forcucci, NYSDOH, Buffalo

Jamie P. Barr, Langan Engineering, Environ., Surveying, and Landscape Architecture

Robert Murray, Harris Beach PLLC

DECISION DOCUMENT

Fashion Outlets of Niagara Falls Expansion Brownfield Cleanup Program Niagara, Niagara County Site No. C932162 January 2014



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Fashion Outlets of Niagara Falls Expansion Brownfield Cleanup Program Niagara, Niagara County Site No. C932162 January 2014

Statement of Purpose and Basis

This document presents the remedy for the Fashion Outlets of Niagara Falls Expansion site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Fashion Outlets of Niagara Falls Expansion site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

- 1. Remedial Design A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:
- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 2. Excavation Excavation and off-site disposal of contaminant source areas, including:

- Soil exceeding 6NYCRR Part 371 hazardous criterion for chromium; and
- An area of PCB-impacted soils that exceed the Track 4 SCO of 1 ppm at the surface and 10 ppm in the subsurface.

Approximately 9,500 cubic yards of soil will be removed from the site. On-site soil that does not exceed commercial SCOs may be used to backfill the excavations to the extent that a sufficient volume of on-site soil is available to establish the designed grades at the site below the cover system described in remedy element 3. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavations and to establish the designed grades at the site. Site soils excavated from the detention ponds may also be used for backfilling and regrading if they meet the requirements of 6 NYCRR Part 375-6.7(d). The site will be re-graded to accommodate installation of the cover system described in remedy element 3 below. Soil derived from the re-grading may be used to backfill the excavations.

- 3. Cover System A site cover will be required to allow for commercial use of the site. The cover will consist of structures, such as buildings, pavement, and sidewalks comprising the site development; a soil cover in landscaped areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs); and three clay lined detention ponds required for stormwater management. Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).
- 4. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
- Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- Requires compliance with the Department approved Site Management Plan.
- 6. Site Management Plan A Site Management Plan is required, which includes the following:
- An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and engineering controls remain in place and effective:
- Institutional Controls: The environmental easement discussed in remedy element 4: and
 - Engineering Controls: The cover system discussed in remedy element 3 and vapor (b)

mitigation systems installed in any buildings constructed within the boundaries of the BCP site to prevent the migration of vapors into the building from soil and/or groundwater.

This plan includes, but may not be limited to:

- An Excavation Plan that details the provisions for management of future (a) excavations in areas of remaining contamination;
- Descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;
- A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- Provisions for the management and inspection of the identified engineering controls:
 - Maintaining site access controls and Department notification; and (e)
- The steps necessary for the periodic reviews and certification of the institutional (f) and engineering controls.
- A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- Monitoring of soil vapor to assess the performance and effectiveness of the (a) remedy;
 - (b) A schedule of monitoring and frequency of submittals to the Department; and
- Monitoring for vapor intrusion for any buildings developed on the site, as may be (c) required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

1. /

01/21/2014	Mulfle		
Date	Michael Cruden, Director Remedial Bureau F	_	

January 2014 Fashion Outlets of Niagara Falls Expansion, Site No. C932162 Page 3

DECISION DOCUMENT

Fashion Outlets of Niagara Falls Expansion Niagara, Niagara County Site No. C932162 January 2014

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Niagara Town Hall 7105 Lockport Road Niagara Falls, NY 14305 Phone: 716-297-2150

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email

DECISION DOCUMENT January 2014 listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The site is located in an urban area in the Town of Niagara. The site is bordered by Factory Outlet Boulevard and Route 190 to the west, the existing Fashion Outlets of Niagara Falls Mall to the north, Wal-Mart to the east, and National Grid power lines, vacant land and the City of Niagara Falls to the south.

Site Features:

The site encompasses approximately 48.6-acres and includes the 34-acre former Sabre Park Mobile Home Community located at 1705 Factory Outlet Boulevard, a 10.35-acre parcel located on the southern portion of the Fashion Outlets of Niagara Falls property, and a 3.45-acre parcel on the western side of the site located at 1755 Factory Outlet Boulevard. The majority of the Sabre Park property consists of asphalt/gravel parking areas, asphalt driveways, and vegetated areas. The Fashion Outlets parcel consists of an asphalt parking lot and associated roadways. The 1755 Factory Outlet Boulevard parcel is improved with a Secure Storage facility and associated asphalt parking.

Current Zoning and Land Use:

All three parcels are currently zoned for commercial use. The Fashion Outlets of Niagara Falls property is currently improved with an asphalt parking lot, the 1755 Factory Outlet Boulevard property is currently improved with a Secure Storage facility and associated asphalt parking, and the Sabre Park property is currently vacant.

Past Use of the Site:

Sabre Park Property: This property was owned by the Union Carbide Corporation from 1949 until 1969. The exact use of this property by Union Carbide is unknown. Use of the property for a mobile home community began in 1972. During an expansion to the south in 1978, fill material with elevated levels of chlorinated solvents, mercury and heating oil was discovered. The fill material was subsequently excavated by the Hooker Chemical Company and disposed off-site at a permitted facility.

Soil sampling by the United States Environmental Protection Agency (USEPA) in November 1986 and May 1988 identified the presence of elevated concentrations of mercury. As a result, a portion of the property was listed in the NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites (Registry) in 1989 (Site No. 932104). Also in 1989, the USEPA excavated

approximately 1,200 cubic-yards of mercury contaminated fill from the southern portion of the property and disposed of the material as hazardous waste (D009-mercury) at an off-site permitted facility. The site was delisted from the NYSDEC's Registry in 1995.

Fashion Outlets of Niagara Falls Property: During construction of a mall expansion in November 1994, a white powder waste was encountered while drilling caissons for the mall's foundation. A sample of the waste was collected for analysis and found to exceed the TCLP regulatory limit for vinyl chloride. In February 1995 approximately 3,037 cubic yards of material was excavated and staged on-site. This material was subsequently screened on-site to separate drums, wood and other debris. The drums and debris were disposed off-site at permitted facilities. Analysis of the screened soils did not exceed TCLP limits for vinyl chloride, so the soils were backfilled on-site and covered with an asphalt parking lot. The backfill area is within the BCP site.

1755 Factory Outlet Boulevard Property: This property was owned by the Union Carbide Corporation from 1949 until 1969. The exact use of this property by Union Carbide is unknown.

Site Geology and Hydrogeology:

The geology of the site consists of fill material underlain by native silty sand and clay. The fill material, ranging to 15 feet depth, consists of reworked soil with varying amounts of silt, clay, gravel, roots, brick, concrete, wood, glass, rubber, slag, plastic and metal. The underlying native soils are continuous across the site. Bedrock was encountered from 10.5 to 16 feet below grade.

Shallow overburden groundwater is located within the fill material at the site, and ranges in depth from 1.80 to 4.39 feet below ground surface. This water is perched (located) on top of the native silty sand and clay deposit because of this unit's low permeability and flows generally to the north. Bedrock groundwater was not evaluated during the Remedial Investigation.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). Applicant(s) does/do not have an obligation to address off-site contamination. However, the

Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: **Summary of the Remedial Investigation**

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require

evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

POLYCHLORINATED BIPHENYLS (PCB) **CHROMIUM** Polycyclic Aromatic Hydrocarbons (PAHs), Total

DICHLOROETHYLENE TRICHLOROETHENE (TCE) TETRACHLOROETHYLENE (PCE) VINYL CHLORIDE

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil
- soil vapor intrusion

6.2: **Interim Remedial Measures**

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: **Summary of Environmental Assessment**

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

The remedial investigation determined that the primary contaminants of concern include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and chromium. These contaminants were detected in soil, fill, groundwater and/or soil vapor.

PAHs were detected in 16 of 295 soil and fill samples at concentrations exceeding the commercial soil cleanup objectives (SCOs). PCBs were detected in 5 samples at concentrations (1.07 to 23.0 ppm) exceeding the commercial SCO of 1 ppm. Total chromium was detected in 20 samples at concentrations (1,500 to 6,560 ppm) exceeding the commercial SCO of 1,500 ppm, while hexavalent chromium exceeded the commercial SCO of 400 ppm in 2 samples (486 and 506 ppm).

Slag was observed in the historic fill at many locations throughout the site, but did not exhibit radioactivity.

Total chromium was detected in four groundwater samples at concentrations (884 to 1,260 ppb) exceeding the groundwater standard of 50 ppb, while hexavalent chromium was detected in four samples at concentrations (818 to 1,230 ppb) exceeding the groundwater standard of 50 ppb. Chlorinated solvents were detected in one groundwater sample at concentrations exceeding groundwater standards. These compounds included (cis) 1,2-dichloroethylene (59 ppb; standard 5 ppb), trichloroethylene (19 ppb; standard 5 ppb) and vinyl chloride (13 ppb; standard 2 ppb). Groundwater pH ranged from 6.29 to 12.2. Contaminated overburden groundwater is not migrating from the site.

Soil vapor contained VOCs at elevated concentrations.

6.4: **Summary of Human Exposure Pathways**

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

The site is not fenced and persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. People are not expected to come into direct contact with contaminated groundwater unless they dig below the ground surface, and the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Sampling indicates soil vapor intrusion is not a concern for offsite buildings.

6.5: **Summary of the Remediation Objectives**

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent

DECISION DOCUMENT January 2014 Fashion Outlets of Niagara Falls Expansion, Site No. C932162 Page 9 practicable.

Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Hot-Spot Removal, Cover System, and Vapor Mitigation remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

- 1. Remedial Design A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:
- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;

- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.
- 2. Excavation Excavation and off-site disposal of contaminant source areas, including:
- Soil exceeding 6NYCRR Part 371 hazardous criterion for chromium; and
- An area of PCB-impacted soils that exceed the Track 4 SCO of 1 ppm at the surface and 10 ppm in the subsurface.

Approximately 9,500 cubic yards of soil will be removed from the site. On-site soil that does not exceed commercial SCOs may be used to backfill the excavations to the extent that a sufficient volume of on-site soil is available to establish the designed grades at the site below the cover system described in remedy element 3. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavations and to establish the designed grades at the site. Site soils excavated from the detention ponds may also be used for backfilling and regrading if they meet the requirements of 6 NYCRR Part 375-6.7(d). The site will be re-graded to accommodate installation of the cover system described in remedy element 3 below. Soil derived from the re-grading may be used to backfill the excavations.

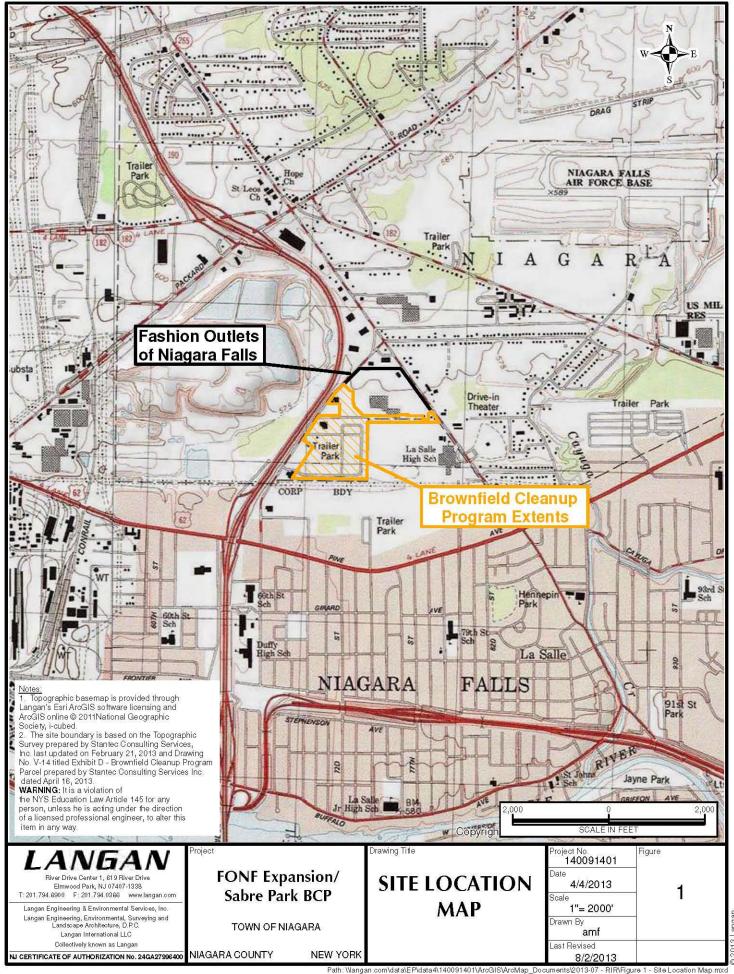
- 3. Cover System A site cover will be required to allow for commercial use of the site. The cover will consist of structures, such as buildings, pavement, and sidewalks comprising the site development; a soil cover in landscaped areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs); and three clay lined detention ponds required for stormwater management. Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).
- 4. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
- Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- Requires compliance with the Department approved Site Management Plan.
- 6. Site Management Plan A Site Management Plan is required, which includes the following:

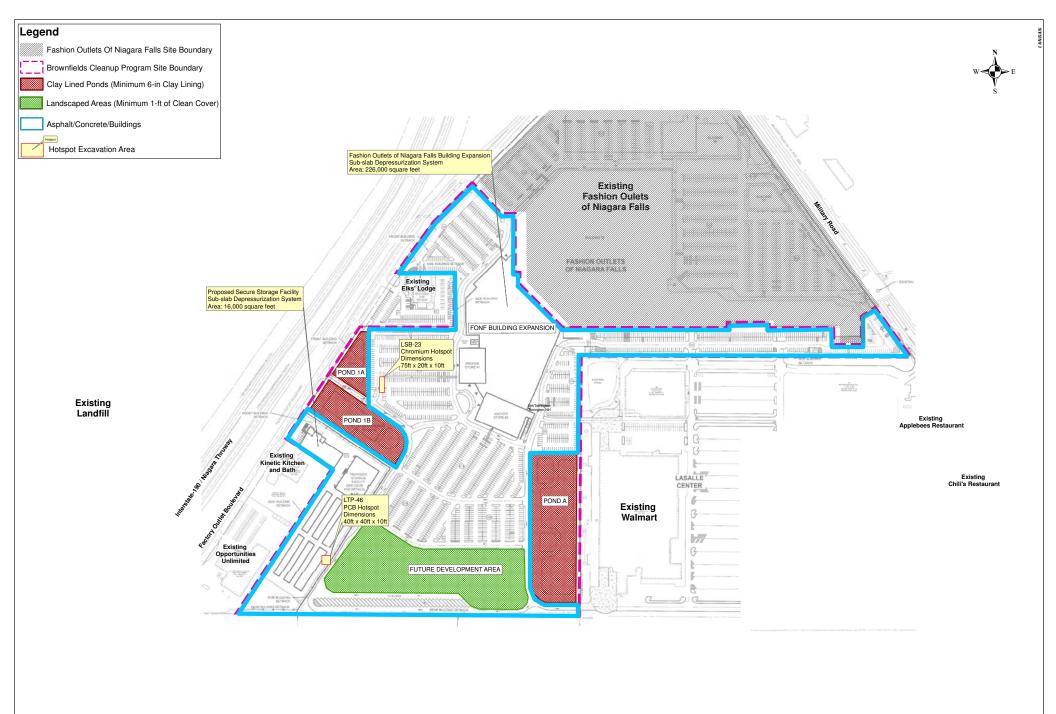
- An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and engineering controls remain in place and effective:
- (a) Institutional Controls: The environmental easement discussed in remedy element 4; and
- Engineering Controls: The cover system discussed in remedy element 3 and vapor mitigation systems installed in any buildings constructed within the boundaries of the BCP site to prevent the migration of vapors into the building from soil and/or groundwater.

This plan includes, but may not be limited to:

- An Excavation Plan that details the provisions for management of future (a) excavations in areas of remaining contamination;
- Descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;
- A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- (d) Provisions for the management and inspection of the identified engineering controls;
 - (e) Maintaining site access controls and Department notification; and
- The steps necessary for the periodic reviews and certification of the institutional and engineering controls.
- A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- Monitoring of soil vapor to assess the performance and effectiveness of the (a) remedy;
 - A schedule of monitoring and frequency of submittals to the Department; and (b)
- Monitoring for vapor intrusion for any buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

DECISION DOCUMENT January 2014





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FONF Expansion/ Sabre Park BCP TOWN OF NIAGARA 2

New York State Department of Environmental Conservation Division of Environmental Remediation, Region 9

270 Michigan Avenue, Buffalo, New York, 14203-2915 **Phone:** (716) 851-7220 • **FAX:** (716) 851-7226

Website: www.dec.ny.gov



January 21, 2014

Mr. Jamie Barr Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C. 555 Long Wharf Drive New Haven, Connecticut 06511

Dear Mr. Barr:

Interim Remedial Measures Work Plan Fashion Outlets of Niagara Falls BCP Site Site No. C932162 Town of Niagara, Niagara County, New York

The New York State Department of Environmental Conservation (NYSDEC) is in receipt of the revised Interim Remedial Measures Work Plan (IRMWP) submitted to the Department in October 2013 by Langan Engineering on behalf of Fashion Outlets II, LLC, and Macerich-Niagara, LLC. A review of the revised work plan finds it to be acceptable. This letter, therefore, transmits formal NYSDEC approval of the IRMWP dated October 9, 2013.

Should you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely yours,

Glenn M. May, CPG Engineering Geologist 2

Menn M May

GMM:sz

ec: Mr. Gregory Sutton, NYSDEC, Region 9

Mr. Matthew Forcucci, NYS Department of Health, Buffalo

Mr. Aladdin Ghafari, Macerich-Niagara, LLC



5 March 2014

Gregory P. Sutton, P.E.
Regional Hazardous Waste Remediation Engineer
Regional Spill Engineer
NYSDEC - Region 9
Division of Environmental Remediation
270 Michigan Ave.
Buffalo, New York 14203

RE: Discovery of Previously Unknown AOC
Fashion Outlets of Niagara Falls Expansion/Sabre Park BCP
Brownfield Cleanup Program Site #: C932162
1705 Factory Outlet Boulevard
Town of Niagara, New York
Langan Project No.: 140091402

Dear Mr. Sutton:

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan), has developed this letter on behalf of Macerich-Niagara, LLC (Macerich) to inform the New York State of Department of Environmental Conservation (NYSDEC) of the discovery of a previously unknown area of concern (AOC) at the Fashion Outlets of Niagara Falls Expansion/Sabre Park BCP (BCP No. C932162) located at 1705 Factory Outlet Boulevard, Town of Niagara, New York (the "Site").

BACKGROUND

On 26 February 2014, during the excavation and installation of a water utility line within the footprint of the proposed FONF mall expansion building pad (see Figure 1), Langan observed the remains of a highly degraded 55-gallon drum. The soil surrounding the drum fragment consisted of historic fill with no evidence of impacts based on visual, olfactory, and photoionization detector (PID) readings; however, a sheen was observed on the perched groundwater water entering the excavation.

In accordance with *Section 4.2.7 - Contingency Plan* of the Interim Remedial Measures Work Plan (IRMWP) dated August 2013, Langan proposed the following plan of action:

- Construction of a temporary fence around the excavation to prevent access by unauthorized personnel.
- Preliminary sampling of soils and groundwater within the vicinity of drum remains for laboratory analysis of the following:
 - Target Compound List (TCL) Volatile Organic Compounds (VOCs)

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o TCL Semi-Volatile Organic Compounds (SVOCs)

- o Target Analyte List (TAL) Metals
- o PCBs

Langan Project No.: 140091402

- Pesticides
- Herbicides

NYSDEC NOTIFICATION/COORESPONDENCE

Mr. Jamie Barr (Langan) notified Mr. Greg Sutton (NYSDEC) within 30 minutes of the discovery, and described the proposed plan to sample the most impacted materials (soil and water), prior to continuing with delineation and excavation. Mr. Kevin Glazer (NYSDEC) inspected the Site on March 3, 2014 and indicated that he would be reporting back to Mr. Sutton, and Mr. Glenn May (NYSDEC), regarding his assessment of the materials and soil/groundwater data.

ACTIVITIES CONDUCTED

On 26 February 2014, two soil samples (WL-EX-1 and WL-EX-2) were collected from the southern and western sidewalls of the water line excavation, respectively, where Langan observed the greatest evidence of impacts in the soil and the degraded 55-gallon drum. Groundwater sample (GW-1) was collected from accumulated perched groundwater in the water line excavation. See Attachment A for photos and sample locations. Soil and groundwater samples were submitted on an expedited 3 day turn-around time, to York Analytical, a NYSDOH ELAP certified laboratory, for the analyses identified above.

SAMPLING RESULTS

Soil and groundwater results are summarized below and in the attached Tables 1 and 2. The laboratory analytical reports are provided as Attachment B.

VOCs, SVOCs, and PCBs were detected at concentrations below applicable NSYDEC criteria in all samples collected. Pesticides and herbicides were not detected above laboratory reporting limits in any samples submitted. Various metals were detected at concentrations exceeding NSYDEC criteria in both soil and groundwater samples. The tables below compare the concentrations of each metal detected above the applicable NYSDEC criteria, with an additional comparison to metals concentrations identified in soils and groundwater during the Remedial Investigation phase.



Soils Sample Results

Compound	Minimum Concentrations Detected during RI (mg/kg)	Maximum Concentrations Detected during RI (mg/kg)	WL-EX-1 (mg/kg)	WL-EX-2 (mg/kg)
Chromium	5.07	6,560	35.4	58.2
Copper	3.76	146	37.6	84.4
Lead	3.15	11.900	12.4	84.2
Mercury	0.00517	3.86	0.0895	0.553
Nickel	5.26	2,440	42.1	41.8
Zinc	8.65	817	114	259

Groundwater Sample Results

Compound	Minimum Concentrations Detected during RI (ug/l)	Maximum Concentrations Detected during RI (ug/l)	GW-1 (ug/l)
Barium	21	148	1,250
Chromium	884	1,260	131
Copper	ND	ND	208
Lead	ND	ND	397
Magnesium	NA	NA	76,800
Manganese	504	2,730	1,990
Mercury	ND	ND	1
Nickel	5	65	109
Sodium	NA	NA	113,000

As shown above, concentrations of metals detected in soil samples collected at the unknown AOC are consistent with background conditions observed across the Site during the remedial investigation.

Some of the metals concentrations detected in the sample GW-1 exceeded those previously identified during the remedial investigation. A number of these metals also exceed the criteria set by the Niagara County Water Board (NCWB) for discharge to the sanitary system.

PROPOSED ACTIONS

Based on Langan's assessment of the site conditions and sampling results, we present the following proposed actions for NYSDEC approval:

Proposed Actions

- Soils Continue to excavate utility trench and dispose of soils off-site at the preapproved Allied Landfill;
- Groundwater Perched groundwater encountered during utility trench excavation in this
 area that requires dewatering to complete utility installation will be containerized onsite
 in fractionation tanks, solids allowed to settle, and then resampled to confirm
 compliance with the NCWB discharge criteria, prior to discharging offsite. If they do not
 comply, an alternative, approved, offsite disposal method will be selected.



CLOSURE

Should you have any questions regarding the information contained in this memorandum, please do not hesitate to contact me.

Sincerely,

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.

Jamie P. Barr

Senior Associate/Vice President

Enclosure(s): Figure 1 – Previously Unknown AOC Location Plan

Table 1 – Unknown AOC in the NW Corner Soil Analytical Results

Table 2 – Unknown AOC in the NW Corner Groundwater Analytical Results

Attachment A – Photo Log

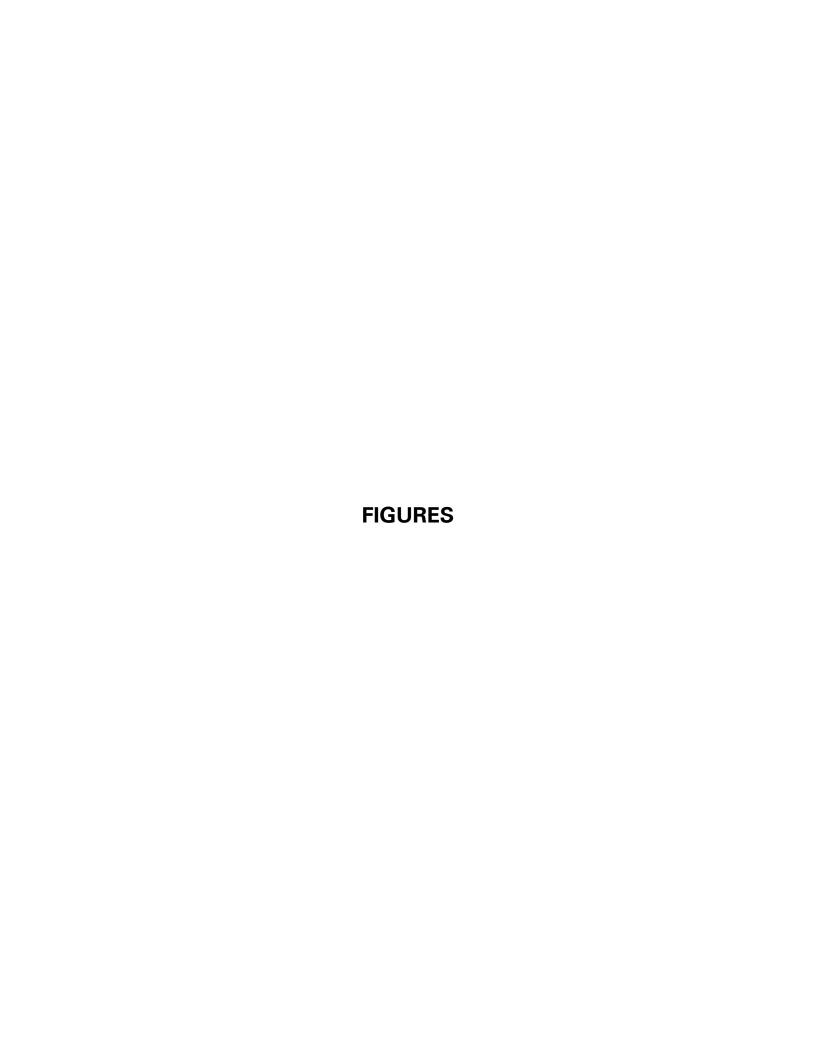
Attachment B - Laboratory Analytical Data

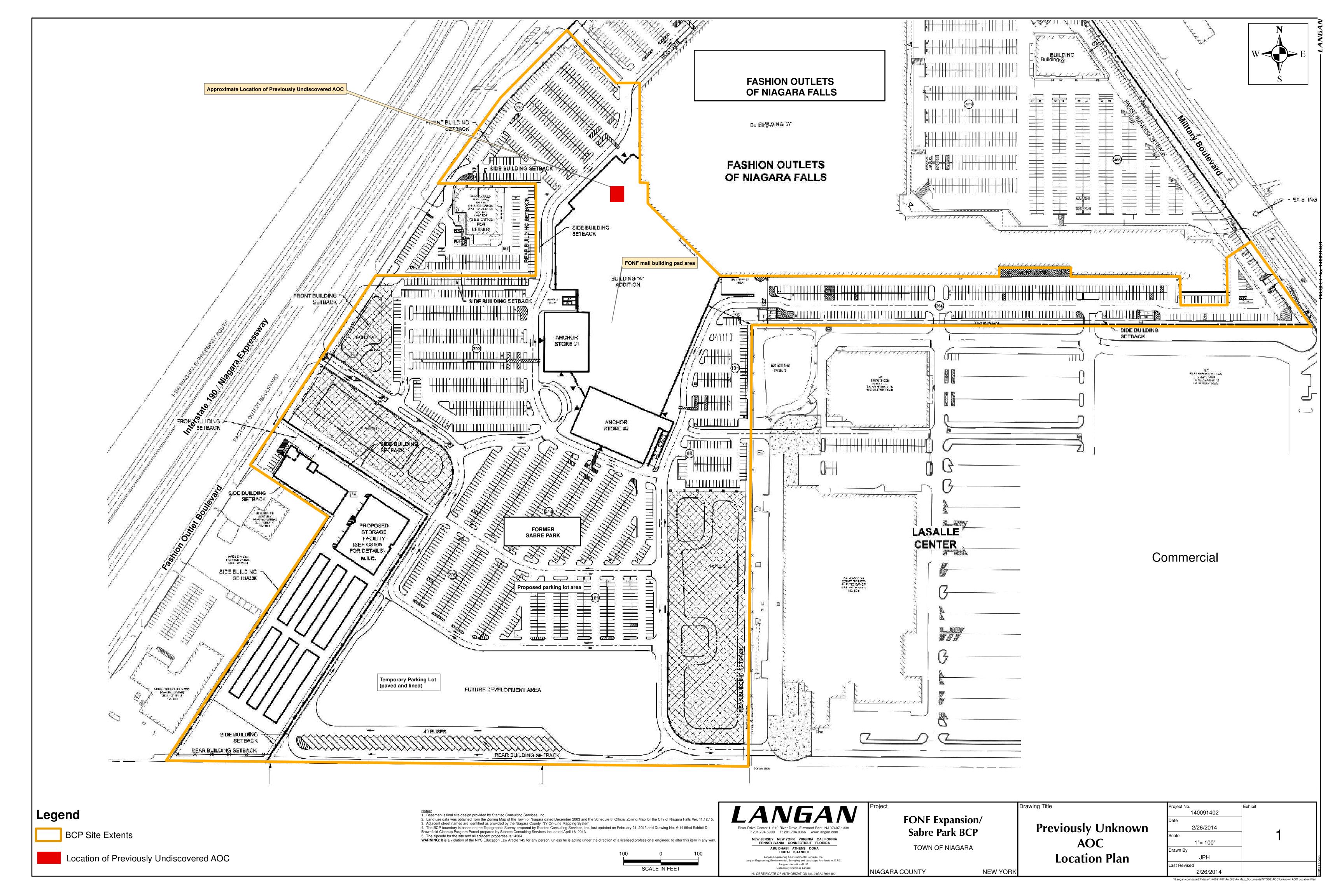
cc: Glenn May / NYSDEC Region 9

Kevin Glazer / NYSDEC Region 9

Aladdin Ghafari / Macerich







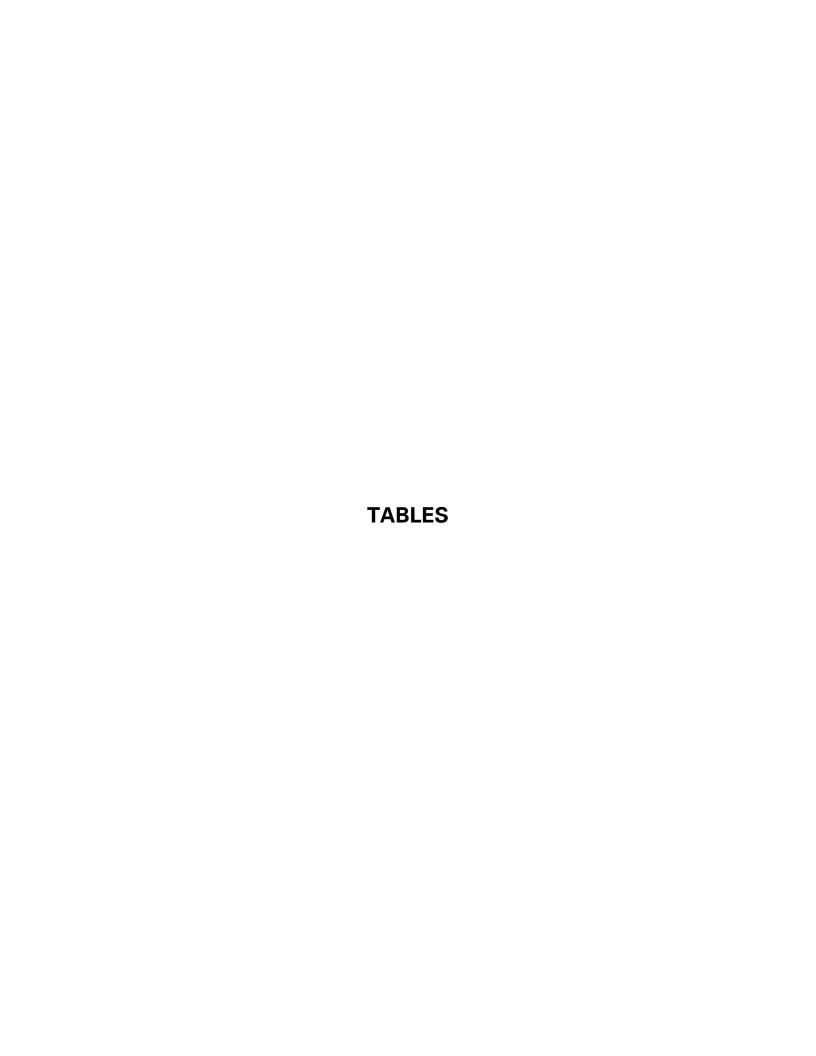


Table 1

Unknown AOC in the Northwest Corner Soil Analytical Results 1705 Factory Outlet Boulevard Niagara, New York Langan Project No. 140091402

	· ·	5-6: Remedial Program	WL-EX-1	WL-EX-2
		p Objectives	2/26/2014	2/26/2014
	Unrestricted Use	Restricted		
Parameters	(mg/kg)	Commercial (mg/kg)	mg/kg	mg/kg
VOCs (mg/kg)				
Acetone	0.05	500	0.022	0.015
Naphthalene	12	100	0.013 B	ND<0.0053
Xylenes, Total	0.26	100	0.004 J	ND<0.016
SVOCs (mg/kg)				
Benzo(a)anthracene	1	5.6	ND<0.252	0.161 J
Benzo(a)pyrene	1	1	0.116 J	0.126 J
Benzo(b)fluoranthene	1	5.6	0.0741 J	0.165 J
Benzo(k)fluoranthene	0.8	56	0.0716 J	0.190 J
Bis(2-ethylhexyl)phthalate	NE	NE	ND<0.252	0.133 J
2-Chlorophenol	NE	NE	ND<0.252	0.200 J
Chrysene	1	56	0.0978 J	0.166 J
Fluoranthene	100	500	0.210 J	0.451 J
Fluorene	30	500	ND<0.252	0.171 J
Indeno(1,2,3-cd)pyrene	0.5	5.6	0.0721 J	ND<0.434
2-Methylnaphthalene	NE	NE	ND<0.252	0.418 J
Phenanthrene	100	500	0.147 J	0.354 J
Pyrene	100	500	0.125 J	0.320 J
PCBs (mg/kg)				
Aroclor 1254	0.1	1	0.0683	ND<0.0221
Pesticides (mg/kg)	Varies	Varies	ND<0.0302	ND<0.0260
Metals (mg/kg)				
Aluminum	NE	NE	11200	9780
Antimony	NE	NE	ND<0.756	1.6
Arsenic	13	16	6.61	14.0
Barium	350	400	98.6	560
Cadmium	2.5	4.3	1.13	1.34
Calcium	NE	NE	92200	28100
Chromium	30*	180*	35.4	58.2
Cobalt	NE	NE	11.2	10.9
Copper	50	270	37.6	84.4
Iron	NE	NE	27800	20800
Lead	63	400	12.4	84.2
Magnesium	NE	NE	14700	8810
Manganese	1600	2000	485	702
Mercury	0.18	0.81	0.0895	0.553
Nickel	30	310	42.1	41.8
Potassium	NE NE	NE NE	2320	1410
Sodium	NE	NE NE	927	530
Vanadium	NE	NE NE	24.3	27.9
Zinc	109	10000	114	259

Notes:

ND = Not detected above laboratory reporting limits

NE = Not established

B = Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value is artifact.

Indicates exceedance of the Part 375 Unrestricted Use Objectives

J = Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

Table 2

Unknown AOC in the Northwest Corner Groundwater Analytical Results 1705 Factory Outlet Boulevard Niagara, New York Langan Project No. 140091402

	NN/0050 T0 00	GW-1
	NYSDEC TOGS	2/26/2014
Parameters	Standards	μg/L
VOCs		1 0.
1,2,4-Trimethylbenzene	5	0.92 J
Benzene	1	0.88 J
Methylene Chloride	5	3.0 B,J
Naphthalene	10	4.7 B,J
p- & m- Xylenes	5	2.3 J
Xylenes, Total	5	2.3 J
SVOCs		
Acenaphthene	20	0.558
Fluorene	50	0.463
Naphthalene	10	2.66
Phenanthrene	1.5	0.684
Pyrene	4.6	0.200
PCBs	0.2	0.129
Pesticides/Herbicides		
Silvex (2,4,5-Tp)		ND<5.0
Metals		
Aluminum	NE	17500
Arsenic	25	22
Barium	1000	1250
Cadmium	5	5
Calcium	NE	341000
Chromium	50	131
Cobalt	NE	25
Copper	200	208
Iron	NE	52700
Lead	25	397
Magnesium	35000	76800
Manganese	300	1990
Mercury	0.7	1
Nickel	100	109
Potassium	NE	56400
Sodium	20000	113000
Vanadium	NE	69
Zinc	2000	1230

Notes:

ND = Not detected above laboratory reporting limits

NE = Not established

J = Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL); therefore, the result is an estimated

B = Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value is artifact.

Indicates exceedance of the NYSDEC Criteria

ATTACHMENT A PHOTO LOG



Photo 1: Remains of a 55-gallon drum encountered in the water utility line excavation facing southwest

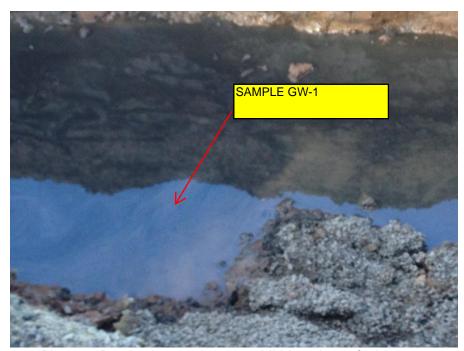


Photo 2: Perched groundwater exhibiting sheen facing east



Photo 3: Urban fill surrounding the 55-gallon drum remains facing west

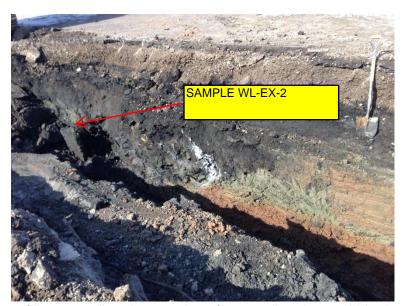


Photo 4: Urban fill surrounding the remains of a 55-gallon drum within the water utility line excavation facing southwest

ATTACHMENT B LABORATORY ANALYTICAL REPORT



Technical Report

prepared for:

Langan Engineering & Environmental Services (CT)

Long Wharf Maritime Center, 555 Long Wharf Drive New Haven CT, 06511

Attention: Alison Suarato

Report Date: 02/28/2014

Client Project ID: FONF

York Project (SDG) No.: 14B0724

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

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Report Date: 02/28/2014
Client Project ID: FONF

York Project (SDG) No.: 14B0724

Langan Engineering & Environmental Services (CT)

Long Wharf Maritime Center, 555 Long Wharf Drive New Haven CT, 06511 Attention: Alison Suarato

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 27, 2014 and listed below. The project was identified as your project: **FONF**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	<u>Matrix</u>	Date Collected	Date Received
14B0724-01	WL-EX-1	Soil	02/26/2014	02/27/2014
14B0724-02	WL-EX-2	Soil	02/26/2014	02/27/2014
14B0724-03	GW-1	Water	02/26/2014	02/27/2014
14B0724-04	trip blank	Water	02/26/2014	02/27/2014

General Notes for York Project (SDG) No.: 14B0724

- 1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
- 6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.

8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:

Date:

Benjamin Gulizia Laboratory Director 02/28/2014



Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No	o. Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freor	112ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.2	13	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.2	13	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
78-93-3	2-Butanone	ND		ug/kg dry	3.2	13	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
591-78-6	2-Hexanone	ND		ug/kg dry	3.2	13	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
67-64-1	Acetone	22		ug/kg dry	3.2	13	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
71-43-2	Benzene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-25-2	Bromoform	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
74-83-9	Bromomethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-00-3	Chloroethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
67-66-3	Chloroform	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
74-87-3	Chloromethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.2	6.4	1 E	PA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS

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Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-09-2	Methylene chloride	ND		ug/kg dry	3.2	13	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
91-20-3	Naphthalene	13	В	ug/kg dry	3.2	13	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
95-47-6	o-Xylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	3.2	13	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
100-42-5	Styrene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
108-88-3	Toluene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.2	6.4	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
1330-20-7	Xylenes, Total	4.0	J	ug/kg dry	3.2	19	1	EPA 8260C	02/27/2014 16:18	02/28/2014 11:28	SS
	Surrogate Recoveries	Result		Acce	ptance R	ange					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %			72-137						
460-00-4	Surrogate: p-Bromofluorobenzene	92.9 %			72-138						
2037-26-5	Surrogate: Toluene-d8	101 %			85-118						

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
120-12-7	Anthracene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR



Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
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CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilut	ion Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
50-32-8	Benzo(a)pyrene	116	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
205-99-2	Benzo(b)fluoranthene	74.1	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
65-85-0	Benzoic acid	ND		ug/kg dry	172	504	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
207-08-9	Benzo(k)fluoranthene	71.6	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
218-01-9	Chrysene	97.8	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	252	503	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	252	504	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
606-20-2	2,4-Dinitrotoluene	ND		ug/kg dry		252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR



Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

<u>Log-in Notes:</u> <u>S</u>	Sample Notes:
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CAS No.	Parameter	Result	Flag	Units	MDL	RL	Diluti	on Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
206-44-0	Fluoranthene	210	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
86-73-7	Fluorene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
193-39-5	Indeno(1,2,3-cd)pyrene	72.1	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
78-59-1	Isophorone	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
91-20-3	Naphthalene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	127	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
85-01-8	Phenanthrene	147	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
108-95-2	Phenol	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
129-00-0	Pyrene	125	J	ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	63.5	252	1	EPA 8270D	02/27/2014 17:00	02/28/2014 11:05	SR
	Surrogate Recoveries	Result		Acce	ptance R	ange					
367-12-4	Surrogate: 2-Fluorophenol	36.6 %			10-109						
4165-62-2	Surrogate: Phenol-d5	39.2 %			10-124						
4165-60-0	Surrogate: Nitrobenzene-d5	59.9 %			10-148						
120 R	ESEARCH DRIVE	STRATFOR	D. CT 06	615			(203) 3	325-1371	FAX (203) 35	7-0166	



Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

CAS No.

321-60-8

Log-in Notes:

Sample Notes:

Date/Time Date/Time

Result Flag Units MDL RL Dilution Reference Method Prepared Analyzed Analyst
56.5 % 10-111

 5175-83-7
 Surrogate: 2,4,6-Tribromophenol
 111 %
 10-142

 1718-51-0
 Surrogate: Terphenyl-d14
 48.2 %
 10-147

Parameter

Surrogate: 2-Fluorobiphenyl

Pesticides/PCBs, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/kg dry	126	126	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
72-43-5	Methoxychlor	ND		ug/kg dry	12.5	12.5	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
76-44-8	Heptachlor	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
72-20-8	Endrin	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
959-98-8	Endosulfan I	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
60-57-1	Dieldrin	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
319-86-8	delta-BHC	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
57-74-9	Chlordane, total	ND		ug/kg dry	9.98	9.98	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
319-85-7	beta-BHC	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
319-84-6	alpha-BHC	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
309-00-2	Aldrin	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
72-54-8	4,4'-DDD	ND		ug/kg dry	2.49	2.49	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 15:58	JW
11096-82-5	Aroclor 1260	ND		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
11097-69-1	Aroclor 1254	68.3		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
12672-29-6	Aroclor 1248	ND		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
53469-21-9	Aroclor 1242	ND		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
11141-16-5	Aroclor 1232	ND		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW

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Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Pesticides/PCBs, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	on Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11104-28-2	Aroclor 1221	ND		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
12674-11-2	Aroclor 1016	ND		ug/kg dry	25.7	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
1336-36-3	Total PCBs	68.3		ug/kg dry	10.3	25.7	1	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 17:11	JW
	Surrogate Recoveries	Result		Acce	ptance R	lange					
877-09-8	Surrogate: Tetrachloro-m-xylene	32.3 %			30-140						
2051-24-3	Surrogate: Decachlorobiphenyl	29.2 %	GC-Sur		30-140						

Herbicides, Target List

Sample Prepared by Method: EPA 3550B/8151A

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	on Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
94-75-7	2,4-D	ND		ug/kg dry	30.2	30.2	1	EPA 8151A m	02/28/2014 07:03	02/28/2014 14:02	JW
93-72-1	2,4,5-TP (Silvex)	ND		ug/kg dry	30.2	30.2	1	EPA 8151A m	02/28/2014 07:03	02/28/2014 14:02	JW
93-76-5	2,4,5-T	ND		ug/kg dry	30.2	30.2	1	EPA 8151A m	02/28/2014 07:03	02/28/2014 14:02	JW
	Surrogate Recoveries	Result		Acce	ptance Ra	inge					
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid	120 %			30-150						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	11200		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-36-0	Antimony	ND		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-38-2	Arsenic	6.61		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-39-3	Barium	98.6		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.151	0.151	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-43-9	Cadmium	1.13		mg/kg dry	0.454	0.454	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-70-2	Calcium	92200		mg/kg dry	0.756	7.56	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-47-3	Chromium	35.4		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-48-4	Cobalt	11.2		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-50-8	Copper	37.6		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7439-89-6	Iron	27800		mg/kg dry	3.02	3.02	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7439-92-1	Lead	12.4		mg/kg dry	0.454	0.454	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7439-95-4	Magnesium	14700		mg/kg dry	7.56	7.56	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7439-96-5	Manganese	485		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW



Client Sample ID: WL-EX-1 York Sample ID: 14B0724-01

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:50 pm02/27/2014

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes:

Sample Notes:

D-4-/T:---

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-02-0	Nickel	42.1		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-09-7	Potassium	2320		mg/kg dry	7.56	7.56	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7782-49-2	Selenium	ND		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-22-4	Silver	ND		mg/kg dry	0.756	0.756	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-23-5	Sodium	927		mg/kg dry	15.1	15.1	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-28-0	Thallium	ND		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-62-2	Vanadium	24.3		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW
7440-66-6	Zinc	114		mg/kg dry	1.51	1.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:20	MW

Mercury by 7473 <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Prepared	Analyzed	Analyst
7439-97-6	Mercury	0.0895		mg/kg dry	0.0454	0.0454	1	EPA 7473	02/28/2014 07:01	02/28/2014 09:03	ALD

Total Solids <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	66.1		%	0.100	0.100	1	SM 2540G	02/28/2014 10:15	02/28/2014 11:46	KK

Sample Information

Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5035A

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	MDL	RL	Diluti	on Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon	113ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS

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Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
591-78-6	2-Hexanone	ND		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
67-64-1	Acetone	15		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
71-43-2	Benzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-25-2	Bromoform	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
67-66-3	Chloroform	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
		ND		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-09-2	Methylene chloride	ND		ug ng ur j							

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Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5035A

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	2.6	11	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
100-42-5	Styrene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
108-88-3	Toluene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.6	5.3	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	2.6	16	1	EPA 8260C	02/27/2014 16:18	02/28/2014 12:08	SS
	Surrogate Recoveries	Result		Acce	ptance R	ange					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	103 %			72-137						
460-00-4	Surrogate: p-Bromofluorobenzene	93.6 %			72-138						
2037-26-5	Surrogate: Toluene-d8	101 %			85-118						

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
120-12-7	Anthracene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
56-55-3	Benzo(a)anthracene	161	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
50-32-8	Benzo(a)pyrene	126	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
205-99-2	Benzo(b)fluoranthene	165	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
65-85-0	Benzoic acid	ND		ug/kg dry	297	868	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
207-08-9	Benzo(k)fluoranthene	190	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR



Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
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CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
95-57-8	2-Chlorophenol	200	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
218-01-9	Chrysene	166	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	435	867	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	435	868	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
117-81-7	Bis(2-ethylhexyl)phthalate	133	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
206-44-0	Fluoranthene	451		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
86-73-7	Fluorene	171	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR



Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Semi-Volatiles, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes:	Sample Notes:
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CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutior	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
78-59-1	Isophorone	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
91-57-6	2-Methylnaphthalene	418	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
91-20-3	Naphthalene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	219	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
85-01-8	Phenanthrene	354	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
108-95-2	Phenol	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
129-00-0	Pyrene	320	J	ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	109	434	2	EPA 8270D	02/27/2014 17:00	02/28/2014 11:36	SR
	Surrogate Recoveries	Result		Acce	ptance R	ange					
367-12-4	Surrogate: 2-Fluorophenol	46.9 %			10-109						
4165-62-2	Surrogate: Phenol-d5	54.8 %			10-124						
4165-60-0	Surrogate: Nitrobenzene-d5	50.5 %			10-148						
321-60-8	Surrogate: 2-Fluorobiphenyl	71.4 %			10-111						
5175-83-7	Surrogate: 2,4,6-Tribromophenol	97.7 %			10-142						
1718-51-0	Surrogate: Terphenyl-d14	90.7 %			10-147						



Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Pesticides/PCBs, EPA TCL List

Sample Prepared by Method: EPA 3550C

Log-in Notes: Sample Notes:

Toxaphene Methoxychlor Heptachlor epoxide Heptachlor gamma-BHC (Lindane) Endrin ketone Endrin aldehyde Endrin Endosulfan sulfate Endosulfan II	ND		ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry ug/kg dry	109 10.7 2.15 2.15 2.15 2.15	109 10.7 2.15 2.15 2.15	5 5 5 5	EPA 8081B/8082A EPA 8081B/8082A EPA 8081B/8082A EPA 8081B/8082A	02/27/2014 11:46 02/27/2014 11:46 02/27/2014 11:46 02/27/2014 11:46 02/27/2014 11:46	02/27/2014 16:13 02/27/2014 16:13 02/27/2014 16:13 02/27/2014 16:13 02/27/2014 16:13	JW JW JW
Heptachlor epoxide Heptachlor gamma-BHC (Lindane) Endrin ketone Endrin aldehyde Endrin Endosulfan sulfate	ND ND ND ND ND ND ND		ug/kg dry ug/kg dry ug/kg dry ug/kg dry	2.152.152.15	2.15 2.15	5	EPA 8081B/8082A EPA 8081B/8082A	02/27/2014 11:46 02/27/2014 11:46	02/27/2014 16:13 02/27/2014 16:13	JW JW
Heptachlor gamma-BHC (Lindane) Endrin ketone Endrin aldehyde Endrin Endosulfan sulfate	ND ND ND ND ND		ug/kg dry ug/kg dry ug/kg dry	2.15 2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
gamma-BHC (Lindane) Endrin ketone Endrin aldehyde Endrin Endosulfan sulfate	ND ND ND		ug/kg dry ug/kg dry	2.15						
Endrin ketone Endrin aldehyde Endrin Endosulfan sulfate	ND ND ND		ug/kg dry		2.15	5		02/27/2014 11:46	02/27/2014 16:13	
Endrin aldehyde Endrin Endosulfan sulfate	ND ND			2.15			EPA 8081B/8082A			JW
Endrin Endosulfan sulfate	ND		ug/ko dry		2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Endosulfan sulfate				2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Endosulfan II	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Endosulfan I	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Dieldrin	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
delta-BHC	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Chlordane, total	ND		ug/kg dry	8.59	8.59	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
beta-BHC	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
alpha-BHC	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Aldrin	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
4,4'-DDT	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
4,4'-DDE	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
4,4'-DDD	ND		ug/kg dry	2.15	2.15	5	EPA 8081B/8082A	02/27/2014 11:46	02/27/2014 16:13	JW
Aroclor 1260	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Aroclor 1254	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Aroclor 1248	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Aroclor 1242	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Aroclor 1232	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Aroclor 1221	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Aroclor 1016	ND		ug/kg dry	22.1	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Total PCBs	ND		ug/kg dry	8.85	22.1	1	EPA 8081B/8082A	02/27/2014 11:46	02/28/2014 09:33	JW
Surrogate Recoveries	Result		Acce	ptance Ra	ange					
Surrogate: Tetrachloro-m-xylene	79.0 %			30-140						
	Endosulfan I Dieldrin delta-BHC Chlordane, total beta-BHC alpha-BHC Aldrin 4,4'-DDT 4,4'-DDE 4,4'-DDD Aroclor 1260 Aroclor 1254 Aroclor 1248 Aroclor 1242 Aroclor 1232 Aroclor 1221 Aroclor 1016 Total PCBs	Endosulfan I ND Dieldrin ND delta-BHC ND Chlordane, total ND beta-BHC ND alpha-BHC ND Aldrin ND 4,4'-DDT ND 4,4'-DDE ND Aroclor 1260 ND Aroclor 1254 ND Aroclor 1248 ND Aroclor 1242 ND Aroclor 1242 ND Aroclor 1232 ND Aroclor 1221 ND Aroclor 1016 ND Total PCBs ND Surrogate Recoveries Result Surrogate: Tetrachloro-m-xylene 79.0 %	Endosulfan I Dieldrin ND Dieldrin ND delta-BHC ND Chlordane, total ND beta-BHC Aldrin ND Aldrin ND 4,4'-DDT ND 4,4'-DDE ND Aroclor 1260 ND Aroclor 1254 ND Aroclor 1248 ND Aroclor 1242 ND Aroclor 1232 ND Aroclor 1221 ND Aroclor 1016 ND Surrogate Recoveries Result Surrogate: Tetrachloro-m-xylene 79.0 %	Endosulfan I ND ug/kg dry Dieldrin ND ug/kg dry delta-BHC ND ug/kg dry Chlordane, total ND ug/kg dry beta-BHC ND ug/kg dry alpha-BHC ND ug/kg dry Aldrin ND ug/kg dry 4,4'-DDT ND ug/kg dry 4,4'-DDE ND ug/kg dry 4,4'-DDD ND ug/kg dry Aroclor 1260 ND ug/kg dry Aroclor 1254 ND ug/kg dry Aroclor 1248 ND ug/kg dry Aroclor 1242 ND ug/kg dry Aroclor 1232 ND ug/kg dry Aroclor 1232 ND ug/kg dry Aroclor 1221 ND ug/kg dry Aroclor 1016 ND ug/kg dry Total PCBs ND ug/kg dry Surrogate Recoveries Result Acce	Endosulfan I ND ug/kg dry 2.15 Dieldrin ND ug/kg dry 2.15 delta-BHC ND ug/kg dry 2.15 Chlordane, total ND ug/kg dry 2.15 alpha-BHC ND ug/kg dry 2.15 Aldrin ND ug/kg dry 2.15 Aldrin ND ug/kg dry 2.15 4,4'-DDT ND ug/kg dry 2.15 4,4'-DDE ND ug/kg dry 2.15 Aroclor 1260 ND ug/kg dry 2.15 Aroclor 1254 ND ug/kg dry 2.15 Aroclor 1248 ND ug/kg dry 22.1 Aroclor 1242 ND ug/kg dry 22.1 Aroclor 1232 ND ug/kg dry 22.1 Aroclor 1221 ND ug/kg dry 22.1 Aroclor 1016 ND ug/kg dry 22.1 Total PCBs ND ug/kg dry 8.85 Surrogate Recoveries Result Acceptance Result Surrogate: Tetrachloro-m-xylene 79.0 % 30-140	Endosulfan I Dieldrin ND ug/kg dry 2.15 2.15 Dieldrin ND ug/kg dry 2.15 2.15 2.15 Chlordane, total ND ug/kg dry 2.15 2.15 Chlordane, total ND ug/kg dry 2.15 2.15 Chlordane, total ND ug/kg dry 2.15 2.15 Aldrin ND ug/kg dry 2.15 2.15 Aldrin ND ug/kg dry 2.15 2.15 Aldrin ND ug/kg dry 2.15 2.15 4,4'-DDT ND ug/kg dry 2.15 2.15 4,4'-DDE ND ug/kg dry 2.15 2.15 Aroclor 1260 ND ug/kg dry 2.15 2.15 Aroclor 1254 ND ug/kg dry 2.21 22.1 Aroclor 1248 ND ug/kg dry 22.1 22.1 Aroclor 1242 ND ug/kg dry 22.1 22.1 Aroclor 1242 ND ug/kg dry 22.1 22.1 Aroclor 1221 ND ug/kg dry 22.1 22.1 Aroclor 1016 ND ug/kg dry 22.1 22.1 22.1	Endosulfan I ND ug/kg dry 2.15 2.15 5 Dieldrin ND ug/kg dry 2.15 2.15 5 delta-BHC ND ug/kg dry 2.15 2.15 5 Chlordane, total ND ug/kg dry 2.15 2.15 5 beta-BHC ND ug/kg dry 2.15 2.15 5 Aldrin ND ug/kg dry 2.15 2.15 5 Aldrin ND ug/kg dry 2.15 2.15 5 Aldrin ND ug/kg dry 2.15 2.15 5 4,4'-DDT ND ug/kg dry 2.15 2.15 5 4,4'-DDE ND ug/kg dry 2.15 2.15 5 4,4'-DDD ND ug/kg dry 2.15 2.15 5 Aroclor 1260 ND ug/kg dry 2.15 2.15 5 Aroclor 1254 ND ug/kg dry 2.15 2.1 1 Aroclor 1248 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1248 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1240 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1241 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1242 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1254 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1255 ND ug/kg dry 2.2.1 22.1 1 Aroclor 1260 ND ug/kg dry 2.2.1 22.1 1	Endosulfan I ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A Dieldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A delta-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A Chlordane, total ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A beta-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A alpha-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A Aldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A Aldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 4,4'-DDT ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 4,4'-DDE ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 4,4'-DDD ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 4,4'-DDD ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A Aroclor 1260 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1254 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1242 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1254 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1260 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1270 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 128 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 129 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Aroclor 1016 ND ug/kg dry 22.1 22.1 1 EPA 8081B/8082A Surrogate: Tetrachloro-m-xylene 79.0 %	Endosulfan I ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 Dieldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 delta-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 Chlordane, total ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 beta-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 alpha-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 alpha-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 Aldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 4,4*-DDT ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 4,4*-DDE ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 4,4*-DDD ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1260 ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1254 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1248 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1240 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1241 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1242 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1240 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1251 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1260 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1260 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1270 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1270 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Aroclor 1016 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 02/27/2014 11:46 Total PCBs ND ug/kg dry 8.5 2.1 1 EPA 8081B/8082A 02/27/2014 11:46 Surrogate: Tetrachloro-m-xylene 79.0 %	Endosulfan I ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 Dieldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 delta-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 Chlordane, total ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 beta-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 alpha-BHC ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 Aldrin ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 4,4*-DDT ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 4,4*-DDE ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 4,4*-DDD ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 4,4*-DDD ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 Aroclor 1260 ND ug/kg dry 2.15 2.15 5 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 Aroclor 1264 ND ug/kg dry 2.1 2.1 1 EPA 8081B/8082A 0227/2014 11:46 0227/2014 16:13 Aroclor 1254 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1248 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1242 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1242 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1252 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1252 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1268 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1268 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1268 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Aroclor 1268 ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Total PCBs ND ug/kg dry 2.1 22.1 1 EPA 8081B/8082A 0227/2014 11:46 0228/2014 09:33 Burro

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Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Herbicides, Target List

Sample Prepared by Method: EPA 3550B/8151A

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
94-75-7	2,4-D	ND		ug/kg dry	26.0	26.0	1	EPA 8151A m	02/28/2014 07:03	02/28/2014 14:29	JW
93-72-1	2,4,5-TP (Silvex)	ND		ug/kg dry	26.0	26.0	1	EPA 8151A m	02/28/2014 07:03	02/28/2014 14:29	JW
93-76-5	2,4,5-T	ND		ug/kg dry	26.0	26.0	1	EPA 8151A m	02/28/2014 07:03	02/28/2014 14:29	JW
	Surrogate Recoveries	Result		Acce	ptance Ra	ange					
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic a	cia 84.2 %			30-150						

Metals, Target Analyte

Sample Prepared by Method: EPA 3050B

Log-in Notes: Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	9780		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-36-0	Antimony	1.60		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-38-2	Arsenic	14.0		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-39-3	Barium	560		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.130	0.130	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-43-9	Cadmium	1.34		mg/kg dry	0.391	0.391	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-70-2	Calcium	28100		mg/kg dry	0.651	6.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-47-3	Chromium	58.2		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-48-4	Cobalt	10.9		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-50-8	Copper	84.4		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7439-89-6	Iron	20800		mg/kg dry	2.60	2.60	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7439-92-1	Lead	84.2		mg/kg dry	0.391	0.391	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7439-95-4	Magnesium	8810		mg/kg dry	6.51	6.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7439-96-5	Manganese	702		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-02-0	Nickel	41.8		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-09-7	Potassium	1410		mg/kg dry	6.51	6.51	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7782-49-2	Selenium	ND		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-22-4	Silver	ND		mg/kg dry	0.651	0.651	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-23-5	Sodium	530		mg/kg dry	13.0	13.0	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-28-0	Thallium	ND		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-62-2	Vanadium	27.9		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW
7440-66-6	Zinc	259		mg/kg dry	1.30	1.30	1	EPA 6010C	02/27/2014 13:40	02/27/2014 18:25	MW

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Client Sample ID: WL-EX-2 York Sample ID: 14B0724-02

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFSoilFebruary 26, 2014 12:55 pm02/27/2014

Mercury by 7473 <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: EPA 7473 soil

Date/Time Date/Time CAS No. Parameter Result Units MDL Dilution Reference Method Prepared Analyzed 0.553 02/28/2014 07:01 02/28/2014 09:12 ALD mg/kg dry 0.0391 0.0391 EPA 7473 7439-97-6 Mercury

<u>Total Solids</u> <u>Log-in Notes:</u> <u>Sample Notes:</u>

Sample Prepared by Method: % Solids Prep

Date/Time Date/Time Flag Units MDL RL Dilution Reference Method CAS No. Result Analyst Parameter Prepared Analyzed % Solids 76.8 0.100 0.100 SM 2540G 02/28/2014 10:15 02/28/2014 11:46 KK solids

Sample Information

Client Sample ID: GW-1 York Sample ID: 14B0724-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:45 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5030B

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.23	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.59	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon	113ND		ug/L	0.34	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	1.3	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.42	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.52	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.91	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
95-63-6	1,2,4-Trimethylbenzene	0.92	J	ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.98	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.44	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.36	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.23	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.48	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
78-93-3	2-Butanone	ND		ug/L	1.5	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
591-78-6	2-Hexanone	ND		ug/L	1.1	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS

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Client Sample ID: GW-1 York Sample ID: 14B0724-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:45 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

<u>Log-in Notes:</u>

Sample Notes:

Sample Prepared by	Method: EPA 5030B								Date/Time	Date/Time	
CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Prepared	Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.86	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
67-64-1	Acetone	ND		ug/L	6.1	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
71-43-2	Benzene	0.88	J	ug/L	0.30	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-25-2	Bromoform	ND		ug/L	0.58	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
74-83-9	Bromomethane	ND		ug/L	2.0	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-15-0	Carbon disulfide	ND		ug/L	0.51	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.56	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
108-90-7	Chlorobenzene	ND		ug/L	0.38	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-00-3	Chloroethane	ND		ug/L	2.8	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
67-66-3	Chloroform	ND		ug/L	0.42	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
74-87-3	Chloromethane	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.43	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.39	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.35	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.25	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.53	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-09-2	Methylene chloride	3.0	CCV-E, J, B	ug/L	2.4	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
91-20-3	Naphthalene	4.7	B, J	ug/L	1.2	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.30	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.54	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
95-47-6	o-Xylene	1.0	J	ug/L	0.21	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
179601-23-1	p- & m- Xylenes	1.3	J	ug/L	0.53	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.59	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
100-42-5	Styrene	ND		ug/L	0.22	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
98-06-6	tert-Butylbenzene	ND		ug/L	1.4	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
108-88-3	Toluene	ND		ug/L	0.17	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.52	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS

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Client Sample ID: GW-1 York Sample ID: 14B0724-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:45 pm02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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Sample Notes: EXT-EM

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.67	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
79-01-6	Trichloroethylene	ND		ug/L	0.16	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.54	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.68	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
1330-20-7	Xylenes, Total	2.3	J	ug/L	0.55	15	1	EPA 8260C	02/28/2014 08:00	02/28/2014 12:49	SS
	Surrogate Recoveries	Result		Acc	eptance Ra	ange					
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	107 %			78-122						
460-00-4	Surrogate: p-Bromofluorobenzene	95.9 %			87-112						
2037-26-5	Surrogate: Toluene-d8	104 %			91-110						

Log-in Notes:

Semi-Volatiles, EPA TCL List - Low Level

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	0.558		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
208-96-8	Acenaphthylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
120-12-7	Anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
65-85-0	Benzoic acid	ND		ug/L	26.3	52.6	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
100-51-6	Benzyl alcohol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR

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Client Sample ID: GW-1 **York Sample ID:** 14B0724-03

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received 14B0724 FONF Water February 26, 2014 12:45 pm 02/27/2014

Log-in Notes:

Sample Notes: EXT-EM

Semi-Volatiles, EPA TCL List - Low Level

Sample Prepared by M	Method: EPA 3510C										
CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
218-01-9	Chrysene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
132-64-9	Dibenzofuran	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
206-44-0	Fluoranthene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
86-73-7	Fluorene	0.463		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
118-74-1	Hexachlorobenzene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
67-72-1	Hexachloroethane	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
78-59-1	Isophorone	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
95-48-7	2-Methylphenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
91-20-3	Naphthalene	2.66		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR

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Client Sample ID: GW-1 York Sample ID: 14B0724-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:45 pm02/27/2014

Log-in Notes:

Sample Notes: EXT-EM

Semi-Volatiles, EPA TCL List - Low Level

Sample Prepared b	by Method: EPA 3510C										
CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
98-95-3	Nitrobenzene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
100-02-7	4-Nitrophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
87-86-5	Pentachlorophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
85-01-8	Phenanthrene	0.684		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
108-95-2	Phenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
129-00-0	Pyrene	0.200		ug/L	0.0526	0.0526	1	EPA 8270D	02/28/2014 08:07	02/28/2014 12:31	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.63	5.26	1	EPA 8270D	02/28/2014 08:07	02/28/2014 13:17	SR
	Surrogate Recoveries	Result		Acc	eptance R	ange					
367-12-4	Surrogate: 2-Fluorophenol	24.4 %			10-52						
4165-62-2	Surrogate: Phenol-d5	14.1 %			10-117						
4165-60-0	Surrogate: Nitrobenzene-d5	72.5 %			12-112						
321-60-8	Surrogate: 2-Fluorobiphenyl	78.0 %			14-101						
5175-83-7	Surrogate: 2,4,6-Tribromophenol	122 %			17-127						

Pesticides/PCBs, EPA TCL List

1718-51-0

Sample Prepared by Method: EPA SW846-3510C Low Level

Surrogate: Terphenyl-d14

97.3 %

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/L	0.121	0.121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
72-43-5	Methoxychlor	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
76-44-8	Heptachlor	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW

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Client Sample ID: GW-1 York Sample ID: 14B0724-03

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:45 pm02/27/2014

Pesticides/PCBs, EPA TCL List

Sample Prepared by Method: EPA SW846-3510C Low Level

Log-in Notes: Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-20-8	Endrin	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
959-98-8	Endosulfan I	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
60-57-1	Dieldrin	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
319-86-8	delta-BHC	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
57-74-9	Chlordane, total	ND		ug/L	0.0485	0.0485	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
319-85-7	beta-BHC	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
319-84-6	alpha-BHC	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
309-00-2	Aldrin	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00121	0.00121	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:19	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0512	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
11097-69-1	Aroclor 1254	0.129		ug/L	0.0512	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0440	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0440	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0440	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0440	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
12674-11-2	Aroclor 1016	ND		ug/L	0.0440	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
1336-36-3	Total PCBs	0.129		ug/L	0.0440	0.0606	1	EPA 8081B/8082A	02/28/2014 09:00	02/28/2014 12:33	JW
	Surrogate Recoveries	Result		Acc	eptance Ra	ange					
877-09-8	Surrogate: Tetrachloro-m-xylene	46.4 %			30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	13.9 %	GC-Su	ır	30-120						

Herbicides, Target List

Sample Prepared by Method: EPA 3535A

<u>Log-in Notes:</u> <u>Sample Notes:</u>

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
94-75-7	2,4-D	ND		ug/L	5.00	5.00	1	EPA 8151A m	02/28/2014 09:57	02/28/2014 13:12	JW
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	5.00	1	EPA 8151A m	02/28/2014 09:57	02/28/2014 13:12	JW
93-76-5	2,4,5-T	ND		ug/L	5.00	5.00	1	EPA 8151A m	02/28/2014 09:57	02/28/2014 13:12	JW
	Surrogate Recoveries	Result		Acc	eptance R	ange					



Client Sample ID: GW-1 **York Sample ID:** 14B0724-03

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received FONF 14B0724 Water February 26, 2014 12:45 pm 02/27/2014

Log-in Notes: Sample Notes: Herbicides, Target List

Sample Prepared by Method: EPA 3535A

Date/Time Date/Time Analyzed CAS No. Parameter Result Flag Units MDL Dilution Reference Method Prepared Analyst

30-150 19719-28-9 $Surrogate: 2,4-Dichlorophenylacetic\ acia\ 109\ \%$

Metals, Target Analyte Sample Prepared by Method: EPA 3010A

Log-in Notes: Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	17.5		mg/L	0.010	0.010	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-36-0	Antimony	ND		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-38-2	Arsenic	0.022		mg/L	0.004	0.004	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-39-3	Barium	1.25		mg/L	0.010	0.010	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-43-9	Cadmium	0.005		mg/L	0.003	0.003	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-70-2	Calcium	341		mg/L	0.050	0.050	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-47-3	Chromium	0.131		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-48-4	Cobalt	0.025		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-50-8	Copper	0.208		mg/L	0.003	0.003	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7439-89-6	Iron	52.7		mg/L	0.020	0.020	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7439-92-1	Lead	0.397		mg/L	0.003	0.003	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7439-95-4	Magnesium	76.8		mg/L	0.050	0.050	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7439-96-5	Manganese	1.99		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-02-0	Nickel	0.109		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-09-7	Potassium	56.4		mg/L	0.050	0.050	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7782-49-2	Selenium	ND		mg/L	0.010	0.010	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-23-5	Sodium	1130		mg/L	0.500	0.500	5	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-28-0	Thallium	ND		mg/L	0.005	0.005	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-62-2	Vanadium	0.069		mg/L	0.010	0.010	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW
7440-66-6	Zinc	1.23		mg/L	0.010	0.010	1	EPA 200.7/6010C	02/27/2014 13:57	02/28/2014 01:50	MW

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Client Sample ID: GW-1 **York Sample ID:** 14B0724-03

Client Project ID Collection Date/Time Date Received York Project (SDG) No. Matrix FONF 14B0724 Water February 26, 2014 12:45 pm 02/27/2014

Log-in Notes: Sample Notes: Mercury by 7470/7471

Sample Prepared by Method: EPA SW846-7470

Date/Time Date/Time CAS No. Parameter Result Units MDL Dilution Reference Method Prepared Analyzed 0.0100 02/28/2014 10:26 02/28/2014 14:37 AA mg/L 0.0040 0.0040 20 EPA 7470 7439-97-6 Mercury

Sample Information

Client Sample ID: trip blank **York Sample ID:** 14B0724-04

York Project (SDG) No. Client Project ID Matrix Collection Date/Time Date Received **FONF** Water February 26, 2014 12:00 am 02/27/2014 14B0724

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5030B

Log-in Notes: Sample Notes:

CAS No	o. Parameter	Result	Flag	Units	MDL	RL	Dilution	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.23	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.59	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon	113ND		ug/L	0.34	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	1.3	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.42	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.52	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.91	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.98	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.44	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.36	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.23	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.48	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
78-93-3	2-Butanone	ND		ug/L	1.5	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
591-78-6	2-Hexanone	ND		ug/L	1.1	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.86	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
67-64-1	Acetone	ND		ug/L	6.1	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
71-43-2	Benzene	ND		ug/L	0.30	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS

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Client Sample ID: trip blank York Sample ID: 14B0724-04

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:00 am02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5030B

Log-in Notes:	Sample Notes:
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CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilutio	n Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-25-2	Bromoform	ND		ug/L	0.58	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
74-83-9	Bromomethane	ND		ug/L	2.0	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-15-0	Carbon disulfide	ND		ug/L	0.51	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.56	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
108-90-7	Chlorobenzene	ND		ug/L	0.38	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-00-3	Chloroethane	ND		ug/L	2.8	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
67-66-3	Chloroform	ND		ug/L	0.42	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
74-87-3	Chloromethane	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.43	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.39	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.35	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.25	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.53	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-09-2	Methylene chloride	3.7	CCV-E, J, B	ug/L	2.4	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
91-20-3	Naphthalene	ND		ug/L	1.2	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
04-51-8	n-Butylbenzene	ND		ug/L	0.30	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.54	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
95-47-6	o-Xylene	ND		ug/L	0.21	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.53	10	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.59	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
100-42-5	Styrene	ND		ug/L	0.22	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
98-06-6	tert-Butylbenzene	ND		ug/L	1.4	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.41	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
08-88-3	Toluene	ND		ug/L	0.17	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
56-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.52	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.67	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
79-01-6	Trichloroethylene	ND		ug/L	0.16	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.54	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.68	5.0	1	EPA 8260C	02/28/2014 08:00	02/28/2014 13:24	SS

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Client Sample ID: trip blank York Sample ID: 14B0724-04

York Project (SDG) No.Client Project IDMatrixCollection Date/TimeDate Received14B0724FONFWaterFebruary 26, 2014 12:00 am02/27/2014

Volatile Organics, TCL (Target Compound List)

Sample Prepared by Method: EPA 5030B

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilu	ıtion	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1330-20-7	Xylenes, Total	ND		ug/L	0.55	15	1	EP	A 8260C	02/28/2014 08:00	02/28/2014 13:24	SS
	Surrogate Recoveries	Result		Acc	eptance R	ange						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	110 %			78-122							
460-00-4	Surrogate: p-Bromofluorobenzene	95.4 %			87-112							
2037-26-5	Surrogate: Toluene-d8	101 %			91-110							

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Analytical Batch Summary

Batch ID: BB41026	Preparation Method:	EPA 3550C	Prepared By:	CM
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/27/14		
14B0724-02	WL-EX-2	02/27/14		
BB41026-BLK1	Blank	02/27/14		
BB41026-BS1	LCS	02/27/14		
BB41026-BS2	LCS	02/27/14		
BB41026-BSD1	LCS Dup	02/27/14		
Batch ID: BB41057	Preparation Method:	EPA 3050B	Prepared By:	MW
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/27/14		
14B0724-02	WL-EX-2	02/27/14		
BB41057-BLK1	Blank	02/27/14		
BB41057-SRM1	Reference	02/27/14		
Batch ID: BB41059	Preparation Method:	EPA 3550C	Prepared By:	SA
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/27/14		
14B0724-02	WL-EX-2	02/27/14		
BB41059-BLK1	Blank	02/27/14		
BB41059-BS1	LCS	02/27/14		
BB41059-BSD1	LCS Dup	02/27/14		
Batch ID: BB41063	Preparation Method:	EPA 3010A	Prepared By:	MW
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-03	GW-1	02/27/14		
BB41063-BLK1	Blank	02/27/14		
BB41063-SRM1	Reference	02/27/14		
BB41063-SRM2	Reference	02/27/14		
Batch ID: BB41074	Preparation Method:	EPA 5035A	Prepared By:	BGS
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/27/14		
14B0724-02	WL-EX-2	02/27/14		
BB41074-BLK1	Blank	02/27/14		
BB41074-BS1	LCS	02/27/14		
BB41074-BSD1	LCS Dup	02/27/14		
Batch ID: BB41082	Preparation Method:	EPA 7473 soil	Prepared By:	ALD



YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/28/14		
14B0724-02	WL-EX-2	02/28/14		
BB41082-BLK1	Blank	02/28/14		
BB41082-SRM1	Reference	02/28/14		
Batch ID: BB41083	Preparation Method:	EPA 3550B/8151A	Prepared By:	CM
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/28/14		
14B0724-02	WL-EX-2	02/28/14		
BB41083-BLK1	Blank	02/28/14		
BB41083-BS1	LCS	02/28/14		
BB41083-BSD1	LCS Dup	02/28/14		
BB41083-MS1	Matrix Spike	02/28/14		
Batch ID: BB41086	Preparation Method:	EPA 3510C	Prepared By:	KAT
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-03	GW-1	02/28/14		
BB41086-BLK1	Blank	02/28/14		
BB41086-BS1	LCS	02/28/14		
BB41086-BS2	LCS	02/28/14		
BB41086-BSD1	LCS Dup	02/28/14		
Batch ID: BB41087	Preparation Method:	EPA SW846-3510C Low Level	Prepared By:	KAT
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-03	GW-1	02/28/14		
BB41087-BLK1	Blank	02/28/14		
BB41087-BS1	LCS	02/28/14		
BB41087-BS2	LCS	02/28/14		
BB41087-BSD1	LCS Dup	02/28/14		
BB41087-BSD2	LCS Dup	02/28/14		
Batch ID: BB41101	Preparation Method:	EPA 3535A	Prepared By:	CM
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-03	GW-1	02/28/14		
BB41101-BLK1	Blank	02/28/14		
BB41101-BS1	LCS	02/28/14		
BB41101-BSD1	LCS Dup	02/28/14		
Batch ID: BB41102	Preparation Method:	% Solids Prep	Prepared By:	KK
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-01	WL-EX-1	02/28/14		
		02/28/14		



Batch ID: BB41105	Preparation Method:	EPA SW846-7470	Prepared By:	AA
YORK Sample ID	Client Sample ID	Preparation Date		
14B0724-03	GW-1	02/28/14		
BB41105-BLK1	Blank	02/28/14		
BB41105-BS1	LCS	02/28/14		
BB41105-BS2	LCS	02/28/14		
Batch ID: BB41127	Preparation Method:	EPA 5030B	Prepared By:	SS
Batch ID: BB41127 YORK Sample ID	Preparation Method: Client Sample ID	EPA 5030B Preparation Date	Prepared By:	SS
	•		Prepared By:	SS
YORK Sample ID	Client Sample ID	Preparation Date	Prepared By:	SS
YORK Sample ID 14B0724-03	Client Sample ID GW-1	Preparation Date 02/28/14	Prepared By:	SS
YORK Sample ID 14B0724-03 14B0724-04	Client Sample ID GW-1 trip blank	Preparation Date 02/28/14 02/28/14	Prepared By:	SS
YORK Sample ID 14B0724-03 14B0724-04 BB41127-BLK1	Client Sample ID GW-1 trip blank Blank	Preparation Date 02/28/14 02/28/14 02/28/14	Prepared By:	SS



York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BB41074 - EPA 5035A			
Blank (BB41074-BLK1)			Prepared: 02/27/2014 Analyzed: 02/28/2014
1,1,1-Trichloroethane	ND	5.0 ug/kg wet	
1,1,2,2-Tetrachloroethane	ND	5.0 "	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0 "	
1,1,2-Trichloroethane	ND	5.0 "	
1,1-Dichloroethane	ND	5.0 "	
1,1-Dichloroethylene	ND	5.0 "	
1,2,4-Trichlorobenzene	ND	10 "	
1,2,4-Trimethylbenzene	ND	5.0 "	
1,2-Dibromo-3-chloropropane	ND	10 "	
1,2-Dibromoethane	ND	5.0 "	
1,2-Dichloroethane	ND	5.0 "	
1,2-Dichloropropane	ND	5.0 "	
1,3,5-Trimethylbenzene	ND	5.0 "	
2-Butanone	ND	10 "	
2-Hexanone	ND	10 "	
4-Methyl-2-pentanone	ND	5.0 "	
Acetone	ND	10 "	
Benzene	ND	5.0 "	
Bromodichloromethane	ND	5.0 "	
Bromoform	ND	5.0 "	
Bromomethane	ND	5.0 "	
Carbon disulfide	ND	5.0 "	
Carbon tetrachloride	ND	5.0 "	
Chlorobenzene	ND	5.0 "	
Chloroethane	ND	5.0 "	
Chloroform	ND	5.0 "	
Chloromethane	ND	5.0 "	
cis-1,2-Dichloroethylene	ND	5.0 "	
cis-1,3-Dichloropropylene	ND	5.0 "	
Dibromochloromethane	ND	5.0 "	
Dichlorodifluoromethane	ND	5.0 "	
Ethyl Benzene	ND	5.0 "	
Methyl tert-butyl ether (MTBE)	ND	5.0 "	
Methylene chloride	ND	10 "	
Naphthalene	6.1	10 "	
n-Butylbenzene	ND	5.0 "	
n-Propylbenzene	ND ND	5.0 "	
o-Xylene	ND ND	5.0 "	
p- & m- Xylenes		10 "	
sec-Butylbenzene	ND		
Styrene Styrene	ND	5.0	
	ND ND	5.0	
tert-Butylbenzene Tetraekleraethylene	ND	5.0	
Telware	ND	5.0	
Toluene	ND	5.0	
trans-1,2-Dichloroethylene	ND	5.0	
trans-1,3-Dichloropropylene	ND	5.0	
Trichloroethylene	ND	5.0 "	
Trichlorofluoromethane	ND	5.0 "	
Vinyl Chloride	ND	5.0 "	
Xylenes, Total	ND	15 "	



York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41074 - EPA 5035A											
Blank (BB41074-BLK1)							Prepa	ared: 02/27/2	2014 Analyz	ed: 02/28/2	2014
Surrogate: 1,2-Dichloroethane-d4	60.1		ug/L	50.0		120	72-137				
Surrogate: p-Bromofluorobenzene	51.0		"	50.0		102	72-138				
Surrogate: Toluene-d8	48.9		"	50.0		97.8	85-118				
LCS (BB41074-BS1)							Prepa	ared: 02/27/2	2014 Analyz	ed: 02/28/2	2014
1,1,1-Trichloroethane	55		ug/L	50.0		110	76-135				
1,1,2,2-Tetrachloroethane	46		"	50.0		91.9	82-119				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	63		"	50.0		125	68-144				
1,1,2-Trichloroethane	49		"	50.0		98.5	82-114				
1,1-Dichloroethane	53		"	50.0		106	80-119				
1,1-Dichloroethylene	58		"	50.0		117	58-139				
1,2,4-Trichlorobenzene	50		"	50.0		100	69-135				
1,2,4-Trimethylbenzene	50		"	50.0		99.9	82-116				
1,2-Dibromo-3-chloropropane	54		"	50.0		109	72-131				
1,2-Dibromoethane	52		"	50.0		103	86-114				
1,2-Dichloroethane	55		"	50.0		110	72-136				
1,2-Dichloropropane	51		"	50.0		103	79-119				
1,3,5-Trimethylbenzene	50		,,	50.0		99.5	86-114				
2-Butanone	56		,,	50.0		112	60-114				
2-Hexanone	44		,,	50.0		88.7	58-129				
4-Methyl-2-pentanone	48		"	50.0			46-121				
Acetone			"			95.7					
Benzene	51		,,	50.0		102	26-119				
Bromodichloromethane	53		,,	50.0		106	81-117				
	52		"	50.0		105	88-123				
Bromoform	51		,,	50.0		101	85-122				
Bromomethane	66			50.0		131	43-137				
Carbon disulfide	61		"	100		61.5	18-145				
Carbon tetrachloride	56			50.0		113	79-135				
Chlorobenzene	52		"	50.0		103	87-112				
Chloroethane	63		"	50.0		127	60-132				
Chloroform	55		"	50.0		111	80-126				
Chloromethane	45		"	50.0		90.5	36-133				
cis-1,2-Dichloroethylene	54		"	50.0		109	80-119				
cis-1,3-Dichloropropylene	48		"	50.0		95.5	87-125				
Dibromochloromethane	54		"	50.0		107	86-128				
Dichlorodifluoromethane	44		"	50.0		87.4	10-156				
Ethyl Benzene	52		"	50.0		105	88-117				
Methyl tert-butyl ether (MTBE)	54		"	50.0		108	58-137				
Methylene chloride	55		"	50.0		110	47-140				
Naphthalene	50		"	50.0		99.6	65-143				
n-Butylbenzene	52		"	50.0		103	79-119				
n-Propylbenzene	49		"	50.0		97.9	82-116				
o-Xylene	53		"	50.0		106	88-111				
p- & m- Xylenes	100		"	100		104	86-117				
sec-Butylbenzene	51		"	50.0		101	85-119				
Styrene	54		"	50.0		107	85-119				
tert-Butylbenzene	51		"	50.0		101	84-119				
Tetrachloroethylene	56		"	50.0		113	74-127				
Toluene	52		"	50.0		104	83-114				
trans-1,2-Dichloroethylene	55		"	50.0		109	68-131				
trans-1,3-Dichloropropylene											
	49		"	50.0		98.5	81-127				



York Analytical Laboratories, Inc.

	R	eporting	Spike	Source*		%REC			RPD	
Analyte	Result	Limit Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41074 - EPA 5035A										
LCS (BB41074-BS1)						Prep	pared: 02/27/20	014 Analyze	ed: 02/28/2	2014
Trichlorofluoromethane	59	ug/L	50.0		118	59-148				
Vinyl Chloride	53	"	50.0		106	46-133				
Surrogate: 1,2-Dichloroethane-d4	49.8	"	50.0		99.5	72-137				
Surrogate: p-Bromofluorobenzene	48.4	"	50.0		96.9	72-138				
Surrogate: Toluene-d8	49.6	"	50.0		99.3	85-118				
LCS Dup (BB41074-BSD1)						Prep	pared: 02/27/20	014 Analyze	ed: 02/28/2	2014
1,1,1-Trichloroethane	47	ug/L	50.0		93.4	76-135		16.5	30	
1,1,2,2-Tetrachloroethane	40	"	50.0		80.1	82-119	Low Bias	13.7	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	53	"	50.0		106	68-144		16.9	30	
1,1,2-Trichloroethane	43	"	50.0		85.8	82-114		13.8	30	
1,1-Dichloroethane	46	"	50.0		92.4	80-119		13.8	30	
1,1-Dichloroethylene	51	"	50.0		102	58-139		13.3	30	
1,2,4-Trichlorobenzene	42	"	50.0		84.4	69-135		17.2	30	
1,2,4-Trimethylbenzene	42	"	50.0		84.2	82-116		17.0	30	
1,2-Dibromo-3-chloropropane	44	"	50.0		87.9	72-131		21.2	30	
1,2-Dibromoethane	43	"	50.0		85.6	86-114	Low Bias	18.6	30	
1,2-Dichloroethane	48	"	50.0		95.5	72-136		14.1	30	
1,2-Dichloropropane	42	"	50.0		83.6	79-119		20.8	30	
1,3,5-Trimethylbenzene	43	"	50.0		86.3	86-114		14.2	30	
2-Butanone	50	"	50.0		101	60-129		10.7	30	
2-Hexanone	39	"	50.0		77.5	58-129		13.6	30	
4-Methyl-2-pentanone	40	"	50.0		79.7	46-121		18.3	30	
Acetone	45	"	50.0		89.2	26-119		13.5	30	
Benzene	45	"	50.0		90.2	81-117		15.9	30	
Bromodichloromethane	45	"	50.0		89.4	88-123		15.9	30	
Bromoform	46	"	50.0		91.0	85-122		10.7	30	
Bromomethane	54	"	50.0		109	43-137		18.8	30	
Carbon disulfide	52	"	100		51.8	18-145		17.1	30	
Carbon tetrachloride	49	"	50.0		97.7	79-135		14.2	30	
Chlorobenzene	44	"	50.0		89.0	87-112		15.0	30	
Chloroethane	54	"	50.0		108	60-132		15.8	30	
Chloroform	46	"	50.0		91.7	80-126		18.9	30	
Chloromethane	39	"	50.0		78.5	36-133		14.2	30	
cis-1,2-Dichloroethylene	46	"	50.0		92.6	80-119		16.1	30	
cis-1,3-Dichloropropylene	42	"	50.0		83.0	87-125	Low Bias	14.0	30	
Dibromochloromethane	45	"	50.0		89.7	86-128		17.9	30	
Dichlorodifluoromethane	36	"	50.0		72.5	10-156		18.6	30	
Ethyl Benzene	45	"	50.0		89.9	88-117		15.1	30	
Methyl tert-butyl ether (MTBE)	45	"	50.0		89.1	58-137		19.5	30	
Methylene chloride	47	"	50.0		94.6	47-140		15.1	30	
Naphthalene	43	"	50.0		85.6	65-143		15.1	30	
n-Butylbenzene	43	"	50.0		85.3	79-119		19.2	30	
n-Propylbenzene	43	"	50.0		85.1	82-116		14.1	30	
o-Xylene	45	"	50.0		90.8	88-111		15.5	30	
p- & m- Xylenes	89	"	100		89.1	86-117		15.7	30	
sec-Butylbenzene	43	"	50.0		86.1	85-119		16.0	30	
Styrene	45	"	50.0		89.5	85-119		17.8	30	
tert-Butylbenzene	43	"	50.0		86.7	84-119		15.6	30	
Tetrachloroethylene	47	"	50.0		93.4	74-127		18.8	30	
Toluene	44	"	50.0		87.7	83-114		16.6	30	
trans-1,2-Dichloroethylene	48	"	50.0		95.2	68-131		13.9	30	
120 RESEARCH DRIVE	STRATEORD OT			(203) 325 13			EAX (203)			

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York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41074 - EPA 5035A											
LCS Dup (BB41074-BSD1)							Prep	ared: 02/27/2	2014 Analyz	ed: 02/28/2	2014
trans-1,3-Dichloropropylene	42		ug/L	50.0		83.6	81-127		16.4	30	
Trichloroethylene	44		"	50.0		87.9	84-118		13.2	30	
Trichlorofluoromethane	50		"	50.0		101	59-148		16.2	30	
Vinyl Chloride	45		"	50.0		89.2	46-133		17.7	30	
Surrogate: 1,2-Dichloroethane-d4	51.0		"	50.0		102	72-137				
Surrogate: p-Bromofluorobenzene	48.9		"	50.0		97.8	72-138				
Surrogate: Toluene-d8	49.5		"	50.0		99.0	85-118				
Datab DD41127 EDA 5020D											
Batch BB41127 - EPA 5030B							Dron	arad fr Anali	uradi 02/29/	2014	
Blank (BB41127-BLK1)							Ртер	ared & Anal	yzed: 02/28/	2014	
1,1,1-Trichloroethane	ND	5.0	ug/L								
1,1,2,2-Tetrachloroethane	ND	5.0	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"								
1,1,2-Trichloroethane	ND	5.0	"								
1,1-Dichloroethane	ND	5.0	"								
1,1-Dichloroethylene	ND	5.0	,,								
1,2,4-Trichlorobenzene	1.1	10	,,								
1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane	ND ND	5.0	,,								
1,2-Dibromoethane	ND ND	10 5.0	,,								
1,2-Diolinoculaire	ND ND	5.0	,,								
1,2-Dichloropropane	ND ND	5.0	,,								
1,3,5-Trimethylbenzene	ND ND	5.0	,,								
2-Butanone	ND	10	,,								
2-Hexanone	ND	5.0	"								
4-Methyl-2-pentanone	ND	10	"								
Acetone	ND	10	"								
Benzene	ND	5.0	"								
Bromodichloromethane	ND	5.0	"								
Bromoform	ND	5.0	"								
Bromomethane	ND	5.0	"								
Carbon disulfide	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylene chloride	3.9	10	"								
Naphthalene	2.2	10	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10									
sec-Butylbenzene	ND	5.0	"								



York Analytical Laboratories, Inc.

		Danastina		C:1	Source*		0/DEC			RPD	
Analyte	Result	Reporting Limit	Units	Spike Level	Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
Batch BB41127 - EPA 5030B											
Blank (BB41127-BLK1)							Pre	pared & Analy	zed: 02/28/	2014	
Styrene	ND	5.0	ug/L								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	55.0		"	50.0		110	78-122				
Surrogate: p-Bromofluorobenzene	48.3		"	50.0		96.6	87-112				
Surrogate: Toluene-d8	49.7		"	50.0		99.4	91-110				
LCS (BB41127-BS1)							Pre	pared & Analy	zed: 02/28/	2014	
1,1,1-Trichloroethane	54		ug/L	50.0		107	83-125	<u> </u>			
1,1,2,2-Tetrachloroethane	63		"	50.0		125	84-122	High Bias			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	46		"	50.0		91.1	66-141	8			
1,1,2-Trichloroethane	57		"	50.0		114	83-116				
1,1-Dichloroethane	55		"	50.0		110	82-121				
1,1-Dichloroethylene	49		"	50.0		97.2	59-135				
1,2,4-Trichlorobenzene	60		,,	50.0		120	72-133				
1,2,4-Trimethylbenzene	55		,,	50.0		111	82-119				
1,2-Dibromo-3-chloropropane	69		,,	50.0		138	69-134	High Bias			
1,2-Dibromoethane	56		,,	50.0		112	85-118	111611 2140			
1,2-Dichloroethane	55		,,	50.0		109	79-125				
1,2-Dichloropropane	55		,,	50.0		111	82-119				
1,3,5-Trimethylbenzene	54		,,	50.0		109	84-120				
2-Butanone	59		,,	50.0		119	59-127				
2-Hexanone	65		,,	50.0		130	59-127	High Bias			
4-Methyl-2-pentanone	68		"	50.0		135	50-119	High Bias			
Acetone	48		"	50.0		96.7	30-119	Tilgii Dias			
Benzene	53		"	50.0		105	88-113				
Bromodichloromethane	56		,,	50.0		112	87-122				
Bromoform	57		,,	50.0		114	83-127				
Bromomethane			,,								
Carbon disulfide	45 45		,,	50.0 100		90.5 45.0	36-135				
Carbon tetrachloride	51		"	50.0		103	35-126 82-128				
Chlorobenzene	52		"	50.0		103	90-111				
Chloroethane	50		,,	50.0			60-132				
Chloroform	53		,,	50.0		101	89-116				
Chloromethane	54		,,	50.0		106	39-110				
cis-1,2-Dichloroethylene			,,			108					
cis-1,2-Dichloropropylene	48		,,	50.0		96.7	90-112				
Dibromochloromethane	56 54		,,	50.0		112	89-124				
Dichlorodifluoromethane	54 50		,,	50.0		108	82-132				
Ethyl Benzene	50		,,	50.0		99.1	10-143				
-	53		,,	50.0		107	91-117				
Isopropylbenzene Methyl tert bytyl other (MTPE)	55		,,	50.0		110	82-122				
Methyl tert-butyl ether (MTBE)	56		"	50.0		111	59-135				
Methylene chloride	61			50.0		122	51-136				
Naphthalene	60		"	50.0		120	61-147				
n-Butylbenzene	57		"	50.0		114	79-122				

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York Analytical Laboratories, Inc.

Spike

Source*

Reporting

	Re	eporting	Spike	Source*		%REC			KFD	
Analyte	Result	Limit Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41127 - EPA 5030B										
LCS (BB41127-BS1)						Prep	ared & Analy	zed: 02/28/2	2014	
n-Propylbenzene	57	ug/L	50.0		113	80-123				
o-Xylene	54	"	50.0		109	91-110				
p- & m- Xylenes	110	"	100		108	86-118				
sec-Butylbenzene	56	"	50.0		113	82-127				
Styrene	52	"	50.0		104	88-121				
tert-Butylbenzene	55	"	50.0		110	70-130				
Tetrachloroethylene	48	"	50.0		96.6	67-138				
Toluene	53	"	50.0		106	88-113				
trans-1,2-Dichloroethylene	54	"	50.0		107	73-123				
trans-1,3-Dichloropropylene	58	"	50.0		117	85-123				
Trichloroethylene	52	"	50.0		104	83-120				
Trichlorofluoromethane	52	"	50.0		104	62-138				
Vinyl Chloride	52	"	50.0		104	49-127				
Surrogate: 1,2-Dichloroethane-d4	53.6	"	50.0		107	78-122				
Surrogate: p-Bromofluorobenzene	49.6	"	50.0		99.2	87-112				
Surrogate: Toluene-d8	48.6	"	50.0		97.2	91-110				
LCS Dup (BB41127-BSD1)						Prep	ared & Analy	zed: 02/28/2	2014	
1,1,1-Trichloroethane	52	ug/L	50.0		105	83-125		2.25	30	
1,1,2,2-Tetrachloroethane	60	"	50.0		120	84-122		4.01	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	45	"	50.0		89.0	66-141		2.33	30	
1,1,2-Trichloroethane	55	"	50.0		110	83-116		3.63	30	
1,1-Dichloroethane	56	"	50.0		112	82-121		1.91	30	
1,1-Dichloroethylene	48	"	50.0		96.0	59-135		1.33	30	
1,2,4-Trichlorobenzene	61	"	50.0		121	72-133		0.728	30	
1,2,4-Trimethylbenzene	56	"	50.0		113	82-119		2.11	30	
1,2-Dibromo-3-chloropropane	65	"	50.0		130	69-134		6.12	30	
1,2-Dibromoethane	55	"	50.0		110	85-118		1.69	30	
1,2-Dichloroethane	55	"	50.0		110	79-125		0.603	30	
1,2-Dichloropropane	56	"	50.0		112	82-119		1.22	30	
1,3,5-Trimethylbenzene	56	"	50.0		113	84-120		3.72	30	
2-Butanone	57	"	50.0		114	59-127		4.05	30	
2-Hexanone	60	"	50.0		121	59-127		7.39	30	
4-Methyl-2-pentanone	64	"	50.0		128	50-119	High Bias	5.75	30	
Acetone	46	"	50.0		92.2	30-112		4.74	30	
Benzene	52	"	50.0		105	88-113		0.286	30	
Bromodichloromethane	56	"	50.0		111	87-122		0.628	30	
Bromoform	57	"	50.0		114	83-127		0.158	30	
Bromomethane	47	"	50.0		93.3	36-135		3.05	30	
Carbon disulfide	45	"	100		45.5	35-126		1.04	30	
Carbon tetrachloride	51	"	50.0		103	82-128		0.0194	30	
Chlorobenzene	52	"	50.0		104	90-111		1.35	30	
Chloroethane	52	"	50.0		103	60-132		2.46	30	
Chloroform	54	"	50.0		107	89-116		1.01	30	
Chloromethane	55	"	50.0		110	39-131		1.72	30	
cis-1,2-Dichloroethylene	49	"	50.0		98.2	90-112		1.52	30	
cis-1,3-Dichloropropylene	56	"	50.0		112	89-124		0.750	30	
Dibromochloromethane	53	"	50.0		106	82-132		1.90	30	
Dichlorodifluoromethane	51	"	50.0		102	10-143		2.43	30	
Ethyl Benzene	54	"	50.0		108	91-117		0.969	30	
Isopropylbenzene	56	"	50.0		112	82-122		1.89	30	
Methyl tert-butyl ether (MTBE)	55	"	50.0		111	59-135		0.631	30	
120 RESEARCH DRIVE	STRATFORD, CT 0	16615		(203) 325-13	 R 7 1		FAX (203)	357-0166		

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RPD

%REC



York Analytical Laboratories, Inc.

Spike

50.0

50.0

116

105

85-123

83-120

Source*

%REC

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41127 - EPA 5030B											
LCS Dup (BB41127-BSD1)							Prep	ared & Anal	yzed: 02/28/	2014	
Methylene chloride	61		ug/L	50.0		122	51-136		0.229	30	
Naphthalene	59		"	50.0		118	61-147		1.09	30	
n-Butylbenzene	59		"	50.0		119	79-122		4.38	30	
n-Propylbenzene	56		"	50.0		113	80-123		0.212	30	
o-Xylene	55		"	50.0		110	91-110		1.46	30	
p- & m- Xylenes	110		"	100		111	86-118		2.98	30	
sec-Butylbenzene	56		"	50.0		112	82-127		0.391	30	
Styrene	51		"	50.0		103	88-121		1.76	30	
tert-Butylbenzene	55		"	50.0		111	70-130		0.833	30	
Tetrachloroethylene	50		"	50.0		99.1	67-138		2.57	30	
Toluene	53		"	50.0		106	88-113		0.509	30	
trans-1,2-Dichloroethylene	53		"	50.0		106	73-123		0.826	30	

Trichlorofluoromethane 54 50.0 109 62-138 Vinyl Chloride 52 50.0 103 49-127 Surrogate: 1,2-Dichloroethane-d4 51.6 50.0 103 78-122 50.4 50.0 101 87-112 $Surrogate: p\hbox{-} Bromofluor obenzene$ Surrogate: Toluene-d8 48.9 50.0 97.7 91-110

58

53

trans-1,3-Dichloropropylene

Trichloroethylene

Reporting

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RPD

1.05

1.01

4.27

0.695

30 30

30

30



York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch	BB41059	- EPA 3550C
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Blank (BB41059-BLK1)				Prepared: 02/27/2014 Analyzed: 02/28/2014
Acenaphthene	ND	167	ug/kg wet	
Acenaphthylene	ND	167	II .	
Anthracene	ND	167	II .	
Benzo(a)anthracene	ND	167	"	
Benzo(a)pyrene	ND	167	"	
Benzo(b)fluoranthene	ND	167	"	
Benzo(g,h,i)perylene	ND	167	"	
Benzoic acid	ND	333	"	
Benzo(k)fluoranthene	ND	167	"	
Benzyl alcohol	ND	167	"	
Benzyl butyl phthalate	ND	167	"	
4-Bromophenyl phenyl ether	ND	167	"	
4-Chloro-3-methylphenol	ND	167	"	
4-Chloroaniline	ND	167	"	
Bis(2-chloroethoxy)methane	ND	167	"	
Bis(2-chloroethyl)ether	ND	167	"	
Bis(2-chloroisopropyl)ether	ND	167	"	
2-Chloronaphthalene	ND	167	"	
2-Chlorophenol	ND	167	"	
4-Chlorophenyl phenyl ether	ND	167	"	
Chrysene	ND	167	"	
Dibenzo(a,h)anthracene	ND	167	"	
Dibenzofuran	ND	167	"	
Di-n-butyl phthalate	ND	167	II .	
1,2-Dichlorobenzene	ND	167	"	
1,4-Dichlorobenzene	ND	167	"	
1,3-Dichlorobenzene	ND	167	"	
3,3'-Dichlorobenzidine	ND	333	"	
2,4-Dichlorophenol	ND	167	"	
Diethyl phthalate	ND	167	"	
2,4-Dimethylphenol	ND	167	"	
Dimethyl phthalate	ND	167	"	
4,6-Dinitro-2-methylphenol	ND	167	"	
2,4-Dinitrophenol	ND	333	"	
2,4-Dinitrotoluene	ND	167	"	
2,6-Dinitrotoluene	ND	167	u .	
Di-n-octyl phthalate	ND	167	u .	
Bis(2-ethylhexyl)phthalate	ND	167	"	
Fluoranthene	ND	167	"	
Fluorene	ND	167	"	
Hexachlorobenzene	ND	167	"	
Hexachlorobutadiene	ND	167	"	
Hexachlorocyclopentadiene	ND	167	"	
Hexachloroethane	ND	167	"	
Indeno(1,2,3-cd)pyrene	ND	167	"	
Isophorone	ND	167	"	
2-Methylnaphthalene	ND	167	"	
2-Methylphenol	ND	167	"	
3- & 4-Methylphenols	ND	167	"	
Naphthalene	ND	167	"	
3-Nitroaniline	ND	167	"	



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Blank (BB41059-BLK1)						Prepared: 02/27/2014 Analyzed: 02/28/201
-Nitroaniline	ND	167	ug/kg wet			
-Nitroaniline	ND	167	"			
itrobenzene	ND	167	"			
Nitrophenol	ND	167	"			
Nitrophenol	ND	167	"			
-nitroso-di-n-propylamine	ND	167	"			
-Nitrosodiphenylamine	ND	167	"			
entachlorophenol	ND	167	"			
nenanthrene	ND	167	"			
nenol	ND ND	167	"			
rene	ND ND	167	"			
2,4-Trichlorobenzene	ND ND		"			
		167	"			
4,5-Trichlorophenol	ND	167	"			
4,6-Trichlorophenol	ND	167				
rrogate: 2-Fluorophenol	1600		"	2520	63.3	10-109
rrogate: Phenol-d5	1620		"	2520	64.5	10-124
rrogate: Nitrobenzene-d5	1100		"	1700	64.8	10-148
rrogate: 2-Fluorobiphenyl	1100		"	1690	64.7	10-111
rrogate: 2,4,6-Tribromophenol	4540		"	2480	183	10-142
rrogate: Terphenyl-d14	1190		"	1690	70.3	10-147
CS (BB41059-BS1)						Prepared: 02/27/2014 Analyzed: 02/28/20
cenaphthene	1010	167	ug/kg wet	1670	60.5	35-127
enaphthylene	954	167	"	1670	57.2	37-121
thracene	1260	167	"	1670	75.9	38-131
nzo(a)anthracene	655	167	"	1670	39.3	37-137
enzo(a)pyrene	1590	167	"	1670	95.1	33-162
enzo(b)fluoranthene	1310	167	"	1670	78.7	26-160
enzo(g,h,i)perylene	1750	167	"	1670	105	10-154
enzo(k)fluoranthene	1380	167	"	1670	82.8	34-143
enzyl alcohol	1090	167	"	1670	65.2	33-124
enzyl butyl phthalate	1010	167	"	1670	60.6	30-143
Bromophenyl phenyl ether	1700	167	"	1670	102	35-135
Chloro-3-methylphenol	1300	167	"	1670	77.9	34-133
Chloroaniline	1060	167	"	1670	63.8	17-175
s(2-chloroethoxy)methane			"			
s(2-chloroethyl)ether	1160	167	"	1670	69.3	31-119
· · · · · · · · · · · · · · · · · · ·	1320	167	"	1670	79.3	18-124
s(2-chloroisopropyl)ether	1260	167		1670	75.8	10-141
Chloronaphthalene	1130	167	"	1670	67.7	34-117
Chlorophenol	1210	167		1670	72.6	32-123
Chlorophenyl phenyl ether	1250	167	"	1670	74.8	25-142
nrysene	1300	167	"	1670	77.9	38-132
benzo(a,h)anthracene	911	167	"	1670	54.7	14-153
benzofuran	1240	167	"	1670	74.1	39-123
-n-butyl phthalate	1280	167	"	1670	76.5	35-132
2-Dichlorobenzene	1090	167	"	1670	65.1	22-121
1-Dichlorobenzene	1250	167	"	1670	74.9	20-122
3-Dichlorobenzene	1220	167	"	1670	73.2	22-120
3'-Dichlorobenzidine	1220	333	"	1670	73.4	16-177
4-Dichlorophenol	1390	167	"	1670	83.3	30-134
iethyl phthalate	1190	167	"	1670	71.6	41-125



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BB41059 - EPA 3550C						
LCS (BB41059-BS1)						Prepared: 02/27/2014 Analyzed: 02/28/2014
2,4-Dimethylphenol	1140	167	ug/kg wet	1670	68.1	33-120
Dimethyl phthalate	1420	167	"	1670	85.2	39-125
4,6-Dinitro-2-methylphenol	1170	167	"	1670	70.0	10-165
2,4-Dinitrophenol	1190	333	"	1670	71.3	53-209
2,4-Dinitrotoluene	1380	167	"	1670	82.7	41-129
2,6-Dinitrotoluene	1350	167	"	1670	81.1	42-130
Di-n-octyl phthalate	951	167	"	1670	57.1	19-162
Bis(2-ethylhexyl)phthalate	865	167	"	1670	51.9	35-137
Fluoranthene	1500	167	"	1670	90.0	35-136
Fluorene	1120	167	"	1670	67.3	33-134
Hexachlorobenzene	1080	167	"	1670	64.7	31-139
Hexachlorobutadiene	1700	167	"	1670	102	19-137
Hexachlorocyclopentadiene	201	167	"	1670	12.0	10-145
Hexachloroethane	1050	167	"	1670	62.9	12-125
Indeno(1,2,3-cd)pyrene	553	167	"	1670	33.2	11-155
Isophorone	1280	167	"	1670	76.9	30-125
2-Methylnaphthalene	1130	167	"	1670	67.7	30-125
2-Methylphenol	1040	167	"	1670	62.1	30-128
3- & 4-Methylphenols	873	167	"	1670	52.4	30-120
Naphthalene	1180	167	"	1670	71.1	28-121
3-Nitroaniline	1220	167	"	1670	72.9	10-234
2-Nitroaniline	1290	167	"	1670	77.4	38-130
4-Nitroaniline	922	167	"	1670	55.3	10-208
Nitrobenzene	1320	167	"	1670	79.5	28-118
2-Nitrophenol	1310	167	"	1670	78.7	23-129
4-Nitrophenol	968	167	"	1670	58.1	10-185
N-nitroso-di-n-propylamine	1120	167	"	1670	67.4	21-136
N-Nitrosodiphenylamine	1360	167	"	1670	81.6	36-163
Pentachlorophenol	1350	167	"	1670	81.3	15-182
Phenanthrene	1260	167	"	1670	75.4	37-132
Phenol	1160	167	"	1670	69.5	28-124
Pyrene	1300	167	"	1670	77.7	30-147
1,2,4-Trichlorobenzene	1310	167	"	1670	78.3	22-129
2,4,5-Trichlorophenol	1260	167	"	1670	75.6	34-126
2,4,6-Trichlorophenol	1290	167	"	1670	77.2	36-130
Surrogate: 2-Fluorophenol	1650		"	2520	65.6	10-109
Surrogate: Phenol-d5	1450		"	2520	57.5	10-124
Surrogate: Nitrobenzene-d5	1070		"	1700	62.7	10-148
Surrogate: 2-Fluorobiphenyl	1020		"	1690	60.0	10-111
Surrogate: 2,4,6-Tribromophenol	3080		"	2480	124	10-142
Surrogate: Terphenyl-d14	1330		"	1690	78.8	10-147



		Reporting		Spike	Source*		%REC			RPD		1
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag	

LCS Dup (BB41059-BSD1)						Prep	oared: 02/27/20	14 Analyze	d: 02/28/	2014
Acenaphthene	1010	167	ug/kg wet	1670	60.4	35-127		0.0662	30	
Acenaphthylene	954	167	"	1670	57.2	37-121		0.0349	30	
Anthracene	1360	167	"	1670	81.6	38-131		7.24	30	
Benzo(a)anthracene	1590	167	"	1670	95.3	37-137		83.2	30	Non-dir.
Benzo(a)pyrene	1020	167	"	1670	61.2	33-162		43.4	30	Non-dir.
Benzo(b)fluoranthene	1220	167	"	1670	73.2	26-160		7.21	30	
Benzo(g,h,i)perylene	1560	167	"	1670	93.8	10-154		11.4	30	
Benzo(k)fluoranthene	989	167	"	1670	59.3	34-143		33.0	30	Non-dir.
Benzyl alcohol	1060	167	"	1670	63.6	33-124		2.61	30	
Benzyl butyl phthalate	1120	167	"	1670	67.2	30-143		10.4	30	
4-Bromophenyl phenyl ether	1450	167	"	1670	86.7	35-135		16.2	30	
4-Chloro-3-methylphenol	1300	167	"	1670	78.2	34-133		0.333	30	
4-Chloroaniline	858	167	"	1670	51.5	17-175		21.3	30	
Bis(2-chloroethoxy)methane	1140	167	"	1670	68.3	31-119		1.45	30	
Bis(2-chloroethyl)ether	1190	167	,,	1670	71.4	18-124		10.5	30	
Bis(2-chloroisopropyl)ether	1090	167	,,	1670	65.4	18-124		14.7	30	
2-Chloronaphthalene	1120	167	,,	1670	67.0	34-117		1.07	30	
2-Chlorophenol			,,					6.69	30	
4-Chlorophenyl phenyl ether	1130	167	,,	1670	67.9	32-123		5.78	30	
	1180	167	,,	1670	70.6	25-142		9.98	30	
Chrysene	1430	167	,,	1670	86.1	38-132		9.98 54.1	30	N J:
Dibenzo(a,h)anthracene Dibenzofuran	1590	167	,,	1670	95.2	14-153		1.63	30	Non-dir.
	1220	167	,,	1670	72.9	39-123			30	
Di-n-butyl phthalate	1320	167	,,	1670	79.3	35-132		3.57		
1,2-Dichlorobenzene	1000	167	,,	1670	60.2	22-121		7.92	30	
,4-Dichlorobenzene	1040	167	,,	1670	62.4	20-122		18.2	30	
,3-Dichlorobenzene	1080	167	,,	1670	64.6	22-120		12.4	30	
3,3'-Dichlorobenzidine	1240	333		1670	74.3	16-177		1.19	30	
2,4-Dichlorophenol	1370	167		1670	82.3	30-134		1.28	30	
Diethyl phthalate	1160	167	"	1670	69.7	41-125		2.66	30	
2,4-Dimethylphenol	1140	167	"	1670	68.2	33-120		0.147	30	
Dimethyl phthalate	1270	167	"	1670	76.1	39-125		11.3	30	
4,6-Dinitro-2-methylphenol	1190	167	"	1670	71.2	10-165		1.78	30	
2,4-Dinitrophenol	1030	333	"	1670	61.9	53-209		14.1	30	
2,4-Dinitrotoluene	1250	167	"	1670	74.8	41-129		10.0	30	
2,6-Dinitrotoluene	957	167	"	1670	57.4	42-130		34.2	30	Non-dir.
Di-n-octyl phthalate	916	167	"	1670	55.0	19-162		3.71	30	
Bis(2-ethylhexyl)phthalate	1040	167	"	1670	62.2	35-137		18.1	30	
Fluoranthene	1370	167	"	1670	82.2	35-136		9.06	30	
Fluorene	1010	167	"	1670	60.3	33-134		10.9	30	
Hexachlorobenzene	1290	167	"	1670	77.3	31-139		17.7	30	
Hexachlorobutadiene	1430	167	"	1670	85.7	19-137		17.3	30	
Hexachlorocyclopentadiene	163	167	"	1670	9.76	10-145	Low Bias	20.9	30	
Hexachloroethane	894	167	"	1670	53.7	12-125		15.9	30	
ndeno(1,2,3-cd)pyrene	1280	167	"	1670	77.0	11-155		79.5	30	Non-dir.
sophorone	1170	167	"	1670	70.1	30-125		9.33	30	
2-Methylnaphthalene	977	167	"	1670	58.6	30-125		14.3	30	
2-Methylphenol	915	167	"	1670	54.9	30-128		12.3	30	
3- & 4-Methylphenols	851	167	"	1670	51.1	30-120		2.55	30	
Naphthalene	1170	167	"	1670	70.2	28-121		1.30	30	
3-Nitroaniline	911	167	"	1670	54.6	10-234		28.6	30	
2-Nitroaniline	1160	167	"	1670	69.9	38-130		10.2	30	



		Reporting		Spiles	Source*		%REC			RPD	
Analyte	Result	Reporting Limit	Units	Spike Level	Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
Batch BB41059 - EPA 3550C											
LCS Dup (BB41059-BSD1)							Prep	ared: 02/27/	2014 Analyz	ed: 02/28/2	2014
4-Nitroaniline	847	167	ug/kg wet	1670		50.8	10-208		8.48	30	
Nitrobenzene	1270	167	"	1670		76.2	28-118		4.21	30	
2-Nitrophenol	1090	167	"	1670		65.4	23-129		18.4	30	
4-Nitrophenol	813	167	,,	1670		48.8	10-185		17.4	30	
N-nitroso-di-n-propylamine	1120	167	,,	1670		67.1	21-136		0.506	30	
N-Nitrosodiphenylamine	1330	167	"	1670		79.6	36-163		2.38	30	
Pentachlorophenol	1590	167	,,	1670		95.7	15-182		16.3	30	
Phenanthrene	1420	167	,,	1670		85.3	37-132		12.3	30	
Phenol	1130	167	,,	1670		67.6	28-124		2.80	30	
Pyrene	1540	167	,,	1670		92.7	30-147		17.6	30	
1,2,4-Trichlorobenzene	1300	167	,,	1670		92.7 77.9	22-129		0.563	30	
2,4,5-Trichlorophenol			,,						23.1	30	
- 1 · 1	999	167	,,	1670		59.9	34-126				
2,4,6-Trichlorophenol	1180	167		1670		70.8	36-130		8.67	30	
Surrogate: 2-Fluorophenol	1580		"	2520		62.6	10-109				
Surrogate: Phenol-d5	1230		"	2520		48.9	10-124				
Surrogate: Nitrobenzene-d5	916		"	1700		53.9	10-148				
Surrogate: 2-Fluorobiphenyl	904		"	1690		53.4	10-111				
Surrogate: 2,4,6-Tribromophenol	2750		"	2480		111	10-142				
Surrogate: Terphenyl-d14	1580		"	1690		93.3	10-147				
Batch BB41086 - EPA 3510C											
							Dran	arad & Anal	yzed: 02/28/	2014	
Blank (BB41086-BLK1)							Пер	arcu & Anai	yzcu. 02/26/	2014	
Acenaphthene	ND	0.0500	ug/L								
Acenaphthylene	ND	0.0500	"								
Anthracene	ND	0.0500	"								
Benzo(a)anthracene	ND	0.0500	"								
Benzo(a)pyrene	ND	0.0500	"								
Benzo(b)fluoranthene	ND	0.0500	"								
Benzo(g,h,i)perylene	ND	0.0500	"								
Benzoic acid	ND	50.0	"								
Benzo(k)fluoranthene	ND	0.0500	"								
Benzyl alcohol	ND	5.00	"								
Benzyl butyl phthalate	ND	5.00	"								
4-Bromophenyl phenyl ether	ND	5.00	"								
4-Chloro-3-methylphenol	ND	5.00	"								
4-Chloroaniline	ND	5.00	"								
Bis(2-chloroethoxy)methane	ND	5.00	"								
Bis(2-chloroethyl)ether	ND	5.00	"								
Bis(2-chloroisopropyl)ether	ND	5.00	"								
2-Chloronaphthalene	ND	5.00	"								
2-Chlorophenol	ND	5.00	"								
4-Chlorophenyl phenyl ether	ND	5.00	"								
Chrysene	ND	0.0500	"								
Dibenzo(a,h)anthracene	ND	0.0500	"								
Dibenzofuran	ND	5.00	"								
Di-n-butyl phthalate	ND	5.00	"								
1,2-Dichlorobenzene	ND ND	5.00	,,								
1,4-Dichlorobenzene	ND ND	5.00	,,								
1,3-Dichlorobenzene	ND ND	5.00	,,								
3,3'-Dichlorobenzidine	ND ND		,,								
2,4-Dichlorophenol		5.00	,,								
2,4-Dichiolophenoi	ND	5.00									

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York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

lank (BB41086-BLK1)						Prepared & Analyzed: 02/28/20
iethyl phthalate	ND	5.00	ug/L			
4-Dimethylphenol	ND	5.00	ug/L			
imethyl phthalate	ND	5.00	"			
6-Dinitro-2-methylphenol	ND	5.00	"			
4-Dinitrophenol	ND	5.00	"			
4-Dinitrotoluene	ND	5.00	"			
6-Dinitrotoluene	ND	5.00	"			
i-n-octyl phthalate	ND	5.00	"			
is(2-ethylhexyl)phthalate	ND	5.00	"			
luoranthene	ND	0.0500	"			
luorene	ND	0.0500	"			
exachlorobenzene	ND	5.00	"			
exachlorobutadiene	ND	5.00	"			
exachlorocyclopentadiene	ND	5.00	"			
exachloroethane	ND	5.00	"			
ideno(1,2,3-cd)pyrene	ND	0.0500	"			
ophorone	ND	5.00	"			
-Methylnaphthalene	ND	5.00	"			
Methylphenol	ND	5.00	"			
& 4-Methylphenols	ND	5.00	"			
aphthalene	ND	0.0500	"			
Nitroaniline	ND	5.00	"			
Nitroaniline	ND	5.00	"			
Nitroaniline	ND	5.00	"			
itrobenzene	ND	5.00	"			
Nitrophenol	ND	5.00	"			
Nitrophenol	ND	5.00	"			
-nitroso-di-n-propylamine	ND	5.00	"			
-Nitrosodiphenylamine	ND	5.00	"			
entachlorophenol	ND	5.00	"			
henanthrene	ND	0.0500	"			
henol	ND	5.00	"			
yrene	ND	0.0500	"			
2,4-Trichlorobenzene	ND	5.00	"			
4,5-Trichlorophenol	ND	5.00	"			
4,6-Trichlorophenol	ND	5.00	"			
urrogate: 2-Fluorophenol	17.9		"	75.6	23.7	10-52
urrogate: Phenol-d5	10.0		"	75.5	13.3	10-117
urrogate: Nitrobenzene-d5	33.0		"	51.0	64.7	12-112
urrogate: 2-Fluorobiphenyl	35.2		"	50.8	69.2	14-101
urrogate: 2,4,6-Tribromophenol	79.3		"	74.4	107	17-127
ırrogate: Terphenyl-d14	49.4		"	50.7	97.4	10-151



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41086 - EPA 3510C											
LCS (BB41086-BS1)							Prej	pared & Analy	zed: 02/28/	2014	
Acenaphthene	36.4	0.0500	ug/L	50.0		72.8	10-116				
Acenaphthylene	34.0	0.0500	"	50.0		67.9	10-115				
Anthracene	38.4	0.0500	"	50.0		76.9	10-118				
Benzo(a)anthracene	41.0	0.0500	"	50.0		82.0	10-137				
Benzo(a)pyrene	50.9	0.0500	"	50.0		102	10-136				
Benzo(b)fluoranthene	48.1	0.0500	"	50.0		96.1	10-141				
Benzo(g,h,i)perylene	33.5	0.0500	"	50.0		67.1	10-152				
Benzoic acid	ND	50.0	"	50.5			30-130	Low Bias			
Benzo(k)fluoranthene	47.9	0.0500	"	50.0		95.8	10-137				
Benzyl alcohol	17.6	5.00	"	50.0		35.1	11-82				
Benzyl butyl phthalate	38.4	5.00	"	50.0		76.9	14-134				
4-Bromophenyl phenyl ether	44.1	5.00	"	50.0		88.2	28-109				
4-Chloro-3-methylphenol	31.8	5.00	"	50.0		63.6	23-100				
4-Chloroaniline	45.0	5.00	"	50.0		89.9	17-168				
Bis(2-chloroethoxy)methane	30.7	5.00	"	50.0		61.3	23-106				
Bis(2-chloroethyl)ether	28.4	5.00	"	50.0		56.8	14-116				
Bis(2-chloroisopropyl)ether	27.1	5.00	"	50.0		54.3	10-155				
2-Chloronaphthalene	35.5	5.00	"	50.0		71.0	32-94				
2-Chlorophenol	25.4	5.00	"	50.0		50.8	16-99				
4-Chlorophenyl phenyl ether	38.8	5.00	"	50.0		77.6	26-113				
Chrysene	34.7	0.0500	"	50.0		69.4	10-132				
Dibenzo(a,h)anthracene	33.7	0.0500	"	50.0		67.4	10-159				
Dibenzofuran	39.0	5.00	"	50.0		78.1	36-96				
Di-n-butyl phthalate	37.5	5.00	"	50.0		75.1	20-119				
1,2-Dichlorobenzene	31.6	5.00	"	50.0		63.2	22-97				
1,4-Dichlorobenzene	31.1	5.00	"	50.0		62.2	20-100				
1,3-Dichlorobenzene	29.2	5.00	"	50.0		58.5	19-94				
3,3'-Dichlorobenzidine	48.7	5.00	"	50.0		97.3	25-154				
2,4-Dichlorophenol	35.6	5.00	"	50.0		71.2	28-97				
Diethyl phthalate	38.8	5.00	"	50.0		77.5	34-104				
2,4-Dimethylphenol	28.5	5.00	"	50.0		57.0	23-94				
Dimethyl phthalate	39.3	5.00	"	50.0		78.6	33-104				
4,6-Dinitro-2-methylphenol	30.4	5.00	"	50.0		60.7	10-133				
2,4-Dinitrophenol	30.1	5.00	"	50.0		60.1	10-145				
2,4-Dinitrotoluene	40.7	5.00	"	50.0		81.4	32-104				
2,6-Dinitrotoluene	40.0	5.00	"	50.0		79.9	34-105				
Di-n-octyl phthalate	40.9	5.00	"	50.0		81.8	10-144				
Bis(2-ethylhexyl)phthalate	33.4	5.00	"	50.0		66.8	10-171				
Fluoranthene	40.8	0.0500	"	50.0		81.5	10-126				
Fluorene	36.1	0.0500	"	50.0		72.2	10-126				
Hexachlorobenzene	34.2	5.00	"	50.0		68.4	16-127				
Hexachlorobutadiene	40.1	5.00	"	50.0		80.2	22-95				
Hexachlorocyclopentadiene	11.8	5.00	"	50.0		23.6	10-101				
Hexachloroethane	26.5	5.00	"	50.0		53.1	10-99				
Indeno(1,2,3-cd)pyrene	34.9	0.0500	"	50.0		69.8	10-158				
Isophorone	32.4	5.00	"	50.0		64.8	19-119				
2-Methylnaphthalene	36.6	5.00	"	50.0		73.1	27-97				
2-Methylphenol	17.9	5.00	"	50.0		35.8	10-88				
3- & 4-Methylphenols	16.8	5.00	"	50.0		33.6	10-71				
Naphthalene	32.0	0.0500	"	50.0		64.0	12-103				
3-Nitroaniline	37.2	5.00	"	50.0		74.3	10-221				



Analysis	n t	Reporting	II'	Spike	Source*	0/DEC	%REC	Flag	RPD	RPD Limit	Flag
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	riag	KPD	Limit	Flag
Batch BB41086 - EPA 3510C											
LCS (BB41086-BS1)							Prep	ared & Anal	yzed: 02/28/	2014	
2-Nitroaniline	35.7	5.00	ug/L	50.0		71.5	33-106				
4-Nitroaniline	35.5	5.00	"	50.0		71.0	10-139				
Nitrobenzene	31.0	5.00	"	50.0		61.9	16-114				
2-Nitrophenol	33.8	5.00	"	50.0		67.6	24-101				
4-Nitrophenol	8.08	5.00	"	50.0		16.2	10-55				
N-nitroso-di-n-propylamine N-Nitrosodiphenylamine	31.2	5.00	,,	50.0		62.3	14-133				
Pentachlorophenol	42.9	5.00	,,	50.0		85.8	39-123				
Phenanthrene	37.3 38.0	5.00 0.0500	,,	50.0 50.0		74.7	15-150 10-119				
Phenol	7.41	5.00	,,	50.0		76.0 14.8	10-119				
Pyrene	42.5	0.0500		50.0		85.1	10-37				
1,2,4-Trichlorobenzene	36.9	5.00	,,	50.0		73.7	25-91				
2,4,5-Trichlorophenol	40.6	5.00	,,	50.0		81.1	30-102				
2,4,6-Trichlorophenol	39.5	5.00		50.0		79.0	34-100				
		3.00	"								
Surrogate: 2-Fluorophenol	21.6		,,	75.6		28.6	10-52				
Surrogate: Phenol-d5	12.7		,,	75.5		16.8	10-117				
Surrogate: Nitrobenzene-d5	36.5		,,	51.0		71.5	12-112				
Surrogate: 2-Fluorobiphenyl	40.0		,,	50.8		78.7	14-101				
Surrogate: 2,4,6-Tribromophenol	90.1		,,	74.4		121	17-127				
Surrogate: Terphenyl-d14	52.6		"	50.7		104	10-151				
LCS (BB41086-BS2)							Prep	ared & Anal	yzed: 02/28/	2014	
Acenaphthene	0.910	0.0500	ug/L	1.00		91.0	10-116				
Acenaphthylene	1.11	0.0500	"	1.00		111	10-115				
Anthracene	1.02	0.0500	"	1.00		102	10-118				
Benzo(a)anthracene	0.950	0.0500	"	1.00		95.0	10-137				
Benzo(a)pyrene	0.950	0.0500	"	1.00		95.0	10-136				
Benzo(b)fluoranthene	1.16	0.0500	"	1.00		116	10-141				
Benzo(g,h,i)perylene Benzoic acid	0.890	0.0500	,,	1.00		89.0	10-152				
Benzo(k)fluoranthene	ND	50.0	,,	1.00		05.0	30-130				
Benzyl alcohol	0.850	0.0500	,,	1.00		85.0	10-137				
Benzyl butyl phthalate	ND	5.00	,,				11-82				
4-Bromophenyl phenyl ether	ND ND	5.00 5.00	,,				14-134 28-109				
4-Chloro-3-methylphenol	ND ND	5.00	,,				23-109				
4-Chloroaniline	ND	5.00	,,				17-168				
Bis(2-chloroethoxy)methane	ND	5.00	,,				23-106				
Bis(2-chloroethyl)ether	ND	5.00	"				14-116				
Bis(2-chloroisopropyl)ether	ND	5.00	"				10-155				
2-Chloronaphthalene	ND	5.00	"				32-94				
2-Chlorophenol	ND	5.00	"				16-99				
4-Chlorophenyl phenyl ether	ND	5.00	"				26-113				
Chrysene	0.800	0.0500	"	1.00		80.0	10-132				
Dibenzo(a,h)anthracene	1.12	0.0500	"	1.00		112	10-159				
Dibenzofuran	ND	5.00	"				36-96				
Di-n-butyl phthalate	ND	5.00	"				20-119				
1,2-Dichlorobenzene	ND	5.00	"				22-97				
1,4-Dichlorobenzene	ND	5.00	"				20-100				
1,3-Dichlorobenzene	ND	5.00	"				19-94				
3,3'-Dichlorobenzidine	ND	5.00	"				25-154				
2,4-Dichlorophenol	ND	5.00	"				28-97				

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		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

						<u> </u>
Batch BB41086 - EPA 3510C						
LCS (BB41086-BS2)						Prepared & Analyzed: 02/28/2014
Diethyl phthalate	ND	5.00	ug/L			34-104
2,4-Dimethylphenol	ND	5.00	"			23-94
Dimethyl phthalate	ND	5.00	"			33-104
4,6-Dinitro-2-methylphenol	ND	5.00	"			10-133
2,4-Dinitrophenol	ND	5.00	"			10-145
2,4-Dinitrotoluene	ND	5.00	"			32-104
2,6-Dinitrotoluene	ND	5.00	"			34-105
Di-n-octyl phthalate	ND	5.00	"			10-144
Bis(2-ethylhexyl)phthalate	ND	5.00	"			10-171
Fluoranthene	1.01	0.0500	"	1.00	101	10-126
Fluorene	1.06	0.0500	"	1.00	106	10-126
Hexachlorobenzene	ND	5.00	"			16-127
Hexachlorobutadiene	ND	5.00	"			22-95
Hexachlorocyclopentadiene	ND	5.00	"			10-101
Hexachloroethane	ND	5.00	"			10-99
Indeno(1,2,3-cd)pyrene	1.02	0.0500	"	1.00	102	10-158
Isophorone	ND	5.00	"			19-119
2-Methylnaphthalene	ND	5.00	"			27-97
2-Methylphenol	ND	5.00	"			10-88
3- & 4-Methylphenols	ND	5.00	"			10-71
Naphthalene	0.920	0.0500	"	1.00	92.0	12-103
3-Nitroaniline	ND	5.00	"			10-221
2-Nitroaniline	ND	5.00	"			33-106
4-Nitroaniline	ND	5.00	"			10-139
Nitrobenzene	ND	5.00	"			16-114
2-Nitrophenol	ND	5.00	"			24-101
4-Nitrophenol	ND	5.00	"			10-55
N-nitroso-di-n-propylamine	ND	5.00	"			14-133
N-Nitrosodiphenylamine	ND	5.00	"			39-123
Pentachlorophenol	ND	5.00	"			15-150
Phenanthrene	0.890	0.0500	"	1.00	89.0	10-119
Phenol	ND	5.00	"			10-57
Pyrene	1.00	0.0500	"	1.00	100	10-159
1,2,4-Trichlorobenzene	ND	5.00	"			25-91
2,4,5-Trichlorophenol	ND	5.00	"			30-102
2,4,6-Trichlorophenol	ND	5.00	"			34-100
Surrogate: 2-Fluorophenol	0.00		"	75.6		10-52
Surrogate: Phenol-d5	0.00		"	75.5		10-117
Surrogate: Nitrobenzene-d5	68.8		"	51.0	135	12-112
Surrogate: 2-Fluorobiphenyl	40.8		"	50.8	80.4	14-101
Surrogate: 2,4,6-Tribromophenol	0.00		"	74.4		17-127
G						10.141

120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 35<u>7-0166</u>

50.7

99.5

10-151

50.5

Surrogate: Terphenyl-d14



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

CS Dup (BB41086-BSD1)						Pre	pared & Analyzed: 02/28/2	2014
cenaphthene	35.7	0.0500	ug/L	50.0	71.5	10-116	1.89	30
cenaphthylene	33.1	0.0500	"	50.0	66.2	10-115	2.60	30
nthracene	37.5	0.0500	"	50.0	74.9	10-118	2.56	30
enzo(a)anthracene	39.2	0.0500	"	50.0	78.5	10-137	4.36	30
enzo(a)pyrene	49.4	0.0500	"	50.0	98.7	10-136	3.11	30
enzo(b)fluoranthene	46.2	0.0500	"	50.0	92.4	10-141	4.01	30
enzo(g,h,i)perylene	32.3	0.0500	"	50.0	64.6	10-152	3.74	30
enzoic acid	ND	50.0	"	50.5		30-130	Low Bias	20
enzo(k)fluoranthene	45.2	0.0500	"	50.0	90.5	10-137	5.69	30
enzyl alcohol	17.8	5.00	"	50.0	35.5	11-82	1.08	20
enzyl butyl phthalate	37.4	5.00	"	50.0	74.8	14-134	2.72	20
Bromophenyl phenyl ether	44.0	5.00	"	50.0	88.1	28-109	0.181	20
Chloro-3-methylphenol	30.7	5.00	"	50.0	61.4	23-100	3.46	20
Chloroaniline	43.7	5.00	"	50.0	87.4	17-168	2.89	20
s(2-chloroethoxy)methane	31.3	5.00	"	50.0	62.7	23-106	2.16	20
s(2-chloroethyl)ether	29.1	5.00	"	50.0	58.1	14-116	2.30	20
s(2-chloroisopropyl)ether	28.1	5.00	"	50.0	56.2	10-155	3.58	20
Chloronaphthalene	35.0	5.00	"	50.0	70.1	32-94	1.28	20
Chlorophenol	25.8	5.00	"	50.0	51.6	16-99	1.56	20
Chlorophenyl phenyl ether	37.6	5.00	"	50.0	75.1	26-113	3.22	20
rysene	33.5	0.0500	"	50.0	66.9	10-132	3.64	30
benzo(a,h)anthracene	32.4	0.0500	"	50.0	64.9	10-159	3.75	30
benzofuran	38.2	5.00	"	50.0	76.3	36-96	2.33	20
n-butyl phthalate	36.5	5.00	"	50.0	73.0	20-119	2.84	20
Dichlorobenzene	31.7	5.00	"	50.0	63.3	22-97	0.253	20
Dichlorobenzene	31.3	5.00	"	50.0	62.6	20-100	0.737	20
Dichlorobenzene	29.2	5.00	"	50.0	58.3	19-94	0.240	20
-Dichlorobenzidine	47.4	5.00	"	50.0	94.8	25-154	2.64	20
-Dichlorophenol	35.8	5.00	"	50.0	71.7	28-97	0.644	20
ethyl phthalate	37.9	5.00	"	50.0	75.8	34-104	2.30	20
4-Dimethylphenol	28.2	5.00	"	50.0	56.5	23-94	0.917	20
methyl phthalate	38.4	5.00	"	50.0	76.7	33-104	2.42	20
5-Dinitro-2-methylphenol	32.0	5.00	"	50.0	64.0	10-133	5.20	20
4-Dinitrophenol	31.2	5.00	"	50.0	62.3	10-145	3.59	20
4-Dinitrotoluene	40.0	5.00	"	50.0	80.0	32-104	1.71	20
5-Dinitrotoluene	38.6	5.00	"	50.0	77.1	34-105	3.57	20
-n-octyl phthalate	39.0	5.00	"	50.0	78.0	10-144	4.73	20
s(2-ethylhexyl)phthalate	33.0	5.00	"	50.0	65.9	10-144	1.39	20
uoranthene	40.1	0.0500	"	50.0	80.2	10-171	1.66	30
uorene	35.3	0.0500	"	50.0	70.5	10-126	2.27	30
exachlorobenzene	33.5	5.00	"	50.0	67.0	16-127	2.04	20
exachlorobutadiene	39.1	5.00	"	50.0	78.1	22-95	2.63	20
exachlorocyclopentadiene	13.0	5.00	"	50.0	26.0	10-101	9.92	20
exachloroethane	26.0	5.00	"	50.0	51.9	10-101	2.17	20
deno(1,2,3-cd)pyrene	33.8	0.0500	"	50.0	67.5	10-99	3.32	30
phorone	32.9	5.00	"	50.0	65.7	19-119	1.41	20
Methylnaphthalene	36.5	5.00	"	50.0	72.9	27-97	0.274	20
Methylphenol	30.3 17.7	5.00	"	50.0	35.4	10-88	1.29	20
& 4-Methylphenols			"				0.716	20
	16.7	5.00	"	50.0	33.4	10-71	0.0313	30
phthalene Nitroaniline	32.0 36.1	0.0500 5.00	"	50.0 50.0	64.0 72.2	12-103 10-221	2.87	20



		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41086 - EPA 3510C											
LCS Dup (BB41086-BSD1)							Prep	ared & Anal	yzed: 02/28/	2014	
2-Nitroaniline	34.5	5.00	ug/L	50.0		69.0	33-106		3.50	20	
4-Nitroaniline	34.6	5.00	"	50.0		69.1	10-139		2.71	20	
Nitrobenzene	32.1	5.00	"	50.0		64.3	16-114		3.74	20	
2-Nitrophenol	34.1	5.00	"	50.0		68.1	24-101		0.736	20	
4-Nitrophenol	7.82	5.00	"	50.0		15.6	10-55		3.27	20	
N-nitroso-di-n-propylamine	31.8	5.00	"	50.0		63.5	14-133		1.88	20	
N-Nitrosodiphenylamine	42.7	5.00	"	50.0		85.3	39-123		0.608	20	
Pentachlorophenol	37.6	5.00	"	50.0		75.3	15-150		0.800	20	
Phenanthrene	37.0	0.0500	"	50.0		74.0	10-119		2.61	30	
Phenol	7.26	5.00	"	50.0		14.5	10-57		2.04	20	
Pyrene	41.3	0.0500	"	50.0		82.6	10-159		2.93	30	
1,2,4-Trichlorobenzene	36.0	5.00	"	50.0		72.0	25-91		2.42	20	
2,4,5-Trichlorophenol	39.1	5.00	"	50.0		78.1	30-102		3.74	20	
2,4,6-Trichlorophenol	39.5	5.00	"	50.0		78.9	34-100		0.127	20	
Surrogate: 2-Fluorophenol	22.2		"	75.6		29.4	10-52				
Surrogate: Phenol-d5	12.9		"	75.5		17.0	10-117				
Surrogate: Nitrobenzene-d5	39.1		"	51.0		76.6	12-112				
Surrogate: 2-Fluorobiphenyl	39.8		"	50.8		78.4	14-101				

74.4

50.7

124

104

17-127

10-151

92.0

52.7

 $Surrogate:\ 2,4,6\hbox{-}Tribromophenol$

Surrogate: Terphenyl-d14



Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BB41	026 -	EPA	3550C
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Blank (BB41026-BLK1)						Prepared & Analyzed: 02/27/2014
Toxaphene	ND	16.7	ug/kg wet			
Methoxychlor	ND	1.65	"			
Heptachlor epoxide	ND	0.330	"			
Heptachlor	ND	0.330	"			
gamma-BHC (Lindane)	ND	0.330	"			
Endrin ketone	ND	0.330	"			
Endrin aldehyde	ND	0.330	"			
Endrin	ND	0.330	"			
Endosulfan sulfate	ND	0.330	"			
Endosulfan II	ND	0.330	"			
Endosulfan I	ND	0.330	"			
Dieldrin	ND	0.330	"			
delta-BHC	ND	0.330	"			
Chlordane, total	ND	1.32	"			
beta-BHC	ND	0.330	"			
alpha-BHC	ND	0.330	"			
Aldrin	ND	0.330	"			
4,4'-DDT	ND	0.330	"			
4,4'-DDE	ND	0.330	"			
4,4'-DDD	ND	0.330	"			
Aroclor 1260	ND	17.0	"			
Aroclor 1254	ND	17.0	"			
Aroclor 1248	ND	17.0	"			
Aroclor 1242	ND	17.0	"			
Aroclor 1232	ND	17.0	"			
Aroclor 1221	ND	17.0	"			
Aroclor 1016	ND	17.0	"			
Total PCBs	ND	17.0	"			
Surrogate: Tetrachloro-m-xylene	48.9		"	66.3	73.7	30-140
Surrogate: Decachlorobiphenyl	39.1		"	66.3	59.0	30-140



Organochlorine Pesticides by GC/ECD - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

LCS (BB41026-BS1)						Prepared &	Analyzed: 02/27/2	2014
Methoxychlor	32.9	1.65	ug/kg wet	33.3	98.8	40-140		
Ieptachlor epoxide	26.3	0.330	"	33.3	78.9	40-140		
leptachlor	29.8	0.330	"	33.3	89.5	40-140		
amma-BHC (Lindane)	27.0	0.330	"	33.3	80.9	40-140		
ndrin ketone	29.6	0.330	"	33.3	88.8	40-140		
ndrin aldehyde	21.8	0.330	"	33.3	65.4	40-140		
ndrin	31.6	0.330	"	33.3	94.7	40-140		
ndosulfan sulfate	30.2	0.330	"	33.3	90.7	40-140		
ndosulfan II	30.0	0.330	"	33.3	89.9	40-140		
ndosulfan I	25.7	0.330	"	33.3	77.2	40-140		
ieldrin	30.4	0.330	"	33.3	91.3	40-140		
lta-BHC	28.6	0.330	"	33.3	85.8	40-140		
ta-BHC	25.1	0.330	"	33.3	75.2	40-140		
oha-BHC	27.8	0.330	"	33.3	83.3	40-140		
ldrin	26.0	0.330	"	33.3	78.0	40-140		
4'-DDT	30.1	0.330	"	33.3	90.3	40-140		
4'-DDE	24.3	0.330	"	33.3	72.9	40-140		
4'-DDD	29.0	0.330	"	33.3	86.9	40-140		
urrogate: Tetrachloro-m-xylene	52.9		"	66.3	79.8	30-140		
urrogate: Decachlorobiphenyl	47.6		"	66.3	71.8	30-140		
птодине. Бесистогоограенуї	47.0			00.5	/1.0			
CS (BB41026-BS2)						Prepared &	Analyzed: 02/27/2	2014
roclor 1260	382	17.0	ug/kg wet	333	115	40-130		
roclor 1016	377	17.0	"	333	113	40-130		
rrogate: Tetrachloro-m-xylene	67.7		"	66.3	102	30-140		
urrogate: Decachlorobiphenyl	63.7		"	66.3	96.0	30-140		
						Propagad &	Analyzed: 02/27/2	2014
CS Dup (BB41026-BSD1)						•	-	
ethoxychlor	33.2	1.65	ug/kg wet	33.3	99.5	40-140	0.662	30
eptachlor epoxide	27.3	0.330	"	33.3	81.9	40-140	3.65	30
eptachlor	30.6	0.330	"	33.3	91.8	40-140	2.53	30
mma-BHC (Lindane)	28.2	0.330	"	33.3	84.6	40-140	4.40	30
ndrin ketone	31.2	0.330	"	33.3	93.5	40-140	5.13	30
ndrin aldehyde	23.4	0.330	"	33.3	70.3	40-140	7.15	30
ndrin	33.2	0.330	"	33.3	99.6	40-140	5.03	30
ndosulfan sulfate	32.4	0.330	"	33.3	97.1	40-140	6.82	30
ndosulfan II	31.6	0.330	"	33.3	94.8	40-140	5.38	30
ndosulfan I	26.7	0.330	"	33.3	80.2	40-140	3.82	30
ieldrin	31.1	0.330	"	33.3	93.3	40-140	2.19	30
elta-BHC	30.3	0.330	"	33.3	90.8	40-140	5.70	30
ta-BHC	26.0	0.330	"	33.3	78.1	40-140	3.78	30
bha-BHC	28.9	0.330	"	33.3	86.6	40-140	3.81	30
drin	27.0	0.330	"	33.3	80.9	40-140	3.64	30
4'-DDT	32.6	0.330	"	33.3	97.7	40-140	7.91	30
4'-DDE	26.0	0.330	"	33.3	78.1	40-140	6.89	30
4'-DDD	31.5	0.330	"	33.3	94.5	40-140	8.28	30
ırrogate: Tetrachloro-m-xylene	54.4		"	66.3	82.0	30-140		



Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BB41087	- EPA	SW846-	-3510C L	ow Level
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Blank (BB41087-BLK1)						Prepared & Analyzed: 02/28/2014
Toxaphene	ND	0.100	ug/L			
Methoxychlor	ND	0.00100	"			
Heptachlor epoxide	ND	0.00100	"			
Heptachlor	ND	0.00100	"			
gamma-BHC (Lindane)	ND	0.00100	"			
Endrin ketone	ND	0.00100	"			
Endrin aldehyde	ND	0.00100	"			
Endrin	ND	0.00100	"			
Endosulfan sulfate	ND	0.00100	"			
Endosulfan II	ND	0.00100	"			
Endosulfan I	ND	0.00100	"			
Dieldrin	ND	0.00100	"			
delta-BHC	ND	0.00100	"			
Chlordane, total	ND	0.0400	"			
beta-BHC	ND	0.00100	"			
alpha-BHC	ND	0.00100	"			
Aldrin	ND	0.00100	"			
4,4'-DDT	ND	0.00100	"			
4,4'-DDE	ND	0.00100	"			
4,4'-DDD	ND	0.00100	"			
Aroclor 1260	ND	0.0500	"			
Aroclor 1254	ND	0.0500	"			
Aroclor 1248	ND	0.0500	"			
Aroclor 1242	ND	0.0500	"			
Aroclor 1232	ND	0.0500	"			
Aroclor 1221	ND	0.0500	"			
Aroclor 1016	ND	0.0500	"			
Total PCBs	ND	0.0500	"			
Surrogate: Tetrachloro-m-xylene	0.125		"	0.199	63.0	30-120
Surrogate: Decachlorobiphenyl	0.125		"	0.199	62.6	30-120



Organochlorine Pesticides by GC/ECD - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

LCS (BB41087-BS1)						Prepared &	Analyzed: 02/28/2	2014
Methoxychlor	0.0848	0.00100	ug/L	0.100	84.8	40-120		
Heptachlor epoxide	0.0724	0.00100	"	0.100	72.4	40-120		
Heptachlor	0.0780	0.00100	"	0.100	78.0	40-120		
gamma-BHC (Lindane)	0.0727	0.00100	"	0.100	72.7	40-120		
Endrin ketone	0.0853	0.00100	"	0.100	85.3	40-120		
Endrin aldehyde	0.0822	0.00100	"	0.100	82.2	40-120		
Endrin	0.0854	0.00100	"	0.100	85.4	40-120		
Endosulfan sulfate	0.0860	0.00100	"	0.100	86.0	40-120		
ndosulfan II	0.0859	0.00100	"	0.100	85.9	40-120		
ndosulfan I	0.0705	0.00100	"	0.100	70.5	40-120		
Dieldrin	0.0827	0.00100	"	0.100	82.7	40-120		
elta-BHC	0.0584	0.00100	"	0.100	58.4	40-120		
eta-BHC	0.0737	0.00100	"	0.100	73.7	40-120		
lpha-BHC	0.0766	0.00100	"	0.100	76.6	40-120		
lldrin	0.0674	0.00100	"	0.100	67.4	40-120		
,4'-DDT	0.0867	0.00100	"	0.100	86.7	40-120		
,4'-DDE	0.0689	0.00100	"	0.100	68.9	40-120		
,4'-DDD	0.0849	0.00100	"	0.100	84.9	40-120		
urrogate: Tetrachloro-m-xylene	0.139		"	0.199	69.7	30-120		
urrogate: Decachlorobiphenyl	0.145		"	0.199	72.9	30-120		
	*****			*****	,			1014
LCS (BB41087-BS2)						-	Analyzed: 02/28/2	2014
Aroclor 1260	0.967	0.0500	ug/L	1.00	96.7	40-120		
croclor 1016	1.01	0.0500	"	1.00	101	40-120		
urrogate: Tetrachloro-m-xylene	0.164		"	0.199	82.4	30-120		
urrogate: Decachlorobiphenyl	0.160		"	0.199	80.4	30-120		
.CS Dup (BB41087-BSD1)						Prepared &	Analyzed: 02/28/2	2014
Methoxychlor	0.0869	0.00100	ug/L	0.100	86.9	40-120	2.40	30
Ieptachlor epoxide	0.0685	0.00100	"	0.100	68.5	40-120	5.50	30
leptachlor	0.0738	0.00100	"	0.100	73.8	40-120	5.58	30
amma-BHC (Lindane)	0.0684	0.00100	"	0.100	68.4	40-120	5.99	30
Endrin ketone	0.0802	0.00100	"	0.100	80.2	40-120	6.09	30
Indrin aldehyde	0.0787	0.00100	"	0.100	78.7	40-120	4.44	30
Endrin	0.0820	0.00100	"	0.100	82.0	40-120	3.98	30
ndosulfan sulfate	0.0827	0.00100	"	0.100	82.7	40-120	3.98	30
Indosulfan II	0.0822	0.00100	"	0.100	82.2	40-120	4.48	30
Endosulfan I	0.0664	0.00100		0.100	66.4	40-120	5.97	30
Dieldrin	0.0786	0.00100		0.100	78.6	40-120	5.05	30
elta-BHC	0.0550	0.00100	"	0.100	55.0	40-120	5.89	30
eta-BHC	0.0686	0.00100	"	0.100	68.6	40-120	7.09	30
lpha-BHC	0.0722	0.00100	"	0.100	72.2	40-120	5.90	30
ldrin	0.0637	0.00100	"	0.100	63.7	40-120	5.69	30
,4'-DDT	0.0828	0.00100	,,	0.100	82.8	40-120	4.60	30
,4'-DDE	0.0661	0.00100	"	0.100	66.1	40-120	4.15	30
,4'-DDD	0.0818	0.00100	"	0.100	81.8	40-120	3.79	30
		0.00100					3.17	
urrogate: Tetrachloro-m-xylene	0.132		"	0.199	66.2	30-120		
urrogate: Decachlorobiphenyl	0.139		"	0.199	69.6	30-120		



Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch BB4108'	7 -	EPA S	3W846	5-3510C	Low L	evel
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LCS Dup (BB41087-BSD2)		Prepared & Analyzed: 02/28/2014							
Aroclor 1260	0.946	0.0500	ug/L	1.00	94.6	40-120	2.19	30	
Aroclor 1016	1.04	0.0500	"	1.00	104	40-120	3.26	30	
Surrogate: Tetrachloro-m-xylene	0.159		"	0.199	79.9	30-120			
Surrogate: Decachlorobiphenyl	0.147		"	0.199	73.9	30-120			



$Chlorinated \ Herbicides \ by \ GC/ECD - Quality \ Control \ Data$

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41083 - EPA 3550B/8151A											
Blank (BB41083-BLK1)							Prep	ared & Anal	yzed: 02/28/	2014	
2,4-D	ND	20.0	ug/kg wet								
2,4,5-TP (Silvex)	ND	20.0	"								
2,4,5-T	ND	20.0	"								
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	643		"	500		129	30-150				
LCS (BB41083-BS1)							Prep	ared & Anal	yzed: 02/28/	2014	
2,4-D	168	20.0	ug/kg wet	160		105	40-140				
2,4,5-TP (Silvex)	179	20.0	"	160		112	40-140				
2,4,5-T	170	20.0	"	160		106	40-140				
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	482		"	500		96.4	30-150				
LCS Dup (BB41083-BSD1)							Prep	ared & Anal	yzed: 02/28/	2014	
2,4-D	157	20.0	ug/kg wet	160		98.1	40-140		6.77	30	
2,4,5-TP (Silvex)	171	20.0	"	160		107	40-140		4.57	30	
2,4,5-T	157	20.0	"	160		98.1	40-140		7.95	30	
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	449		"	500		89.8	30-150				
Matrix Spike (BB41083-MS1)	*Source sample: 14	B0724-01 (V	VL-EX-1)				Prep	ared & Anal	yzed: 02/28/	2014	
2,4-D	298	30.2	ug/kg dry	242	ND	123	30-150				
2,4,5-TP (Silvex)	251	30.2	"	242	ND	104	30-150				
2,4,5-T	234	30.2	"	242	ND	96.9	30-150				
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	760		"	756		101	30-150				
Batch BB41101 - EPA 3535A											
Blank (BB41101-BLK1)							Prep	ared & Anal	yzed: 02/28/	2014	
2,4-D	ND	5.00	ug/L								
2,4,5-TP (Silvex)	ND	5.00	"								
2,4,5-T	ND	5.00	"								
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	99.8		"	125		79.8	30-150				



Chlorinated Herbicides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41101 - EPA 3535A											
LCS (BB41101-BS1)							Prep	ared & Analy	yzed: 02/28/	2014	
2,4-D	33.0	5.00	ug/L	40.0		82.5	40-140				
2,4,5-TP (Silvex)	35.2	5.00	"	40.0		88.1	40-140				
2,4,5-T	31.2	5.00	"	40.0		78.1	40-140				
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	88.5		"	125		70.8	30-150				
LCS Dup (BB41101-BSD1)							Prep	ared & Analy	yzed: 02/28/	2014	
2,4-D	31.0	5.00	ug/L	40.0		77.5	40-140		6.25	30	
2,4,5-TP (Silvex)	34.2	5.00	"	40.0		85.6	40-140		2.88	30	
2,4,5-T	29.2	5.00	"	40.0		73.1	40-140		6.61	30	
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	86.5		"	125		69.2	30-150				



Metals by ICP - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Blank (BB41057-BLK1)						Prepared & Analyzed: 02/27/2014
luminum	ND	1.00	mg/kg wet			
ntimony	ND	0.500	"			
rsenic	ND	1.00	"			
arium	ND	1.00	"			
eryllium	ND	0.100	"			
admium	ND	0.300	"			
ılcium	ND	5.00	"			
nromium	ND	0.500	"			
balt	ND	0.500	"			
opper	ND	0.500	"			
n	ND	2.00	"			
ad	ND	0.300	"			
agnesium	ND	5.00	"			
anganese	ND	0.500	"			
ckel	ND	0.500	"			
tassium	ND	5.00	"			
lenium	ND	1.00	"			
ver	ND	0.500	"			
dium	ND	10.0	"			
allium	ND	1.00	"			
nadium	ND	1.00	"			
nc	ND	1.00	"			
eference (BB41057-SRM1)						Prepared & Analyzed: 02/27/2014
uminum	8270	1.00	mg/kg wet	8840	93.6	42-158
timony	96.0	0.500	"	88.2	109	26.3-289
senic	101	1.00	"	99.6	101	69.3-131
rium	301	1.00	"	310	97.0	74.2-126
ryllium	72.5	0.100	"	72.3	100	73.8-126
dmium	173	0.300	"	182	95.0	73.6-126
lcium	6690	5.00	"	6790	98.5	74.2-126
romium	130	0.500	"	136	95.8	70.4-130
balt	128	0.500	"	128	100	74.1-125
pper	107	0.500	"	102	105	74.3-126
n	12400	2.00	"	12600	98.4	31-168
ad	111	0.300	"	115	96.7	72.1-129
agnesium	2870	5.00	"	3010	95.2	66.1-134
anganese	318	0.500	"	323	98.3	74.9-125
ckel	164	0.500	"	153	108	73.2-126
tassium	2770	5.00	"	2840	97.6	62-138
lenium	154	1.00	"	150	102	67.3-133
ver	36.4	0.500	"	40.4	90.0	65.8-134
dium	2860	10.0	"	2760	104	65.9-134
allium	162	1.00	"	174	93.4	69-132
nadium	95.0	1.00	"	97.6	97.3	65.2-135
nc	155	1.00			96.1	68.3-132



Metals by ICP - Quality Control Data York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

lank (BB41063-BLK1)						Prepared & Analyzed: 02/27/2014
luminum	ND	0.010	mg/L			
ntimony	ND	0.005	"			
rsenic	ND	0.004	"			
arium	ND	0.010	"			
eryllium	ND	0.001	"			
dmium	ND	0.003	"			
alcium	ND	0.050	"			
romium	ND	0.005	"			
balt	ND	0.005	"			
pper	ND	0.003	"			
n	ND	0.020	"			
ad	ND	0.003	"			
gnesium	ND	0.050	"			
nganese	ND	0.005	"			
kel	ND	0.005	"			
assium	ND	0.050	"			
enium	ND	0.010	"			
ver	ND	0.005	"			
lium	ND	0.100	"			
llium	ND	0.005	"			
adium	ND	0.010	"			
	ND	0.010	"			
ference (BB41063-SRM1)						Prepared & Analyzed: 02/27/2014
minum	0.420	0.010	mg/L	0.419	100	75.9-124
mony	0.406	0.005	"	0.435	93.2	69.4-121
enic	0.308	0.004	"	0.341	90.3	83.3-118
um	1.14	0.010	"	1.18	96.6	86.4-113
yllium	0.070	0.001	"	0.0749	93.9	83.3-113
lmium	0.078	0.003	"	0.0854	91.2	84.4-115
omium	0.592	0.005	"	0.644	91.9	87.1-113
alt	0.346	0.005	"	0.351	98.6	87.7-112
per	0.480	0.003	"	0.521	92.2	90-110
1	1.36	0.020	"	1.44	94.3	88.2-113
d	0.493	0.003	"	0.517	95.3	87-113
nganese	1.71	0.005	"	1.73	99.0	90.2-111
kel	1.41	0.005	"	1.52	92.6	90.1-112
nium	0.324	0.010	"	0.362	89.4	78.7-116
ver .	0.188	0.005	"	0.210	89.4	85.7-115
ıllium	0.348	0.005	"	0.358	97.2	77.9-122
nadium	1.39	0.010	"	1.51	92.2	87.4-112
c	1.57	0.010	"		92.9	85.8-114



Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC			RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag

Batch	BB41063	- EPA 30	10A
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Reference (BB41063-SRM2)						Prepared & Analyzed: 02/27/2014
Calcium	64.1	0.050	mg/L	62.7	102	86-114
Magnesium	27.8	0.050	"	29.0	95.9	86.2-114
Potassium	31.3	0.050	"	32.4	96.7	85.2-115
Sodium	82.2	0.100	"	85.1	96.6	85-115



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

		Reporting		Spike	Source*		%REC		222	RPD	771
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	Flag	RPD	Limit	Flag
Batch BB41082 - EPA 7473 soil											
Blank (BB41082-BLK1)							Prep	ared & Analy	yzed: 02/28/	2014	
Mercury	ND	0.0300	mg/kg wet								
Reference (BB41082-SRM1)							Prep	ared & Analy	yzed: 02/28/	2014	
Mercury	4.81		mg/kg	3.73		129	68.6-131				
Batch BB41105 - EPA SW846-7470											
Blank (BB41105-BLK1)							Prep	ared & Analy	yzed: 02/28/	2014	
Mercury	ND	0.0002	mg/L								
LCS (BB41105-BS1)							Prep	ared & Analy	yzed: 02/28/	2014	
Mercury	0.002003	0.0002	mg/L	0.00200		100	80-120				
LCS (BB41105-BS2)							Prep	ared & Analy	yzed: 02/28/	2014	
Mercury	0.002058	0.0002	mg/L	0.00200		103	80-120				



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
14B0724-01	WL-EX-1	40mL Vial with Stir Bar-Cool 4° C
14B0724-02	WL-EX-2	40mL Vial with Stir Bar-Cool 4° C
14B0724-03	GW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
14B0724-04	trip blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

	Notes and Definitions
S-AC	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two acid surrogates.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
M-OLR	Original sample over instrument linear dynamic range.
M-CCVO	CCV Out. Samples bracketed by acceptable CCVs.
M-ACCB	Analyte in CCB. Run is bracketed by acceptable CCBs.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
GC-Surr	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the alternate surrogate.
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for averge Rf or >20% Drift for quadratic fit).
В	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
ND	Analyte NOT DETECTED at the stated Reporting Limit (RL) or above.
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
MDL	METHOD DETECTION LIMIT - the minimum concentration that can be measured and reported with a 99% confidence that the concentration is greater than zero. If requested or required, a value reported below the RL and above the MDL is considered estimated and is noted with a "J" flag.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.



If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the MDL, with values between the MDL and the RL being "J" flagged as estimated results.

Corrective Action: Client submitted 1-1 L Amber (GW-1) & 1 VOA Vial (Trip Blank) Broken - Client submitted 2(TWO) VOA Vials for Trip Blank NOT 3 as indicated on COC - Client submitted extra VOA Vials w/stir bars Not indicated on COC - 02/27/14

120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 35<u>7-0166</u>

Page 60 of 62

YORK ANALYTIGAL LABORATORIES 120 RESEARCH DR.

STRATFORD, CT 06615 (203) 325-1371

FAX (203) 357-0166

Field Chain-of-Custody Record

and the second second

This document serves as your written authorization to York to proceed with the analyses requested and your NOTE: York's Std. Terms & Conditions are listed on the back side of this document.

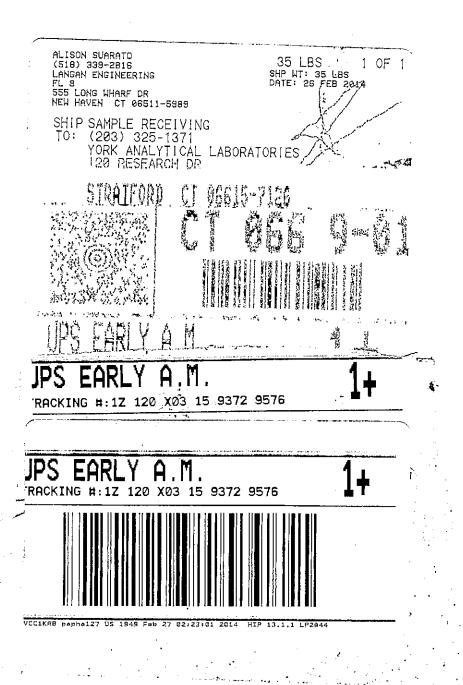
Ö Page__

York Project No. 14 BO 724

Electronic Data Deliverables (EDD) Summary W/ QA Summary ambers, 10195the, York Regulatory Comparison NJDEP SRP HazSite EDD Report Type CTRCP DQA/DUE Pkg Description(s) NY ASP B Package NY ASP A Package NIDEP Red. Deliv. Summary Report NYSDEC EQuIS CT RCP Package 3 VOAS EZ-EDD (EQuIS) Excel Spreadsheet PCBS, Post + Provide 145-TP SINCE GIS/KEY (std) Simple Excel EQuIS (std) Choose Analyses Needed from the Menu Above and Enter Below Turn-Around Time Part 360-Rovine | Heterotrophs Standard(5-7 Days) Part 360 Expressed Acquatic Tox. Sieve Anal. Flash Point lgnitability RUSH - Same Day RUSH - Three Day TCL Ogenis Reactivity RUSH - Next Day RUSH - Four Day Misc. Org. Full Lists Misc. NYSDECsoner Asbestos RUSH - Two Day Par 360 Baseine TOX = TAL MOON Full App. IX NYCDEPSeuer Full TCLP Pri Poll. Air TO14A NY310-13 TPH DRO TPII 1664 CTETPH Air TO15 AirSTARS TPH GRO ICLP Herb (SPIPerTCLP Air VPH **AirTICs** Methane YOUR Project ID Purchase Order No. 770001702 ndiv. Metuk TAGM list NJDEP list LIST Below Semi-Vols, PestPCBHort Metals CT15 list Dissolved PP13 list RCRA8 CT RCP list | SPLP or TCLP | Total 1201 VOCS, SYROCE, METALLS, signature binds you to York's Std. Terms & Conditions. 8270 or 623 (8082PCB) TCLP Pest Chlordane STARS list (8081Pest 8151Herb Site Spec. App. IX 608 Pest SPLPATCLP 608 PCB Acids Only CT RCP App.IX list SPLP or TCLP BNA NJDEP list IAGM list BN Only PAH list App. IX Attention: AllSON SAPULO REMOVED ANGAR. Nassau Co. Suffolk Co. Halog.ouly NJDEP list Oxygenales TCLP list Ketones Invoice To: CT RCP list 524,2 clock will not begin until any questions by York are resolved. IAGM list Arom. only Print Clearly and Legibly. All Information must be complete 2260 full MTBE E-Mail Address: Phone No. Samples will NOT be logged in and the turn-around time DW - drinking water Other - specify(oil, etc.) Date/Time Sampled | Sample Matrix GW - groundwater Matrix Codes WW - wastewater Air-A - ambient air Air-SV - soil vapor N S 0 Report To: Attention: See BC10W Company: Company 1250 1245 Samples Collected/Authorized By (Signature) E-Mail Address: 2.26.14 KISON SUZOUS Name (printed) Phone No. Address: SST (Bry Wharf Dr. Contact Person: #118Dn Bletcho OS Varn-to C E-Mail Address: 10 n.00 n. YOUR Information DOW TOWN OF DAS! Sample Identification Phone No. 203-502-5771 Company: Langue N-0X-2 trip blank 1-XC- CX-1)-NU

Temperature 0. L. on Receipt Samples Received in LAB by Samples Received By 2.26.14 1403 Date/Time Ascorbic Acid Date/Time HCI Samples Relinquished By Samples Relinquished By 4°C S Frozen Check those Applicable Preservation Field Filtered

Lab to Filter Instructions 116 Part-sparrelangerila





30 April 2014

Glenn May NYSDEC - Region 9 Division of Environmental Remediation 270 Michigan Ave. Buffalo, New York 14203

RE: Low Level Radioactive Waste (LLRW) Work Plan
Fashion Outlets of Niagara Falls Expansion/Sabre Park BCP
Brownfield Cleanup Program Site #: C932162
1705 Factory Outlet Boulevard
Town of Niagara, New York
Langan Project No.: 140091402

Dear Mr. May:

On behalf of Macerich-Niagara, LLC (Macerich), Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) has prepared this Low Level Radioactive Waste (LLRW) Work Plan for the above referenced property (BCP No. C932162) located at 1705 Factory Outlet Boulevard, Town of Niagara, New York (the "Site"). The purpose of this Work Plan is to describe the procedures that will be followed during the excavation activities to be performed within known and potential LLRW-impacted areas of the Site.

BACKGROUND

On Friday, April 18, 2014, Mark Cerrone Inc. (MCI) was excavating a trench for the installation of the new storm sewer system on the existing Fashion Outlets of Niagara Falls property. At approximately 2:00 pm, the project team was informed by Allied that one of the truck loads triggered an elevated radiation warning level (approx. 5x background). This truck was immediately directed back to the Site and the contents were dumped on a double poly-lined stockpile area, specifically created for this material. At this time, Langan issued a "Stop Work" order for the area where these excavated materials had originated. At the request of Langan and MCI, Greater Radiological Dimensions Inc. (GRD) mobilized to the Site to screen the open excavation, the rejected truck load, and background conditions using a Ludlum model 2221 with a 44-10 probe (gamma scintillator). GRD's screening identified the following:

555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com

- Background levels for GRD instrument = 5,000-7,000 counts per minute (CPM); Levels
 in excavation = 35,000-52,000 CPM; Level at surface of truck load = 65,000 CPM;
- Visual identification of slag material within the excavation at approximately 1 to 3-feet below grade surface (ft bgs), localized to 20-25 foot length of trench (approximately 25 cubic yards of material). Elevated levels of radiation were detected off the slag identified in the trench.

The origin of this material is believed to be the backfill that was utilized during the construction of the existing shopping center. Prior to issuing the "Stop Work" order, approximately 100 cubic yards of material from the vicinity of this LLRW material was transported to the southern portion of the site for reuse and grading of a swale. GRD completed a comprehensive screening of these materials and confirmed that these soils did not exhibit readings above background and therefore could be reused for rough site grading. From the LLRW material, GRD collected samples for analysis of full gamma spectroscopy (with isotopic radium, uranium and thorium) and waste classification. The purpose of this sampling was to identify radiation dosage levels in order to complete a dosage assessment for this material and to determine a suitable disposal facility.

PROPOSED WORK PLAN

Based on the results of GRD's comprehensive field screening and spectroscopy analysis for the LLRW, a dosage assessment was performed to evaluate exposure to residual radioactivity in the soil/slag material (See Attachment A). The dose assessment demonstrates that the estimated dose of the LLRW material is below the established public limit of 100 mRem/year. Based on the dosage assessment and recommendations provided by GRD, Langan proposes that the following procedures be followed, should additional LLRW material be identified on the Site.

LLRW Screening

Langan will continue to provide fulltime environmental oversight during all excavation activities. In the event that slag is identified during any excavation activities performed within 200 feet of the previously identified LLRW material, GRD will mobilize to the Site to screen the material and document radioactivity levels prior to any personnel or equipment entering the excavation. The field screening will be performed using a Ludlum Model 2221 meter with a 44-10 probe. If elevated radiation levels are identified, the proposed LLRW training, shielding, decontamination, handling and disposal procedures described below, will be followed. Upon exiting LLRW areas, all personnel and equipment will be scanned 100% with a Ludlum Model 3 paired with a 44-9



Frisker Probe to ensure there is no residual LLRW present. See decontamination procedures below should LLRW be identified during the personnel/equipment scans.

LLRW Training

As discussed, the GRD dose assessment demonstrates that the estimated dose of the LLRW material is below the established public limit of 100 mRem/year; therefore, radiological worker training will not be required for site personnel. However, as a conservative measure, site workers who may be involved in a minimal or indirect manner with radioactive material or activities supporting decontamination efforts will receive training specific to the site activities by GRD personnel. This training may be similar in content to the Radiological Worker training (certification received GRD radiation technicians) but will not require a practical exercise.

LLRW Shielding

Personnel are not anticipated to have the potential for significant uptakes of radioactive materials based on the results of the dosage assessment and duration of construction activities within the LLRW area. However, as a conservative measure, open excavations within LLRW-impacted areas will be lined with a minimum 80-mil poly barrier to reduce radiation exposure to site personnel during forthcoming storm sewer installation activities.

LLRW Decontamination

Personnel

The guideline for determining the presence of skin contamination on personnel is any detectable radiological contamination above background. If necessary, decontamination of personnel will be performed only under the direct supervision of RAD-certified GRD personnel. Generally, dry, nonabrasive methods will be attempted first and, if necessary, may be followed by washing with mild soap and warm water. Material generated during decontamination, including wipes, tape, and water, will be collected and disposed as radioactive waste. Specific decontamination procedures and documentation requirements shall be under the direction of GRD.

Equipment

If decontamination of equipment is deemed necessary by GRD personnel, dry decontamination methods such as high-efficiency particulate air (HEPA) vacuuming or wipe-downs will be used. Although not anticipated, additional decontamination methods in extreme conditions can



include sand or other abrasive blasting. Specific decontamination procedures and decontamination requirements shall be under the direction of GRD.

LLRW Handling & Storage

Pending the results of the field screening, excavated LLRW soil will be either into covered roll-off containers, or placed onto a minimum of two layers of 8-mil poly sheeting of sufficient strength and thickness or equivalent to prevent puncture during use. Equipment and procedures will be used to place and remove the soil that will minimize the potential to jeopardize the integrity of the liner. If the material is below background, it may be used to backfill the pipe (if suitable), relocated onsite, or characterized and taken offsite to one of the previously approved disposal facilities. If additional elevated LLRW is identified, it will be consolidated with the existing LLRW stockpile exclusion zone in preparation for offsite disposal. The exclusion zone stockpile will be covered at all times with a minimum of two layers of 8-mil poly sheeting or tarps that will be securely anchored to the ground. Stockpiles will be routinely inspected and broken sheeting covers will be promptly replaced.

LLRW materials will not be stored onsite for more than 30 days, before disposing at an approved offsite landfill site.

LLRW Sampling

Upon excavation and stockpiling of confirmed LLRW, the material will be sampled for waste classification (full toxicity characteristic leaching procedure [TCLP]) and analysis of full gamma spectroscopy (with isotopic radium, uranium and thorium) by a NYSDOH ELAP-accredited laboratory. The selected offsite LLRW disposal facility may require additional sampling and/or analyses depending on their state/federal permit and Site Engineer. Sampling and analysis of excavated soil will be performed in accordance with the requirements of the selected disposal facility.

LLRW Offsite Disposal

The LLRW identified on the Site meets the radiation thresholds for disposal at the Mahoning Landfill, located in New Springfield, Ohio. Prior to transporting LLRW offsite, the following documents will be compiled by Langan and submitted to the NYSDEC and NYSDOH for approval:

- Appropriate disposal facility permits
- Commitment letters will be supplied on the facility's letterhead, and include:



- The FONF Expansion site as the originating site,
- o The specific analytical data provided to and reviewed by the facility, and
- A statement that the facility is in compliance with its permit, any restrictions on delivery schedules or other conditions that may cause rejection of transported materials

Transportation and off-site disposal of LLRW at permitted facilities will be performed in accordance with this LLRW Work Plan, the NYSDEC-approved Interim Remedial Measure Work Plan, disposal facility requirements, and applicable laws and regulations for handling, transport, and disposal of LLRW per NYSDEC Department of Environmental Remediation (DER)-38 Cleanup Guidelines for Soils Contaminated with Radioactive Materials.

CLOSURE

Should you have any questions or require additional information regarding the information contained in this Work Plan, please do not hesitate to contact us.

Sincerely,

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.

Ryan Wohlstrom Senior Staff Engineer

Jamie P. Barr

Senior Associate/Vice President

cc: Greg Sutton / NYSDEC Region 9
Matthew Forcucci / NYSDOH Region 9
Kevin Glaser / NYSDEC Region 9
Aladdin Ghafari / Macerich

Enclosure(s): Attachment 1 – GRD Dose Assessment



ATTACHMENT 1

GRD Dose Assessment



1527 Ridge Rd, Lewiston NY 14092 (716) 754-2654

Jamie Barr Langan Engineering Senior Project Engineer 555 Long Wharf Drive New Haven CT 06511

Jamie,

Per our discussion I've enclosed the Dose Assessment with a copy of our Radioactive Materials Handling License. If you have any questions please don't hesitate to contact me.

With Regards,

George Weissenburger Vice President Greater Radiological Dimensions Inc.



T. G. ADAMS and ASSOCIATES, INC.

11 West Main Street Springville, NY 14141 (716) 592-3431 FAX (716) 592-3439

April 30, 2014

Mr. George Weissenburger Greater Radiological Dimensions, Inc. 1527 Ridge Road Lewiston, NY 14092

Subject: Niagara Fashion Outlet - Niagara Falls Dose Assessment

Dear Weissenburger:

In response to your request, attached is the dose assessment for the stockpile of construction debris located at the Niagara Fashion Outlet at Niagara Falls.

The dose assessment demonstrates that the estimated dose for the stockpile is below the established public limit of 100 mRem/year.

If you have any questions, please do not hesitate to give me a call at 716.592.3431 or e-mail me at TGAdams01@aol.com

Sincerely,

Theodore G. Adams

President

Enclosure

Niagara Fashion Outlet of Niagara Falls

Dose Assessment

Overview

At the request of Greater Radiological Dimensions, Inc (GRD), T.G. Adams and Associates, Inc. (TGA) was tasked to perform a dose assessment of the stockpile of soil, slag and concrete rubble located at the Niagara Fashion Outlet of Niagara Falls, 1900 Military Road, Niagara Falls, NY 14304.

GRD provided TGA with basic radiological information, which included a survey of the stockpile that was performed on September 18, 2014 (Attachment 1) and laboratory (Pace Analytical) results of soil samples that were taken of the stockpile on April 14, 2014 (Attachment 2). This information was used as input parameters to develop a dose assessment of the stockpile.

The basic request was to demonstrate that the radiation dose from the stockpile to nearby workers/public was within the established NYSDEC/NYSDOH limit of 100 mRem/year. The dose assessment for this demonstration was carried out via two approaches.

The first approach was a simplistic approach utilizing the actual radiation readings obtained from the survey performed on September 18, 2014. The second approach utilized an accepted dose assessment code (RESRAD) which utilized the information provided in Attachment 1 and the laboratory results provided in Attachment 2 to derive an estimated dose to the worker/public.

Each approach and the resulting dose assessment is presented in the sections below.

Simplistic Approach

Attachment 1 provides basic information in support of the survey that was done on September 14, 2014. The basic information includes the stockpile dimensions, stockpile composition, radiation instrumentation that was used, and documented random survey points of the stockpile where radiation readings were obtained. The instrument used (Bicron) to obtain the dose rate measurement is appropriate in that it measures dose to the individual (tissue equivalent) directly.

The dose rate measurements obtained at 6 random locations from the stockpile ranged from 15 μ Rem/hour to 40 μ Rem/hour on contact and from 10 μ Rem/hour to 20 μ Rem/hour at 3 feet. Background for the general area was 5 μ Rem/hour.

If the maximum dose rate reading of 40 μ Rem/hour on contact is used, and assuming that a worker would be in direct contact with the stockpile for 8 hours/day for 40 hours/week for 50 weeks/work year (all of which would be unrealistic for a worker), the estimated dose would be:

 40μ Rem/hour x 40 hours/week x 50 weeks/work year = 80,000 μRem/year (80 mRem/year)

Thus, the dose to the worker even under this unrealistic scenario is less than the 100 mRem/year acceptable limit to the worker/public.

If a more reasonable maximum dose rate of 20 μ Rem/hour at 3 feet were used with the other assumptions, the resulting estimated dose would be 40 mRem/year.

This estimated dose is still considered overly conservative since it is not reasonable to assume that a worker would be working for 8 hours a day for 40 hours a week for 50 weeks around or adjacent to the stockpile. It also is conservative in that the background value of 5 μ Rem/hour was not subtracted from the gross dose rate reading used in the determination of the dose. Subtraction of the background from the gross dose measurements would result in even a further reduction in the estimated annual dose.

RESRAD Dose Model Approach

The RESRAD code (Argonne National Laboratory, Version 7) is as a well-known dose assessment methodology accepted by the US NRC, DOE and other federal and state regulators.

The RESRAD code calculates estimated doses to indentified groups of individuals (public, workers) by evaluating various pathways (water, air, food, external) under selected scenarios (industrial, resident farmer, etc). The code accomplishes these estimates by utilizing appropriate input parameters/data that are required by the RESRAD code to derive the estimated the dose. In this dose assessment effort, the code examined the external dose pathway from the stockpile under the industrial worker scenario.

Input parameters from Attachment 1(stockpile dimensions, composition) and Attachment 2 (radionuclides present in the stockpile) were used in the RESRAD model, along with other appropriate default input parameters that were used in the deriving the estimated dose. The major specific input parameters used in the RESRAD run were:

- concentrations of Ra-226, Ra-228 and U-235 based on the average of the three sample results (24.9, 4.7, and 1.03 pCi/g, respectively)
- area of stockpile 31 square meters
- thickness of stockpile 1.2 meters

Attachment 3 presents selected pages from the RESRAD run output, which presents the results and pathways, which were used in the RESRAD dose assessment. The estimated derived dose from the RESRAD methodology is 91 mRem/year. This value is below the accepted annual dose of 100 mRem/year.

Conclusion

The requested dose assessment was derived from two separate approaches: simplistic and dose model (RESRAD). The results of both approaches were in good agreement and demonstrated annual doses from the stockpile material that were below the public/worker limit of 100 mRem/year.

ATTACHMENT 1

Ted Adams, 11 West Main Springville NY 14141

Ted,

Per our conversation I am providing you with the data for the dose assessment. Please call me if you have any questions 937-260-3533.

Regards,

George Weissenburger

Vice President

Greater Radiological Dimensions Inc.

Greater Radiological Dimensions, Inc.

1527 Ridge Rd, Lewiston NY 14092 (716) 754-2654

Data Collection for Dose Assessment at Niagara Fashion Outlet of Niagara Falls, 1900 Military Road, Niagara Falls NY 14304

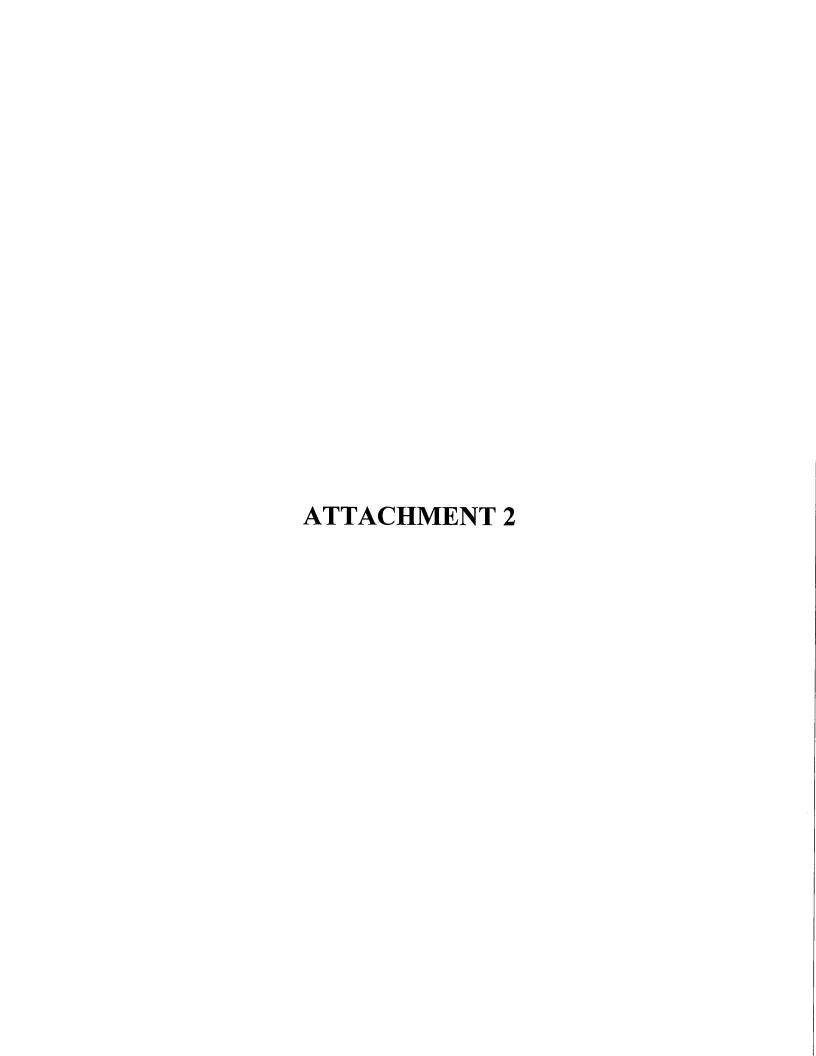
Stockpile Dimensions: 10' x 10'	x 4'	
Stockpile Composition: soil, co	ncrete and slag	
Rad Instrument Used:	Serial #	Cal Due Date:
Ludlum Model #2221	144887	9/18/14
Probe Gx2 (2 x 2)	12003	9/18/14
Bicron micro rem	С279Н	9/17/14

Random Survey Points of Stockpile

#		At Contact	at 36"
1	uR/hr	20	15
	Cpm	24,000	14,000
2	uR/hr	30	20
	Cpm	26,000	18,000
3	uR/hr	30	20
	Cpm	28,000	20,000
4	uR/hr	40	20
	Cpm	39,000	25,000
5	uR/hr	15	10
	Cpm	15,000	12,000
6	uR/hr	25	15
	Cpm	22,000	20,000
	<u> </u>		

Performed by: George Weissenburger

Signature







April 25, 2014

Mr. Stuart Pryce Greater Radiological Dimensions 1527 Ridge Road Lewiston, NY 14092

RE: Project: Fashion Outlet Mall

Pace Project No.: 30118773

Dear Mr. Pryce:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

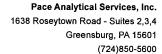
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins jacquelyn.collins@pacelabs.com Project Manager

Enclosures







CERTIFICATIONS

Project:

Fashion Outlet Mall

Pace Project No.:

30118773

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4 Greensburg, PA 15601 ACLASS DOD-ELAP Accreditation #: ADE-1544

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California/TNI Certification #: 04222CA

Colorado Certification

Connecticut Certification #: PH-0694

Delaware Certification

Florida/TNI Certification #: E87683

Guam/PADEP Certification

Hawaii/PADEP Certification Idaho Certification

Illinois/PADEP Certification Indiana/PADEP Certification

Iowa Certification #: 391 Kansas/TNI Certification #: E-10358

Kentucky Certification #: 90133

Louisiana DHH/TNI Certification #: LA140008 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: PA00091

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification

Missouri Certification #: 235

Montana Certification #: Cert 0082 Nebraska Certification #: NE-05-29-14

Nevada Certification

New Hampshire/TNI Certification #: 2976

New Jersey/TNI Certification #: PA 051

New Mexico Certification
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190

Oregon/TNI Certification #: PA200002

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

South Dakota Certification

Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188
Utah/TNI Certification #: ANTE

Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: 490196
Washington Certification #: 6868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin/PADEP Certification

Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS





SAMPLE SUMMARY

Project:

Fashion Outlet Mall

Pace Project No.:

30118773

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30118773001	FO-001	Solid	04/21/14 09:00	04/23/14 10:00
30118773002	FO-002	Solid	04/21/14 09:00	04/23/14 10:00
30118773003	FO-003	Solid	04/21/14 09:00	04/23/14 10:00







SAMPLE ANALYTE COUNT

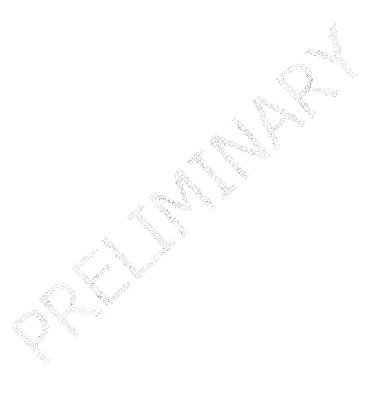
Project:

Fashion Outlet Mall

Pace Project No.:

30118773

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30118773001	FO-001	EPA 901.1	MAH	11
30118773002	FO-002	EPA 901.1	MAH	11
30118773003	FO-003	EPA 901.1	MAH	11







PROJECT NARRATIVE

Project:

Fashion Outlet Mall

Pace Project No.:

30118773

Method:

EPA 901.1

Client:

Description: 901.1 Gamma Spec

D.

Greater Radiological Dimensions

Date:

April 25, 2014

General Information:

3 samples were analyzed for EPA 901.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



ANALYTICAL RESULTS

Project:

Fashion Outlet Mall

Pace Project No.:

30118773

Sample: FO-001 PWS:

Lab ID: 30118773001

Site ID:

Collected: 04/21/14 09:00 Received: 04/23/14 10:00 Matrix: Solid Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1	2.792 ± 0.739 (0.731) C:NA T:NA	pCi/g	04/25/14 13:56	14331-83-0	
Bismuth-212	EPA 901.1	2.900 ± 1.915 (2.794) C:NA T:NA	pCi/g	04/25/14 13:56	14913-49-6	
Bismuth-214	EPA 901.1	7.882 ± 1.288 (0.368) C:NA T:NA	pCi/g	04/25/14 13:56	14733-03-0	
Lead-212	EPA 901.1	3.986 ± 0.659 (0.333) C:NA T:NA	pCi/g	04/25/14 13:56	15092-94-1	
Lead-214	EPA 901.1	7.948 ± 1.260 (0.421) C:NA T:NA	pCi/g	04/25/14 13:56	15067-28-4	
Potassium-40	EPA 901.1	11.958 ± 2.920 (1.648) C:NA T:NA	pCi/g	04/25/14 13:56	13966-00-2	
Radium-226	EPA 901.1	18.386 ± 4.500 (3.954) C:NA T:NA	pC i/g	04/25/14 13:56	13982-63-3	
Radium-228	EPA 901.1	2.792 ± 0.739 (0.731) C:NA T:NA	pGi/g	04/25/14 13:56	15262-20-1	
Thallium-208	EPA 901.1	1.477 ± 0.338 (0.210) C:NA T:NA	pCi/g	04/25/14 13:56	14913-50-9	
Thorium-234	EPA 901.1	5.492 ± 3.106 (4.768) C:NA T:NA	pCi/g	04/25/14 13:56	15065-10-8	
Uranium-235	EPA 901.1	0.559 ± 0.927 (1.588) C:NA T:NA	pCi/g	04/25/14 13:56	15117-96-1	

Sample: FO-002 PWS:

Date: 04/25/2014 03:41 PM

Lab ID: 30118773002 Site ID:

Collected: 04/21/14 09:00 Sample Type:

Received: 04/23/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1	6.890 ± 1.248 (0.631) C:NA T:NA	pCi/g	04/25/14 14:13	14331-83-0	
Bismuth-212	EPA 901.1	9.773 ± 3.488 (2.717) C:NA T:NA	pCi/g	04/25/14 14:13	14913-49-6	
Bismuth-214	EPA 901.1	13.240 ± 1.988 (0.442) C:NA T:NA	pCi/g	04/25/14 14:13	14733-03-0	
Lead-212	EPA 901.1	6.074 ± 0.944 (0.421) C:NA T:NA	pCi/g	04/25/14 14:13	15092-94-1	
Lead-214	EPA 901.1	14.329 ± 2.087 (0.455) C:NA T:NA	pCi/g	04/25/14 14:13	15067-28-4	
Potassium-40	EPA 901.1	14.547 ± 3.145 (1.232) C:NA T:NA	pCi/g	04/25/14 14:13	13966-00-2	
Radium-226	EPA 901.1	29.109 ± 6.051 (4.740) C:NA T:NA	pCi/g	04/25/14 14:13	13982-63-3	
Radium-228	EPA 901.1	6.890 ± 1.248 (0.631) C:NA T:NA	pCi/g	04/25/14 14:13	15262-20-1	
Thallium-208	EPA 901.1	2.320 ± 0.440 (0.208) C:NA T:NA	pCi/g	04/25/14 14:13	14913-50-9	
Thorium-234	EPA 901.1	12.270 ± 4.086 (4.303) C:NA T:NA	pCi/g	04/25/14 14:13	15065-10-8	
Uranium-235	EPA 901.1	0.747 ± 1.193 (1.973) C:NA T:NA	pCi/g	04/25/14 14:13	15117-96-1	

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project:

PWS:

Fashion Outlet Mall

Pace Project No.:

30118773

Sample: FO-003

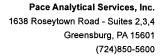
Lab ID: 30118773003 Site ID:

Collected: 04/21/14 09:00 Received: 04/23/14 10:00 Matrix: Solid

Sample Type:

Results reported on a "dry-weight" basis

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Actinium-228	EPA 901.1	4.501 ± 1.083 (0.613) C:NA T:NA	pCi/g	04/25/14 14:30	14331-83-0	
Bismuth-212	EPA 901.1	6.446 ± 2.362 (1.953) C:NA T:NA	pCi/g	04/25/14 14:30	14913-49-6	
Bismuth-214	EPA 901.1	11.773 ± 1.827 (0.452) C:NA T:NA	pCi/g	04/25/14 14:30	14733-03-0	
Lead-212	EPA 901.1	5.120 ± 0.822 (0.384) C:NA T:NA	pCi/g	04/25/14 14:30	15092-94-1	
Lead-214	EPA 901.1	11.656 ± 1.738 (0.416) C:NA T:NA	pCi/g	04/25/14 14:30	15067-28-4	
Potassium-40	EPA 901.1	12.788 ± 3.285 (1.944) C:NA T:NA	pCi/g	04/25/14 14:30	13966-00-2	
Radium-226	EPA 901.1	27.386 ± 6.153 (4.896) C:NA T:NA	pCi/g	04/25/14 14:30	13982-63-3	
Radium-228	EPA 901.1	4.501 ± 1.083 (0.613) C:NA T:NA	pGi/g	04/25/14 14:30	15262-20-1	
Thallium-208	EPA 901.1	1.742 ± 0.382 (0.241) C:NA T:NA	pCi/g	04/25/14 14:30	14913-50-9	
Thorium-234	EPA 901.1	12.107 ± 4.250 (4.543) C:NA T:NA	pCi/g	04/25/14 14:30	15065-10-8	
Uranium-235	EPA 901.1	1.856 ± 1.389 (1.583) C:NA T:NA	pCi/g	04/25/14 14:30	15117-96-1	





QUALITY CONTROL DATA

Project:

Fashion Outlet Mall

Pace Project No.:

30118773

QC Batch:

RADC/19448

Analysis Method:

EPA 901.1

QC Batch Method:

EPA 901.1

Analysis Description:

901.1 Gamma Spec

Associated Lab Samples:

30118773001, 30118773002, 30118773003

METHOD BLANK: 718512 Associated Lab Samples:

Date: 04/25/2014 03:41 PM

Matrix: Solid 30118773001, 30118773002, 30118773003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Bismuth-212	0.170 ± 0.615 (1.129) C:NA T:NA	— pCi/g	04/18/14 14:38	
Bismuth-214	0.009 ± 0.099 (0.193) C:NA T:NA	pCi/g	04/18/14 14:38	
Lead-212	-0.024 ± 0.956 (0.134) C:NA T:NA	pCi/g	04/18/14 14:38	
Lead-214	0.018 ± 0.090 (0.169) C:NA T:NA	pCi/g	04/18/14 14:38	
Potassium-40	-0.190 ± 7.595 (0.677) C:NA T:NA	pCi/g	04/18/14 14:38	
Radium-226	-0.414 ± 3.486 (1.632) C:NA T:NA	pCi/g	04/18/14 14:38	
Radium-228	-0.053 ± 2.122 (0.197) C:NA T:NA	pCi/g	04/18/14 14:38	
Thallium-208	-0.026 ± 0.202 (0.102) C:NA T:NA	pCi/g	04/18/14 14:38	
Thorium-234	0.190 ± 0.367 (2.504) C:NA T:NA	pCi/g	04/18/14 14:38	
Uranium-235	0.059 ± 0.087 (0.500) C:NA T:NA	pCi/g	04/18/14 14:38	





QUALIFIERS

Project:

Fashion Outlet Mall

Pace Project No.:

30118773

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Date: 04/25/2014 03:41 PM

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

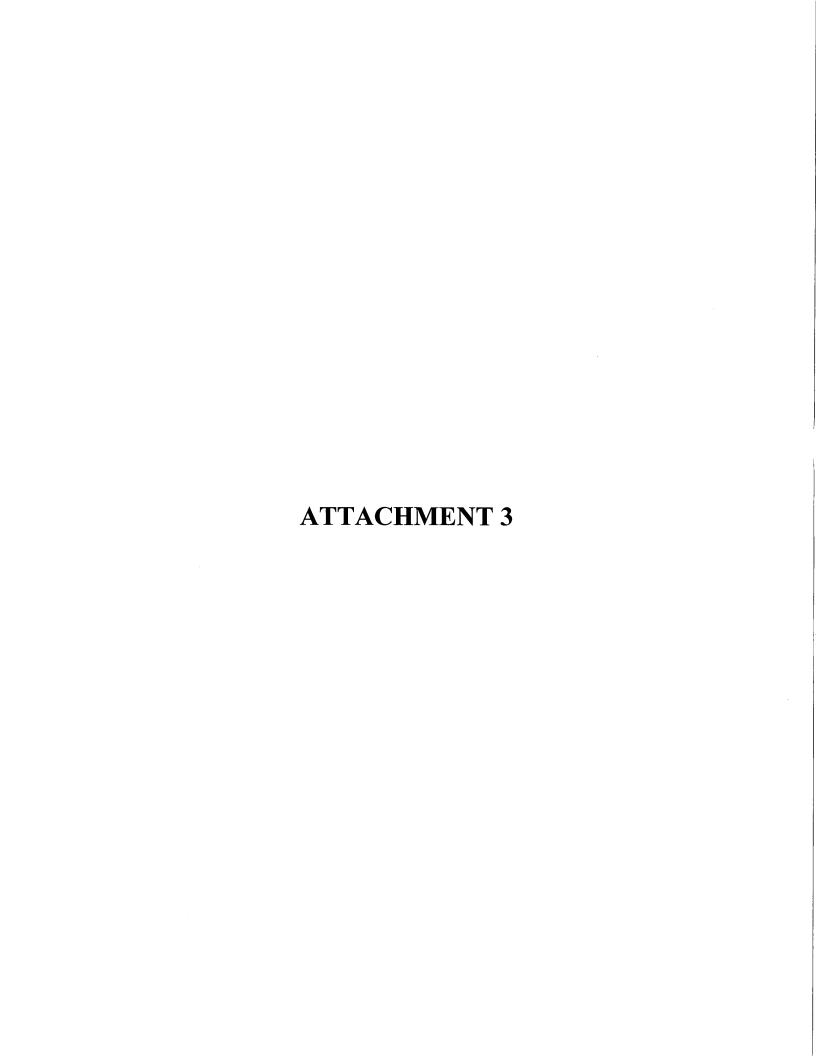
Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS



RESRAD, Version 7.0 T½ Limit = 180 days 04/30/2014 16:56 Page 1
Summary : Dose Assessment for Niagara Fashion Outlet
File : C:\RESRAD_FAMILY\RESRAD\7.0\USERFILES\SITE1.RAD

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RESRAD, Version 7.0 T_{2} Limit = 180 days 04/30/2014 16:56 Page 12

Summary : Dose Assessment for Niagara Fashion Outlet
File : C:\RESRAD_FAMILY\RESRAD\7.0\USERFILES\SITE1.RAD

Summary of Pathway Selections

Pathway	User Selection
1 external gamma 2 inhalation (w/o radon) 3 plant ingestion 4 meat ingestion 5 milk ingestion 6 aquatic foods 7 drinking water	suppressed suppressed suppressed suppressed suppressed
8 soil ingestion 9 radon	suppressed suppressed
9 radon Find peak pathway doses	suppressed suppressed

RESRAD, Version 7.0 T½ Limit = 180 days 04/30/2014 16:56 Page 13

Summary : Dose Assessment for Niagara Fashion Outlet

File : C:\RESRAD_FAMILY\RESRAD\7.0\USERFILES\SITE1.RAD

Contaminated Zone Dimensions Initial Soil Concentrations, pCi/g

 Area:
 31.00 square meters
 Ra-226
 2.490E+01

 Thickness:
 1.20 meters
 Ra-228
 4.700E+00

 Cover Depth:
 0.00 meters
 U-235
 1.030E+00

Total Dose TDOSE(t), mrem/yr

Basic Radiation Dose Limit = 1.000E+02 mrem/yr

Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years): 0.000E+00 1.000E+00 1.000E+01 TDOSE(t): 8.949E+01 9.126E+01 8.412E+01 M(t): 8.949E-01 9.126E-01 8.412E-01

Maximum TDOSE(t): 9.183E+01 mrem/yr at t = 2.160 ± 0.004 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p) $As \ \, \text{mrem/yr and Fraction of Total Dose At t = 2.160E+00 years}$

Water Independent Pathways (Inhalation excludes radon)

Ground		Inhala	tion	Rade	on	Pla	nt	Mea	t	Mil	k	Soi	1	
Radio- Nuclide Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.								
Ra-226	7.958E+01	0.8666	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ra-228	1.202E+01	0.1309	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	2.337E-01	0.0025	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
												_		
Total	9.183E+01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p) As mrem/yr and Fraction of Total Dose At t = 2.160E+00 years

Water Dependent Pathways

	Wate	er	Fish	n	Rado	on	Pla	nt	Mea	t	Mill	k	All Path	hways*
Radio- Nuclide Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.								
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	7.958E+01	0.8666								
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	1.202E+01	0.1309								
U-235	0.000E+00	0.0000	0.000E+00	0.0000	2.337E-01	0.0025								
														
Total	0.000E+00	0.0000	0.000E+00	0.0000	9.183E+01	1.0000								

 $[\]star Sum \ of \ all \ water \ independent \ and \ dependent \ pathways.$

RESRAD, Version 7.0 The Limit = 180 days 04/30/2014 16:56 Page 14

Summary : Dose Assessment for Niagara Fashion Outlet

File : C:\RESRAD_FAMILY\RESRAD\7.0\USERFILES\SITE1.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p) As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

	Ground Inhalati		Radon	Plant	Meat	Milk	Soil	
Radio- Nuclide	mrem/yr fract	. mrem/yr fract.						
Ra-226	8.034E+01 0.897	7 0.000E+00 0.0000						
Ra-228	8.915E+00 0.099	6 0.000E+00 0.0000						
U-235	2.365E-01 0.002	6 0.000E+00 0.0000						
								
Total	8.949E+01 1.000	0.000E+00 0.0000	0.000E+00 0.0000	0.000E+00 0.0000	0.000E+00 0.0000	0.000E+00 0.0000	0.000E+00 0.0000	

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p) As mrem/yr and Fraction of Total Dose At t=0.000E+00 years

Water Dependent Pathways

	Water		Fis	h	Radon		Plant		Meat		Milk		All Pathways*	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.000E+00	0.0000	0.000E+00	0.0000	8.915E+00	0.0996
U-235 ———	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.365E-01	0.0026
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.949E+01	1.0000

 $^{{}^{\}star}\mathrm{Sum}$ of all water independent and dependent pathways.

RESRAD, Version 7.0 $T^{1/2}$ Limit = 180 days 04/30/2014 16:56 Page 15

Summary : Dose Assessment for Niagara Fashion Outlet
File : C:\RESRAD_FAMILY\RESRAD\7.0\USERFILES\SITE1.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p) As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

	Groun	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-															
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
Ra-226	7.999E+01	0.8764	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Ra-228	1.104E+01	0.1210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
U-235	2.352E-01	0.0026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Total	9.126E+01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
	>														

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p) As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways

	Water		Fis	h	Radon		Plant		Meat		Milk		All Pathways*	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.								
					0.000E+00				0.000E+00		0.000E+00		7.999E+01	
					0.000E+00				0.000E+00		0.000E+00 0.000E+00		1.104E+01 2.352E-01	***
Total	0.000E+00	0.0000	0.000E+00	0.0000	9.126E+01	1.0000								

 $[\]star Sum \ of \ all \ water \ independent \ and \ dependent \ pathways.$

state department of

Nirav R. Shah, M.D., M.P.H. Commissioner

HEALTH

Sue Kelly **Executive Deputy Commissioner**

March 21, 2012

Greater Radiological Dimensions, Inc. 1527 Ridge Road Lewiston, New York 14092

Attention:

George Weissenburger

Radiation Safety Officer

RE:

NYS Dept. of Health Radioactive Materials License No. C5514

DH No. 11-1048

Dear Licensee:

Enclosed is New York State Department of Health Radioactive Materials License No. C5514, which authorizes the use of the materials listed in the license subject to the conditions therein and to the applicable regulations of Part 16 of the New York State Sanitary Code and/or Industrial Code Rule 38. You should become familiar with the conditions of your license and the provisions of Part 16 and/or Industrial Code Rule 38 as they relate to your facility.

Please note that in your license application you agreed to adhere to certain criteria and procedures established in Radiation Guide 1.13. Therefore, you should make copies of those procedures for reference and keep them on file with the license, as they are part of the licensing document. You are also bound by statements and representations in documents listed in Condition No. 11 of the license. These are also a part of the licensing document and must be maintained with it. If you have employed the services of a consultant for assistance in the preparation of any portion of the application or subsequent supporting information, ensure that you have a copy of all correspondence and submissions.

One of our Radiological Health Specialists or Radiophysicists will periodically inspect your installation and respond to any radiation incidents. Any questions concerning the license or your radiation program should be directed to this office at 518/402-7590 or:

> New York State Department of Health Bureau of Environmental Radiation Protection Radioactive Materials Section 547 River Street, Flanigan Square – Room 530 Troy, New York 12180-2216

> > Sincerely,

Charles J. Burns, Chief

Radioactive Materials Section

Bureau of Environmental Radiation Protection

CJB/MGH:ks

Enclosures:

RML No. C5514

Part 16

Notice to Employees



NEW YORK STATE DEPARTMENT OF HEALTH

RADIOACTIVE MATERIALS LICENSE

Pursuant to the Public Health Law, Part 16 of the New York State Sanitary Code, Industrial Code Rule 38, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing radioactive material(s) for the purpose(s), and at the place(s) designated below. The license is subject to all applicable rules, regulations, and orders now or hereafter in effect of all appropriate regulatory agencies and to any conditions specified below.

1. NAME OF LICENSEE		3. LICENSE NUMBER				
	FEIN 45-0917795	C5514				
Greater Radiological Dimens	sions, Inc.	4. EXPIRATION DATE				
	Phone (937) 260-3533	March 21, 2022				
2. ADDRESS OF LICENSEE		5a. REFERENCE b. AMENDMENT NO.				
1527 Ridge Road Lewiston, New York 14092		DH 11-1048				
6. Radioactive Materials (elements in mass number)	7. Chemical and/or physical form	Maximum quantity licensee may possess at any one time				
A. Any	A. Any, as potentiall known contamina materials					

9. Authorized use.

Condition 6.A.:

For use incident to providing radiation protection and general health physics support to clients, as authorized under this license and approved by the Department, and in accordance with the documents referenced in Condition 11 of this license.

- 10. A. The Radiation Safety Officer (RSO) for this License is George Weissenburger.
 - B. Licensed material shall be used by, or under the supervision of, George Weissenburger, by persons with the training and experience described in Condition 16 of the License.



NEW YORK STATE DEPARTMENT OF HEALTH

RADIOACTIVE MATERIALS LICENSE

3. License Number C5514

5a. Reference <u>DH 11-1048</u>

- 11. Except as specifically provided otherwise in this License, the licensee shall conduct its program in accordance with the statements, representation and procedures contained in the documents, including any enclosures, listed below. The Department's Regulations shall govern, unless the statements, representation and procedures in the licensee's application and correspondence are more restrictive than the Regulations.
 - A. Application dated March 2, 2012, signed by George Weissenburger, with attachments.
 - B. Letter dated March 9, 2012, signed by George Weissenburger, with attachments.
- 12. Licensed material shall be used at temporary job sites of the licensee's client site(s) anywhere within the State of New York, where the Department of Health exercises jurisdiction.
- 13. The licensee shall instruct persons before they engage in work under the license, in accordance with 10 NYCRR 16.13(c), and shall provide annual refresher training. Such instruction shall include the licensee's operating and emergency procedures, and other information contained in documents incorporated in Condition 11.
- 14. The licensee shall have available appropriate survey meters which shall be maintained operational and shall be calibrated before initial use and at subsequent intervals not exceeding twelve months by a person specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. Records of all calibrations shall be kept a minimum of three years.
- 15. Pursuant to 10 NYCRR 16.26 (c) (4), the licensee shall notify the Department in writing at least 30 days prior to the use of respiratory protection equipment for restricting internal exposure to radioactive materials.
- 16. A. Personnel who handle radioactive materials shall have at least 40 hours of on the job training in the use of those radioactive materials authorized in the License, or shall receive such training at the licensee's facility under the supervision of an authorized user.



NEW YORK STATE DEPARTMENT OF HEALTH

RADIOACTIVE MATERIALS LICENSE

3. License Number C5514

5a. Reference DH 11-1048

- 16. B. <u>All</u> personnel who perform work under the license will be instructed in applicable regulations, license conditions, and the licensee's operating and emergency procedures.
 - C. Records of training received pursuant to paragraphs A and B of this Condition shall be maintained for a period of three (3) years and shall include:
 - i) the name of the individual who conducted the training;
 - ii) the name of the individual who received the training;
 - iii) the dates and duration of the training; and
 - iv) a list of topics covered.
- 17. The licensee shall submit full information on any proposed change of ownership of Greater Radiological Dimensions, Inc. at least 90 days prior to the proposed action.
- 18. The licensee may not open any sealed source containing licensed material.
- 19. A. Transportation of licensed radioactive material shall be subject to all regulations of the U.S. Department of Transportation and other agencies of the United States having jurisdiction insofar as such regulations relate to the packaging of radioactive material, marking and labeling of the packages, loading and storage of packages, monitoring requirements, accident reporting, and shipping papers.
 - B. Transportation of low level radioactive waste shall be in accordance with the regulations of the New York State Department of Environmental Conservation as contained in 6 NYCRR Part 381.
- 20. The licensee shall not release any licensed radioactive materials into the environment except as permitted by the regulations of the New York State Department of Environmental Conservation.

FOR THE NEW YORK STATE DEPARTMENT OF HEALTH

Date: March 21, 2012

CJB/AC

Charles J. Burns, Chief

Radioactive Materials Section

Bureau of Environmental Radiation Protection

Alison Suarato

From: Ryan Wohlstrom

Sent: Thursday, May 22, 2014 12:34 PM **To:** Glenn May (gmmay@gw.dec.state.ny.us)

Cc: Gregory Sutton < gpsutton@gw.dec.state.ny.us > (gpsutton@gw.dec.state.ny.us)

Subject: BCP # C932162 - FONF Unknown AOC Discovery Summary **Attachments:** Figure 1 - Uknown AOC Location Plan_May 2014.pdf

Good afternoon Glen,

The purpose of this e-mail it to inform the NYSDEC of the discovery of a previously unknown area of concern (AOC) at the FONF site.

On 15 February 2014, during the excavation and installation of the storm sewer to the northwest of the proposed FONF mall expansion building pad (See Figure 1), Langan detected sustained PID readings ranging from 10 to 20 ppm within 15 feet of the work area. As a result work activities were halted and a temporary fence was constructed around the excavation to prevent access by site personnel. Within approximately 20 to 30 minutes, PID readings within the area had dropped to background levels. Shortly thereafter, Langan identified a silty black soil exhibiting elevated VOC readings (PID = 20-60ppm). A sample of the suspect material was collected and submitted for laboratory analysis of VOCs at Paradigm Environmental Services. NYSDEC representative, Kevin Glaser, was called to the Site to observe the situation.

As shown in the attached table no VOCs were detected above NYSDEC Part 375 Unrestricted Use SCOs. Based on Langan's assessment of the site conditions and sampling results, we present the following proposed actions for NYSDEC approval:

- Continue to excavate storm sewer trench under full-time Langan oversight and air monitoring for VOCs.
- Excavated material exhibiting elevated PID readings will be stockpiled on poly in preparation for off-site disposal. This material will not be reused onsite.
- If the ambient air concentrations of total organic vapors at the downwind perimeter of the work area exceeds 5 ppm, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.
- The Site Contractor, MCI, will be responsible for the health and safety of its personnel. In addition to VOC monitoring by MCI, Langan will provide them with the real-time results of our air monitoring activities to assist in their decision making related to the work activities.

We will not proceed with the proposed actions without your authorization. Please contact me with any questions.

Thanks, -Ryan

Ryan J Wohlstrom Senior Staff Engineer Direct: 203.784.3069 Mobile: 203.464.2731

LANGAN

Phone: 203.562.5771 Fax: 203.789.6142

Long Wharf Maritime Center

555 Long Wharf Drive New Haven, CT 06511-6107 www.langan.com

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Langan's goal is to be SAFE (Stay Accident Free Everyday)

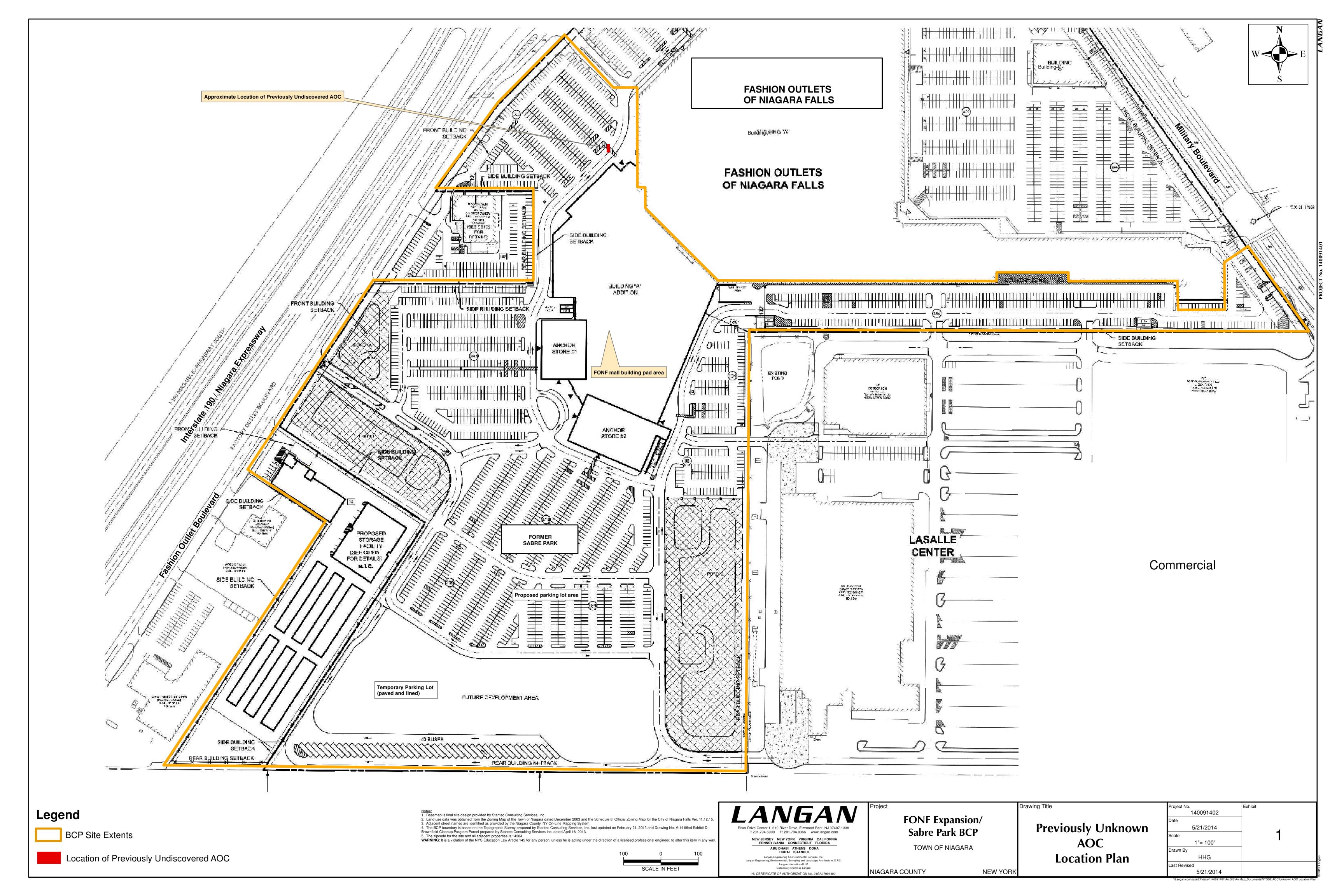


Table 1 Storm Sewer Trench Soil Analytical Results 1705 Factory Outlet Boulevard Niagara, New York Langan Project No. 140091402

Sample ID Sample Date Units	NYSDEC Subpart 375-6: Remedial Program Unrestricted Use Soil Cleanup Objectives (mg/kg)	PAOC-3-S-1 5/15/2014 mg/kg		
Volatile Organic Compour	IIIg/kg			
Acetone	0.05	0.0184		
2-Butanone	NE	0.00535		
n-Butylbenzene	12	0.00194		
sec-Butylbenzene	11	0.00115		
Carbon Disulfide	NE	0.00326		
Ethylbenzene	1	0.00105		
p-Isopropyltoluene	NE	0.00175		
Methylcyclohexane	NE	0.00267		
Naphthalene	12	0.0132		
n-Propylbenzene	3.9	0.000978		
1,2,4-Trimethylbenzene	3.6	0.00498		
1,3,5-Trimethylbenzene	8.4	0.00259		
m,p-Xylene	NE	0.000991		
o-Xylene	NE	0.00173		
Xylenes, Total	0.26	0.002721		

Notes:

- 1. Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYCDEC) title 6 of the official compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO).
- 2. No sample detections above NYSDEC Part 375 Unrestricted Use SCOs were identified.
- 3. Only compounds with detections are shown in table.

NE = Not established

J = Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated



Lab Project ID: 141992

Client: <u>Langan Engineering</u>

Project Reference: FONF

Sample Identifier: PAOC-3-5-1

Lab Sample ID: 141992-01 **Date Sampled:** 5/15/2014

Matrix: Soil Date Received: 5/15/2014

Volatile Organics

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 1.81	ug/Kg		5/15/2014
1,1,2,2-Tetrachloroethane	< 1.81	ug/Kg		5/15/2014
1,1,2-Trichloroethane	< 1.81	ug/Kg		5/15/2014
1,1-Dichloroethane	< 1.81	ug/Kg		5/15/2014
1,1-Dichloroethene	< 1.81	ug/Kg		5/15/2014
1,2,3-Trichlorobenzene	< 4.52	ug/Kg		5/15/2014
1,2,4-Trichlorobenzene	< 4.52	ug/Kg		5/15/2014
1,2,4-Trimethylbenzene	4.98	ug/Kg		5/15/2014
1,2-Dibromo-3-Chloropropane	< 9.04	ug/Kg		5/15/2014
1,2-Dibromoethane	< 1.81	ug/Kg		5/15/2014
1,2-Dichlorobenzene	< 1.81	ug/Kg		5/15/2014
1,2-Dichloroethane	< 1.81	ug/Kg		5/15/2014
1,2-Dichloropropane	< 1.81	ug/Kg		5/15/2014
1,3,5-Trimethylbenzene	2.59	ug/Kg		5/15/2014
1,3-Dichlorobenzene	< 1.81	ug/Kg		5/15/2014
1,4-Dichlorobenzene	< 1.81	ug/Kg		5/15/2014
1,4-dioxane	< 18.1	ug/Kg		5/15/2014
2-Butanone	5.35	ug/Kg		5/15/2014
2-Hexanone	< 4.52	ug/Kg		5/15/2014
4-Methyl-2-pentanone	< 4.52	ug/Kg		5/15/2014
Acetone	18.4	ug/Kg		5/15/2014
Benzene	< 1.81	ug/Kg		5/15/2014
Bromochloromethane	< 4.52	ug/Kg		5/15/2014
Bromodichloromethane	< 1.81	ug/Kg		5/15/2014
Bromoform	< 4.52	ug/Kg		5/15/2014
Bromomethane	< 1.81	ug/Kg		5/15/2014
Carbon disulfide	3.26	ug/Kg		5/15/2014

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 141992

Client: <u>Langan Engineering</u>

Project Reference: FONF

Sample Identifier:PAOC-3-5-1Lab Sample ID:141992-01Date Sampled:5/15/2014Matrix:SoilDate Received:5/15/2014

Matrix:	Soil		Date Received:	5/15/2014
	Carbon Tetrachloride	< 1.81	ug/Kg	5/15/2014
	Chlorobenzene	< 1.81	ug/Kg	5/15/2014
	Chloroethane	< 1.81	ug/Kg	5/15/2014
	Chloroform	< 1.81	ug/Kg	5/15/2014
	Chloromethane	< 1.81	ug/Kg	5/15/2014
	cis-1,2-Dichloroethene	< 1.81	ug/Kg	5/15/2014
	cis-1,3-Dichloropropene	< 1.81	ug/Kg	5/15/2014
	Cyclohexane	< 9.04	ug/Kg	5/15/2014
	Dibromochloromethane	< 1.81	ug/Kg	5/15/2014
	Dichlorodifluoromethane	< 1.81	ug/Kg	5/15/2014
	Ethylbenzene	1.05	ug/Kg	5/15/2014
	Freon 113	< 1.81	ug/Kg	5/15/2014
	Isopropylbenzene	< 1.81	ug/Kg	5/15/2014
	m,p-Xylene	0.991	ug/Kg	5/15/2014
	Methyl acetate	< 1.81	ug/Kg	5/15/2014
	Methyl tert-butyl Ether	< 1.81	ug/Kg	5/15/2014
	Methylcyclohexane	2.67	ug/Kg	5/15/2014
	Methylene chloride	< 4.52	ug/Kg	5/15/2014
	Naphthalene	13.2	ug/Kg	5/15/2014
	n-Butylbenzene	1.94	ug/Kg	5/15/2014
	n-Propylbenzene	0.978	ug/Kg	5/15/2014
	o-Xylene	1.73	ug/Kg	5/15/2014
	p-Isopropyltoluene	1.75	ug/Kg	5/15/2014
	sec-Butylbenzene	1.15	ug/Kg	5/15/2014
	Styrene	< 4.52	ug/Kg	5/15/2014
	tert-Butylbenzene	< 1.81	ug/Kg	5/15/2014
	Tetrachloroethene	< 1.81	ug/Kg	5/15/2014
	Toluene	< 1.81	ug/Kg	5/15/2014
	trans-1,2-Dichloroethene	< 1.81	ug/Kg	5/15/2014
	trans-1,3-Dichloropropene	< 1.81	ug/Kg	5/15/2014

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 141992

Client: <u>Langan Engineering</u>

Project Reference: FONF

Sample Identifier: PAOC-3-5-1

Lab Sample ID: 141992-01 **Date Sampled:** 5/15/2014

Matrix: Soil Date Received: 5/15/2014

Trichloroethene < 1.81 ug/Kg 5/15/2014

 Trichlorofluoromethane
 < 1.81</td>
 ug/Kg
 5/15/2014

 Vinyl chloride
 < 1.81</td>
 ug/Kg
 5/15/2014

Method Reference(s): EPA 8260C

EPA 5035

Data File: x13303.D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside OC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

 $"L" = Laboratory\ Control\ Sample\ recovery\ outside\ accepted\ QC\ limits.$

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958



CHAIN OF CUSTODY

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Chain of Custody Supplement

Client:	Langan	Completed by:	55 L		
Lab Project ID:	141992	Date:	5/15/14		
		ion Requirements 210/241/242/243/244			
NI Condition	ELAC compliance with the sampl Yes	e condition requirements upon 1 No	receipt N/A		
Container Type	X				
Comments					
Transferred to method- compliant container					
Headspace (<1 mL) Comments			X		
Preservation Comments					
Chlorine Absent (<0.10 ppm per test strip) Comments					
Holding Time Comments					
Temperature Comments	19°C hand del received 5/15/14	inded no custody	çuels		
Sufficient Sample Quantity Comments	perer vea spropriq				

Alison Suarato

From: Glenn May <gmmay@gw.dec.state.ny.us>

Sent: Thursday, May 22, 2014 4:04 PM

To: Ryan Wohlstrom Cc: Glaser, Kevin

Subject: RE: BCP # C932162 - FONF Unknown AOC Discovery Summary

Ryan,

I have completed a review of your May 22, 2014 e-mail that includes analytical results of fill material from a utility trench excavation, along with a proposed course of action. Based upon a review of the analytical results, your proposed course of action is acceptable to the Department.

Glenn

Glenn May
NYSDEC
Geologist

(716) 851-7220 Work
gmmay@gw.dec.state.ny.us

270 Michigan Avenue
Buffalo, NY 14203-2999

United States of America

>>> Ryan Wohlstrom <<u>RWohlstrom@Langan.com</u>> 5/22/2014 2:47 PM >>> Good afternoon Glen,

The purpose of this e-mail it to inform the NYSDEC of the discovery of a previously unknown area of concern (AOC) at the FONF site.

On 15 May 2014, during the excavation and installation of the storm sewer to the northwest of the proposed FONF mall expansion building pad (See Figure 1), Langan detected sustained PID readings ranging from 10 to 20 ppm within 15 feet of the work area. As a result work activities were halted and a temporary fence was constructed around the excavation to prevent access by site personnel. Within approximately 20 to 30 minutes, PID readings within the area had dropped to background levels. Shortly thereafter, Langan identified a silty black soil exhibiting elevated VOC readings (PID = 20-60ppm). A sample of the suspect material was collected and submitted for laboratory analysis of full part 375 VOCs at Paradigm Environmental Services. NYSDEC representative, Kevin Glaser, was called to the Site to observe the situation.

As shown in the attached table no VOCs were detected above NYSDEC Part 375 Unrestricted Use SCOs. Based on Langan's assessment of the site conditions and sampling results, we present the following proposed actions for NYSDEC approval:

- Continue to excavate storm sewer trench under full-time Langan oversight and air monitoring for VOCs.
- Excavated material exhibiting elevated PID readings will be stockpiled on poly in preparation for off-site disposal. This material will not be reused onsite.
- If the ambient air concentrations of total organic vapors at the downwind perimeter of the work area exceeds 5 ppm, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.
- The Site Contractor, MCI, will be responsible for the health and safety of its personnel. In addition to VOC monitoring by MCI, Langan will provide them with the real-time results of our air monitoring activities to assist in their decision making related to the work activities.

We will not proceed with the proposed actions without your authorization. Please contact me with any questions.

Thanks, -Ryan

Ryan J Wohlstrom Senior Staff EngineerDirect: 203.784.3069
Mobile: 203.464.2731

LANGAN

Phone: 203.562.5771 Fax: 203.789.6142 Long Wharf Maritime Center 555 Long Wharf Drive New Haven, CT 06511-6107 www.langan.com

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Alison Suarato

From: Glenn May <gmmay@gw.dec.state.ny.us>

Sent: Tuesday, April 29, 2014 9:31 AM

To: Ryan Wohlstrom Cc: Glaser, Kevin

Subject: Re: FONF Expansion/Sabre Park BCP: Importation of Topsoil

Ryan,

A review of the analytical results in the April 24, 2014 letter from you and Jamie Barr indicates that topsoil from the Niagara Falls High School athletic field is suitable for use as part of the 1-foot thick topsoil cover to be installed within landscaped areas of the subject site.

Glenn

Glenn May

NYSDEC Geologist

(716) 851-7220 Work gmmay@gw.dec.state.ny.us

270 Michigan Avenue Buffalo, NY 14203-2999 United States of America

>>> Ryan Wohlstrom <<u>RWohlstrom@Langan.com</u>> 4/24/2014 05:42 PM >>> Good Afternoon Glenn,

Our Client (Macerich-Niagara, LLC) wishes to use topsoil from the Niagara Falls High School athletic fields as import fill for the FONF BCP site. As such, attached to this e-mail is a letter requesting NYSDEC to approve the use of this material as import fill based on recently collected soil samples.

Your prompt response would be greatly appreciated. Please feel free to reach out with any questions or concerns.

Thank you, -Ryan

Ryan J Wohlstrom Senior Staff Engineer

Direct: 203.784.3069 Mobile: 203.464.2731

LANGAN

Phone: 203.562.5771 Fax: 203.789.6142

Long Wharf Maritime Center 555 Long Wharf Drive New Haven, CT 06511-6107

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Alison Suarato

From: Glenn May <gmmay@gw.dec.state.ny.us>

Sent: Monday, May 19, 2014 11:10 AM

To: Ryan Wohlstrom

Subject: Re: FONF Expansion/Sabre Park BCP: Importation of Topsoil

Ryan,

A review of the analytical results in the May 16, 2014 letter from you and Jamie Barr indicates that the topsoil/chipped composted vegetation mix from the inactive Town of Tonawanda Landfill is suitable for use as part of the 1-foot thick topsoil cover to be installed within landscaped areas of the subject site.

Glenn

Glenn May NYSDEC Geologist

(716) 851-7220 Work gmmay@gw.dec.state.ny.us

270 Michigan Avenue Buffalo, NY 14203-2999 United States of America

>>> Ryan Wohlstrom <<u>RWohlstrom@Langan.com</u>> 5/16/2014 04:34 PM >>> Good Afternoon Glenn,

Our Client (Macerich-Niagara, LLC) wishes to use topsoil from the inactive Town of Tonawanda Landfill located off of East Park Drive, north of the I-290 Expressway and directly south of the City of Tonawanda in Erie County. The topsoil is a manufactured mix of chipped composted vegetation form the October storm event mixed with a clean, virgin silty loam originating from the excavation for the Buffalo General Surgical Center on the corner of Main and High street in Buffalo, New York.

Attached to this e-mail is a letter requesting NYSDEC to approve the use of this material as import fill based on recently collected soil samples.

Your prompt response would be greatly appreciated. Please feel free to reach out with any questions or concerns.

Thank you, -Ryan

Ryan J Wohlstrom Senior Staff Engineer Direct: 203.784.3069 Mobile: 203.464.2731

LANGAN

Phone: 203.562.5771 Fax: 203.789.6142

Long Wharf Maritime Center 555 Long Wharf Drive New Haven, CT 06511-6107

www.langan.com

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APPENDIX F Remediation-Related Permits



NIAGARA FALLS WATER BOARD WASTEWATER FACILITIES WASTEWATER DISCHARGE PERMIT FOR INDUSTRIAL COMMERCIAL USER

PERMIT NO. ICU – 72 Mark Cerrone, Inc. – Sabre Park Site

In accordance with all terms and conditions of the Niagara Falls Water Board Regulations Part 1960 and also with all applicable provisions of Federal and State Law or regulation:

Permission is Hereby Granted To: Mark Cerrone, Inc. Sabre Park Site.

located at: 1705 Factory Outlet Blvd., Niagara Falls, NY 14304

classified by SIC No(s): None

for the contribution of wastewater into the Niagara Falls Water Board Publicly-Owned Treatment Works (POTW).

EFFECTIVE THIS 17th DAY OF October 2013 TO EXPIRE THIS 17th DAY OF October 2014 This permit modified 10/22/13

for

Paul J. Drof - Executive Director of the Niagara Falls Water Board

Signed this 22nd Day of October 2013

allarte, Zayobel

REVISED - REV /

LIST - DISCHARGE IDENTIFICATION

OUTFALL	DESCRIPTION	LOCATION	RECEIVING
MS #1	Monitoring Site No. 1	1705 Factory Outlet Blvd. (8" property sewer connects to 12" NFWB sewer)	Contaminated Storm and Ground Water
		i.	

A. GENERAL WASTEWATER DISCHARGE PERMIT CONDITIONS

- 1. Flow monitoring should be performed concurrently with any Wastewater Discharge Permit sampling and should be reported at the same time as analytical results. If it is not feasible to perform flow monitoring, an estimate of flow (method of estimated flow preapproved by the Niagara Falls Water Board) should be submitted with the analytical results.
- 2. All sampling for pretreatment compliance purposes shall be coordinated through the Industrial Monitoring Coordinator.
- 3. All analyses must be performed by a laboratory using analytical test methods specified in 40 CFR Part 403.12.
- 4. All samples shall be handled in accordance with EPA approved methods. Chain of Custody records shall be submitted with all sampling results.
- 5. All conditions, standards and numeric limitations of Part 1960 of the Niagara Falls Water Board Regulations are hereby incorporated into this permit by reference. These conditions, standards and numeric limitations must be complied with. Failure to comply with any part of said ordinance constitutes a violation and is subject to enforcement action(s) described in Part 1960.9 of said regulation.
- 6. Any violation noted by the Industrial User (IU) must be reported immediately to the Niagara Falls Water Board Wastewater Facilities. In accordance with Federal Regulation 40 CFR, Part 403.12(g), any violation noted by the ICU must be re-sampled, analyzed and resubmitted to the NFWB Wastewater Facility within thirty (30) days.
- 7. Sampling frequency for any permitted compounds may be increased beyond the requirements set forth in Section C and D of this permit. If the permittee monitors (sample and analysis) more frequent than required under this permit, <u>all</u> results of this monitoring must be reported.

- 8. As noted in Part 1960.6 of the Niagara Falls Water Board Regulation, "Personnel as designated by the Director shall be permitted any anytime for reasonable cause to enter upon all properties served by the NFWB POTW for the purpose of, and to carry out, inspection of the premises, observation, measurement, sampling and testing, in accordance with provisions of the Regulation."
- As noted in Part 1960.5 of the Niagara Falls Water Board Regulation, significant changes in discharge characteristics or volume must be reported immediately to the NFWB – Wastewater Facilities.
- 10. As noted in Part 250.6 of the Niagara Falls Water Board Regulation, "Permits are issued to a specific user for a specific monitoring site. A permit shall not be reassigned or transferred without the approval of the Director which approval shall not be unreasonably withheld. Any succeeding owner or user to which a permit has been transferred and approved shall also comply with all terms and conditions of the existing permit."
- 11. Periodic Self-Monitoring Reports (PSMR) shall be submitted as directed in Section D of this permit. Such PSMRs shall obtain the following information.
 - a) Name of permitted facility,
 - b) The exact place, date and time of sampling,
 - c) The dates the analysis were performed,
 - d) The person(s) who performed the analysis,
 - e) The analytical techniques or methods used.
 - f) The results of all required analysis in concentration and mass,
 - g) The flow quantity measured during the 24 hour period of sample collection and the means by which the flow quantity was derived, and
 - h) The report shall be signed by a "Responsible Company Official" acknowledging the following statement:

A. GENERAL WASTEWATER DISCHARGE PERMIT CONDITIONS CON'T

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

12. All reports shall be submitted to the following address:

Industrial Monitoring Coordinator Niagara Falls Water Board Wastewater Facilities 5815 Buffalo Avenue Niagara Falls, New York 14304

B. SPECIFIC WASTEWATER DISCHARGE PERMIT CONDITIONS

- The chemistry of the groundwater and storm runoff may fluctuate. As such, the wastewater must be stored in tanks and tested analytically for the list of pollutants contained in Attachment A. The results should be compiled in a monthly report and submitted to the Niagara Falls Water Board. The target list is subject to change as more data is obtained.
- 2) All conditions, standards and pollutant limitations contained in the Niagara Falls Water Board Regulations Part 1960 are incorporated into this permit by reference.
- 3) The daily discharged will be measured by a flow meter. These daily measurements will be compiled in a monthly report and submitted to the Niagara Falls Water Board along with the analysis results.

C. <u>DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS</u>

During the period beginning the effective date of this permit and lasting until the expiration date, discharge from the permitted facility outfall(s) shall be limited and monitored by the permittee as specified below.

OUTFALL NUMBER SAMPLE EFFLUENT	DISCHARGE	LIMITATIONS		MINIMUM MONITORING REQUIREMENTS MEASUREMENT		
PARAMETER	ANNUAL DAILY AVERAGE MAXIMUM		UNITS	FREQUENCY	TYPE	
MS #1 Flow	0.025	0.035	MGD	Daily	Effluent Meter	
MS #1 Pollutant List "Attachment A"		Local Limit Attachment A	Lbs/day	Monthly	Grab	
MS #1 T. Suspended Solids	350	375	Lbs/day	Monthly	Grab	
MS #1 T. Chromium	1.75	2.00	Lbs/day	Monthly	Grab	

C. <u>DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS</u> CON'T

SAMPLE TYPE FOOTNOTES

- (1) Sample shall consist of a laboratory composite of four (4) grabs collected equally throughout the batch discharge period. A total of four (4) samples (batches) will be analyzed and reported each quarter for each outfall.
- (2) A sample shall consist of a 24-hour laboratory composite of four (4) grab samples collected evenly spaced over the period of release. pH of each grab sample shall be tested immediately upon collection.
- (3) Sample shall consist of a 24-hour flow proportion composite sample collected from each monitoring station.
- (4) Flow will be monitored continuously via water meters.
- (5) Sample shall consist of a 24-hour time proportion composite sample from each approved discharge monitoring point.
- (6) Determination of quantities shall be derived from five (5) 24-hour proportion composite samples collected from each approved monitoring point.
- (7) Same as (3), however, five (5) samples will be collected per quarter from the monitoring station and analyzed by and at the Niagara Falls Water Board's expense.

D. <u>DISCHARGE MONITORING REPORTING REQUIREMENTS</u>

During the period beginning the effective date of this permit and lasting until its expiration date, discharge monitoring results shall be summarized and reported by the permittee, as noted below. Semiannual Self-Monitoring Reports will be submitted February 28th and August 31st. Annual Reports will be submitted by February 28th.

OUTFALL NO.	PARAMETER	REPORTING FREQUENCY
MS #1	Flow	Monthly
MS #1	Pollutant List "Attachment A"	Monthly

Attachment A

Fashion Outlet/Sabre Park Remedial Water

Analysis Laboratory
Sample dates

Paradigm 9/21/2013

10/2/2013

				Local Limit
A.VOLATILE COMPOUNDS		ug/L	LBS/DAY	LBS/Day
VINYL CHLORIDE	<	10.0	0.002086	0.03
1,1 DICHLOROETHYLENE	<	10.0	0.002086	0.065
METHYLENE CHLORIDE	<	10.0	0.002086	0.15
1,2 DICHLOROETHYLENE	<	10.0	0.002086	0.065
CHLOROFORM	<	10.0	0.002086	0.055
1,1,1 TRICHLOROETHANE	<	10.0	0.002086	0.02
CARBON TETRACHLORIDE	<	10.0	0.002086	0.046
BENZENE	<	10.0	0.002086	0.062
DICHLOROPROPYLENES	<	10.0	0.002086	NONE
TRICHLOROETHYLENE	<	10.0	0.002086	0.088
DICHLOROBROMOMETHANE	<	10.0	0.002086	0.011
TOLUENE	<	10.0	0.002086	0.344
1,1,2-TRICHLOROETHANE	<	10.0	0.002086	0.02
TETRACHLOROETHYLENE	<	10.0	0.002086	0.114
DIBROMOCHLOROMETHANE	<	10.0	0.002086	0.015
MONOCHLOROBENZENE	<	10.0	0.002086	0.2
MONOCHLOROBENZOTRIFLUORIDES	<	10.0	0.002086	0.2
ETHYLBENZENE	<	10.0	0.002086	0.047
BROMOFORM	<	10.0	0.002086	0.2
1,1,2,2-TETRACHLORETHANE	<	10.0	0.002086	0.027
MONOCHLOROTOLUENES	<	10.0	0.002086	1.4
XYLENES(M,P,O)	<	10.0	0.002086	0.344
		ug/L	LBS/DAY	Local Limit
B.ACID COMPOUNDS		400	0.00000	LBS/Day
MONOCHLOROPHENOLS	<	10.0	0.002086	0.063
DICHLOROPHENOLS	<	10.0	0.002086	0.038
MONOCHLOROCRESOLS	<	10.0	0.002086	0.036
TRICHLOROPHENOLS	<	10.0	0.002086	0.102
PENTACHLOROPHENOL	<	10.0	0.002086	0.038

C.BASE/NEUTRAL COMPOUNDS					
DICHLOROBENZENES	<	10.0	0.002086	0.016	
TRICHLOROBENZENE	<	10.0	0.002086	0.076	
DICHLOROTOLUENE	<	10.0	0.002086	0.016	
NAPHTHALENE	<	10.0	0.002086	0.022	
HEXACHLOROBUTADIENE	<	10.0	0.002086	0.009	
HEXACHLOROCYCLOPENTADIENE	<	10.0	0.002086	0.088	
TETRACHLOROBENZENES	<	10.0	0.002086	0.076	

PAGE 2 OF 2

TRICHLOROTOLUENES	<	10.0	0.002086	0.076	
HEXACHLOROBENZENE	<	10.0	0.002086	0.00016	
DICHLOROBENZOTRIFLUORIDES	<	10.0	0.002086	0.20	
ACENAPHTHENE	<	10.0	0.002086	0.024	
PHENANTHRENE	<	10.0	0.002086	0.017	
FLUORANTHENE	<	10.0	0.002086	0.009	
PYRENE	<	10.0	0.002086	0.009	
	T		T	···-	
		ug/L	LBS/DAY		
CHRYSENE	<	10.0	0.002086	0.009	
BENZO(A)ANTHRACENE	<	10.0	0.002086	0.009	
DIMETHYLPHTHALATE	<	10.0	0.002086	0.052	
BUTYLBENZYLPHTHALATE	<	10.0	0.002086	0.102	
DI-N-BUTYLPHTHALATE	<	10.0	0.002086	0.052	
DIETHYLPHTHALATE	<	10.0	0.002086	0.204	
DI-N-OCTYLPHTHALATE	<	10.0	0.002086	0.052	
NITROSODIPHENYLAMINE	<	10.0	0.002086	0.025	
D.PESTICIDES/PCBs					
HEXACHLOROCYLOHEXANES		0.263	5.49E-05	0.0013	
PCB's(AROCHLOR 1248)	<	1.0	0.000209	0.00024	
ENDOSULFAN I + II + ENDOSULFAN SULFATE	<	1.0	0.000209	0.0012	
MIREX	<	1.0	0.000209	0.00032	
DECHLORANE PLUS	<	1.0	0.000209	0.006	
HEPTICHLOR + HEPTICHLOR EPOXIDE	<	1.0	0.000209	0.00002	
CONVENTIONAL C. METAL C.				Local Limit	Permit Lim.
CONVENTIONALS, METALS, CYANIDE		mg/L	LBS/DAY	LBS/Day	LBS/Day
ALUMINUM			0	19.4	

CADMIUM	<	0.005	0.001043	0.008	
CHROMIUM		4.89	· 1.00	0.04	2.00
COPPER		0.131	0.02733	0.965	
LEAD		0.0107	0.002232	0.32	
MERCURY		0.000723	0.000151	0.00064	
NICKEL		0.124	0.02587	0.4	
ZINC		0.762	0.158972	1.38	
PHENOLICS		0.005	0.001043	0.474	
TSS		1400	292.075	200	375
TOTAL ORGANIC CARBON (DOC)		4.64	0.96802	48.8	
TOTAL PHOSPHOROUS		0.4	0.08345	2	
SOC			0	48.8	
TOTAL CYANIDE	<	0.01	0.002086	0.155	
FLOW		0.025	MGD	0.025	

H:WINWORD\ZAEPFEL\ICU\PERMITS\\Mark Cerrone – Sabre Park #ICU-72

New York State Department of Environmental Conservation Division of Materials Management, Region 9

270 Michigan Ave, Buffalo, New York 14203-2915

Phone: (716) 851-7220 Fax: 716-851-7226

Website: www.dec.ny.gov

Joe Martens Commissioner

October 21, 2013

Mr. Michael Gullo Modern Landfill Inc. P. O. Box 209 Model City, New York 14107

Dear Mr. Gullo:



Macerich Niagara LLC 1705 Factory Outlet Boulevard Niagara Falls, New York Soil and wood debris Application #M13-2676

The Department has reviewed the above referenced application for Treatment or Disposal of an Industrial Waste Stream (Form 47-19-7). Based on the information provided, this waste is acceptable for disposal at the **Modern Landfill as a one time occurrence**. Other waste streams will be reviewed under separate application.

In the event that significant changes in the information presented on the application occur, you shall immediately notify this Department in writing. Such changes shall include, but not be limited to, changes in: tonnage, process, facility name or address, waste composition and/or hauler.

Enclosed is a copy of the approved application. Should you have questions, please call this office at 716/851-7220.

Sincerely,

Dennis R. Weiss, P.E.

Acting Regional Materials Management Engineer

DRW/ed

Enclosure

47-19-7 (10/88) - Text 12
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDSOU WASTE • BUREAU OF HAZARDOUS WASTE
OPERATIONS
60 WOLF ROAD, ALBANY, NEW YORK 12293-4017

APPLICATION FOR TREATMENT OR DISPOSAL OF AN INDUSTRIAL WASTE STREAM SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

FOR STATE USE ONLY							
SITE NO.	APPLICATION NO.	DATE RECEIVED					
32N30	M13-2676	10/18/13					
DEPARTMEN Approved	T ACTION Disapproved	DATE 0/21/13					
The)	1, 1					

1. NAME OF PROJECT/FACILITY	2. COUNTY NIAGARA		3. SITE NUMBER 32N30
MODERN LANDFILL, INC.	6. ADDRESS (Street, City, State, Zip Code		6. TELEPHONE NO
RICHARD WASHUTA	4746 Model City Road, Model	City, NY 14107	(716) 754-8226
6 NAME OF OPERATOR RICHARD WASHUTA	8. Addition State 2p Code Pletcher & Harold Road, Mode		(716) 754-8226
10. METHOD OF TREATMENT OR DISPOSAL	13 14	<u> </u>	Land was the control of the control
DANITADVI ANITSII I DOO			
SANITARY LANDFILL - D90	BCP # C93	2/62	
11, COMPANY GENERATING WASYE	12. ADDRESS OF FACILI	TY GENERATING WASTE (Breet, City, Stale, Zip Code)
MACERICH NIAGARA LLC. 13. REPRESENTATIVE OF WASTE GENERATOR 14. MAILING.	ADDRESS OF REPRESENTATIVE	overet Blu	16. TELEPHONE NO.
	MARYLANDAN NENY	/	716-282-5244
16, DESCRIPTION OF PROCESS PRODUCING WASTE	v .		
& Exponsion of Facility - Ningu	m take outlet mall -	- Execuvation	of former trail
1 17 EXPECTED ANNUAL WASTE PRODUCTION 1 18. W	ARTE HALLIED IN		
30,000 Tone Year Gellons Year Dour	ns Bulk Tank Roll-Olf Container	Dinor Desarp	more
1 19. WASTE COMPOSITION 70 1 190, Physical State	CT Obudes FOX Culty CT Contelled Cine	19o. pH Range	ı. <i>9</i>
	Sludgo 🔀 Solid 🗌 Contained Gas	mar/wearne	same and the same of the same in the same
19d, COMPONENTS	CONDENTRATION Upper Los	V (Dry Weight) wer Typical	UNIT (Check One) Wl. % ppm
1) Soil (Industrial Fill)		90	
2) Stone	A STATE OF THE STA		B C
3) Wood	a de seguirio grande gr	2,5	图 ()
	三大,被翻译。 只管生物家	,	
Waste No- NOII			Small Scool
20, IS AN ANALYSIS OF WASTE ATTACHED? 21. WAS A TOLF	No Si yes altach rosulls		Non-Hazardous
23, DETAIL ÂLL HAZARD AND NUISANCE PROBLEMS ASSOCIATED WIT		g, treatment and disposal pro	ecoulions.
NYSDEC PROJECT REP	Glenn May		
	/		
	- A A	.TV .W .O.A .	. Ma C
a Modern disposal services 4746	MODELCITY RIS, MODELC	117,109 94-0	13 (716)754-8226
24. WHERE WAS MATERIAL DISPOSED OF PREVIOUSLY?			
25. NAME OF WASTE TRANSPORTER 26. ADDRESS (Sins	el, Cily, State, Zip Code)	27, NYSDEC PERMIT No	. 28. TELEPHONE NO>
MARK Cerrory, Inc 2368 May	head Dr. Augora Tolish	94-723	716-282-5244
29. CERTIFICATION	<u>~ / </u>		un to the hand at me.
I hereby affirm under penalty of perjury that information p knowledge and berjef. Felse statements made herein are	iovjuegon ivis ionn and attached state Dintahable as a Class A misdemeanni	monta and exhibita is to r pursuant to Section 21	10.45 of the Penal Law.
B. GIGNATURE AND WILE OF REPRESENTATIVE OF WASTE, GENERAL			DATE
X/ los / Ca/	BOBAL FACILITY Waste Approval C	ect mgr.	10/16/13
D. SIGNATURE AND THE OF REPRESENTATIVE OF THEATMENT OR D	ISPOSAL FACILITY	7 /	DATE
Much Insullo -	- Waste Approval C	ourdinator	10/17/13



THIRD PARTY SIGNATURE AUTHORIZATION for special waste disposal

Name of Authorized Agent:	Title:
Jeff Salvatore	Title: Senior Project-Manager Telephone Number: 716-282-5244
Name of Company:	Telephone Number
MARK Cerrone, Inc	- 116-282-3297
The above broker/individual is authorized to	act as our authorized agent for the following purposes:
✓ Complete and sign Special Waste	Profile
Complete and sign Special Waste	Profile-Recertification
Authorize amendments to Special	Waste Profile
☑ Sign Contracts to dispose and/or t	transport material.
Sign certifications necessary to co	omply with landfill requirements.
Sign manifests to initiate shipmen	t to disposal facilities
ur authorized agent will notify us prior to any acti ocuments bearing our name.	ion stated above, and will provide us with copies of any
ame of Company:	Mailing Address:
acerich- Niagara LLC	1705 Factory Outlet Blud.
enerator Contact (Print Name):	Title: Aladdin Ghafari
laddin (shutari	AVP, Environmental Affairs
gnature:	Telephone Number:
AVA	310-394-6000

New York State Department of Environmental Conservation Division of Materials Management, Region 9

270 Michigan Avenue, Buffalo, New York 14203-2915

Phone: (716) 851-7220; Fax (716) 851-7226

Website: www.dec.ny.gov



OCT 22 2013

October 21, 2013

Mr. David Hanson Allied Waste Niagara Falls Landfill 5600 Niagara Falls Boulevard Niagara Falls, New York 14304

Dear Mr. Hanson:

Macerich Niagara LLC 1705 Factory Outlet Boulevard Town of Niagara, New York Soil Application #4145

The Department has reviewed the above referenced application for Treatment or Disposal of an Industrial Waste Stream (Form 47-19-7). Based on the information provided, this waste is acceptable for disposal at the **Allied Waste Niagara Falls**Landfill in Niagara Falls, New York.

In the event that significant changes in the information presented on the application occur, you shall immediately notify this Department in writing. Such changes shall include, but not be limited to, changes in: process, facility name or address, waste composition and/or hauler.

Enclosed is a copy of the approved application. Should you have questions, please call this office at 716/851-7220.

Sincerely,

Dennis R. Weiss, P.E.

Acting Regional Materials Management Engineer

DRW/ed

Enclosure

REPUBLIC SERVICES, INC.	Republic Services, Inc. 18500 N. Allied Way, Phoenix, AZ 85054	
	SPECIAL WASTE DEPARTMENT DECISION	
	Waste Profile # Expiration Date	
I. Decision Request:	☑ Initial ☐ Recertification ☐ Change	
Disposal Facility: 4215 - Niagara Falls		
Generator Name: Macerich-Niagara, LLC		
Generator Site Address: 1705 Factory Ou	itlet Blvd	
City: Town of Niagara	County: State: NY	Zip:
Name of Waste: Excavated soil from mall	expansion construction	
Estimated Annual Volume: 20000 Tons		
		<u> </u>
II. Special Waste Department De	cision: ☑Approved ☐Rejected	· · · · · · · · · · · · · · · · · · ·
Management Method(s):	10 (AMANA) (AMANA)	
	THE STATE OF THE S	
Problematic Special Waste according to	Republic? Yes 🛂 No	uponinina
If yes, which one?		
Approved by Special Waste Review Com	mittee?	
	Precautions, Conditions or Limitations on Approval	
The New York State Department of Er	vironmental Conservation, Division of Materials Management approved ap	olication #4145 on
10/21/13 for Soil from Macerich-Niaga	ra, LLC. The volume was amended to 20,000 Tons per the generator on 10	0/23/13.
		#
,		
	_	₹ :
Constitution to American Circumstance	327	winter De Torre Dieler
Special Waste Analyst Signature: Date: 10/23/2013	Name (P	rinted): <u>Terry Staley</u>
	V.	
III. Facility Decision:	Approved Rejected	
	Precautions, Conditions or Limitations on Approval	

By signing below the Congret Manager of	Design அரேees that a fylly executed Special Waste Service Agreement is on file for	this profile and that the
special waste file is complete	Joseph Le Jayres mara romy executed opecial vvaste dervice Agreement is on file for	/ / / / / / /
- 1/1//////	1/10 Atmom 1) AVII 14	AACON!
General Manager or Designed Date: 10/23/2013	Name (Printed):	11/1/10/00/0
Date. 10/23/2013	10179113	
	' / ' /	

New York State Department of Environmental Conservation

Division of Materials Management, Region 9 270 Michigan Avenue, Buffalo, New York 14203-2915

Phone: (716) 851-7220; Fax (716) 851-7226

Website: www.dec.ny.gov



October 23, 2013

OCT 2 9 2013

Mr. David Hanson Allied Waste Niagara Falls Landfill 5600 Niagara Falls Boulevard Niagara Falls, New York 14304

Dear Mr. Hanson:

Macerich Niagara LLC 1705 Factory Outlet Boulevard Town of Niagara, New York Soil Application #4145

The Department has reviewed your request to increase the tonnage for the above referenced application from 10,000 tons to 20,000 tons. The increased tonnage is approved. The soil will be inspected by the Department monitor to determine if it is suitable for use as alternate cover.

In the event that significant changes in the information presented on the application occur, you shall immediately notify this Department in writing. Such changes shall include, but not be limited to, changes in: process, facility name or address, waste composition and/or hauler.

Enclosed is a copy of the approved application. Should you have questions, please call this office at 716/851-7220.

Sincerely,

Dennis R. Weiss, P.E.

Acting Regional Materials Management Engineer

DRW/ed

Enclosure

New York State Department of Environmental Conservation

Division of Materials Management, Region 9

270 Michigan Avenue, Buffalo, New York 14203-2915 **Phone:** (716) 851-7220; **Fax** (716) 851-7226

Website: www.dec.ny.gov

April 30, 2014



Mr. David Hanson Allied Waste Niagara Falls Landfill 5600 Niagara Falls Boulevard Niagara Falls, New York 14304

Dear Mr. Hanson:

Macerich Niagara LLC 1705 Factory Outlet Boulevard Niagara Falls, New York Soil, Application #4177

The Department has reviewed the above referenced application for Treatment or Disposal of an Industrial Waste Stream (Form 47-19-7). Based on the information provided, this waste is acceptable for disposal at the Allied Waste Niagara Falls Landfill in Niagara Falls, New York.

In the event that significant changes in the information presented on the application occur, you shall immediately notify this Department in writing. Such changes shall include, but not be limited to, changes in: process, facility name or address, waste composition and/or hauler.

Enclosed is a copy of the approved application. Should you have questions, please call this office at 716/851-7220.

Sincerely,

Dennis R. Weiss, P.E.

Regional Materials Management Engineer

DRW/ed

Enclosure

REPUBLIC SERVICES, INC.		Services, I	nc.	
	<u> </u>		VY #417	7
	SPECIAL WASTE DEPAI		<u> </u>	
	Waste Profile #	Expiration Date	<u> </u>	
	4215147049	3/14/2015		
I. Decision Request:	☑ Initial ☐ Recertificat	ion Change		
Disposal Facility: 4215 - Niagara Falls				
Generator Name: Macerich-Niagara				
Generator Site Address: 1705 Factory Ou	itlet Blvd.			
Cîty: Niagara Falls	County:	State: NY	Zip:	
Name of Waste: Construction soil from ma	ll expansion			
Estimated Annual Volume: 2500 Tons				
II. Special Waste Department Dec	cision: Approved	Rejected		
		-		
Management Method(s):				
Problematic Special Waste according to	Republic? Yes	No		
If yes, which one?				
Approved by Special Waste Review Com	mittee?	No Vi Not Applicable		
The waste must be able to pass a Pair	Precautions, Conditions or L nt Filter test prior to shipment and	or and and company of the contract of	ermitted for landfill o	disposal.
Special Waste Analyst Signature: Date: 5/1/2014 III. Facility Decision:	Approved Precautions, Conditions or L	୍ଲି Rejected .imitations on Approval	Name (Printed): <u>Te</u>	∍rry Staley
By signing below, the General Manager or I special waste file is complete? General Manager of Designed LUU Date: 5/1/2014	I (L.	Special Waste Service Agreement is Name (Printed):	s on file for this profile	

New York State Department of Environmental Conservation

Division of Materials Management, Region 9

270 Michigan Avenue, Buffalo, New York 14203-2915

Phone: (716) 851-7220; Fax (716) 851-7226

Website: www.dec.ny.gov



August 28, 2014

Mr. David Hanson Allied Waste Niagara Falls Landfill 5600 Niagara Falls Boulevard Niagara Falls, New York 14304

Dear Mr. Hanson:

Macerich-Niagara 1705 Factory Outlet Boulevard Niagara Falls, New York Construction soil Application #4192

The Department has reviewed the above referenced application for Treatment or Disposal of an Industrial Waste Stream (Form 47-19-7). Based on the information provided, this waste is acceptable for disposal at the **Allied Waste Niagara Falls Landfill** in Niagara Falls, New York.

In the event that significant changes in the information presented on the application occur, you shall immediately notify this Department in writing. Such changes shall include, but not be limited to, changes in: process, facility name or address, waste composition and/or hauler.

Enclosed is a copy of the approved application. Should you have questions, please call this office at (716) 851-7220.

Sincerely,

Dennis R. Weiss, P.E.

Regional Materials Management Engineer

DRW/bb

Enclosure

REPUBLIC SERVICES, INC.		Services, I	nc.		
			NV#4197		
SPECIAL WASTE DEPARTMENT DECISION					
Waste Profile # Expiration Date					
	42151414875	8/28/2015			
I. Decision Request:	☑ Initial ☐ Recertificati	on Change			
Disposal Facility: 4215 - Niagara Falls					
Generator Name: Macerich-Niagara					
Generator Site Address: 1705 Factory Ou	tlet Blvd.				
City: Niagara Falls	County:	State: NY	Zip:		
Name of Waste: Construction Soil from ma	ıll expansion				
Estimated Annual Volume: 5000 Tons					
II. Special Waste Department De	cision:	Rejected			
,,,,,,,,					
Management Method(s):		•			
Problematic Special Waste according to	Republic? Yes	No			
If yes, which one?					
Approved by Special Waste Review Com	mittee? Yes II	No 😰 Not Applicable			
	Descritions Conditions of C	imitations on Annuaral			
	Precautions, Conditions or Li				
NY State Dept of Environmental Cons 8/28/2014.	ervation Division of Materials Mana	agement, Region 9 approved a	ipplication #4192 on		
G202014.					
ر بيد بما المعاد فهوري					
Samuel Company	\sim \sim \sim				
Special Waste Analyst Signature:			Name (Printed): Suzanne Glass		
Date: 8/28/2014	· X				
III. Facility Decision:	VA proved	Rejected			
•	Precautions, Conditions or Li	•			
			a coprogram to the professional trace of the second		
	- 1				
By signing below, the General Manager or I special waste file is complete.	Designee agrees that a fully executed S	Special Waste Service Agreement	is on file for this profile and that the		
special waste life is complete.	11/1/1/1/20	λ	as blace		
General Manager or Designed	y // Tansor	Name (Printed):	10 ITHNSON		
Date: 8/28/2014	180/29/14	-			
	versing				



THIRD PARTY SIGNATURE AUTHORIZATION for Special Waste Disposal

Date: 9-17-13

This Authorization is only valid for 3 years from the above date.

To Whom It May Concern:

Please be advised that the following company/individual has been appointed to work as our agent for purposes of managing waste materials that we may generate.

Name of Authorized Agent	Title
Jeff Salvatore	Senior Project Manager
Name of Company	Telephone Number
Mark Cerrone, Inc	716-282-5244

The above broker/individual is authorized to act as our authorized agent for the following purposes:

- Complete and sign Special Waste Profile.
- Complete and sign Special Waste Profile-Recertification.
- Authorize amendments to Special Waste Profile.
- Sign contracts to dispose and/or transport material.
- Sign certifications necessary to comply with landfill requirements.
- Sign manifests to initiate shipment to disposal facilities.

Our authorized agent will notify us prior to any action stated above, and will provide us with copies of any documents bearing our name.

Name of Company Macerich-Niagara/LLC	Mailing Address 1705 Factory Outlet Blvd
Generator Contact (Print Name) Aladdin Ghafari	Aladdin Ghafari AVP, Environmental Affairs
Signature	Telephone Number 310-394-6000

PAGE 84/84

: - 01/15/2014 12:52 7168245313

TRUCKLOIS BAR CORP

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PART SHA

WASTE TRANSPORTER PERMIT NO. SAJER

PERMIT MISUED TO

PERMIT TYPE:

ROQUOIS BAR CORPORATION 188 COMMERCE DRIVE LADKAMMANNA NY 14218

DINEW # RENEWAL E MODIFICATION

CONTACT HANDS

ARNOLD COLLIER

EFEE

EXPIRATION DATE: LIR EPA ID NUMBER 11/24/2019 44/2012014

ANTHORIZED VEHICLES

(790)270-0438

Thir Permittee is Authorized to Operate the Passaving Vehicles to Transport Window.

(Aphrolis envisions in 44s are authorized to bod Plantandod Row Springs and/or large.)

12 (Thirteen) Permitted Vehicle(s)



PAGE S OF 3



PART 364

WASTE TRANSPORTER PERMIT NO. SALTER

Probability to Affilia 27, when it and its of the Maniparaneous Communities Law and a HYCRR 304

PERMIT ISULTED TO:

ROQUOIS BAR CORPORATION 155 COMMERCE DRIVE LACKAHANNA, NY 14218

AMINOLO COLLIER CONTACT NAME:

COUNTY TELEPHONE NO:

部記 (718)270-0433 PERMIT TYPE:

口作的 IN RENEWAL

INDDIFICATION

ELLECTIVE DATE ECPRATION DATE: 11/24/2013 计应制设计4

US EPA ID RUMINER

AUTHORIZED WANTE TYPES BY DESTRICTION PACILITY:

The Pornities is Authorized to Transport the Pelisping Wastin Type(e) to the Destination Facility listed :

Continuina Paritty :	Legentiers	temp totalist		Rota
AGE SHEET COGE LLC	DIESUSH , NY	Note I financiam inclusiva Consumpted		
ALBUMI ANGAIL.	AURIEN, NY	Non-Parameter Industrial Community Ashabiti . Patrimon Contactingled Sell	-	
efi magara 1941 iş landifili facility	W. B.LLER ANIMALIE	Aller Street Annual Street Adventure Street Adventure Street Adventure Street S		
CHARLISTIN COUNTY FAMORIES	JANEER ROHN, NY	Point-Properties technical (Compounds) Whath Trops Advanta. Pulsefuer Conjuntinated State Grango Top Wante	•	,
CID LANDPRA, INC.	CHAPPED, NY	Non-Visuacious tratashisi/Commercial Pairelaus Contervisated Stat Administra		•.
High Astron, Washirm Expiration Landill	Pairport , NY	Nep-Jaconskes intental/Contracts Astronom Petrojom Contentrated Sul		

WAS VOLKED AND ALE LALER BA DESTINATION LACIFILA FIRM (Continued by using beads)

NOTE: By exceptance of this parink, the permittee agrees that the permit is contrigent upon sixtal companion with the Defect requilibries, and the Contrigent upon sixtal companion in the pack of the page.

ADDRESS.

New York State Department of Endronmental Conservation Christon of Materials Management - Waste Transporter Program 625 Broadway, 9th Picor Albery, NY 12233-7251

ALTHORIZED BIGNATURE:

PAGE 1 OF 3

The first to the time the state of the state . The company of the control of the control

INCOLUCIS BAR CORP

PAGE 83/64

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION OF MATERIALS MANAGEMENT

PART 384

WASTE TRANSPORTER PERMIT NO. SA-759

Provinces Apada 27, 1984 8 and 16 of the Seventeckel Companion Law and 6 NYC NR NEX

PERMIT ISSUED TO:

PERMIT TYPE:

ROQUOIS BAR CORPORATION 155 COMMERCE DRIVE LACKAMANNA, NY 14218

7168245313

DNEW E RENEWAL I MODIFICATION

CONTACT NAME: COUNTY: TELEPHONE NO:

81/15/2014 12:52

ARMOLD COLLIER ERIE

BFFECTIVE DATE: IDMPRATION DATE: US EPA ID NUMBER:

11/24/2019 11/23/2014

(716)270-0485

AUTHORIZED WASTE TYPES BY SERTMATION RACILITY (Continued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Lengthon	Winds Typesial None
HAAND LANDENS	YH , ACT EXCHA.	Nas-Nagraham Industrial Covernments
HILL SEAL INDIGET	BERDEN; NY	Non-Hearndone Industrial/Cuty/nitrakt Petroluum Conjuntinated Soli
MODURN LANGELL INC.	MODEL CTY, NY	Non-Reconstruct Industricis Commercial Wester Error Antonisto Percolate Contemporated Golf
Oriento County Stanling Length	Sintay, NY	Non-finishmous (righterful/Constitutate) Authoritie Petralisist Contemprished Stati Shalipa from Statingto or Winter Stating Trinstruent Plant
BENECA MEADOWN LANDFIL	MATHERLOO, NY	Poledium Columbiated Soll
TONUMBON (T) LANGELL	TOWNSHIP A. NY	Non-Figurebus Industrial Communical Publishint Conjunting at Ball
TOWNAMEN TERMINAL TREATMENT FACILITY	TONKAMOA, NY	Non-Heardina Industria Copyridadel

PAGE 2 OF 3



PART 364

WASTE TRANSPORTER PERMIT NO. 9A-759

Pursuant to Article 27, Tries 5 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

PERMIT TYPE:

IROQUOIS BAR CORPORATION 155 COMMERCE DRIVE LACKAWANNA, NY 14218

I NEW ■ RENEWAL ☐ MODIFICATION

CONTACT NAME:

ARNOLD COLLIER

EFFECTIVE DATE: EXPIRATION DATE: 11/24/2013 11/23/2014

COUNTY; TELEPHONE NO:

(716)270-0433

US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:

ERIE

The Permittee is Authorized to Transport the Following Weste Type(s) to the Destination Fecility listed:

Continution Paritity :	Lostion	Wanto Typo(e)	Noti
AES GREENIUGE LLC	DREEDEN, NY	Non-Hexardeus Industriel/Commercial	
AUBURN LANDFILL	AUBLIEN , NY	Non-Hazardous Industrial/Commercial Astentos Petrolaum Contamineted Soli	
BFI MAGARA FALLS LANDFILL FAC	YN, ALIAH ARABAN YTI'L	Non-Hazardous Industriel/Commercial Waste Tires Asbestos Patroleum Corseminated Solf Grusse Thep Waste	
CHAUTAUGUA COUNTY LANDRILL	YM , MNOTBEIMAL	Non-Heardow Industrial/Commercial Waste Tires Astraction Petroloum Conteminated Soil Greese Trap Waste	,
CID LANDFILL, INC.	CHAFFEE, NY	Non-Hazardous Industrial/Communical Petroleum Conteminated Soil Adhesios	
High Aores Western Expansion Land		Non-Histardous industrial/Commercial Ashestos Patroleum Contembrated Soil	

^{***} AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ***

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict combiliance with the Environmental Conservation Law, all applicable requisitions, and the General Conditions printed on the back of this page.

> C. 1957 (1967) 1967 (1967) 1967 (1967) 1967 (1967) The Same of the control of the same

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program

625 Broadway, 9th Floor Albany, NY 12233-7251

AUTHORIZED SIGNATURE:

PAGE 1 OF 3

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-759

Pursuant to Article 27, Tritles 3 and 16 of the Environmental Conservation Law anti 6 NYCRR 364

PERMIT ISSUED TO:

PERMIT TYPE:

IROQUOIS BAR CORPORATION 155 COMMERCE DRIVE LACKAWANNA, NY 14218

DNEW M RENEWAL □ MODIFICATION

CONTACT NAME:

ARNOLD COLLIER

EFFECTIVE DATE:

11/24/2013

COUNTY: :

ERIE

EXPIRATION DATE:

11/23/2014

US EPA ID NUMBER:

TELEPHONE NO:

(716)270-0433

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Cortinued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	lote
HYLAND LANDFILL	ANGELICA, NY	Non-Hazerdous Industrial/Commercial	
MILL SEAT LANDFILL	BEFGEN; NY	Non-Pazardous Industrial/Commercial Petroleum Conterminated Soli	,
MODERN LANDFILL, INC.	MODEL CITY, NY	Non-Hazardous Industrial/Commercial Waste Tires Asbestos Patroleum Contaminated Soli	
Onterfo County Sanitary Landfill	Stanley , NY	Non-Hazardous Industrial/Commercial Asbestos Petroleum Contemnated Soil Studge from Sewage or Water Supply Treatment Plant	
SENECA MEADOWS LANDFILL	WATERLOO, NY	Petroleum Contentinated Soil	
TONAMANDA,(T) LANDFILL	TONAMANDA, NY	Non-risserdous industrial/Commercial Petroleum Conteminated 808	
TONAWANDA TERMINAL TREATMENT FACILTY	TONAWANDA, NY	Nort-Hazardous Industrial/Commercial	

PART 364

WASTE TRANSPORTER PERMIT NO. 8A-789

Purpuent to Article 27. Titles 5 and 15 of the Environmental Censervation Law and 5 NYCRR 384

PERMIT ISSUED TO:

PERMIT TYPE:

IROQUOIS BAR CORPORATION 155 COMMERCE DRIVE LACKAWANNA NY 14218

DNEW **RENEWAL** I MODIFICATION

CONTACT NAME: COUNTY:

ARNOLD COLLIER

ERIE

EFPECTIVE DATE: EXPIRATION DATE:

11/24/2013 11/23/2014

TELEPHONE NO:

(716)270-0433

US EPA ID NUMBER:

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Weste:

(Vehicles enclosed in <>'s are authorized to held Residential Rew Sewage and/or Suptage only) .

13 (Thirteen) Permitted Vehicle(s)



PART 384

Waste transporter Permit No. <u>9A-717</u>

DEDMIT ICOLUMN IN	Purauent to Afficia 27, Titles 3 and 15 of t	is Emprovemental Connervation Law and 8 NYCRR 264	
PERMIT ISSUED T	O:	PERMIT TYPE:	•
G. J. LLOYD ENTI 7064 SCHULTZ RO NORTH TONAWA	DAD	D NEW RENEWAL D MODIFICATION	
CONTACT NAME: COUNTY TELEPHONE NO:	GREGORY J. LLOYD NIAGARA (718)283-1138	EFFECTIVE DATE: 04/28/2013 EXPIRATION DATE: 04/27/2014 US EPRID NUMBER:	
AUTHORIZED WASTE TY	PES BY DESTINATION FACILIT		,, ,,2,

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed:

Destination Facility	Location	Waste Type(s)		Note
BFI NIAGARA FALLS LANDFILL FACILITY	MAGARA FALLS, NY	Non-Hazardous Industrial/Commercial		Note
		Petroleum Contaminated Soil Sludge from Sewage or Water Supply Treatment Plant		
MODERN LANDFILL, INC.	MODEL CITY, NY	Non-Hazerdous Industria/Commercial	-/	
		Petroleum Conteminated Soil .		
TONAWANDA (T) LANDFILL	TONAWANDA , NY	Sludge from Sewage or Water Supply Treatment Plant . Petroleum Contermated Soil		<u></u>
,	Torris		•	

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance: with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program 625 Broadway, 9th Floor Albany, NY 12233-7251

PAGE 1 OF 2

This renewed permit is not valid until the effective date listed on the permit

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-717

Pursuant to Article 27, Tibes 3 and 15 of the Environmental Conservation Law and 6 NYCRE 384

EXPIRATION DATE:

PERMIT ISSUED TO:		PERMIT TYPE:
G. J. LLOYD ENTERPRISES, INC.		□ NEW
7064 SCHULTZ ROAD	0.	RENEWAL
NORTH TONAVVANDA, NY 14120		□ MODIFICATION
CONTACT NAME: GREGORY J. LLOYD COUNTY: NAGARA	٠,	EFFECTIVE DATE: 04

TELEPHONE NO: (716)283-1138 AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sewage sind/or Septage only)

oliver twist 7166550776 p.2

TERMS AND CONDITIONS

These Purchase Order Terms and Conditions, and any attachments hereto (collectively, the "Purchase Order") are the exclusive terms and conditions for the delivery of the specified materials, equipment and services ("Goods") by the named Vendor ("Vendor") to Mark Cerrone Inc. ("MCI").

- 1. Acceptance by MCI. Delivery of Goods will be deemed to be complete only when delivered pursuant to a valid Purchase Order agreement and Order prior to inspection by MCI. All Goods are subject to MCI's right of inspection following delivery by Vendor. Payment for Goods under this Purchase discretion, comply with the terms and conditions of this Purchase Order or MCI's requirements.
- 2. Time for Delivery. Time is of the essence with respect to Vendor's delivery of the Goods under this Purchase Order. Delivery will be strictly in accordance with MCI's delivery schedule. If Vendor's delivery fails to meet such schedule. MCI may, without limiting any of its other rights or remedies, Oder's routing costs will be paid by Vendor upon MCI's demand.
- 3. Risk of Loss. Until delivered to MCI in accordance with Section 2, Vendor will bear all risk of loss or damage. Shipment of Goods is DDP/FOB Destination unless Purchase Order states otherwise.
- 4. Cancellation for Breach by Seller. MCI may terminate this Purchase Order, in whole or in part, for Vendor's breach of this Purchase Order, including but not limited to, the failure to deliver the Goods as, where, and when specified. If MCI terminates this Purchase Order for Vendor's breach, in addition to all of MCI's other rights and remedies under law, Vendor will be flable to MCI for all damages including, but not limited to, the cost of securing Vendor may only be made with the prior written consent of MCI. This right of termination is in addition to and not in place of any other rights or remedies
- 5. Cancellation for Convenience. MCI, in its sole discretion and without cause, may terminate this Purchase Order, in whole or in part, at any time delivered and accepted. Payment due will be the unit prices for Goods delivered and accepted by MCI.
- 6. Pricing. MCI will pay Vendor only for such Goods and at such prices as agreed upon pursuant to this Purchase Oder. No additional charges of any in this Purchase Order or otherwise specifically agreed to in writing.
- 7. Representations and Warranties. In addition to, and without limiting any of Vendor's other representations and warranties, express or implied, Vendor expressly represents and warrants to MCI that: (a) all Goods conform and will continue to conform to professional industry standards and to any for which purchased, free from defects in materials and workmanship, and safe for their intended use; (c) Vendor has all right, title and interest in and to will not infininge the intellectual property rights of any third party. All of Vendor's representations and warranties, both express and implied, also constitute fail within the warranty period, Vendor will at its own expense promptly repair or replace defective Goods at the discretion of MCI. All warranty repairs, including, but not limited to, labor, materials, and freight.
- 8. Force Majeure. Neither party will have responsibility to the other due to circumstances beyond that Party's reasonable control, including (without restriction, or any act of God, war or public enemy, or any agency thereof, or any fire, flood, explosion or other catastrophe, or any epidemic or quarantine restriction, or any act of sabotage or terrorism, or any strike, lockout other work stoppage, slowdown or dispute.
- 9. Indemnification. Vendor hereby agrees to indemnify and hold hamless MCI, its owners, officers, agents and employees against any and all damages, claims expenses or other liability, including attorneys fees, arising out of any (a) alleged or actual infringement or misappropriation of any negligence or willful misconduct of Vendor; (c) Vendor's failure to perform fully its obligations herein in a timely manner; or (d) breach of any Seller's connection therewith. MCI shall have the right to participate in the defense or settlement of any such claim with counsel of its choice at its own expense.
- 10. Miscellaneous. This Purchase Order will be binding on the Patties and their respective successors and permitted assigns. Vendor may not assign this Purchase Order or any of its rights and obligations hereunder (including its right to receive payment) without MCl's express prior written otherwise, between Vendor and MCl, including but not limited to any prior or subsequent price quotation, invoice, confirmation or other document subject matter of this Purchase Order and supersedes all Extraneous Terms with respect to the matters contained herein. All provisions that logically ought to survive termination of this Purchase Order shall survive.
- 11. Governing Law. This Purchase Order will be governed by and construed according to the taws of the State of New York without regard to principles of conflicts of law. Any and all actions or proceedings relating to the subject matter of this Purchase Order shall be brought in state courts located in Niagara County, New York, which courts will have exclusive jurisdiction for such purposes. Notwithstanding the foregoing, if the primary procedures set forth in the primary contract.



New York State Department of Taxation and Finance

New York State and Local Sales and Use Tax

Contractor Exempt Purchase Certificate

ST-120.1

To be used only by contractors who are registered with the Tax Department for sales tax purposes.

To vendors:

You must collect tax on any sale of taxable property or services unless the contractor gives you a properly completed exempt purchase certificate not later than 90 days after the property is sold or service is rendered. In addition, you must keep the certificate for at least three years, as explained in the instructions.

This form cannot be used to purchase motor fuel or diesel motor fuel exempt from tax.

To contractors and vendors: read the instructions on pages 3 and 4 carefully before completing or accepting this certificate. Name of seller

Name of purchasing contractor

Cor	struction Shanty	Rental Co		Name of	purchasing contractor		
Stree	t address	Tiorital Co		Mark C	errone Inc.		
27	56 Transit Road			Street ac			
City	JO Hansit Road			2368 M	aryland Ave.		
	Seneca,	State	ZIP code	City		State	710
	. Ocheca,	NY	14224	Niagara	Falls	NY	ZIP ccde
1.	I have been is	ssued a New York Stat	e Certificate of Aut	hority,_	16-1567314		, to collect
2.	and and ignore p	te and local sales and personal property or se	ervice being purcha	sed wil	e has not expired a	r hoon oursesses	d or revaked.
		13- 370- Site Improveme					
	located at		iagara Falls, NY, 143				
	for and with	Fashion Outlets II LL	C , Site Improvement	s@FON	VF		
	Inese purchas (Mark an X in the A. The tan in the a or structur an orgal section State go govern any intel United S organiza of the ar organiza that have exempt of personal componical prop	ible personal property	ales and use tax be further explanation, by will be used a building I property or a building, med by Tax Law, New York atted States Nations and of which the rtain posts or an interpretation of the tangible an integral ng, structure, or		 C. The tangible p in an Internet is to be incoming to be incoming to the incoming incoming the incoming	ersonal property of data center when the data center when the report of	will be used: en the property of a capital connection ices for sale sale; or television or with producing programs. ncluding ment, is ect and perty after
	machine	ry and equipment, and ated into real property.	t it will be		both.		o.anon, of m
	Note: This	portificate in					

Note: This certificate is not valid unless the purchaser completes the certification on page 2.

Page 2 of 4 ST-120.1 (7/11)		
 F. The machinery or equipment will be used directly and predominantly to control, prevent, or abate pollution or contaminants from manufacturing or industrial facilities. G. The tangible personal property is residential 		J. The services are for the project described in line 2 on page 1 and will be resold. (This includes trash removal services in connection with repair services to real property.)
solar energy systems equipment. (Note: Item G purchases are exempt from the 4% New York State tax rate and from the 3%% MCTD rate. Item G purchases may be exempt from local taxes. See instructions.)		K. The services are to install, maintain, service, or repair tangible personal property used in an Internet data center, for telecommunication or Internet access services, or for radio or television broadcast production or transmission.
H. The tangible personal property will be used directly and exclusively in adding to, altering, or improving a qualifying tenant's leased premises for use as commercial office space in Eligible Area A or B as described in TSB-M-05(12)S, Tangible		L. The services are to install, maintain, service, or repair tangible personal property that will be used predominantly either in farm production or in a commercial horse
Personal Property Purchased for Leased Commercial Office Space in Lower Manhattan, provided that the tangible personal property becomes an integral component part of the building in which the leased premises are located, and where		boarding operation, or in both. M. The services are to install residential solar energy systems equipment.
such property is purchased during the first year of the qualifying tenant's lease and delivered to the leased premises no later than 90 days after the end of that first year.		N. The services are to install tangible personal property purchased during the first year of the qualifying tenant's lease and delivered to the leased premises no later than
I. The tangible personal property is machinery or equipment used directly and predominantly in loading, unloading, and handling cargo at a qualified marine terminal facility in New York City. This exemption does not apply to the local tax in New York City.		90 days after the end of that first year, that will be used directly and exclusively in adding to, altering, or improving a qualifying tenant's leased premises for use as commercial office space in Eligible Area A or B as described in TSB-M-05(12)S.
Caution: Contractors may not use this certificate to purchase so customers in connection with a project. Construction equipment completing a project but that do not become part of the finished the use of this certificate.	t, tools,	, and supplies purchased or rented for use in
Certification: I certify that the above statements are true, complete, a make these statements and issue this exemption certificate with the kno sales or use taxes do not apply to a transaction or transactions for which with the intent to evade any such tax may constitute a felony or other or and a possible jail sentence. I understand that this document is required Department for the purposes of Tax Law section 1838 and is deemed purpose of prosecution of offenses. I also understand that the Tax Depart exemptions claimed and the accuracy of any information entered on this	wledge to the tender time und to be file a document is a docume	that this document provides evidence that state and located this document and that willfully issuing this docume der New York State Law, punishable by a substantial fir ided with, and delivered to, the vendor as agent for the Tament required to be filed with the Tax Department for the sauthorized to investigate the validity of tax exclusions nent.
George Churakos, Vice President Signature of owner, pattrier, or authorized person of purchasing	ng contrac	
Signature of owner, patrier, or authorized person of porchasting contractor		Date prepared 1/16/2014
Substantial condition will require from		of Main and Million

Substantial penalties will result from misuse of this certificate.



PART 364 WASTE TRANSPORTER PERMIT NO. 9A-852

Pursuent to Article 27, Tries 3 and 15 of the Environmental Conservation Law and 6 NYCRR 354

PERMIT ISSUED TO:

KWH, INCORPORATED 3381 RAYMOND ROAD SANBORN, NY 14132

CONTACT NAME:

KEVIN W. HASELEY

COUNTY: . TELEPHONE NO:

NIAGARA (716)622-3110 PERMIT TYPE:

D NEW

■ RENEWAL

MODIFICATION

EFFECTIVE DATE:

12/16/2013

EXPIRATION DATE:

12/15/2014

US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed:

Destination Facility	Location	Waste Type(s)	 Note
Modern Lendfill	Model City , NY	Non-Hazardous Industrial/Commercial	SAND BLAST

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program 625 Broadway, 9th Floor Albany, NY 12233-7281

PAGE 1 OF 2

This renewed permit is not valid until the effective date listed on the permit

PART 364 WASTE TRANSPORTER PERMIT NO. <u>9A-852</u>

Pursuant to Article 27, Titles 3 and 15 of the En	rwironmental Conservation Law and 6 NYCRR 384
PERMIT ISSUED TO:	PERMIT TYPE:
KWH, INCORPORATED 3381 RAYMOND ROAD SANBORN, NY 14132	□ NEW ■ RENEWAL □ MODIFICATION
CONTACT NAME: KEVIN W. HASELEY COUNTY: NIAGARA TELEPHONE NO: (716)622-3110 AUTHORIZED VEHICLES: The Permittee is Authorized to Operate the Following Vehicles	EFFECTIVE DATE: 12/16/2013 EXPIRATION DATE: 12/15/2014 US EPA ID NUMBER:
(Vehicles enclosed in ⇔'s are authorized to haul Res 3 (Three) Permitted Vehicle(s)	skiential Raw Sewage and/or Septage only)
NY 47646MB NY 86025MD NY 86513KA End of List	



PART 384

WASTE TRANSPORTER PERMIT NO. 9A-748

Purpusant to Article 27, Tilles 3 and 16 of the Environmental Construction Law and 6 NYCRR 354

PERMIT ISSUED TO:

MAVHINEY TRUCKING, INC. **425 LAKE STREET WILSON, NY 14172**

CONTACT NAME:

COUNTY: TELEPHONE NO:

ROGER MAVVHINEY

(718)751-6418

NIAGARA

EFFECTIVE DATE: EXPIRATION DATE:

01/10/2014 01/09/2015

US EPAID NUMBER:

D NEW

RENEWAL

II MODIFICATION

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:

The Permittee is Authorized to Transport the Following Weste Type(s) to the Destination Facility listed:

Destination Facility	Location	Wests Type(s)	
CID LANDFILL INC.	CHAFFEE, NY	Non-Hazardous industrial/Commercial	Note
		Petroleum Contentinated Soil	•
Monophysia		Studge from Severge or Water Supply Treatment Plant	
MODERN CANDFILL, INC.	MODEL CITY, NY	Non-Hazardous industrial/Commercial	
		Whole Tires	
		Petroleum Conferninated Soll	•
NACOSOS TALLOS		Studge from Sewage or Wister Supply Treatment Plent	
NIAGARA FALLS LANDFILL FACILITY	MIAGARA FALLS , NY	Non-Hezerdous Industrial/Commercial	
		Petrofeum Contaminated Soil	
POR LATER ALL .	•	Studge from Sounge or Wilter Supply Treatment Plant	
TONAMANDA (T), LANDFILL	YM, ACHAMAMOT	Petroleum Conteminated Soll	

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program 625 Broadway, 9th Floor Albany, NY 12233-7251

PAGE 1 OF 2

This renewed permit is not valid until the effective date listed on the permit

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-748

Pursuant to Article 27, Tiles 3 and 18 of the Environmental Conservation Law and 8 NYCRR 364

PERMIT TYPE:

DNEW

EFFECTIVE DATE:

EXPIRATION DATE:

US EPA ID NUMBER:

RENEWAL

MODIFICATION

01/09/2018

PERMIT ISSUED TO:

MAWHINEY TRUCKING, INC. 425 LAKE STREET

WILSON, NY 14172

CONTACT NAME:

COUNTY:

ROGER MAWHINEY NIAGARA

NIAGARA (716)751-8418

TELEPHONE NO:

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Weste:

(Vehicles enclosed in <>'s are sufficioned to haut Residential Res

& (Eight) Permitted Vehicle(s)

NY 10858.12 NY 10859.12 NY 16475.12 NY 3959714 NY 4330418 NY 48214KA NY 8281818 NY AR87464

M. W. J. Wilson

PAGE 2 OF 2



PART 364

WASTE TRANSPORTER PERMIT NO. 9A-745

Pursuant to Article 27, Titles 5 and 15 of the Environmental Conservation Law and 6 NYCRR 384

PERMIT ISSUE	OT OF
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GAM TRUCKING CORPORATION 217 WALTER AVENUE · TONAWANDA, NY 14150

CONTACT NAME:

TELEPHONE NO:

COUNTY:

GASPER A. MADONIA

ERIE

(716)583-3690

PERMIT TYPE:

□ NEW

RENEWAL

☐ MODIFICATION

EFFECTIVE DATE:

08/22/2013 08/21/2014

EXPIRATION DATE:

US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION PACILITY:

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Lecation	Waste Type(s)	Note
BFI NIAGARA FALLS LANDFILL FACILITY	NIAGARA FALLS, NY	Non-Hazaidous Industria/Commercial	
		Petroleum Contaminated Soil	
		Sludge from Savage or Water Supply Treatment Plant	
CID LANDFILL, INC.	CHAFFEE, NY	Non-Hazardoue Industrial/Commercial	
E 1000		Petroleum Contaminated Soll	•
Wodern Landfill	Model City , NY	Non-Hazardous Industrial/Commercial	
		Weste Tires	
		Ashestos	
	SAME CONTROL OF THE OWNER.	Skidge from Sewage or Water Supply Treatment Plant	
MODERN LANDFILL, INC.	MODEL CITY, NY	Non-Hazardous Industrial/Commercial	
		Weste Tires	
	2	Ashestos	
	100 miles	Studge from Sewage or Water Supply Treatment Plant	
TONAWANDA (1) LANDFILL	TONAWANDA, NY	Non-Hazardous Industrial/Commercial	
		Petroleum Contaminated Scill	
		Skudge from Sawage or Water Supply Treatment Plant	

MOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program

625 Broadway, 9th Floor Albany, NY 12233-7251

PAGE 1 OF 2

. This renewed permit is not valid until the effective date listed on the permit

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-745

Pursuant to Article 27,710cc 3 and 18 of the Environmental Conservation Law and 6 NYCRR 364

SCOMIT	(de) IED	TO

GAM TRUCKING CORPORATION 217 WALTER AVENUE TONAWANDA, NY 14150

CONTACT NAME:

GASPER A. MADONIA

COUNTY: (716)583-3690 TELEPHONE NO:

ERIE

EFFECTIVE DATE: EXPIRATION DATE:

US EPA ID NUMBER:

RENEWAL

☐ MODIFICATION

PERMIT TYPE: □ NEW

08/21/2014

08/22/2013

ALITHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sewega and/or Septage only)

3 (Three) Permitted Vehicle(s)

NY 10242JT NY 40913JZ NY 43041MD End of List



PART 364

WASTE TRANSPORTER PERMIT NO. <u>9A-688</u>

Pursuant to Article 27, Titles 3 and 15 of the Environmental Correspondion Law and 6 NYCRR 584

PERMIT ISSUED TO:

DORAN TRUCKING COMPANY 2520 CAYUGA STREET NIAGARA FALLS, NY 14304

CONTACT NAME:

COUNTY: TELEPHONE NO:

DOREEN STUMPO NIAGARA .

(716)731-3824

PERMIT TYPE:

D NEW

RENEWAL II MODIFICATION

EFFECTIVE DATE: EXPIRATION DATE:

05/12/2013 08/11/2014

US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION MACALITY:

The Permittee is Authorized to Transport the Following Waste Type(a) to the Destination Facility listed :

Deutination Facility	Location	Wests Type(s) Note:
BFI WASTE SYSTEMS (FORMER NRINEWSC)	NLAGARA FALLS , NY	Petroleum Contaminated Seil
CID LANDFILL, INC.	CHAPPEE, NY	Nan-Hazardous Industrial/Continuedal Petrolaum Contaminated Soil
MODERN LANDFILL, INC.	MODEL CITY, NY	Non-Hezerdous Industrial/Commercial Petroleum Contentinated Soft Studge from Seesge or Weter Supply Treatment Plant
TOMMANDA (T) LANDFILL	TONAMANDA, NY	Non-Hippardous Industrial/Commercial Petroleum Confermated Soil
WASTE MANAGEMENT OF NY - HIGH ACRES LANDFILL	FAIRPORT, NY	Non-Hazardous Industrial/Commercial Petrolaum Contaminated Soil Studge from Sewage or Weiter Supply Treatment Plant

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the beak of this page.

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Weste Transporter Program

625 Broadway, 9th Floor Alberry, NY 12233-7251

AUTHORIZED SIGNATURE

PAGE 1 OF 2

This renewed permit is not valid until the effective date listed on the permit

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-688

Pursuant to Article 27, Trises 3 and 16 of the Environmental Conservation Law and 6 NYCRR 564

PERMIT	16611	Én	TO
	ROOU		1 000

DORAN TRUCKING COMPANY 2520 CAYUGA STREET

NIAGARA FALLS, NY 14304

CONTACT NAME:

COUNTY:

DOREEN STUMPO

NIAGARA

TELEPHONE NO:

(716)731-3824

EFFECTIVE DATE: EXPIRATION DATE:

PERMIT TYPE:

INEW!

RENEWAL

□ MODIFICATION

05/12/2013

05/11/2014

US EPA ID NUMBER:

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Wests:

(Vehicles enciosed in <a>'s are subscrized to heaf Residential Rear Sewage and/or Septage only)

4 (Four) Permitted Vehicle(s)



PART 364

WASTE TRANSPORTER PERMIT NO. 9A-864

Purpusant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 8 NYCRR 354

PERMIT ISSUED TO:

PERMIT TYPE:

J AND J DECKING AND FENCING, INC. 2243 INDEPENDENCE AVE NIAGARA FALLS, NY 14301

■ NEW
□ RENEWAL
□ MODIFICATION

CONTACT NAME: COUNTY: JAMES STRASSBURG NIAGARA EFFECTIVE DATE: EXPIRATION DATE: 05/29/2013 05/28/2014

TELEPHONE NO:

(716)940-1689

US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: -

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed:

Destination Facility :	Location	Waste Type(s)	Note
Allied Waste Nagera Falls Landfill	Magara Falls , NY	Non-Hazardous Industrial/Commercial	
Section (Control of the Control of t		Waste Tires	
		Asbestos	
		Petroleum Conteminated Soll	
		Studge from Bewage or Water Bupply Treatment Plant	
MODERN LÄNDFILL	MODEL CITY, NY	Non-Hezerdous Industrial/Commercial	
∞.		Waste Tires	
		Asbestos	
		Petroleum Contaminated Soll	
- *-	8	Studge from Sewage or Water Supply Treatment Plant	
TONAWANDA (T) LANDFILL	TONAWANDA, NY	Non-Hazardous Industrial/Commercial	
		Asbasios*	
		Petroleum Contaminated Sall	
	¥	Sludge from Sewage or Water Supply Treatment Plant	
WASTE MANAGEMENT	CHAFFEE, NY	Non-Hazardous Industrial/Commercial	
		Asbestos	÷
		Petroleum Contaminated Soil	
		Sludge from Sewage or Water Supply Treatment Flant	

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program

625 Broadway, 9th Floor Albany, NY 12233-7251

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PAGE 1 OF 2

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-884

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

PERMIT TYPE:

J AND J DECKING AND FENCING, INC. 2243 INDEPENDENCE AVE NIAGARA FALLS, NY 14301 ■ NEW □ RENEWAL □ MODIFICATION

CONTACT NAME:

JAMES STRASSBURG NIAGARA EFFECTIVE DATE: EXPIRATION DATE:

05/29/2013 05/28/2014

COUNTY: TELEPHONE NO:

(718)940-1689

US EPA ID NUMBER:

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sawage and/or Septage only)

2 (Two) Permitted Vehicle(s)

NY 42876MD NY 49025JZ End of List

PAGE 2 OF 2



PART ?

WASTE TRANSPORTER PERMIT NO. 9A-683

PERMIT	188U	ED	TO:

MARRAN COMPANY, INC. 2800 LOCKPORT ROAD SANBORN, NY 14132-9350

7167319898

CONTACT NAME: COUNTY: TELEPHONE NO: RANDALL W. RETZLAFF

NIAGARA

(718)734-9898

PERMIT TYPE:

DNEW

RENEWAL

I MODIFICATION

01/28/2014 01/27/2015

EFFECTIVE DATE EXPIRATION DATE: US EPA ED NUMBER:

AUTHORIZED WASTE TYPES BY DESTRUATION FACILITY:

The Permittee is Authorized to Transport the Pollowing Wester Type(s) to the Destination Facility listed:

Continu Field Non-Hadiolog Industrial Commercial Patrologic Contaminated Still BET NEADARA FALLS LANDERL FACILITY HIADARA PALLS , MY Studge tion Seeings or Water Supply Treatment Plant ndous Industrial Communic OHAPPEZ, NY CID LANDFRAL INC. Participant Com MODEL CITY, NY MODIFIEN LANDFILL INC. Petroleum Contorringed Soll Bludge Gins Service or Victor Supply Traditions Plant Non-Hamirdone Industrial/Commi TORRANGEMENT, NY TOMARHODA (1) LAMDERL Potentium Communicated Soll

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS.

New York State Department of Environmental Committee on Division of Materials Management Waste Transporter Program

625 Broadway, 9th Floor Alberry, NY 12253-7251

AUTHORIZED SIGNATURE

PAGE 1 OF 2



This is ideal partition for valid until the unsulve that listed on the permit 01/13/2014 00:56

NEW YORK STATE DEPARTMENT OF INVIRONMENTAL CONSERVATION DEVISION OF MATERIALS MANAGEMENT

PART 384 WASTE TRANSPORTER PERMIT NO. <u>8A-663</u>

PERMIT ISSUED TO:

MARRAN COMPANY, INC. 2600 LOCKPORT ROAD SANBORN, NY 14132-8350

CONTACT NAME:

RANDALL W. RETZLAFF

COUNTY:

MAGARA

TELEPHONE NO:

(718)7\$1-9868

AUTHORIZED VIRIED IS Authorized to Operate the Following Vehicles to Telesport Wester.

(Vehicles enclosed in 4-5 are subprised to real Residential Few Sewage and/or September only)

3 (Three) Permitted Vehicle(s)

PERMIT TYPE:

D NEW

RENEWAL

ID MODIFICATION

EFFECTIVE DATE EXPIRATION DATE:

01/27/2016

US EPA ID NUMBER:



PART 384

WASTE TRANSPORTER PERMIT NO. 9A-749

Pignuars to Article 27, Titles 3 and 15 of the Environmental Compensation Law and 9 NYCRR 255

PERMIT ISSUED TO:

PERMIT TYPE:

PAUL T. FOURNIER ENTERPRISES. INC. 2459 YOUNGSTOWN-WILSON ROAD RANSONVILLE: NY-14131:

D NEW RENEWAL ☐ MODIFICATION

CONTACT NAME:

PAUL FOURNIER/716-628-0357

EFFECTIVE DATE: EXPIRATION DATE: 01/13/2014 01/12/2015

COUNTY: TELEPHONE NO: . MAGARA (716)791-3867

UB EPA ID NUMBER

AUTHORIZED-WASTE TYPES BY DESTINATION FACILITY: .

The Pennittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed:

Deuthalilon Futility	Location	Winste Typo(e)	Nobe
Alfed White Nagera Fells Lundill	Niegara Falls , NY	Non-Histordous Industrial/Commercial Patroleum Conteminated Soli	
, CID LANDFILL, INC.	CHAPTEE, NY	Non-Headout industrat/Commercial Petroleum Conteminated Soll Studge from Sewage or Water Supply Treatment Part	
MODERN LANDFILL, INC.	MODEL CITY, NY	Non-Hazardous Industris/Commercial Wasts Tires Pesroleum Conserninsed Soli Studge from Savings or Water Supply Treatment Plant	
TONAWANDA (T) LANDFILL	TONAMANDA, NY	Non-Heserdeus Industrial/Commercial Petroleum Conteminuted Soli	

... NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS:

New York State Department of Environmental Conservation Division of Materials Management - Waste Transporter Program 625 Broadway, 9th Floor

Albimy, NY 12233-7251

PAGE 1 OF 2

This permit is not valid until the effective date listed on the permit

PART 364

WASTE TRANSPORTER PERMIT NO. 8A-749

Chiefe mind the Andrifes 27 Titles 2 arend 1.5 of the library control Companyation Lawrence 6 NYCRR 254

Splitting to bridge 31' time 9 me 19 de per mandeni-	To Partificate harmonic property and a second as a second	
PERMIT (SSUED TO:	PERMIT TYPE:	•
PAUL T. FOURNIER ENTERPRISES, INC. 2459 YOUNGSTOWN WILSON ROAD RANSOMVILLE, NY 14131	D NEW RENEWAL MODIFICATION	
CONTACT NAME: PAUL POLIFINIER/716-628-0367 COUNTY: NIAGARA TELEPHONE NO: (7.16)791-3667 ALITHORIZED VENECLES: ! The Permittee is Authorized to Operate the Following Vehicles to Tra (Achicles analysed in 4's are authorized to hauf Ranidarise) in Children and Children in	EPPECTIVE DATE: 01/13/2014 EXPIRATION DATE: 04/12/2015 US EPA ID NUMBER: Taleport Whate: Raw Sewage and/or Septage only)	
5 (Sb) Permitted Vehicle(s)		



PART 384

WASTE TRANSPORTER PERMIT NO. <u>9A-882</u>

Pursuant to Article 27, Tiline 5 and 16 of the Environmental Conservation Law and 6 NYCRR 304

PERMIT ISSUED TO:

VENTRY SERVICES 8485 WARD ROAD SANBORN, NY 14132

CONTACT NAME:

COUNTY: TELEPHONE NO:

PARIS VENTRY NIAGARA . (715)940-0860

PERMIT TYPE:

■ NEW D RENEWAL MODIFICATION

EFFECTIVE DATE: EXPIRATION DATE: US EPA ID NUMBER: 05/12/2013 03/11/2014

AUTHORIZED WASTE TYPES BY DESTINATION FACELTY:

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Depthation Facility	Locations	Weste Type(e)	Moto
Alled Wasse Magara Fulls Landill	Niegara Falls , NY	Non-Historiaus Industrial/Commercial Asburius Patroloum Contembrated Soil	
CHALTRUCIUS COUNTY LANDRIUL	LANEBTOWN , NY	Non-Hezerdeus (ridustrial/Communcial Autoustes Patrolaum Contaminated Still	
CID LANDFILL, INC.	CHAPTER NY	Non-Hazardous Industrial Commercial Astronico Petroleum Contentinologi Sell	
High Acres Western Expension Londilli	Feirpart , NY	Non-Hesirdous tratustrial/Commercial Asistance Patroleum Contentinated Soil	
HYLAND LANDFILL	ANGELICA, NY	Non-Heartous Industrial/Communicial Automos Patrigum Contentinated Sali	
MILL BEAT LANDFILL	BENGEN, NY	Non-Reparticus Industrial Communicati Aubustos Petrolaum Containinatud Self	
Nodern Lundill	Model City , NY	Non-Hazardous (nakatahil/Commercial Asbestos	

^{***} AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) ---

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the beck of this page.

ADDRESS:

New York State Department of Environmental Conservation Division of Meterials Management - Waste Transporter Program

625 Broadway, 9th Ploor Albany, NY 12233-7251

AUTHORIZED SIGNATURE:

PAGE 1 OF 3

PART 384

WASTE TRANSPORTER PERMIT NO. SA-962

Pursuants to Article 27,716m 3 and 16 of the Studenmarket Condetration Law and 8 NYCHR 204

PERMIT ISSUED TO:

PERMIT TYPE:

VENTRY SERVICES 8485 WARD ROAD SANBORN, NY 14132 III NEW - RENEWAL I MODIFICATION

CONTACT NAME: COUNTY:

PARIS VENTRY

EFFECTIVE DATE: EXPIRATION DATE: ... DE 11/2014

05/12/2013

- MABARA

US EPA ID NUMBER:

TELEPHONE NO:

(718)840-0800

AUTHORIZED WASTE TYPES BY DESTINATION FACELITY: (Continued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility feted ;

Questination Partitly	Location	Water Type(e)	Note
Modern Landill	Model City , NY	Patroisum Conterninated Boli	
NORTH YOUNGMANN COMMERCE CTR	TONAWANDA, NY	Petroteian Conteminated Boll	
Onlario County Sentiary Landilli	Starley . NY	Non-Hezerdous industrial/Commercial Asbantos Potroleum Comminated Soli	
TONAVVANDA (1) LANDFILL	TOMAWANDA , NY	Non-Huserdoup Industrial/Communicial Asbasios Patroloum Conternisated Soli	

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PAGE 2 OF 3

PART 384

WASTE TRANSPORTER PERMIT NO. <u>9A-962</u>

Pursuant to Afficia 27, Titles 3 and 15 of the Governmental Consequation Law and 6 NYCRR 204

PERMIT ISSUED TO:

PERMIT TYPE:

VENTRY SERVICES 6495 WARD ROAD

音が応久

SANBORN, NY 14132

D RENEWAL II MODIFICATION

CONTACT NAME

PARIS VENTRY

EFFECTIVE DATE:

05/12/2013

. ..COUNTY: -- -

NEAGARA (716)840-0800

EXPIRATION DATE: 08/11/2014 US EPA ID NUMBER:

TELEPHONE NO:

AUTHORIZAD VEHICLES: The Permittee is Authorized to Operate the Following Vehicles to Transport Wester

(Vigiticism entailment in early are authorized to held Residential Rew Sevenge and/or Septings only)

1 (One) Permitted Vehicle(s)

NY 907726/B End of List

PAGE 3 OF 3

1.234



YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF MATERIALS MANAGEMENT

PART 364

WASTE TRANSPORTER PERMIT NO. 9A-802

Pursumet to Article 27, Tilles 3 and 15 of the Environmental Convenients Law and 6 NYCRR 364

PERMIT ISSUED TO:

JEANINE WALKER ENTERPRISES, INC. 982 NORTH HEWITT DRIVE

LEWISTON, NY 14092

CONTACT NAME: COUNTY: TELEPHONE NO:

JEANINE WALKER

NIAGARA . (716)417-8516

EFFECTIVE DATE:

10/01/2018 00/30/2014

EXPIRATION DATE: US EPA !D NUMBER:

RENEWAL

I MODIFICATION

PERMIT TYPE:

□ NEW

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:

The Permittue is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed:

Destination Facility	Location	Waste Type(ii)
Alled Westo Nagara Falls Landia	Niagera Felix , NY	Non-Residous Industrial Communical Petroleum Conteminaled Soli
Modern Landfill	Model City , NY	Non-Huzardous Inclusintel/Commercial Petroleum Contaminated Soli

NOTE: By ecceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRÈSS:

. New York State Department of Environmental Conservation Division of Meterials Management - Waste Transporter Program 625 Broadway, 9th Floor

Alberty, NY 12233-7251

AUTHORIZED SIGNATURE

PAGE 1 OF 2

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PART 384

WASTE TRANSPORTER PERMIT NO. 9A-802

		Engineering Conscivation Line may a MYCKE S	84	
PERMIT ISSUED TO:		PERMIT TYPE:		
JEANINE WALKER ENTERPRISES, INC. 982 NORTH HEWITT DRIVE LEWISTON, NY 14092		□ NEW ■ RENEWAL □ MODIFICATIO		
CONTACT NAME: COUNTY: TELEPHONE NO:	JEANINE WALKER NIAGARA (716)417-8516	EFFECTIVE DATE: EXPIRATION DATE: US EPA ID NUMBER:	10/01/2013 09/30/2014	
- (Vehicle	tzed to Operate the Pollowing Vehi a enclosed in <-> in enclosed in <-> in bestimment	icles to Transport Waste: Residental Raw Bawage and/or Saptaga only	n .	
4 (Four) Permitted Valid	icle(s)			
NY 11610.DX NY 477073V		.e.		