



February 2, 2015

Robert Corcoran, P.E.  
New York State Department of Environmental Conservation  
Div. of Environmental Remediation  
625 Broadway, 12<sup>th</sup> floor  
Albany, NY 12233-7015

**RE: Site No. 152201, Levey Property, 1305 South Strong Avenue, Copiague, NY – Interim Remedial Measure: Operable Unit 01A**

Dear Mr. Corcoran:

The following summarizes the interim remedial measure (IRM) Operable Unit 01A conducted at the above referenced location as per New York State Department of Environmental Conservation (NYSDEC) Standby Contractor Authorization Form dated 8/18/2014 (Callout ID: 122933). The IRM activities consisted of excavation and disposal of impacted soils from Cesspool #5. A site location map is provided as Figure 1. The location of Cesspool #5 is illustrated in a site map provided as Figure 2.

**Field Activities**

EAR staff met a representative from NYSDEC onsite on September 10, 2014, to review site conditions and assess proposed means of excavation/removal of impacted soils from Cesspool #5 (CP-5).

On November 17, EAR returned to the site to excavate CP-5. Prior to conducting any ground intrusive activities, EAR arranged for utility operators to markout any subgrade utilities in the area. Using a John Deere 120D wide-track excavator, EAR uncovered the cesspool and excavated around the structure to approximately 4-5 feet below grade surface (BGS). Soil excavated from above and around the cesspool was staged near the excavation and screened by an EAR geologist for total volatile organic compounds using a photo-ionization detector (PID). Prior to use, the PID was calibrated using a 100 ppm isobutylene standard.

Following removal of the CP-5 lid, the CP-5 block structure collapsed inward. EAR then removed the topmost portion of collapsed soil and block (estimated from approximately 4-5 feet below grade).



Observations and PID screening results are summarized as follows:

| Location                                  | Total VOC's (ppm) | Observations                      |
|-------------------------------------------|-------------------|-----------------------------------|
| Soil from North side of CP-5 (0-5 ft BGS) | 0.4               | No apparent staining, no odor     |
| Soil from South side of CP-5 (0-5 ft BGS) | 0.2               | No apparent staining, no odor     |
| Underside of CP-5 concrete lid            | 0.0               | No apparent staining <sup>1</sup> |
| CP-5 block & soil from 4-5 ft BGS         | 1.5               | No apparent staining <sup>1</sup> |

The above detailed soils were deemed clean and designated for use as backfill after completion of the excavation activities and endpoint sampling activities.

Screening of the next load of soil & block yielded a PID reading of 41.6 ppm. Because of this elevated reading and because of the degree of mixing during the collapse, NYSDEC determined that the remainder of the CP-5 block and interior soil should be designated as impacted waste. As such, the remainder of the CP-5 excavated soils and block (to approximately 10 feet BGS) were loaded directly into a roll-off (20-yard, sealed, tarped) provided by Aarco Environmental Services (Lindenhurst, NY).

At approximately 10 feet BGS, the onsite geologist reported black soils with a fecal odor. PID screening of this material yielded a PID reading of 218 ppm. This coincided with the depth of the bottom of CP-5 as per documentation provided by the NYSDEC. This was determined to be the last load of soil to be designated waste as subsequent soil removal from 10-12 feet BGS yielded significantly lower PID readings ranging from 1.5 to 5.0 ppm. The water table interface was encountered at approximately 12 feet BGS.

Following completion of the excavation/removal, EAR collected three endpoint soil samples as directed by the NYSDEC. One endpoint sample was collected from the horizontal center of the former pool structure (CP-5 BOT). This sample was a composite of soils collected from 10-12 feet BGS. Two sidewall endpoint samples were collected immediately exterior to the former block structure to the southeast and southwest (CP-5 SE SW and CP-5 SW SW) at approximately 10 feet BGS. Observations and PID screening results are summarized as follows:

| Sample           | Total VOC's (ppm) | Observations                     |
|------------------|-------------------|----------------------------------|
| CP-5 bottom      | 8.1               | No apparent staining. Fecal odor |
| CP-5 SW sidewall | 5.2               | No apparent staining. Fecal odor |

<sup>1</sup> Because CP-5 block and interior soils were potentially contaminated, no attempts at olfactory observations were made.



|                  |      |                            |
|------------------|------|----------------------------|
| CP-5 SE sidewall | 14.3 | Tan/light gray. Fecal odor |
|------------------|------|----------------------------|

The endpoint samples were submitted to a NYSDEC contracted laboratory (Test America, Inc.) for analysis of volatile organic compounds (VOC's), semi-volatile organic compounds (SVOC's), full target analyte list (TAL) metals, pesticides/herbicides, and polychlorinated biphenyls (PCB's). Samples for analysis of volatiles were collecting using TerraCore® samplers in accordance with EPA Method 5035. All samples were submitted for a standard 10-day turnaround time with NYSDEC ASP Category B deliverables requested. The analytical results for the above referenced endpoint samples are presented in Tables 1-5. Due to file size, the lab analytical report has been submitted to NYSDEC separately.

The excavation was backfilled to approximately 6-inches below grade using clean native fill, the cesspool lid, and approximately 21 tons of a clean, offsite fill. Offsite fill was free of stones, roots, impact, or other deleterious material. Certifications/analytical results for the fill material are provided as Appendix A.

Prior to leaving the site, the roll-off was covered with a tarp/plastic sheeting to prevent migration of fugitive dusts and prevent the potential accumulation of rainwater. Prior to transporting the excavator offsite, EAR decontaminated the excavator bucket using a liquinox/clean water wash/rinse

Restoration of the excavation area was completed on November 18 & January 5, 2015. Restoration activities consisted of completing backfill of the excavation using topsoil and grading the excavation area as well as areas affected by the excavator and vehicles. Grass seed was applied following grading activities.

Select photographs from the above detailed activities have been included as Appendix B.

### **Soil Transportation & Disposal**

Upon completion of loading impacted soils/block to the roll-off, a composite soil sample was collected for waste characterization on November 17. The waste characterization sample was submitted to a NYSDEC contracted laboratory (Test America, Inc.) for the following analyses as required by the disposal facility:

- VOC's via EPA Method 8260
- Total (TAL) Metals
- Ph
- Flashpoint
- Reactivity

The waste characterization sample was submitted to a NYSDEC contracted laboratory (Test America, Inc.) for an expedited, 3-day turnaround time (NYSDEC ASP Category A deliverables requested). A copy of the laboratory analytical report is included as Appendix C.



On December 2, 2014, Aarco Environmental Services (Aarco) notified EAR that the disposal facility would require a pilot test to be performed on the excavated material to assess suitability for disposal methods. Aarco collected a composite soil sample for pilot testing on December 3, 2014, and submitted this sample to the disposal facility. Following pilot testing of the waste sample and approval from the disposal facility on December 11, 2014, transportation of the roll-off was arranged with Aarco. At this time, Aarco expressed concerns that the soil load in the roll-off may exceed weight limitations. As such, a second roll-off was delivered to the site on January 5, 2015. Immediately upon delivery, EAR loaded a portion of the waste material from the original roll-off to the newly delivered roll-off. The roll-offs were removed from the site on January 5 & 6 and transported to the disposal facility by Freehold Cartage Inc. (Freehold, NJ). Copies of Freehold Cartage's applicable waste transporter permits are included as Appendix D. Waste manifests are provided as Appendix E.

The above detailed waste materials were transported to Solution EAS/Englobe Corp. (Montreal-Est, Quebec) for disposal. Copies of this facility's certificates of authorization are included as Appendix F. As of the writing of this report, certificates of disposal have not yet been issued by the disposal facility. These will be submitted to NYSDEC under separate cover once received.

### **Summary of Endpoint Sample Analytical Results**

- Several VOC's were reported in the endpoint samples in concentrations up to 400 ug/Kg (1,1,1-TCA, CP-5 BOT). Concentrations of these compounds were significantly lower than those reported for the waste soil sample and do not exceed their established unrestricted use soil cleanup objective values<sup>2</sup>.
- With the exception of one tentatively identified compound (TIC) no SVOC's were detected in the three endpoint soil samples. The TIC reported, Cholestan-3-One(5beta), was reported at an estimated concentration of 650 ug/Kg (CP-5 BOT). No soil cleanup objective value has been established for this compound.
- Several metals were reported as detected in all three soil endpoint samples. Of the metals detected, none were reported in concentrations exceeding their established unrestricted use soil cleanup objective values.
- No PCB's or pesticides/herbicides were detected in the three endpoint soil samples.

Should you have any questions or concerns regarding the above detailed activities, please feel free to contact me at 631.241.8741.

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<sup>2</sup> Title 6 New York Codes, Rules, and Regulations (NYCRR), Subpart 375-6.8(b) (2006)





Sincerely,

**Ian Hofmann**  
Project Manager

Cc: J. Hofmann (EAR)  
J. Lawrence (EAR)



## **TABLES**

Table 1: Endpoint Soil Analytical Results – VOC's

Table 2: Endpoint Soil Analytical Results – SVOC's

Table 3: Endpoint Soil Analytical Results - Metals

Table 4: Endpoint Soil Analytical Results – PCB's

Table 5: Endpoint Soil Analytical Results – Pesticides/Herbicides

Table 1

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



### Cesspool #5 Endpoint Soil Analytical Results (ug/Kg)

TestAmerica, Inc.

Methods: SW8260C

| Sample ID                 | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup<br>Objectives -<br>Unrestricted <sup>a</sup> |
|---------------------------|------------|-------------|-------------|-----------------------------------------------------------|
| Location                  | Bottom     | SE Sidewall | SW Sidewall |                                                           |
| Date Collected            | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                           |
| Time Collected            | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                           |
| 1,1 Dichloroethane        | 8.3        | 4.2         | 0.78 J      | 270                                                       |
| 1,1 Dichloroethene        | 8.4        | 0.81 J      | 0.28 J      | 330                                                       |
| 1,1,1 Trichloroethane     | 400        | 31          | 9.9         | 680                                                       |
| 1,1,2 Trichloroethane     | <0.9       | <1          | <1          | n/a                                                       |
| 1,1,2,2 Tetrachloroethane | <0.9       | <1          | <1          | n/a                                                       |
| 1,2 Dibromoethane         | <0.9       | <1          | <1          | n/a                                                       |
| 1,2 Dichlorobenzene       | <0.9       | <1          | <1          | 1,100                                                     |
| 1,2 Dichloroethane        | <0.9       | <1          | <1          | 20                                                        |
| 1,2 Dichloropropane       | <0.9       | <1          | <1          | n/a                                                       |
| 1,2,3 Trichlorobenzene    | <0.9       | <1          | <1          | n/a                                                       |
| 1,2,4 Trichlorobenzene    | <0.9       | <1          | <1          | n/a                                                       |
| 1,3 Dichlorobenzene       | <0.9       | <1          | <1          | 2,400                                                     |
| 1,4 Dichlorobenzene       | 5.8        | <1          | <1          | 1,800                                                     |
| 1,4-Dioxane               | <18        | <21         | <20         | 100                                                       |
| 2-Hexanone                | <4.5       | <5.2        | <5.1        | n/a                                                       |
| 4-Methyl-2-Pentanone      | <4.5       | <5.2        | <5.1        | n/a                                                       |
| Acetone                   | <4.5       | <5.2        | <5.1        | 50                                                        |
| Benzene                   | <0.9       | <1          | <1          | 60                                                        |
| Bromochloromethane        | <0.9       | <1          | <1          | n/a                                                       |
| Bromodichloromethane      | <0.9       | <1          | <1          | n/a                                                       |
| Bromoform                 | <0.9       | <1          | <1          | n/a                                                       |
| Bromomethane              | <0.9       | <1          | <1          | n/a                                                       |
| c 1,3 Dichloropropene     | <0.9       | <1          | <1          | n/a                                                       |
| Carbon Disulfide          | <0.9       | 0.39 J      | <1          | n/a                                                       |
| Carbon Tetrachloride      | <0.9       | <1          | <1          | 760                                                       |
| Chlorobenzene             | <0.9       | <1          | <1          | 1,100                                                     |
| Chloroethane              | <0.9       | <1          | <1          | n/a                                                       |
| Chloroform                | <0.9       | <1          | <1          | 370                                                       |
| Chloromethane             | <0.9       | <1          | <1          | n/a                                                       |
| cis-1,2-Dichloroethene    | 2.5        | 3.6         | 0.24 J      | 250                                                       |
| Cyclohexane               | <0.9       | <1          | <1          | n/a                                                       |
| Cyclohexane, methyl-      | 0.2 J      | <1          | <1          | n/a                                                       |
| Dibromochloromethane      | <0.9       | <1          | <1          | n/a                                                       |
| Dibromochloropropane      | <0.9       | <1          | <1          | n/a                                                       |
| Dichlorodifluoromethane   | <0.9       | <1          | <1          | n/a                                                       |
| Ethylbenzene              | 3.7        | 0.19 J      | <1          | 1,000                                                     |
| Freon 113                 | 170        | 1.6         | 0.84 J      | n/a                                                       |
| Isopropylbenzene          | <0.9       | <1          | <1          | n/a                                                       |
| m + p Xylene              | 14         | 0.83 J      | <1          | n/a                                                       |
| Methyl acetate            | <4.5       | <5.2        | <5.1        | n/a                                                       |
| Methyl Ethyl Ketone       | <4.5       | <5.2        | <5.1        | 120                                                       |
| Methylene Chloride        | <0.9       | <1          | <1          | 50                                                        |
| o-Xylene                  | 1.5        | 0.31 J      | 0.31 J      | n/a                                                       |
| Styrene                   | <0.9       | <1          | <1          | n/a                                                       |
| t 1,3 Dichloropropene     | <0.9       | <1          | <1          | n/a                                                       |
| t butylmethylether        | <0.9       | <1          | <1          | 930                                                       |
| Tetrachloroethene         | 0.86 J     | <1          | <1          | 1,300                                                     |
| Toluene                   | <0.9       | <1          | <1          | 700                                                       |

Table 1

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



# Cesspool #5 Endpoint Soil Analytical Results (ug/Kg)

TestAmerica, Inc.

Methods: SW8260C

| Sample ID                                         | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup Objectives - Unrestricted <sup>a</sup> |
|---------------------------------------------------|------------|-------------|-------------|-----------------------------------------------------|
| Location                                          | Bottom     | SE Sidewall | SW Sidewall |                                                     |
| Date Collected                                    | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                     |
| Time Collected                                    | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                     |
| trans-1,2-Dichloroethene                          | <0.9       | <1          | <1          | 190                                                 |
| Trichloroethylene                                 | 150        | 9.1         | 2.3         | 470                                                 |
| Trichlorofluoromethane                            | <0.9       | <1          | <1          | n/a                                                 |
| Vinyl Chloride                                    | <0.9       | <1          | <1          | 20                                                  |
| 1-Methyldecahydronaphthalene (TIC)                | 12 JN !    | n/a         | n/a         | n/a                                                 |
| 2,2,11,11-Tetramethyldodecane (TIC)               | n/a        | 45 JN !     | n/a         | n/a                                                 |
| 2,2,4,4 - Tetramethylpentane (TIC)                | 11 JN !    | n/a         | n/a         | n/a                                                 |
| 2,2-Dimethyldodecane (TIC)                        | n/a        | 13 JN !     | n/a         | n/a                                                 |
| 2,6,10-Trimethyldodecane (TIC)                    | n/a        | 13 JN !     | n/a         | n/a                                                 |
| 2,6,11-Trimethyldodecane (TIC)                    | n/a        | 48 JN !     | n/a         | n/a                                                 |
| 2-Propyl-1-Heptanol (TIC)                         | n/a        | 12 JN !     | n/a         | n/a                                                 |
| 3-Ethyl-2-Methyl-Heptane (TIC)                    | 8.1 JN !   | n/a         | n/a         | n/a                                                 |
| 3-Methyl-5-Propylnonane (TIC)                     | 15 JN !    | 37 JN !     | n/a         | n/a                                                 |
| Cyclohexane, pentyl- (TIC)                        | 18 JN !    | n/a         | n/a         | n/a                                                 |
| Decahydro-4,4,8,9,10-Pentamethylnaphthalene (TIC) | n/a        | 17 JN !     | n/a         | n/a                                                 |
| Decahydro-9-Ethyl-4,4,8,10-Tetramethylna (TIC)    | n/a        | 18 JN !     | n/a         | n/a                                                 |
| Hexahydropyridine, 4-[4,5-Dihydroxypheny (TIC)    | n/a        | 17 JN !     | n/a         | n/a                                                 |
| n-Decane (TIC)                                    | 26 JN !    | n/a         | n/a         | n/a                                                 |
| Trans-Decahydro-Naphthalene (TIC)                 | 11 JN !    | n/a         | n/a         | n/a                                                 |
| Undecane, 2,6-dimethyl- (TIC)                     | 13 JN !    | n/a         | n/a         | n/a                                                 |
| UNKNOWN VOC WITH HIGHEST CONC. (TIC)              | 41 J !     | 11 J !      | n/a         | n/a                                                 |
| UNKNOWN VOC WITH 2ND HIGHEST CONC. (TIC)          | 8.5 J !    | n/a         | n/a         | n/a                                                 |
| Calculated                                        |            |             |             |                                                     |
| Total VOC's                                       | 928.86     | 283.03      | 14.65       | n/a                                                 |
| Total BTEX                                        | 19.2       | 1.33 J      | 0.31 J      | n/a                                                 |
| Total Xylenes                                     | 15.5       | 1.14 J      | 0.31 J      | 260                                                 |

## Notes:

n/a - not applicable / not analyzed

J - Indicates an estimated value below laboratory reporting limits

N - Indicates the presumptive evidence of a compound

! - Indicates parameter/value was reported as a Tentatively Identified Compound (TIC)

<sup>a</sup> - 6 NYCRR 375-6.8 (a)

Table 2

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



Cesspool #5 Endpoint Soil Analytical Results (ug/Kg)

TestAmerica, Inc.

Methods: SW8270D

| Sample ID                   | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup Objectives - Unrestricted <sup>a</sup> |
|-----------------------------|------------|-------------|-------------|-----------------------------------------------------|
| Location                    | Bottom     | SE Sidewall | SW Sidewall |                                                     |
| Date Collected              | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                     |
| Time Collected              | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                     |
| 1,1-Biphenyl                | <400       | <360        | <340        | n/a                                                 |
| 1,2,4,5-Tetrachlorobenzene  | <400       | <360        | <340        | n/a                                                 |
| 2,3,4,6-Tetrachlorophenol   | <400       | <360        | <340        | n/a                                                 |
| 2,4,5-Trichlorophenol       | <400       | <360        | <340        | n/a                                                 |
| 2,4,6-Trichlorophenol       | <160       | <140        | <140        | n/a                                                 |
| 2,4-Dichlorophenol          | <160       | <140        | <140        | n/a                                                 |
| 2,4-Dimethylphenol          | <400       | <360        | <340        | n/a                                                 |
| 2,4-Dinitrophenol           | <320       | <290        | <280        | n/a                                                 |
| 2,4-Dinitrotoluene          | <81        | <73         | <70         | n/a                                                 |
| 2,6-Dinitrotoluene          | <81        | <73         | <70         | n/a                                                 |
| 2-Chloronaphthalene         | <400       | <360        | <340        | n/a                                                 |
| 2-Chlorophenol              | <400       | <360        | <340        | n/a                                                 |
| 2-Methyl-4,6-dinitrophenol  | <320       | <290        | <280        | n/a                                                 |
| 2-Methylnaphthalene         | <400       | <360        | <340        | n/a                                                 |
| 2-Nitroaniline              | <400       | <360        | <340        | n/a                                                 |
| 2-Nitrophenol               | <400       | <360        | <340        | n/a                                                 |
| 3,3-Dichlorobenzidine       | <160       | <140        | <140        | n/a                                                 |
| 3-Nitroaniline              | <400       | <360        | <340        | n/a                                                 |
| 4-Bromophenyl-phenylether   | <400       | <360        | <340        | n/a                                                 |
| 4-Chloro-3-methylphenol     | <400       | <360        | <340        | n/a                                                 |
| 4-Chloroaniline             | <400       | <360        | <340        | n/a                                                 |
| 4-Chlorophenyl-phenylether  | <400       | <360        | <340        | n/a                                                 |
| 4-Nitroaniline              | <400       | <360        | <340        | n/a                                                 |
| 4-Nitrophenol               | <810       | <730        | <700        | n/a                                                 |
| Acenaphthene                | <400       | <360        | <340        | 20,000                                              |
| Acenaphthylene              | <400       | <360        | <340        | 100,000                                             |
| Acetophenone                | <400       | <360        | <340        | n/a                                                 |
| Anthracene                  | <400       | <360        | <340        | 100,000                                             |
| Atrazine                    | <160       | <140        | <140        | n/a                                                 |
| Benzaldehyde                | <400       | <360        | <340        | n/a                                                 |
| Benzo(a)anthracene          | <40        | <36         | <34         | 1,000                                               |
| Benzo(a)pyrene              | <40        | <36         | <34         | 1,000                                               |
| Benzo(b)fluoranthene        | <40        | <36         | <34         | 1,000                                               |
| Benzo(g,h,i)perylene        | <400       | <360        | <340        | 100,000                                             |
| Benzo(k)fluoranthene        | <40        | <36         | <34         | 800                                                 |
| bis(2-Chloroethoxy)methane  | <400       | <360        | <340        | n/a                                                 |
| bis(2-Chloroethyl)ether     | <40        | <36         | <34         | n/a                                                 |
| bis(2-Chloroisopropyl)ether | <400       | <360        | <340        | n/a                                                 |
| bis(2-Ethylhexyl)phthalate  | <400       | <360        | <340        | n/a                                                 |
| Butylbenzylphthalate        | <400       | <360        | <340        | n/a                                                 |
| Caprolactam                 | <400       | <360        | <340        | n/a                                                 |
| Carbazole                   | <400       | <360        | <340        | n/a                                                 |
| Chrysene                    | <400       | <360        | <340        | 1,000                                               |
| Dibenzo(a,h)anthracene      | <40        | <36         | <34         | 330                                                 |
| Dibenzofuran                | <400       | <360        | <340        | 7,000                                               |
| Diethylphthalate            | <400       | <360        | <340        | n/a                                                 |

Table 2

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



Cesspool #5 Endpoint Soil Analytical Results (ug/Kg)

TestAmerica, Inc.

Methods: SW8270D

| Sample ID                         | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup Objectives - Unrestricted <sup>a</sup> |
|-----------------------------------|------------|-------------|-------------|-----------------------------------------------------|
| Location                          | Bottom     | SE Sidewall | SW Sidewall |                                                     |
| Date Collected                    | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                     |
| Time Collected                    | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                     |
| Dimethylphthalate                 | <400       | <360        | <340        | n/a                                                 |
| Di-n-butylphthalate               | <400       | <360        | <340        | n/a                                                 |
| Di-n-octylphthalate               | <400       | <360        | <340        | n/a                                                 |
| Fluoranthene                      | <400       | <360        | <340        | 100,000                                             |
| Fluorene                          | <400       | <360        | <340        | 30,000                                              |
| Hexachlorobenzene                 | <40        | <36         | <34         | 330                                                 |
| Hexachlorobutadiene               | <81        | <73         | <70         | n/a                                                 |
| Hexachlorocyclopentadiene         | <400       | <360        | <340        | n/a                                                 |
| Hexachloroethane                  | <40        | <36         | <34         | n/a                                                 |
| Indeno(1,2,3-cd)pyrene            | <40        | <36         | <34         | 500                                                 |
| Isophorone                        | <160       | <140        | <140        | n/a                                                 |
| Naphthalene                       | <400       | <360        | <340        | 12,000                                              |
| Nitrobenzene                      | <40        | <36         | <34         | n/a                                                 |
| N-Nitrosodi-N-Propylamine         | <40        | <36         | <34         | n/a                                                 |
| N-Nitrosodiphenylamine            | <400       | <360        | <340        | n/a                                                 |
| o-cresol                          | <400       | <360        | <340        | 330                                                 |
| p-cresol                          | <400       | <360        | <340        | 330                                                 |
| Pentachlorophenol                 | <320       | <290        | <280        | 800                                                 |
| Phenanthrene                      | <400       | <360        | <340        | 100,000                                             |
| Phenol (total)                    | <400       | <360        | <340        | 330                                                 |
| Pyrene                            | <400       | <360        | <340        | 100,000                                             |
| Cholestan-3-One, (5.Beta.)- (TIC) | 640 JN !   | n/a         | n/a         | n/a                                                 |
| Calculated Total SVOC's           | 640        | <18755      | <17784      | n/a                                                 |

Notes:

n/a - not applicable / not analyzed

J - Indicates an estimated value below laboratory reporting limits

N - Indicates the presumptive evidence of a compound

! - Indicates parameter/value was reported as a Tentatively Identified Compound (TIC)

<sup>a</sup> - 6 NYCRR 375-6.8 (a)

Table 3

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



### Cesspool #5 Endpoint Soil Analytical Results (mg/Kg)

TestAmerica, Inc.

Methods: SW6010C, SW7471B, SW9012

| Sample ID        | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup Objectives - Unrestricted <sup>a</sup> |
|------------------|------------|-------------|-------------|-----------------------------------------------------|
| Location         | Bottom     | SE Sidewall | SW Sidewall |                                                     |
| Date Collected   | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                     |
| Time Collected   | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                     |
| Aluminum         | 926        | 570         | 1,070       | n/a                                                 |
| Antimony         | <4.6       | <4.1        | <3.8        | n/a                                                 |
| Arsenic          | <3.4       | <3.1        | 0.96 J      | 13                                                  |
| Barium           | 5.8 J      | 3.3 J       | 3.3 J       | 350                                                 |
| Beryllium        | <0.46      | <0.41       | <0.38       | 7.2                                                 |
| Cadmium          | 0.45 J     | <0.82       | <0.75       | 2.5                                                 |
| Calcium          | 93.4 J     | <1020       | 107 J       | n/a                                                 |
| Chromium (total) | 2.4        | 1.2 J       | 3.9         | n/a                                                 |
| Cobalt           | <11.5      | <10.2       | <9.4        | n/a                                                 |
| Copper           | 4 J        | 1.8 J       | 2.1 J       | 50                                                  |
| Cyanide          | <0.12      | <0.11       | <0.11       | 27                                                  |
| Iron             | 1,380      | 357         | 2,190       | n/a                                                 |
| Lead             | 1.9 J      | 1.3 J       | 1.5 J       | 63                                                  |
| Magnesium        | 158 J      | 91.2 J      | 164 J       | n/a                                                 |
| Manganese        | 6.7        | 3.1         | 9.8         | 1,600                                               |
| Mercury          | <0.018     | <0.017      | 0.08        | 0.18                                                |
| Nickel           | <9.2       | <8.2        | <7.5        | 30                                                  |
| Potassium        | 92.1 J     | 67 J        | 86 J        | n/a                                                 |
| Selenium         | <4.6       | <4.1        | <3.8        | 3.9                                                 |
| Silver           | <2.3       | <2          | 0.4 J       | 2                                                   |
| Sodium           | <1150      | <1020       | <939        | n/a                                                 |
| Thallium         | <4.6       | <4.1        | <3.8        | n/a                                                 |
| Vanadium         | 3.1 J      | 1.3 J       | 2.8 J       | n/a                                                 |
| Zinc             | 19         | 10.1        | 9.6         | 109                                                 |

#### Notes:

n/a - not applicable / not analyzed

J - Indicates an estimated value below laboratory reporting limits

<sup>a</sup> - 6 NYCRR 375-6.8 (a)



Table 4

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



ENVIRONMENTAL  
ASSESSMENT &  
REMEDIATIONS

### Cesspool #5 Endpoint Soil Analytical Results (ug/Kg)

TestAmerica, Inc.

Methods: SW8082A

| Sample ID                         | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup<br>Objectives -<br>Unrestricted <sup>a</sup> |
|-----------------------------------|------------|-------------|-------------|-----------------------------------------------------------|
| Location                          | Bottom     | SE Sidewall | SW Sidewall |                                                           |
| Date Collected                    | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                           |
| Time Collected                    | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                           |
| Aroclor 1016                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1221                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1232                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1242                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1248                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1254                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1260                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1262                      | <81        | <73         | <70         | n/a                                                       |
| Aroclor 1268                      | <81        | <73         | <70         | n/a                                                       |
| Polychlorinated biphenyls (total) | <81        | <73         | <70         | 100                                                       |

#### Notes:

n/a - not applicable / not analyzed

<sup>a</sup> - 6 NYCRR 375-6.8 (a)

Table 5

Levey Property  
1305 South Strong Avenue  
Copiague, NY  
Spill # 152201



### Cesspool #5 Endpoint Soil Analytical Results (ug/Kg)

TestAmerica, Inc.

Methods: SW8081B, SW8151A

| Sample ID                         | CP-5 BOT   | CP-5 SE SW  | CP-5 SW SW  | Soil Cleanup<br>Objectives -<br>Unrestricted <sup>a</sup> |
|-----------------------------------|------------|-------------|-------------|-----------------------------------------------------------|
| Location                          | Bottom     | SE Sidewall | SW Sidewall |                                                           |
| Date Collected                    | 11/17/2014 | 11/17/2014  | 11/17/2014  |                                                           |
| Time Collected                    | 2:10 PM    | 1:15 PM     | 1:25 PM     |                                                           |
| 2,4,5-TP                          | <21        | <18         | <18         | 3,800                                                     |
| 2,4,5-Trichlorophenoxyacetic acid | <21        | <18         | <18         | n/a                                                       |
| 2,4-D                             | <21        | <18         | <18         | n/a                                                       |
| 4,4,-DDT                          | <8.1       | <7.3        | <7          | 3.3                                                       |
| 4,4-DDD                           | <8.1       | <7.3        | <7          | 3.3                                                       |
| 4,4-DDE                           | <8.1       | <7.3        | <7          | 3.3                                                       |
| Aldrin                            | <8.1       | <7.3        | <7          | 5                                                         |
| alpha BHC                         | <2.4       | <2.2        | <2.1        | 20                                                        |
| beta BHC                          | <2.4       | <2.2        | <2.1        | 36                                                        |
| Chlordane                         | <81        | <73         | <70         | n/a                                                       |
| delta-BHC                         | <2.4       | <2.2        | <2.1        | 40                                                        |
| Dieldrin                          | <2.4       | <2.2        | <2.1        | 5                                                         |
| Endosulfan I                      | <8.1       | <7.3        | <7          | 2,400                                                     |
| Endosulfan II                     | <8.1       | <7.3        | <7          | 2,400                                                     |
| Endosulfan Sulfate                | <8.1       | <7.3        | <7          | 2,400                                                     |
| Endrin                            | <8.1       | <7.3        | <7          | 14                                                        |
| Endrin Aldehyde                   | <8.1       | <7.3        | <7          | n/a                                                       |
| Endrin ketone                     | <8.1       | <7.3        | <7          | n/a                                                       |
| Gamma-BHC(Lindane)                | <2.4       | <2.2        | <2.1        | 100                                                       |
| Heptachlor                        | <8.1       | <7.3        | <7          | 42                                                        |
| Heptachlor Epoxide                | <8.1       | <7.3        | <7          | n/a                                                       |
| Methoxychlor                      | <8.1       | <7.3        | <7          | n/a                                                       |
| Toxaphene                         | <81        | <73         | <70         | n/a                                                       |

#### Notes:

n/a - not applicable / not analyzed

<sup>a</sup> - 6 NYCRR 375-6.8 (a)

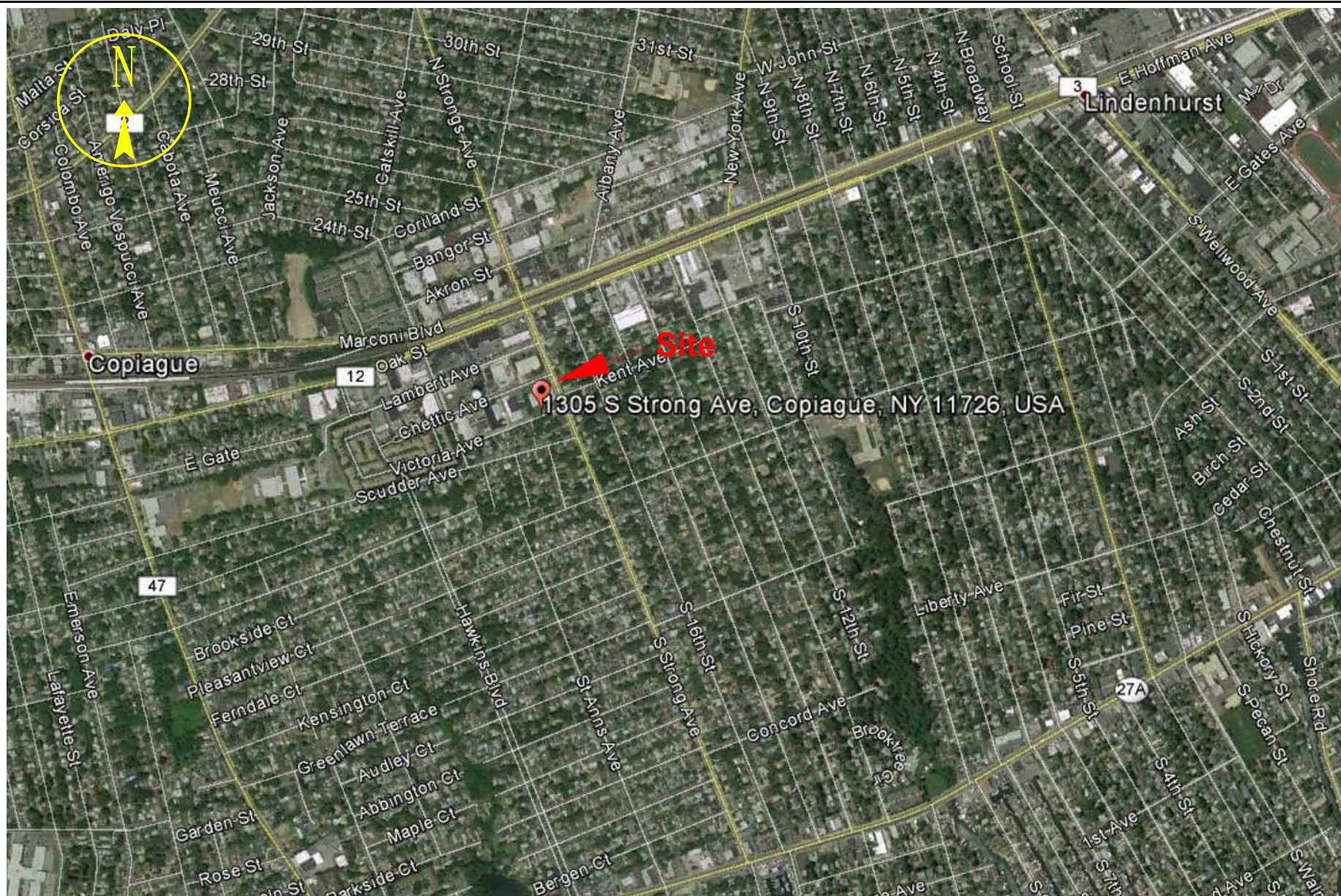


## FIGURES

Figure 1: Site Location Map

Figure 2: Site Map





Modified from 2014 Europa Technologies, Google

Not to Scale



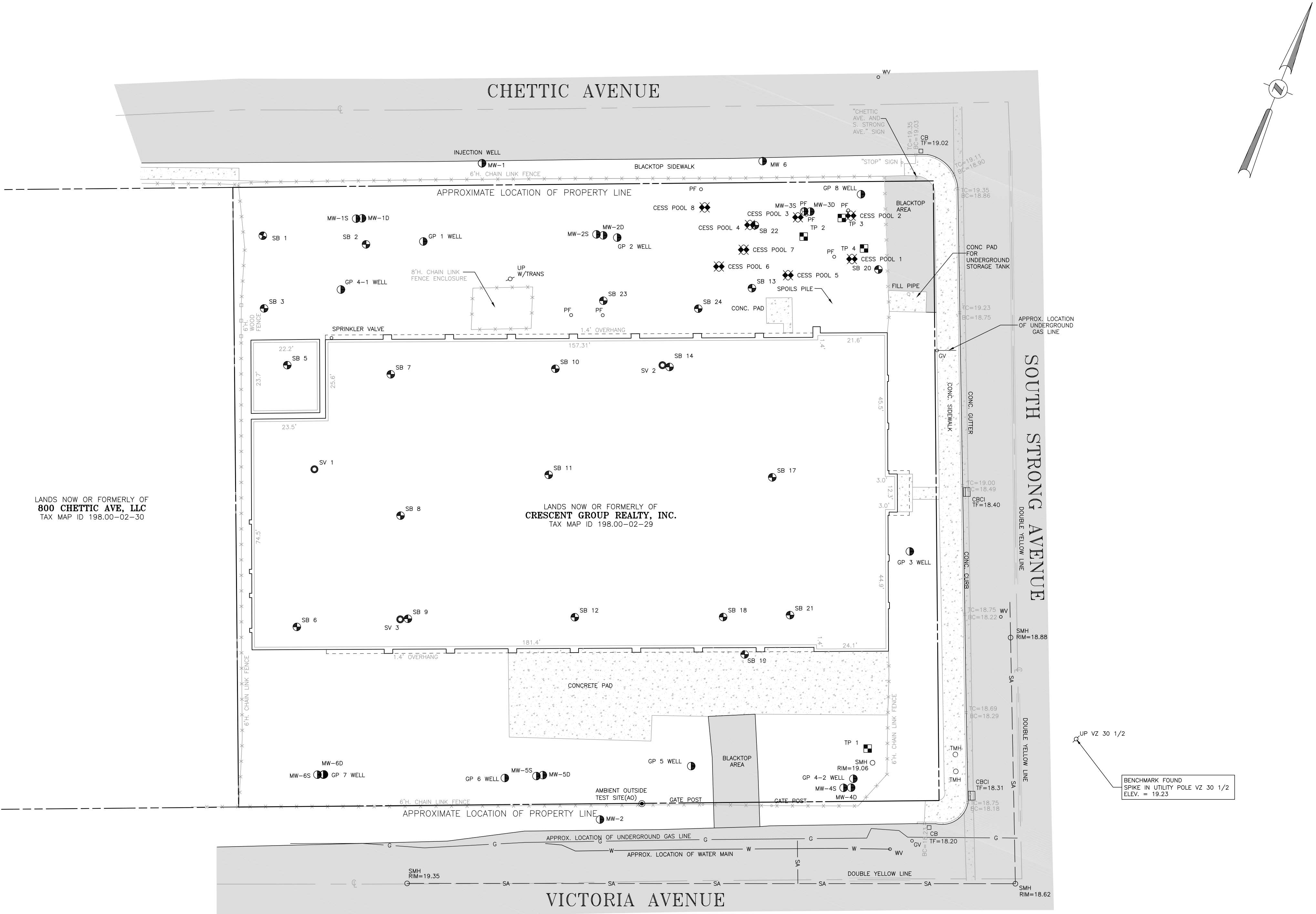
ENVIRONMENTAL  
ASSESSMENT &  
REMEDIATIONS

Figure 1  
Site Location Map

Levey Property  
1305 S. Strong Avenue  
Copiague, NY  
Site No. 152201



FIGURE 2



MAP NOTES:

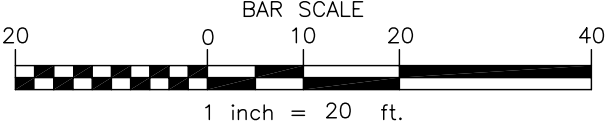
1. North orientation and coordinates are referenced to Grid North and are based on the New York State Plane Coordinate System, Long Island Zone, NAD 83 obtained from GPS observations made on July 20, 2011.
2. Vertical datum shown hereon is NAVD 88 and was obtained through GPS observations.
3. Method of data collection used was G2 - GPS Carrier Phase Kinematic Relative-Positioning Technique.  
Horizontal Accuracy: 0.03 ft. + 1 ppm rms.  
Vertical Accuracy: 0.065 ft + 1 ppm rms.
4. Topographic information shown hereon was compiled from and actual field survey conducted on July 20, 2011.
5. Underground facilities, structures, and utilities have been plotted from data obtained from previous maps and record drawings. Surface features such as catch basin rims, manhole covers, water valves, gas valves, etc. are the result of field survey unless noted otherwise. There may be other underground utilities, the existence of which is not known to the undersigned. Size and location of all underground utilities and structures must be verified by the appropriate authorities. Dig Safely New York must be notified prior to conducting test borings, excavation and construction.
6. Boundary information shown is approximate as protracted from tax mapping and not a result of a boundary survey.

LANDS NOW OR FORMERLY OF  
**800 CHETTIC AVE, LLC**  
TAX MAP ID 198.00-02-30

LANDS NOW OR FORMERLY OF  
**CRESCENT GROUP REALTY, INC.**  
TAX MAP ID 198.00-02-29

LEGEND

- CB CATCH BASIN
- CB CI CATCH BASIN/CURB INLET
- GV GAS VALVE
- CESS POOL 1 CESS POOL
- GP 1 WELL GROUNDWATER PROFILE WELL SITE
- MW 6 MONITOR WELL
- PF PIN FLAG
- SMH SANITARY MANHOLE
- SB 21 SOIL BORING LOCATION
- SV 3 SUB-SLAB SOIL VAPOR TEST LOCATION
- TMH TELEPHONE MANHOLE
- TP 4 TEST PIT
- UTILITY POLE UTILITY POLE
- WV WATER VALVE
- BC BOTTOM OF CURB
- TC TOP OF CURB
- G UNDERGROUND GAS LINE AS MARKED BY OTHERS
- SA UNDERGROUND SANITARY LINE AS MARKED BY OTHERS
- W UNDERGROUND WATER LINE AS MARKED BY OTHERS



"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES, P.C. OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY"

|                                |          |                                            |         |       |       |                                                                                                          |                                                                                                                                                                                  |  |
|--------------------------------|----------|--------------------------------------------|---------|-------|-------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| JAMES F. COOK<br>PLS NO. 49260 | DATE     | REVISIONS RECORD/DESCRIPTION               | DRAFTER | CHECK | APPR. | UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW. | TOPOGRAPHIC AND SAMPLE LOCATION SURVEY<br><br>1305 SOUTH STRONG AVENUE<br>PREPARED FOR<br>SHAW ENVIRONMENTAL, INC                                                                |  |
|                                | 11/11/11 | MISC. REVISIONS, ADDRESSED CLIENT COMMENTS | MMB     | JFC   | WJN   | © 2011                                                                                                   |                                                                                                                                                                                  |  |
|                                | 1/31/12  | ADDITIONAL WELLS ADDED & CHART REVISED     | SMW     | JFC   | WJN   | C.T. MALE ASSOCIATES                                                                                     | HAMLET OF COPIAGUE, TOWN OF BABYLON<br>SUFFOLK COUNTY, NEW YORK                                                                                                                  |  |
|                                | 2/06/13  | ADDITIONAL LOCATIONS & CHART REVISED       | TCB     | JFC   | WJN   | APPROVED: WJN                                                                                            |                                                                                                                                                                                  |  |
|                                |          |                                            |         |       |       | DRAFTED : MDD                                                                                            | <b>C.T. MALE ASSOCIATES</b><br>Engineering, Surveying, Architecture & Landscape Architecture, P.C.<br>50 CENTURY HILL DRIVE, LATHAM, NY 12110<br>518.786.7400 * FAX 518.786.7299 |  |
|                                |          |                                            |         |       |       | CHECKED : JFC                                                                                            |                                                                                                                                                                                  |  |
|                                |          |                                            |         |       |       | PROJ. NO: 11.1202                                                                                        |                                                                                                                                                                                  |  |
|                                |          |                                            |         |       |       | SCALE : 1"=20'                                                                                           |                                                                                                                                                                                  |  |
|                                |          |                                            |         |       |       | DATE : JULY 20, 2011                                                                                     | SHEET 1 OF 1<br>DWG. NO: 11-364                                                                                                                                                  |  |



## **APPENDIX A: BACKFILL MATERIAL DOCUMENTATION**

# 110 Sand Company

170 Cabot Street  
West Babylon, New York 11704  
631-249-4108 Fax 631-249-4126

PIT LOCATION: BETHPAGE/SPAGNOLI ROAD, MELVILLE, N.Y. 11747 (631) 694-2822 FAX (631) 694-2832

May 23, 2014

Environmental Assessment & Remediations  
225 Atlantic Avenue  
Patchogue, NY 11772

Attention: Jennifer A. Lawrence

Re: Former Jericho Marine  
Lindenhurst, NY  
NYSDEC Spill #98-25156

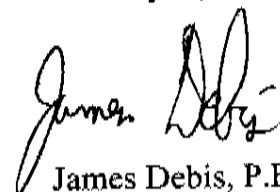
To Whom It May Concern:

Kindly be advised the state sand (otherwise known as concrete sand) represented by the attached gradation and provided from 110 Sand Company in Melville, New York is naturally mined, free of extraneous or deleterious material and/or solid waste. The source, located at 136 Spagnoli Rd, Melville, is a virgin source and is on record with the NYSDOT as Source No. 10-34F.

In addition, the Type 4 commercial RCA blend is free of contaminants and deleterious material, such as brick and asphalt.

If any additional information is required regarding these two materials, please contact me at (631) 694-2822 x 12.

Thank you,



James Debis, P.E.  
Engineer

**State Sand (concrete sand)**

Sample date : 5/15/2014  
Test date : 5/16/2014  
Sample weight : 102.3 (g)

| <u>Sieve Size</u> | <u>Weight retained</u> | <u>Percent retained</u> | <u>Percent Passing</u> | <u>Spec</u> |
|-------------------|------------------------|-------------------------|------------------------|-------------|
| 3/8"              | 0.0                    | 0.00                    | 100.00                 | 100%        |
| #4                | 2.8                    | 2.74                    | 97.26                  | 90%-100%    |
| #8                | 7.6                    | 7.43                    | 89.83                  | 75%-100%    |
| #16               | 9.9                    | 9.68                    | 80.16                  | 50%-87%     |
| #30               | 18.6                   | 18.18                   | 61.97                  | 25%-62%     |
| #50               | 46.1                   | 45.06                   | 16.91                  | 10%-30%     |
| #100              | 15.7                   | 15.35                   | 1.56                   | 1%-10%      |
| #200              | 0.7                    | 0.68                    | 0.88                   | 0%-3%       |
| Pan               | 1.4                    | 1.37                    |                        |             |
| Total             | 102.8                  | 100.49                  |                        |             |



## ANALYTICAL REPORT

Job Number: 460-75841-1

Job Description: DEC Lindenhurst269

For:

New York State D.E.C.  
NYS Suny Bldg 40 Region 1  
Stony Brook, NY 11790

Attention: Ms. Karen Gomez



Approved for release.  
Shalini Isaac  
Project Management Assistant II  
5/15/2014 10:26 AM

---

Designee for  
Melissa Haas, Project Manager I  
777 New Durham Road, Edison, NJ, 08817  
(203)944-1310  
melissa.haas@testamericainc.com  
05/15/2014

cc: Ms. Jennifer Lawrence  
Mr. Greg Mann  
Mrs. Tracy Salvitti

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LA000132

**TestAmerica Laboratories, Inc.**

TestAmerica Edison 777 New Durham Road, Edison, NJ 08817  
Tel (732) 549-3900 Fax (732) 549-3679 [www.testamericainc.com](http://www.testamericainc.com)



## CASE NARRATIVE

**Client: New York State D.E.C.**

**Project: DEC Lindenhurst269**

**Report Number: 460-75841-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 5/9/2014 4:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

Except:

The following sample(s) was collected in an improper container: Fill - item#4 (460-75841-2), Fill - Sand (460-75841-1). The client was contacted regarding this issue, and the laboratory was instructed to <<CHOOSE ONE>> proceed with/cancel analysis.  
Received 8260 Voa. Test as Dirt in Jar

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

### **VOLATILE ORGANICS**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for Volatile organics in accordance with EPA SW-846 Methods 8260C. The samples were prepared on 05/09/2014 and analyzed on 05/12/2014.

The continuing calibration verification (CCV) associated with batch 223925 recovered above the upper control limit for Dichlorodifluoromethane and the minimum response factor for 2-Hexanone was also outside criteria. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The continuing calibration verification (CCV) associated with batch 224223 recovered outside control limit for Acetone, 1,4-Dioxane and Methyl Acetate. The samples associated with this CCV were non-detects, except for Acetone; therefore, the data have been flagged and reported. The following samples are impacted: (CCVIS 460-224223/2).

Surrogate recovery for the following sample was outside control limits: Fill - item#4 (460-75841-2). Re-analysis was performed with concurring results in batch 224223.

Acetone was detected in method blank LB3 460-223546/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Dibromofluoromethane (Surr) failed the surrogate recovery criteria low for Fill - item#4 (460-75841-2).

Refer to the QC report for details.

No other difficulties were encountered during the Volatile organics analysis.

All other quality control parameters were within the acceptance limits.

### **SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS)**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for semivolatile organic compounds (GC/MS) in

accordance with EPA SW-846 Method 8270D. The samples were prepared on 05/12/2014 and analyzed on 05/13/2014.

The continuing calibration verification (CCV) associated with batch 223977 recovered outside the 20%D criteria for the following analytes: Caprolactam, 2,4-Dinitrophenol and Hexachlorobutadiene. The samples associated with this CCV are reported as estimated values for the affected analytes whether detected or non-detected as per the 8270D method.

Acid extractable surrogate standard recoveries are biased low for the following sample: Fill - item#4 (460-75841-2). Sample's high pH is causing low A/E surrogate recoveries.

The laboratory control sample (LCS) for batch 223788 recovered outside control limits for the following analyte: Nitrobenzene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

2-Fluorophenol (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria low for Fill - item#4 (460-75841-2).

Nitrobenzene failed the recovery criteria high for the MS of sample 460-75842-10 in batch 460-223977. For the MSD of sample 460-75842-10 in batch 460-223977, Pentachlorophenol failed the recovery criteria low. Nitrobenzene failed the recovery criteria high. Also, 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol exceeded the RPD limit. The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Sample Fill - item#4 (460-75841-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

#### **PESTICIDES**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for Pesticides in accordance with EPA SW-846 Methods 8081A. The samples were prepared and analyzed on 05/12/2014.

No difficulties were encountered during the Pesticides analysis.

All quality control parameters were within the acceptance limits.

#### **POLYCHLORINATED BIPHENYLS**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082. The samples were prepared and analyzed on 05/12/2014.

No difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

#### **METALS**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for Metals in accordance with EPA SW-846 6010C. The samples were prepared on 05/10/2014 and analyzed on 05/12/2014 and 05/14/2014.

Calcium, Chromium, Iron and Manganese failed the recovery criteria low for the MS of sample Fill - SandMS (460-75841-1) in batch 460-223942.

Refer to the QC report for details.

Samples Fill - Sand (460-75841-1)[4X], Fill - item#4 (460-75841-2)[10X] and Fill - item#4 (460-75841-2)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

#### **TOTAL MERCURY**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for total mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 05/12/2014.

No difficulties were encountered during the Hg analysis.

All quality control parameters were within the acceptance limits.

#### **PERCENT SOLIDS/PERCENT MOISTURE**

Samples Fill - Sand (460-75841-1) and Fill - item#4 (460-75841-2) were analyzed for percent solids/percent moisture in accordance with

EPA Method CLPISM01.2 (Exhibit D). The samples were analyzed on 05/10/2014.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

## EXECUTIVE SUMMARY - Detections

Client: New York State D.E.C.

Job Number: 460-75841-1

| Lab Sample ID<br>Analyte | Client Sample ID     | Result | Qualifier | Reporting<br>Limit | Units | Method   |
|--------------------------|----------------------|--------|-----------|--------------------|-------|----------|
| <b>460-75841-1</b>       | <b>FILL - SAND</b>   |        |           |                    |       |          |
| Benzo[a]pyrene           |                      | 14     | J         | 34                 | ug/Kg | 8270D    |
| Benzo[b]fluoranthene     |                      | 14     | J         | 34                 | ug/Kg | 8270D    |
| Benzo[k]fluoranthene     |                      | 7.3    | J         | 34                 | ug/Kg | 8270D    |
| Indeno[1,2,3-cd]pyrene   |                      | 8.7    | J         | 34                 | ug/Kg | 8270D    |
| Aluminum                 |                      | 823    |           | 38.0               | mg/Kg | 6010C    |
| Arsenic                  |                      | 0.92   | J         | 2.9                | mg/Kg | 6010C    |
| Barium                   |                      | 3.8    | J         | 38.0               | mg/Kg | 6010C    |
| Calcium                  |                      | 414    | J         | 951                | mg/Kg | 6010C    |
| Chromium                 |                      | 3.8    |           | 1.9                | mg/Kg | 6010C    |
| Iron                     |                      | 3130   |           | 28.5               | mg/Kg | 6010C    |
| Potassium                |                      | 91.6   | J         | 951                | mg/Kg | 6010C    |
| Magnesium                |                      | 181    | J         | 951                | mg/Kg | 6010C    |
| Manganese                |                      | 35.7   |           | 2.9                | mg/Kg | 6010C    |
| Lead                     |                      | 0.97   | J         | 1.9                | mg/Kg | 6010C    |
| Vanadium                 |                      | 3.6    | J         | 9.5                | mg/Kg | 6010C    |
| Zinc                     |                      | 4.1    | J         | 5.7                | mg/Kg | 6010C    |
| Percent Moisture         |                      | 4.4    |           | 1.0                | %     | Moisture |
| Percent Solids           |                      | 95.6   |           | 1.0                | %     | Moisture |
| <b>460-75841-2</b>       | <b>FILL - ITEM#4</b> |        |           |                    |       |          |
| Acetone                  |                      | 19     | B         | 5.5                | ug/Kg | 8260C    |
| Acenaphthene             |                      | 110    | J         | 760                | ug/Kg | 8270D    |
| Anthracene               |                      | 240    | J         | 760                | ug/Kg | 8270D    |
| Benzo[a]anthracene       |                      | 290    |           | 76                 | ug/Kg | 8270D    |
| Benzo[a]pyrene           |                      | 220    |           | 76                 | ug/Kg | 8270D    |
| Benzo[b]fluoranthene     |                      | 290    |           | 76                 | ug/Kg | 8270D    |
| Benzo[g,h,i]perylene     |                      | 190    | J         | 760                | ug/Kg | 8270D    |
| Benzo[k]fluoranthene     |                      | 99     |           | 76                 | ug/Kg | 8270D    |
| Carbazole                |                      | 110    | J         | 760                | ug/Kg | 8270D    |
| Chrysene                 |                      | 300    | J         | 760                | ug/Kg | 8270D    |
| Dibenz(a,h)anthracene    |                      | 47     | J         | 76                 | ug/Kg | 8270D    |
| Dibenzofuran             |                      | 100    | J         | 760                | ug/Kg | 8270D    |
| Di-n-butyl phthalate     |                      | 280    | J         | 760                | ug/Kg | 8270D    |
| Fluoranthene             |                      | 780    |           | 760                | ug/Kg | 8270D    |
| Indeno[1,2,3-cd]pyrene   |                      | 200    |           | 76                 | ug/Kg | 8270D    |
| Isophorone               |                      | 380    | J         | 760                | ug/Kg | 8270D    |
| Naphthalene              |                      | 150    | J         | 760                | ug/Kg | 8270D    |
| Phenanthrene             |                      | 1200   |           | 760                | ug/Kg | 8270D    |
| Pyrene                   |                      | 540    | J         | 760                | ug/Kg | 8270D    |
| Aluminum                 |                      | 6800   |           | 38.4               | mg/Kg | 6010C    |
| Arsenic                  |                      | 5.1    |           | 2.9                | mg/Kg | 6010C    |
| Barium                   |                      | 44.7   |           | 38.4               | mg/Kg | 6010C    |
| Beryllium                |                      | 0.26   | J         | 0.38               | mg/Kg | 6010C    |
| Calcium                  |                      | 61200  |           | 2400               | mg/Kg | 6010C    |
| Cobalt                   |                      | 3.1    | J         | 9.6                | mg/Kg | 6010C    |

## EXECUTIVE SUMMARY - Detections

Client: New York State D.E.C.

Job Number: 460-75841-1

| Lab Sample ID<br>Analyte | Client Sample ID | Result | Qualifier | Reporting<br>Limit | Units | Method   |
|--------------------------|------------------|--------|-----------|--------------------|-------|----------|
| Chromium                 |                  | 17.7   |           | 1.9                | mg/Kg | 6010C    |
| Copper                   |                  | 11.3   |           | 4.8                | mg/Kg | 6010C    |
| Iron                     |                  | 10400  |           | 28.8               | mg/Kg | 6010C    |
| Potassium                |                  | 607    | J         | 959                | mg/Kg | 6010C    |
| Magnesium                |                  | 4530   |           | 959                | mg/Kg | 6010C    |
| Manganese                |                  | 153    |           | 2.9                | mg/Kg | 6010C    |
| Nickel                   |                  | 9.0    |           | 7.7                | mg/Kg | 6010C    |
| Lead                     |                  | 20.3   |           | 1.9                | mg/Kg | 6010C    |
| Vanadium                 |                  | 18.4   |           | 9.6                | mg/Kg | 6010C    |
| Zinc                     |                  | 38.8   |           | 5.8                | mg/Kg | 6010C    |
| Mercury                  |                  | 0.039  |           | 0.020              | mg/Kg | 7471B    |
| Percent Moisture         |                  | 13.1   |           | 1.0                | %     | Moisture |
| Percent Solids           |                  | 86.9   |           | 1.0                | %     | Moisture |

## METHOD SUMMARY

Client: New York State D.E.C.

Job Number: 460-75841-1

| Description                                                       | Lab Location | Method       | Preparation Method |
|-------------------------------------------------------------------|--------------|--------------|--------------------|
| <b>Matrix: Solid</b>                                              |              |              |                    |
| Volatile Organic Compounds by GC/MS                               | TAL EDI      | SW846 8260C  |                    |
| Closed System Purge and Trap                                      | TAL EDI      |              | SW846 5035         |
| Semivolatile Organic Compounds (GC/MS)                            | TAL EDI      | SW846 8270D  |                    |
| Automated Soxhlet Extraction                                      | TAL EDI      |              | SW846 3541         |
| Organochlorine Pesticides (GC)                                    | TAL EDI      | SW846 8081B  |                    |
| Microwave Extraction                                              | TAL EDI      |              | SW846 3546         |
| Polychlorinated Biphenyls (PCBs) by Gas Chromatography            | TAL EDI      | SW846 8082A  |                    |
| Microwave Extraction                                              | TAL EDI      |              | SW846 3546         |
| Metals (ICP)                                                      | TAL EDI      | SW846 6010C  |                    |
| Preparation, Metals                                               | TAL EDI      |              | SW846 3050B        |
| Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) | TAL EDI      | SW846 7471B  |                    |
| Preparation, Mercury                                              | TAL EDI      |              | SW846 7471B        |
| Percent Moisture                                                  | TAL EDI      | EPA Moisture |                    |

### Lab References:

TAL EDI = TestAmerica Edison

### Method References:

EPA = US Environmental Protection Agency

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



## METHOD / ANALYST SUMMARY

Client: New York State D.E.C.

Job Number: 460-75841-1

| Method       | Analyst             | Analyst ID |
|--------------|---------------------|------------|
| SW846 8260C  | Tupayachi, Audberto | AAT        |
| SW846 8270D  | Zhao, Chunxin       | CAZ        |
| SW846 8081B  | Kapoor, Sita        | SAK        |
| SW846 8082A  | Patel, Jignesh      | JHP        |
| SW846 6010C  | Huang, Yixin        | YZH        |
| SW846 7471B  | Staib, Thomas       | TJS        |
| EPA Moisture | Martinez, Victor    | VMM        |

## SAMPLE SUMMARY

Client: New York State D.E.C.

Job Number: 460-75841-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time<br>Sampled | Date/Time<br>Received |
|---------------|------------------|---------------|----------------------|-----------------------|
| 460-75841-1   | Fill - Sand      | Solid         | 05/08/2014 1420      | 05/09/2014 1640       |
| 460-75841-2   | Fill - item#4    | Solid         | 05/08/2014 1410      | 05/09/2014 1640       |

# **SAMPLE RESULTS**

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

**8260C Volatile Organic Compounds by GC/MS**

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8260C           | Analysis Batch: | 460-223925 | Instrument ID:         | CVOAMS4 |
| Prep Method:     | 5035            | Prep Batch:     | 460-223546 | Lab File ID:           | D1002.D |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 5.36 g  |
| Analysis Date:   | 05/12/2014 1909 |                 |            | Final Weight/Volume:   | 5 mL    |
| Prep Date:       | 05/09/2014 2217 |                 |            |                        |         |

| Analyte                               | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL   | RL   |
|---------------------------------------|--------------------|----------------|-----------|-------|------|
| 1,1,1-Trichloroethane                 |                    | 0.98           | U         | 0.13  | 0.98 |
| 1,1,2,2-Tetrachloroethane             |                    | 0.98           | U         | 0.088 | 0.98 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane |                    | 0.98           | U         | 0.11  | 0.98 |
| 1,1,2-Trichloroethane                 |                    | 0.98           | U         | 0.14  | 0.98 |
| 1,1-Dichloroethane                    |                    | 0.98           | U         | 0.11  | 0.98 |
| 1,1-Dichloroethene                    |                    | 0.98           | U         | 0.19  | 0.98 |
| 1,2,3-Trichlorobenzene                |                    | 0.98           | U         | 0.16  | 0.98 |
| 1,2,4-Trichlorobenzene                |                    | 0.98           | U         | 0.19  | 0.98 |
| 1,2-Dichloropropane                   |                    | 0.98           | U         | 0.15  | 0.98 |
| 1,3-Dichlorobenzene                   |                    | 0.98           | U         | 0.16  | 0.98 |
| 1,4-Dichlorobenzene                   |                    | 0.98           | U         | 0.11  | 0.98 |
| 1,4-Dioxane                           |                    | 20             | U         | 12    | 20   |
| 2-Butanone (MEK)                      |                    | 4.9            | U         | 0.61  | 4.9  |
| 2-Hexanone                            |                    | 4.9            | U         | 0.13  | 4.9  |
| 4-Methyl-2-pentanone (MIBK)           |                    | 4.9            | U         | 0.20  | 4.9  |
| Acetone                               |                    | 4.9            | U         | 1.6   | 4.9  |
| Benzene                               |                    | 0.98           | U         | 0.15  | 0.98 |
| Bromoform                             |                    | 0.98           | U         | 0.17  | 0.98 |
| Bromomethane                          |                    | 0.98           | U         | 0.42  | 0.98 |
| Carbon disulfide                      |                    | 0.98           | U         | 0.15  | 0.98 |
| Carbon tetrachloride                  |                    | 0.98           | U         | 0.15  | 0.98 |
| Chlorobenzene                         |                    | 0.98           | U         | 0.18  | 0.98 |
| Chlorobromomethane                    |                    | 0.98           | U         | 0.11  | 0.98 |
| Chlorodibromomethane                  |                    | 0.98           | U         | 0.098 | 0.98 |
| Chloroethane                          |                    | 0.98           | U         | 0.32  | 0.98 |
| Chloroform                            |                    | 0.98           | U         | 0.23  | 0.98 |
| Chloromethane                         |                    | 0.98           | U         | 0.16  | 0.98 |
| cis-1,2-Dichloroethene                |                    | 0.98           | U         | 0.11  | 0.98 |
| cis-1,3-Dichloropropene               |                    | 0.98           | U         | 0.14  | 0.98 |
| Cyclohexane                           |                    | 0.98           | U         | 0.13  | 0.98 |
| Dichlorobromomethane                  |                    | 0.98           | U         | 0.31  | 0.98 |
| Dichlorodifluoromethane               |                    | 0.98           | U         | 0.21  | 0.98 |
| Ethylbenzene                          |                    | 0.98           | U         | 0.17  | 0.98 |
| Ethylene Dibromide                    |                    | 0.98           | U         | 0.15  | 0.98 |
| Isopropylbenzene                      |                    | 0.98           | U         | 0.11  | 0.98 |
| Methyl acetate                        |                    | 4.9            | U         | 0.31  | 4.9  |
| Methyl tert-butyl ether               |                    | 0.98           | U         | 0.11  | 0.98 |
| Methylcyclohexane                     |                    | 0.98           | U         | 0.098 | 0.98 |
| Methylene Chloride                    |                    | 0.98           | U         | 0.15  | 0.98 |
| m-Xylene & p-Xylene                   |                    | 0.98           | U         | 0.58  | 0.98 |
| o-Xylene                              |                    | 0.98           | U         | 0.19  | 0.98 |
| Styrene                               |                    | 0.98           | U         | 0.27  | 0.98 |
| Tetrachloroethene                     |                    | 0.98           | U         | 0.12  | 0.98 |
| Toluene                               |                    | 0.98           | U         | 0.14  | 0.98 |
| trans-1,2-Dichloroethene              |                    | 0.98           | U         | 0.13  | 0.98 |
| trans-1,3-Dichloropropene             |                    | 0.98           | U         | 0.098 | 0.98 |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

**8260C Volatile Organic Compounds by GC/MS**

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8260C           | Analysis Batch: | 460-223925 | Instrument ID:         | CVOAMS4 |
| Prep Method:     | 5035            | Prep Batch:     | 460-223546 | Lab File ID:           | D1002.D |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 5.36 g  |
| Analysis Date:   | 05/12/2014 1909 |                 |            | Final Weight/Volume:   | 5 mL    |
| Prep Date:       | 05/09/2014 2217 |                 |            |                        |         |

| Analyte                      | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL               | RL   |
|------------------------------|--------------------|----------------|-----------|-------------------|------|
| Trichloroethene              |                    | 0.98           | U         | 0.12              | 0.98 |
| Trichlorofluoromethane       |                    | 0.98           | U         | 0.16              | 0.98 |
| Vinyl chloride               |                    | 0.98           | U         | 0.33              | 0.98 |
| 1,2-Dichloroethane           |                    | 0.98           | U         | 0.18              | 0.98 |
| 1,2-Dichlorobenzene          |                    | 0.98           | U         | 0.098             | 0.98 |
| 1,2-Dibromo-3-Chloropropane  |                    | 0.98           | U         | 0.43              | 0.98 |
| Surrogate                    |                    | %Rec           | Qualifier | Acceptance Limits |      |
| 1,2-Dichloroethane-d4 (Surr) |                    | 114            |           | 70 - 130          |      |
| 4-Bromofluorobenzene         |                    | 104            |           | 70 - 130          |      |
| Dibromofluoromethane (Surr)  |                    | 116            |           | 70 - 130          |      |
| Toluene-d8 (Surr)            |                    | 104            |           | 70 - 130          |      |

# Analytical Data

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

## 8260C Volatile Organic Compounds by GC/MS

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8260C           | Analysis Batch: | 460-223925 | Instrument ID:         | CVOAMS4 |
| Prep Method:     | 5035            | Prep Batch:     | 460-223546 | Lab File ID:           | D1003.D |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 5.26 g  |
| Analysis Date:   | 05/12/2014 1932 |                 |            | Final Weight/Volume:   | 5 mL    |
| Prep Date:       | 05/09/2014 2218 |                 |            |                        |         |

| Analyte                               | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL   | RL  |
|---------------------------------------|--------------------|----------------|-----------|-------|-----|
| 1,1,1-Trichloroethane                 |                    | 1.1            | U         | 0.14  | 1.1 |
| 1,1,2,2-Tetrachloroethane             |                    | 1.1            | U         | 0.098 | 1.1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane |                    | 1.1            | U         | 0.12  | 1.1 |
| 1,1,2-Trichloroethane                 |                    | 1.1            | U         | 0.15  | 1.1 |
| 1,1-Dichloroethane                    |                    | 1.1            | U         | 0.12  | 1.1 |
| 1,1-Dichloroethene                    |                    | 1.1            | U         | 0.21  | 1.1 |
| 1,2,3-Trichlorobenzene                |                    | 1.1            | U         | 0.18  | 1.1 |
| 1,2,4-Trichlorobenzene                |                    | 1.1            | U         | 0.21  | 1.1 |
| 1,2-Dichloropropane                   |                    | 1.1            | U         | 0.16  | 1.1 |
| 1,3-Dichlorobenzene                   |                    | 1.1            | U         | 0.18  | 1.1 |
| 1,4-Dichlorobenzene                   |                    | 1.1            | U         | 0.12  | 1.1 |
| 1,4-Dioxane                           |                    | 22             | U         | 14    | 22  |
| 2-Butanone (MEK)                      |                    | 5.5            | U         | 0.69  | 5.5 |
| 2-Hexanone                            |                    | 5.5            | U         | 0.14  | 5.5 |
| 4-Methyl-2-pentanone (MIBK)           |                    | 5.5            | U         | 0.22  | 5.5 |
| Acetone                               |                    | 19             | B         | 1.8   | 5.5 |
| Benzene                               |                    | 1.1            | U         | 0.16  | 1.1 |
| Bromoform                             |                    | 1.1            | U         | 0.19  | 1.1 |
| Bromomethane                          |                    | 1.1            | U         | 0.47  | 1.1 |
| Carbon disulfide                      |                    | 1.1            | U         | 0.16  | 1.1 |
| Carbon tetrachloride                  |                    | 1.1            | U         | 0.16  | 1.1 |
| Chlorobenzene                         |                    | 1.1            | U         | 0.20  | 1.1 |
| Chlorobromomethane                    |                    | 1.1            | U         | 0.12  | 1.1 |
| Chlorodibromomethane                  |                    | 1.1            | U         | 0.11  | 1.1 |
| Chloroethane                          |                    | 1.1            | U         | 0.36  | 1.1 |
| Chloroform                            |                    | 1.1            | U         | 0.26  | 1.1 |
| Chloromethane                         |                    | 1.1            | U         | 0.18  | 1.1 |
| cis-1,2-Dichloroethene                |                    | 1.1            | U         | 0.12  | 1.1 |
| cis-1,3-Dichloropropene               |                    | 1.1            | U         | 0.15  | 1.1 |
| Cyclohexane                           |                    | 1.1            | U         | 0.14  | 1.1 |
| Dichlorobromomethane                  |                    | 1.1            | U         | 0.35  | 1.1 |
| Dichlorodifluoromethane               |                    | 1.1            | U         | 0.24  | 1.1 |
| Ethylbenzene                          |                    | 1.1            | U         | 0.19  | 1.1 |
| Ethylene Dibromide                    |                    | 1.1            | U         | 0.16  | 1.1 |
| Isopropylbenzene                      |                    | 1.1            | U         | 0.12  | 1.1 |
| Methyl acetate                        |                    | 5.5            | U         | 0.35  | 5.5 |
| Methyl tert-butyl ether               |                    | 1.1            | U         | 0.12  | 1.1 |
| Methylcyclohexane                     |                    | 1.1            | U         | 0.11  | 1.1 |
| Methylene Chloride                    |                    | 1.1            | U         | 0.16  | 1.1 |
| m-Xylene & p-Xylene                   |                    | 1.1            | U         | 0.65  | 1.1 |
| o-Xylene                              |                    | 1.1            | U         | 0.21  | 1.1 |
| Styrene                               |                    | 1.1            | U         | 0.31  | 1.1 |
| Tetrachloroethene                     |                    | 1.1            | U         | 0.13  | 1.1 |
| Toluene                               |                    | 1.1            | U         | 0.15  | 1.1 |
| trans-1,2-Dichloroethene              |                    | 1.1            | U         | 0.14  | 1.1 |
| trans-1,3-Dichloropropene             |                    | 1.1            | U         | 0.11  | 1.1 |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

**8260C Volatile Organic Compounds by GC/MS**

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8260C           | Analysis Batch: | 460-223925 | Instrument ID:         | CVOAMS4 |
| Prep Method:     | 5035            | Prep Batch:     | 460-223546 | Lab File ID:           | D1003.D |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 5.26 g  |
| Analysis Date:   | 05/12/2014 1932 |                 |            | Final Weight/Volume:   | 5 mL    |
| Prep Date:       | 05/09/2014 2218 |                 |            |                        |         |

| Analyte                      | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL               | RL  |
|------------------------------|--------------------|----------------|-----------|-------------------|-----|
| Trichloroethene              |                    | 1.1            | U         | 0.13              | 1.1 |
| Trichlorofluoromethane       |                    | 1.1            | U         | 0.18              | 1.1 |
| Vinyl chloride               |                    | 1.1            | U         | 0.37              | 1.1 |
| 1,2-Dichloroethane           |                    | 1.1            | U         | 0.20              | 1.1 |
| 1,2-Dichlorobenzene          |                    | 1.1            | U         | 0.11              | 1.1 |
| 1,2-Dibromo-3-Chloropropane  |                    | 1.1            | U         | 0.48              | 1.1 |
| Surrogate                    |                    | %Rec           | Qualifier | Acceptance Limits |     |
| 1,2-Dichloroethane-d4 (Surr) |                    | 118            |           | 70 - 130          |     |
| 4-Bromofluorobenzene         |                    | 112            |           | 70 - 130          |     |
| Dibromofluoromethane (Surr)  |                    | 66             | *         | 70 - 130          |     |
| Toluene-d8 (Surr)            |                    | 111            |           | 70 - 130          |     |

# Analytical Data

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

## 8270D Semivolatile Organic Compounds (GC/MS)

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8270D           | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAM5  |
| Prep Method:     | 3541            | Prep Batch:     | 460-223788 | Lab File ID:           | x1134.D |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 15.02 g |
| Analysis Date:   | 05/13/2014 1133 |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:       | 05/12/2014 1115 |                 |            | Injection Volume:      | 1 uL    |

| Analyte                      | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL  |
|------------------------------|--------------------|----------------|-----------|-----|-----|
| 1,1'-Biphenyl                |                    | 340            | U         | 46  | 340 |
| 1,2,4,5-Tetrachlorobenzene   |                    | 340            | U         | 46  | 340 |
| 2,2'-oxybis[1-chloropropane] |                    | 340            | U         | 38  | 340 |
| 2,3,4,6-Tetrachlorophenol    |                    | 340            | U         | 45  | 340 |
| 2,4,5-Trichlorophenol        |                    | 340            | U         | 45  | 340 |
| 2,4,6-Trichlorophenol        |                    | 340            | U         | 40  | 340 |
| 2,4-Dichlorophenol           |                    | 340            | U         | 51  | 340 |
| 2,4-Dimethylphenol           |                    | 340            | U         | 85  | 340 |
| 2,4-Dinitrophenol            |                    | 700            | U         | 200 | 700 |
| 2,4-Dinitrotoluene           |                    | 70             | U         | 11  | 70  |
| 2,6-Dinitrotoluene           |                    | 70             | U         | 10  | 70  |
| 2-Chloronaphthalene          |                    | 340            | U         | 39  | 340 |
| 2-Chlorophenol               |                    | 340            | U         | 45  | 340 |
| 2-Methylnaphthalene          |                    | 340            | U         | 44  | 340 |
| 2-Methylphenol               |                    | 340            | U         | 59  | 340 |
| 2-Nitroaniline               |                    | 340            | U         | 140 | 340 |
| 2-Nitrophenol                |                    | 340            | U         | 39  | 340 |
| 3,3'-Dichlorobenzidine       |                    | 340            | U         | 120 | 340 |
| 3-Nitroaniline               |                    | 340            | U         | 120 | 340 |
| 4,6-Dinitro-2-methylphenol   |                    | 700            | U         | 94  | 700 |
| 4-Bromophenyl phenyl ether   |                    | 340            | U         | 34  | 340 |
| 4-Chloro-3-methylphenol      |                    | 340            | U         | 52  | 340 |
| 4-Chloroaniline              |                    | 340            | U         | 91  | 340 |
| 4-Chlorophenyl phenyl ether  |                    | 340            | U         | 41  | 340 |
| 4-Methylphenol               |                    | 340            | U         | 68  | 340 |
| 4-Nitroaniline               |                    | 700            | U         | 110 | 700 |
| 4-Nitrophenol                |                    | 340            | U         | 220 | 340 |
| Acenaphthene                 |                    | 340            | U         | 50  | 340 |
| Acenaphthylene               |                    | 340            | U         | 41  | 340 |
| Acetophenone                 |                    | 340            | U         | 53  | 340 |
| Anthracene                   |                    | 340            | U         | 42  | 340 |
| Atrazine                     |                    | 340            | U         | 53  | 340 |
| Benzaldehyde                 |                    | 340            | U         | 41  | 340 |
| Benzo[a]anthracene           |                    | 34             | U         | 2.4 | 34  |
| Benzo[a]pyrene               |                    | 14             | J         | 2.4 | 34  |
| Benzo[b]fluoranthene         |                    | 14             | J         | 2.2 | 34  |
| Benzo[g,h,i]perylene         |                    | 340            | U         | 26  | 340 |
| Benzo[k]fluoranthene         |                    | 7.3            | J         | 2.6 | 34  |
| Bis(2-chloroethoxy)methane   |                    | 340            | U         | 45  | 340 |
| Bis(2-chloroethyl)ether      |                    | 34             | U         | 4.7 | 34  |
| Bis(2-ethylhexyl) phthalate  |                    | 340            | U         | 110 | 340 |
| Butyl benzyl phthalate       |                    | 340            | U         | 32  | 340 |
| Caprolactam                  |                    | 340            | U         | 80  | 340 |
| Carbazole                    |                    | 340            | U         | 41  | 340 |
| Chrysene                     |                    | 340            | U         | 40  | 340 |
| Dibenz(a,h)anthracene        |                    | 34             | U         | 4.4 | 34  |



# Analytical Data

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

## 8270D Semivolatile Organic Compounds (GC/MS)

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8270D           | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAMS5 |
| Prep Method:     | 3541            | Prep Batch:     | 460-223788 | Lab File ID:           | x1134.D |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 15.02 g |
| Analysis Date:   | 05/13/2014 1133 |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:       | 05/12/2014 1115 |                 |            | Injection Volume:      | 1 uL    |

| Analyte                   | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL  |
|---------------------------|--------------------|----------------|-----------|-----|-----|
| Dibenzofuran              |                    | 340            | U         | 41  | 340 |
| Diethyl phthalate         |                    | 340            | U         | 41  | 340 |
| Dimethyl phthalate        |                    | 340            | U         | 41  | 340 |
| Di-n-butyl phthalate      |                    | 340            | U         | 43  | 340 |
| Di-n-octyl phthalate      |                    | 340            | U         | 22  | 340 |
| Fluoranthene              |                    | 340            | U         | 46  | 340 |
| Fluorene                  |                    | 340            | U         | 44  | 340 |
| Hexachlorobenzene         |                    | 34             | U         | 4.7 | 34  |
| Hexachlorobutadiene       |                    | 70             | U         | 8.4 | 70  |
| Hexachlorocyclopentadiene |                    | 340            | U         | 41  | 340 |
| Hexachloroethane          |                    | 34             | U         | 3.8 | 34  |
| Indeno[1,2,3-cd]pyrene    |                    | 8.7            | J         | 6.4 | 34  |
| Isophorone                |                    | 340            | U         | 42  | 340 |
| Naphthalene               |                    | 340            | U         | 40  | 340 |
| Nitrobenzene              |                    | 34             | U *       | 4.9 | 34  |
| N-Nitrosodi-n-propylamine |                    | 34             | U         | 5.8 | 34  |
| N-Nitrosodiphenylamine    |                    | 340            | U         | 34  | 340 |
| Pentachlorophenol         |                    | 700            | U         | 100 | 700 |
| Phenanthrene              |                    | 340            | U         | 44  | 340 |
| Phenol                    |                    | 340            | U         | 46  | 340 |
| Pyrene                    |                    | 340            | U         | 29  | 340 |

| Surrogate                   | %Rec | Qualifier | Acceptance Limits |
|-----------------------------|------|-----------|-------------------|
| 2,4,6-Tribromophenol (Surr) | 81   |           | 19 - 114          |
| 2-Fluorobiphenyl            | 107  |           | 49 - 112          |
| 2-Fluorophenol (Surr)       | 72   |           | 39 - 103          |
| Nitrobenzene-d5 (Surr)      | 101  |           | 40 - 106          |
| Phenol-d5 (Surr)            | 65   |           | 44 - 104          |
| Terphenyl-d14 (Surr)        | 92   |           | 41 - 145          |

# Analytical Data

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

## 8270D Semivolatile Organic Compounds (GC/MS)

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8270D           | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAM5  |
| Prep Method:     | 3541            | Prep Batch:     | 460-223788 | Lab File ID:           | x1139.D |
| Dilution:        | 2.0             |                 |            | Initial Weight/Volume: | 15.03 g |
| Analysis Date:   | 05/13/2014 1343 |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:       | 05/12/2014 1115 |                 |            | Injection Volume:      | 1 uL    |

| Analyte                      | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL   |
|------------------------------|--------------------|----------------|-----------|-----|------|
| 1,1'-Biphenyl                |                    | 760            | U         | 100 | 760  |
| 1,2,4,5-Tetrachlorobenzene   |                    | 760            | U         | 100 | 760  |
| 2,2'-oxybis[1-chloropropane] |                    | 760            | U         | 84  | 760  |
| 2,3,4,6-Tetrachlorophenol    |                    | 760            | U         | 99  | 760  |
| 2,4,5-Trichlorophenol        |                    | 760            | U         | 98  | 760  |
| 2,4,6-Trichlorophenol        |                    | 760            | U         | 89  | 760  |
| 2,4-Dichlorophenol           |                    | 760            | U         | 110 | 760  |
| 2,4-Dimethylphenol           |                    | 760            | U         | 190 | 760  |
| 2,4-Dinitrophenol            |                    | 1500           | U         | 430 | 1500 |
| 2,4-Dinitrotoluene           |                    | 150            | U         | 25  | 150  |
| 2,6-Dinitrotoluene           |                    | 150            | U         | 23  | 150  |
| 2-Chloronaphthalene          |                    | 760            | U         | 85  | 760  |
| 2-Chlorophenol               |                    | 760            | U         | 100 | 760  |
| 2-Methylnaphthalene          |                    | 760            | U         | 98  | 760  |
| 2-Methylphenol               |                    | 760            | U         | 130 | 760  |
| 2-Nitroaniline               |                    | 760            | U         | 320 | 760  |
| 2-Nitrophenol                |                    | 760            | U         | 85  | 760  |
| 3,3'-Dichlorobenzidine       |                    | 760            | U         | 270 | 760  |
| 3-Nitroaniline               |                    | 760            | U         | 270 | 760  |
| 4,6-Dinitro-2-methylphenol   |                    | 1500           | U         | 210 | 1500 |
| 4-Bromophenyl phenyl ether   |                    | 760            | U         | 75  | 760  |
| 4-Chloro-3-methylphenol      |                    | 760            | U         | 110 | 760  |
| 4-Chloroaniline              |                    | 760            | U         | 200 | 760  |
| 4-Chlorophenyl phenyl ether  |                    | 760            | U         | 89  | 760  |
| 4-Methylphenol               |                    | 760            | U         | 150 | 760  |
| 4-Nitroaniline               |                    | 1500           | U         | 240 | 1500 |
| 4-Nitrophenol                |                    | 760            | U         | 490 | 760  |
| Acenaphthene                 |                    | 110            | J         | 110 | 760  |
| Acenaphthylene               |                    | 760            | U         | 90  | 760  |
| Acetophenone                 |                    | 760            | U         | 120 | 760  |
| Anthracene                   |                    | 240            | J         | 92  | 760  |
| Atrazine                     |                    | 760            | U         | 120 | 760  |
| Benzaldehyde                 |                    | 760            | U         | 89  | 760  |
| Benzo[a]anthracene           |                    | 290            |           | 5.3 | 76   |
| Benzo[a]pyrene               |                    | 220            |           | 5.4 | 76   |
| Benzo[b]fluoranthene         |                    | 290            |           | 4.8 | 76   |
| Benzo[g,h,i]perylene         |                    | 190            | J         | 56  | 760  |
| Benzo[k]fluoranthene         |                    | 99             |           | 5.8 | 76   |
| Bis(2-chloroethoxy)methane   |                    | 760            | U         | 98  | 760  |
| Bis(2-chloroethyl)ether      |                    | 76             | U         | 10  | 76   |
| Bis(2-ethylhexyl) phthalate  |                    | 760            | U         | 250 | 760  |
| Butyl benzyl phthalate       |                    | 760            | U         | 70  | 760  |
| Caprolactam                  |                    | 760            | U         | 180 | 760  |
| Carbazole                    |                    | 110            | J         | 90  | 760  |
| Chrysene                     |                    | 300            | J         | 89  | 760  |
| Dibenz(a,h)anthracene        |                    | 47             | J         | 9.6 | 76   |

# Analytical Data

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

## 8270D Semivolatile Organic Compounds (GC/MS)

|                  |                 |                 |            |                        |         |
|------------------|-----------------|-----------------|------------|------------------------|---------|
| Analysis Method: | 8270D           | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAM5  |
| Prep Method:     | 3541            | Prep Batch:     | 460-223788 | Lab File ID:           | x1139.D |
| Dilution:        | 2.0             |                 |            | Initial Weight/Volume: | 15.03 g |
| Analysis Date:   | 05/13/2014 1343 |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:       | 05/12/2014 1115 |                 |            | Injection Volume:      | 1 uL    |

| Analyte                   | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL   |
|---------------------------|--------------------|----------------|-----------|-----|------|
| Dibenzofuran              |                    | 100            | J         | 89  | 760  |
| Diethyl phthalate         |                    | 760            | U         | 91  | 760  |
| Dimethyl phthalate        |                    | 760            | U         | 90  | 760  |
| Di-n-butyl phthalate      |                    | 280            | J         | 94  | 760  |
| Di-n-octyl phthalate      |                    | 760            | U         | 48  | 760  |
| Fluoranthene              |                    | 780            |           | 100 | 760  |
| Fluorene                  |                    | 760            | U         | 97  | 760  |
| Hexachlorobenzene         |                    | 76             | U         | 10  | 76   |
| Hexachlorobutadiene       |                    | 150            | U         | 19  | 150  |
| Hexachlorocyclopentadiene |                    | 760            | U         | 89  | 760  |
| Hexachloroethane          |                    | 76             | U         | 8.5 | 76   |
| Indeno[1,2,3-cd]pyrene    |                    | 200            |           | 14  | 76   |
| Isophorone                |                    | 380            | J         | 92  | 760  |
| Naphthalene               |                    | 150            | J         | 88  | 760  |
| Nitrobenzene              |                    | 76             | U *       | 11  | 76   |
| N-Nitrosodi-n-propylamine |                    | 76             | U         | 13  | 76   |
| N-Nitrosodiphenylamine    |                    | 760            | U         | 75  | 760  |
| Pentachlorophenol         |                    | 1500           | U         | 230 | 1500 |
| Phenanthrene              |                    | 1200           |           | 97  | 760  |
| Phenol                    |                    | 760            | U         | 100 | 760  |
| Pyrene                    |                    | 540            | J         | 64  | 760  |

| Surrogate                   | %Rec | Qualifier | Acceptance Limits |
|-----------------------------|------|-----------|-------------------|
| 2,4,6-Tribromophenol (Surr) | 24   |           | 19 - 114          |
| 2-Fluorobiphenyl            | 69   |           | 49 - 112          |
| 2-Fluorophenol (Surr)       | 29   | *         | 39 - 103          |
| Nitrobenzene-d5 (Surr)      | 67   |           | 40 - 106          |
| Phenol-d5 (Surr)            | 42   | *         | 44 - 104          |
| Terphenyl-d14 (Surr)        | 57   |           | 41 - 145          |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

**8081B Organochlorine Pesticides (GC)**

|                  |                 |                 |            |                        |          |
|------------------|-----------------|-----------------|------------|------------------------|----------|
| Analysis Method: | 8081B           | Analysis Batch: | 460-223857 | Instrument ID:         | CPESTGC1 |
| Prep Method:     | 3546            | Prep Batch:     | 460-223747 | Initial Weight/Volume: | 15.05 g  |
| Dilution:        | 1.0             |                 |            | Final Weight/Volume:   | 10 mL    |
| Analysis Date:   | 05/12/2014 1326 |                 |            | Injection Volume:      | 1 uL     |
| Prep Date:       | 05/12/2014 0614 |                 |            | Result Type:           | PRIMARY  |

| Analyte               | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL  |
|-----------------------|--------------------|----------------|-----------|-----|-----|
| 4,4'-DDD              |                    | 7.0            | U         | 1.4 | 7.0 |
| 4,4'-DDE              |                    | 7.0            | U         | 1.4 | 7.0 |
| 4,4'-DDT              |                    | 7.0            | U         | 1.7 | 7.0 |
| Aldrin                |                    | 7.0            | U         | 1.5 | 7.0 |
| alpha-BHC             |                    | 7.0            | U         | 1.6 | 7.0 |
| beta-BHC              |                    | 7.0            | U         | 1.7 | 7.0 |
| Chlordane (technical) |                    | 70             | U         | 20  | 70  |
| delta-BHC             |                    | 7.0            | U         | 1.3 | 7.0 |
| Dieldrin              |                    | 7.0            | U         | 1.3 | 7.0 |
| Endosulfan I          |                    | 7.0            | U         | 1.6 | 7.0 |
| Endosulfan II         |                    | 7.0            | U         | 1.4 | 7.0 |
| Endosulfan sulfate    |                    | 7.0            | U         | 1.4 | 7.0 |
| Endrin                |                    | 7.0            | U         | 1.7 | 7.0 |
| Endrin aldehyde       |                    | 7.0            | U         | 1.0 | 7.0 |
| Endrin ketone         |                    | 7.0            | U         | 1.4 | 7.0 |
| gamma-BHC (Lindane)   |                    | 7.0            | U         | 1.3 | 7.0 |
| Heptachlor            |                    | 7.0            | U         | 1.7 | 7.0 |
| Heptachlor epoxide    |                    | 7.0            | U         | 1.6 | 7.0 |
| Methoxychlor          |                    | 7.0            | U         | 1.7 | 7.0 |
| Toxaphene             |                    | 70             | U         | 19  | 70  |

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 116  |           | 76 - 149          |
| Tetrachloro-m-xylene   | 117  |           | 72 - 136          |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

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**8081B Organochlorine Pesticides (GC)**

Analysis Method: 8081B

Analysis Batch: 460-223857

Instrument ID: CPESTGC1

Prep Method: 3546

Prep Batch: 460-223747

Initial Weight/Volume: 15.05 g

Dilution: 1.0

Final Weight/Volume: 10 mL

Analysis Date: 05/12/2014 1326

Injection Volume: 1 uL

Prep Date: 05/12/2014 0614

Result Type: SECONDARY

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 114  |           | 76 - 149          |
| Tetrachloro-m-xylene   | 104  |           | 72 - 136          |

# Analytical Data

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

## 8081B Organochlorine Pesticides (GC)

|                  |                 |                 |            |                        |          |
|------------------|-----------------|-----------------|------------|------------------------|----------|
| Analysis Method: | 8081B           | Analysis Batch: | 460-223857 | Instrument ID:         | CPESTGC1 |
| Prep Method:     | 3546            | Prep Batch:     | 460-223747 | Initial Weight/Volume: | 15.02 g  |
| Dilution:        | 1.0             |                 |            | Final Weight/Volume:   | 10 mL    |
| Analysis Date:   | 05/12/2014 1342 |                 |            | Injection Volume:      | 1 uL     |
| Prep Date:       | 05/12/2014 0614 |                 |            | Result Type:           | PRIMARY  |

| Analyte               | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL  |
|-----------------------|--------------------|----------------|-----------|-----|-----|
| 4,4'-DDD              |                    | 7.7            | U         | 1.5 | 7.7 |
| 4,4'-DDE              |                    | 7.7            | U         | 1.5 | 7.7 |
| 4,4'-DDT              |                    | 7.7            | U         | 1.8 | 7.7 |
| Aldrin                |                    | 7.7            | U         | 1.6 | 7.7 |
| alpha-BHC             |                    | 7.7            | U         | 1.7 | 7.7 |
| beta-BHC              |                    | 7.7            | U         | 1.8 | 7.7 |
| Chlordane (technical) |                    | 77             | U         | 22  | 77  |
| delta-BHC             |                    | 7.7            | U         | 1.4 | 7.7 |
| Dieldrin              |                    | 7.7            | U         | 1.4 | 7.7 |
| Endosulfan I          |                    | 7.7            | U         | 1.7 | 7.7 |
| Endosulfan II         |                    | 7.7            | U         | 1.5 | 7.7 |
| Endosulfan sulfate    |                    | 7.7            | U         | 1.5 | 7.7 |
| Endrin                |                    | 7.7            | U         | 1.8 | 7.7 |
| Endrin aldehyde       |                    | 7.7            | U         | 1.1 | 7.7 |
| Endrin ketone         |                    | 7.7            | U         | 1.5 | 7.7 |
| gamma-BHC (Lindane)   |                    | 7.7            | U         | 1.4 | 7.7 |
| Heptachlor            |                    | 7.7            | U         | 1.8 | 7.7 |
| Heptachlor epoxide    |                    | 7.7            | U         | 1.7 | 7.7 |
| Methoxychlor          |                    | 7.7            | U         | 1.8 | 7.7 |
| Toxaphene             |                    | 77             | U         | 21  | 77  |

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 113  |           | 76 - 149          |
| Tetrachloro-m-xylene   | 108  |           | 72 - 136          |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

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**8081B Organochlorine Pesticides (GC)**

Analysis Method: 8081B

Analysis Batch: 460-223857

Instrument ID: CPESTGC1

Prep Method: 3546

Prep Batch: 460-223747

Initial Weight/Volume: 15.02 g

Dilution: 1.0

Final Weight/Volume: 10 mL

Analysis Date: 05/12/2014 1342

Injection Volume: 1 uL

Prep Date: 05/12/2014 0614

Result Type: SECONDARY

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 109  |           | 76 - 149          |
| Tetrachloro-m-xylene   | 95   |           | 72 - 136          |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

**8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

|                  |                 |                 |            |                        |           |
|------------------|-----------------|-----------------|------------|------------------------|-----------|
| Analysis Method: | 8082A           | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Prep Method:     | 3546            | Prep Batch:     | 460-223758 | Initial Weight/Volume: | 15.05 g   |
| Dilution:        | 1.0             |                 |            | Final Weight/Volume:   | 10 mL     |
| Analysis Date:   | 05/12/2014 1506 |                 |            | Injection Volume:      | 1 uL      |
| Prep Date:       | 05/12/2014 0648 |                 |            | Result Type:           | PRIMARY   |

| Analyte                          | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|----------------------------------|--------------------|----------------|-----------|-----|----|
| Aroclor 1016                     |                    | 70             | U         | 16  | 70 |
| Aroclor 1221                     |                    | 70             | U         | 16  | 70 |
| Aroclor 1232                     |                    | 70             | U         | 16  | 70 |
| Aroclor 1242                     |                    | 70             | U         | 16  | 70 |
| Aroclor 1248                     |                    | 70             | U         | 16  | 70 |
| Aroclor 1254                     |                    | 70             | U         | 20  | 70 |
| Aroclor 1260                     |                    | 70             | U         | 20  | 70 |
| Aroclor-1262                     |                    | 70             | U         | 20  | 70 |
| Aroclor 1268                     |                    | 70             | U         | 20  | 70 |
| Polychlorinated biphenyls, Total |                    | 70             | U         | 20  | 70 |

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 111  |           | 53 - 150          |



**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

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**8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analysis Method: 8082A

Analysis Batch: 460-223864

Instrument ID: CPESTGC11

Prep Method: 3546

Prep Batch: 460-223758

Initial Weight/Volume: 15.05 g

Dilution: 1.0

Final Weight/Volume: 10 mL

Analysis Date: 05/12/2014 1506

Injection Volume: 1 uL

Prep Date: 05/12/2014 0648

Result Type: SECONDARY

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 91   |           | 53 - 150          |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

Client Sample ID: Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

**8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

|                  |                 |                 |            |                        |           |
|------------------|-----------------|-----------------|------------|------------------------|-----------|
| Analysis Method: | 8082A           | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Prep Method:     | 3546            | Prep Batch:     | 460-223758 | Initial Weight/Volume: | 15.02 g   |
| Dilution:        | 1.0             |                 |            | Final Weight/Volume:   | 10 mL     |
| Analysis Date:   | 05/12/2014 1525 |                 |            | Injection Volume:      | 1 uL      |
| Prep Date:       | 05/12/2014 0648 |                 |            | Result Type:           | PRIMARY   |

| Analyte                          | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|----------------------------------|--------------------|----------------|-----------|-----|----|
| Aroclor 1016                     |                    | 77             | U         | 17  | 77 |
| Aroclor 1221                     |                    | 77             | U         | 17  | 77 |
| Aroclor 1232                     |                    | 77             | U         | 17  | 77 |
| Aroclor 1242                     |                    | 77             | U         | 17  | 77 |
| Aroclor 1248                     |                    | 77             | U         | 17  | 77 |
| Aroclor 1254                     |                    | 77             | U         | 22  | 77 |
| Aroclor 1260                     |                    | 77             | U         | 22  | 77 |
| Aroclor-1262                     |                    | 77             | U         | 22  | 77 |
| Aroclor 1268                     |                    | 77             | U         | 22  | 77 |
| Polychlorinated biphenyls, Total |                    | 77             | U         | 22  | 77 |

| Surrogate              | %Rec | Qualifier | Acceptance Limits |
|------------------------|------|-----------|-------------------|
| DCB Decachlorobiphenyl | 115  |           | 53 - 150          |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

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**8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analysis Method: 8082A

Analysis Batch: 460-223864

Instrument ID: CPESTGC11

Prep Method: 3546

Prep Batch: 460-223758

Initial Weight/Volume: 15.02 g

Dilution: 1.0

Final Weight/Volume: 10 mL

Analysis Date: 05/12/2014 1525

Injection Volume: 1 uL

Prep Date: 05/12/2014 0648

Result Type: SECONDARY

Surrogate

%Rec

Qualifier

Acceptance Limits

DCB Decachlorobiphenyl

104

53 - 150

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

% Moisture: 4.4

Date Received: 05/09/2014 1640

**6010C Metals (ICP)**

Analysis Method: 6010C

Analysis Batch: 460-223942

Instrument ID: ICP4

Prep Method: 3050B

Prep Batch: 460-223622

Lab File ID: 223620.asc

Dilution: 4.0

Initial Weight/Volume: 1.10 g

Analysis Date: 05/12/2014 1249

Final Weight/Volume: 50 mL

Prep Date: 05/10/2014 1547

| Analyte   | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL  | RL   |
|-----------|--------------------|----------------|-----------|------|------|
| Silver    |                    | 1.9            | U         | 0.37 | 1.9  |
| Aluminum  |                    | 823            |           | 21.0 | 38.0 |
| Arsenic   |                    | 0.92           | J         | 0.78 | 2.9  |
| Barium    |                    | 3.8            | J         | 1.6  | 38.0 |
| Beryllium |                    | 0.38           | U         | 0.26 | 0.38 |
| Calcium   |                    | 414            | J         | 72.7 | 951  |
| Cadmium   |                    | 0.76           | U         | 0.27 | 0.76 |
| Cobalt    |                    | 9.5            | U         | 0.86 | 9.5  |
| Chromium  |                    | 3.8            |           | 0.76 | 1.9  |
| Copper    |                    | 4.8            | U         | 1.7  | 4.8  |
| Iron      |                    | 3130           |           | 23.7 | 28.5 |
| Potassium |                    | 91.6           | J         | 26.2 | 951  |
| Magnesium |                    | 181            | J         | 63.1 | 951  |
| Manganese |                    | 35.7           |           | 0.82 | 2.9  |
| Sodium    |                    | 951            | U         | 71.9 | 951  |
| Nickel    |                    | 7.6            | U         | 1.7  | 7.6  |
| Lead      |                    | 0.97           | J         | 0.78 | 1.9  |
| Antimony  |                    | 3.8            | U         | 1.4  | 3.8  |
| Selenium  |                    | 3.8            | U         | 1.1  | 3.8  |
| Thallium  |                    | 3.8            | U         | 1.9  | 3.8  |
| Vanadium  |                    | 3.6            | J         | 0.79 | 9.5  |
| Zinc      |                    | 4.1            | J         | 1.6  | 5.7  |

**7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)**

Analysis Method: 7471B

Analysis Batch: 460-223808

Instrument ID: LEEMAN5

Prep Method: 7471B

Prep Batch: 460-223739

Lab File ID: 223739HG1.PRN

Dilution: 1.0

Initial Weight/Volume: 0.63 g

Analysis Date: 05/12/2014 0922

Final Weight/Volume: 50 mL

Prep Date: 05/12/2014 0530

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL   | RL    |
|---------|--------------------|----------------|-----------|-------|-------|
| Mercury |                    | 0.017          | U         | 0.012 | 0.017 |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

**Client Sample ID:** Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

% Moisture: 13.1

Date Received: 05/09/2014 1640

**6010C Metals (ICP)**

|                  |                 |                 |            |                        |            |
|------------------|-----------------|-----------------|------------|------------------------|------------|
| Analysis Method: | 6010C           | Analysis Batch: | 460-223942 | Instrument ID:         | ICP4       |
| Prep Method:     | 3050B           | Prep Batch:     | 460-223622 | Lab File ID:           | 223620.asc |
| Dilution:        | 4.0             |                 |            | Initial Weight/Volume: | 1.20 g     |
| Analysis Date:   | 05/12/2014 1325 |                 |            | Final Weight/Volume:   | 50 mL      |
| Prep Date:       | 05/10/2014 1547 |                 |            |                        |            |

| Analyte   | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL  | RL   |
|-----------|--------------------|----------------|-----------|------|------|
| Silver    |                    | 1.9            | U         | 0.37 | 1.9  |
| Aluminum  |                    | 6800           |           | 21.2 | 38.4 |
| Arsenic   |                    | 5.1            |           | 0.79 | 2.9  |
| Barium    |                    | 44.7           |           | 1.7  | 38.4 |
| Beryllium |                    | 0.26           | J         | 0.26 | 0.38 |
| Cadmium   |                    | 0.77           | U         | 0.27 | 0.77 |
| Cobalt    |                    | 3.1            | J         | 0.87 | 9.6  |
| Chromium  |                    | 17.7           |           | 0.77 | 1.9  |
| Copper    |                    | 11.3           |           | 1.7  | 4.8  |
| Iron      |                    | 10400          |           | 23.9 | 28.8 |
| Potassium |                    | 607            | J         | 26.5 | 959  |
| Magnesium |                    | 4530           |           | 63.7 | 959  |
| Manganese |                    | 153            |           | 0.83 | 2.9  |
| Sodium    |                    | 959            | U         | 72.5 | 959  |
| Nickel    |                    | 9.0            |           | 1.7  | 7.7  |
| Lead      |                    | 20.3           |           | 0.79 | 1.9  |
| Antimony  |                    | 3.8            | U         | 1.4  | 3.8  |
| Selenium  |                    | 3.8            | U         | 1.1  | 3.8  |
| Thallium  |                    | 3.8            | U         | 1.9  | 3.8  |
| Vanadium  |                    | 18.4           |           | 0.79 | 9.6  |
| Zinc      |                    | 38.8           |           | 1.6  | 5.8  |

|                  |                 |                 |            |                        |                 |
|------------------|-----------------|-----------------|------------|------------------------|-----------------|
| Analysis Method: | 6010C           | Analysis Batch: | 460-224465 | Instrument ID:         | ICP4            |
| Prep Method:     | 3050B           | Prep Batch:     | 460-223622 | Lab File ID:           | icp4_051414.asc |
| Dilution:        | 10              |                 |            | Initial Weight/Volume: | 1.20 g          |
| Analysis Date:   | 05/14/2014 2058 |                 |            | Final Weight/Volume:   | 50 mL           |
| Prep Date:       | 05/10/2014 1547 |                 |            |                        |                 |

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL | RL   |
|---------|--------------------|----------------|-----------|-----|------|
| Calcium |                    | 61200          |           | 183 | 2400 |

**7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)**

|                  |                 |                 |            |                        |               |
|------------------|-----------------|-----------------|------------|------------------------|---------------|
| Analysis Method: | 7471B           | Analysis Batch: | 460-223808 | Instrument ID:         | LEEMAN5       |
| Prep Method:     | 7471B           | Prep Batch:     | 460-223739 | Lab File ID:           | 223739HG1.PRN |
| Dilution:        | 1.0             |                 |            | Initial Weight/Volume: | 0.60 g        |
| Analysis Date:   | 05/12/2014 0923 |                 |            | Final Weight/Volume:   | 50 mL         |
| Prep Date:       | 05/12/2014 0530 |                 |            |                        |               |

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL   | RL    |
|---------|--------------------|----------------|-----------|-------|-------|
| Mercury |                    | 0.039          |           | 0.014 | 0.020 |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

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**General Chemistry****Client Sample ID:** Fill - Sand

Lab Sample ID: 460-75841-1

Date Sampled: 05/08/2014 1420

Client Matrix: Solid

Date Received: 05/09/2014 1640

| Analyte          | Result                     | Qual                           | Units | RL  | RL  | Dil | Method             |
|------------------|----------------------------|--------------------------------|-------|-----|-----|-----|--------------------|
| Percent Moisture | 4.4                        |                                | %     | 1.0 | 1.0 | 1.0 | Moisture           |
|                  | Analysis Batch: 460-223613 | Analysis Date: 05/10/2014 1551 |       |     |     |     | DryWt Corrected: N |
| Percent Solids   | 95.6                       |                                | %     | 1.0 | 1.0 | 1.0 | Moisture           |
|                  | Analysis Batch: 460-223613 | Analysis Date: 05/10/2014 1551 |       |     |     |     | DryWt Corrected: N |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-75841-1

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**General Chemistry****Client Sample ID:** Fill - item#4

Lab Sample ID: 460-75841-2

Date Sampled: 05/08/2014 1410

Client Matrix: Solid

Date Received: 05/09/2014 1640

| Analyte          | Result                     | Qual                           | Units | RL  | RL  | Dil | Method             |
|------------------|----------------------------|--------------------------------|-------|-----|-----|-----|--------------------|
| Percent Moisture | 13.1                       |                                | %     | 1.0 | 1.0 | 1.0 | Moisture           |
|                  | Analysis Batch: 460-223613 | Analysis Date: 05/10/2014 1551 |       |     |     |     | DryWt Corrected: N |
| Percent Solids   | 86.9                       |                                | %     | 1.0 | 1.0 | 1.0 | Moisture           |
|                  | Analysis Batch: 460-223613 | Analysis Date: 05/10/2014 1551 |       |     |     |     | DryWt Corrected: N |

## DATA REPORTING QUALIFIERS

Client: New York State D.E.C.

Job Number: 460-75841-1

| Lab Section    | Qualifier | Description                                                                                                                                               |
|----------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| GC/MS VOA      |           |                                                                                                                                                           |
|                | U         | Analyzed for but not detected.                                                                                                                            |
|                | J         | Indicates an estimated value.                                                                                                                             |
|                | *         | Surrogate exceeds the control limit                                                                                                                       |
|                | B         | The analyte was found in an associated blank, as well as in the sample.                                                                                   |
| GC/MS Semi VOA |           |                                                                                                                                                           |
|                | U         | Analyzed for but not detected.                                                                                                                            |
|                | *         | Duplicate RPD exceeds control limits                                                                                                                      |
|                | J         | Indicates an estimated value.                                                                                                                             |
|                | *         | LCS or LCSD exceeds the control limits                                                                                                                    |
|                | *         | MS or MSD exceeds the control limits                                                                                                                      |
|                | *         | Surrogate exceeds the control limit                                                                                                                       |
| GC Semi VOA    |           |                                                                                                                                                           |
|                | U         | Analyzed for but not detected.                                                                                                                            |
| Metals         |           |                                                                                                                                                           |
|                | U         | Indicates analyzed for but not detected.                                                                                                                  |
|                | 4         | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
|                | J         | Sample result is greater than the MDL but below the CRDL                                                                                                  |
|                | N         | Spiked sample recovery is not within control limits.                                                                                                      |



# **QUALITY CONTROL RESULTS**

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### QC Association Summary

| Lab Sample ID                    | Client Sample ID                       | Report Basis | Client Matrix | Method | Prep Batch |
|----------------------------------|----------------------------------------|--------------|---------------|--------|------------|
| <b>GC/MS VOA</b>                 |                                        |              |               |        |            |
| <b>Prep Batch: 460-223546</b>    |                                        |              |               |        |            |
| LB3 460-223546/1-A               | Neutral Leach or MeOH Extraction Blank | T            | Solid         | 5035   |            |
| 460-75841-1                      | Fill - Sand                            | T            | Solid         | 5035   |            |
| 460-75841-2                      | Fill - item#4                          | T            | Solid         | 5035   |            |
| <b>Analysis Batch:460-223925</b> |                                        |              |               |        |            |
| LCS 460-223925/3                 | Lab Control Sample                     | T            | Solid         | 8260C  |            |
| LCSD 460-223925/4                | Lab Control Sample Duplicate           | T            | Solid         | 8260C  |            |
| MB 460-223925/6                  | Method Blank                           | T            | Solid         | 8260C  |            |
| LB3 460-223546/1-A               | Neutral Leach or MeOH Extraction Blank | T            | Solid         | 8260C  | 460-223546 |
| 460-75841-1                      | Fill - Sand                            | T            | Solid         | 8260C  | 460-223546 |
| 460-75841-2                      | Fill - item#4                          | T            | Solid         | 8260C  | 460-223546 |

#### Report Basis

T = Total

### GC/MS Semi VOA

|                                  |                        |   |       |       |            |
|----------------------------------|------------------------|---|-------|-------|------------|
| <b>Prep Batch: 460-223788</b>    |                        |   |       |       |            |
| LCS 460-223788/2-A               | Lab Control Sample     | T | Solid | 3541  |            |
| LCS 460-223788/3-A               | Lab Control Sample     | T | Solid | 3541  |            |
| MB 460-223788/1-A                | Method Blank           | T | Solid | 3541  |            |
| 460-75841-1                      | Fill - Sand            | T | Solid | 3541  |            |
| 460-75841-2                      | Fill - item#4          | T | Solid | 3541  |            |
| 460-75842-E-10-C MS              | Matrix Spike           | T | Solid | 3541  |            |
| 460-75842-E-10-D MSD             | Matrix Spike Duplicate | T | Solid | 3541  |            |
| <b>Analysis Batch:460-223977</b> |                        |   |       |       |            |
| LCS 460-223788/2-A               | Lab Control Sample     | T | Solid | 8270D | 460-223788 |
| LCS 460-223788/3-A               | Lab Control Sample     | T | Solid | 8270D | 460-223788 |
| MB 460-223788/1-A                | Method Blank           | T | Solid | 8270D | 460-223788 |
| 460-75841-1                      | Fill - Sand            | T | Solid | 8270D | 460-223788 |
| 460-75841-2                      | Fill - item#4          | T | Solid | 8270D | 460-223788 |
| 460-75842-E-10-C MS              | Matrix Spike           | T | Solid | 8270D | 460-223788 |
| 460-75842-E-10-D MSD             | Matrix Spike Duplicate | T | Solid | 8270D | 460-223788 |

#### Report Basis

T = Total

TestAmerica Edison

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### QC Association Summary

| Lab Sample ID                    | Client Sample ID       | Report Basis | Client Matrix | Method | Prep Batch |
|----------------------------------|------------------------|--------------|---------------|--------|------------|
| <b>GC Semi VOA</b>               |                        |              |               |        |            |
| <b>Prep Batch: 460-223747</b>    |                        |              |               |        |            |
| LCS 460-223747/2-A               | Lab Control Sample     | T            | Solid         | 3546   |            |
| MB 460-223747/1-A                | Method Blank           | T            | Solid         | 3546   |            |
| 460-75444-C-20-M MS              | Matrix Spike           | T            | Solid         | 3546   |            |
| 460-75444-C-20-N MSD             | Matrix Spike Duplicate | T            | Solid         | 3546   |            |
| 460-75841-1                      | Fill - Sand            | T            | Solid         | 3546   |            |
| 460-75841-2                      | Fill - item#4          | T            | Solid         | 3546   |            |
| <b>Prep Batch: 460-223758</b>    |                        |              |               |        |            |
| LCS 460-223758/2-A               | Lab Control Sample     | T            | Solid         | 3546   |            |
| MB 460-223758/1-A                | Method Blank           | T            | Solid         | 3546   |            |
| 460-75444-C-20-P MS              | Matrix Spike           | T            | Solid         | 3546   |            |
| 460-75444-C-20-Q MSD             | Matrix Spike Duplicate | T            | Solid         | 3546   |            |
| 460-75841-1                      | Fill - Sand            | T            | Solid         | 3546   |            |
| 460-75841-2                      | Fill - item#4          | T            | Solid         | 3546   |            |
| <b>Analysis Batch:460-223777</b> |                        |              |               |        |            |
| LCS 460-223747/2-A               | Lab Control Sample     | T            | Solid         | 8081B  | 460-223747 |
| MB 460-223747/1-A                | Method Blank           | T            | Solid         | 8081B  | 460-223747 |
| 460-75444-C-20-M MS              | Matrix Spike           | T            | Solid         | 8081B  | 460-223747 |
| 460-75444-C-20-N MSD             | Matrix Spike Duplicate | T            | Solid         | 8081B  | 460-223747 |
| <b>Analysis Batch:460-223857</b> |                        |              |               |        |            |
| 460-75841-1                      | Fill - Sand            | T            | Solid         | 8081B  | 460-223747 |
| 460-75841-2                      | Fill - item#4          | T            | Solid         | 8081B  | 460-223747 |
| <b>Analysis Batch:460-223864</b> |                        |              |               |        |            |
| LCS 460-223758/2-A               | Lab Control Sample     | T            | Solid         | 8082A  | 460-223758 |
| MB 460-223758/1-A                | Method Blank           | T            | Solid         | 8082A  | 460-223758 |
| 460-75444-C-20-P MS              | Matrix Spike           | T            | Solid         | 8082A  | 460-223758 |
| 460-75444-C-20-Q MSD             | Matrix Spike Duplicate | T            | Solid         | 8082A  | 460-223758 |
| 460-75841-1                      | Fill - Sand            | T            | Solid         | 8082A  | 460-223758 |
| 460-75841-2                      | Fill - item#4          | T            | Solid         | 8082A  | 460-223758 |

#### Report Basis

T = Total

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### QC Association Summary

| Lab Sample ID                    | Client Sample ID                 | Report Basis | Client Matrix | Method | Prep Batch |
|----------------------------------|----------------------------------|--------------|---------------|--------|------------|
| <b>Metals</b>                    |                                  |              |               |        |            |
| <b>Prep Batch: 460-223622</b>    |                                  |              |               |        |            |
| LCSSRM 460-223622/2-A            | LCS-Certified Reference Material | T            | Solid         | 3050B  |            |
| MB 460-223622/1-A ^2             | Method Blank                     | T            | Solid         | 3050B  |            |
| 460-75841-1                      | Fill - Sand                      | T            | Solid         | 3050B  |            |
| 460-75841-1DU                    | Duplicate                        | T            | Solid         | 3050B  |            |
| 460-75841-1MS                    | Matrix Spike                     | T            | Solid         | 3050B  |            |
| 460-75841-2                      | Fill - item#4                    | T            | Solid         | 3050B  |            |
| <b>Prep Batch: 460-223739</b>    |                                  |              |               |        |            |
| LCSSRM 460-223739/11-A ^50       | LCS-Certified Reference Material | T            | Solid         | 7471B  |            |
| MB 460-223739/10-A               | Method Blank                     | T            | Solid         | 7471B  |            |
| 460-75841-1                      | Fill - Sand                      | T            | Solid         | 7471B  |            |
| 460-75841-2                      | Fill - item#4                    | T            | Solid         | 7471B  |            |
| 460-75854-A-1-B DU               | Duplicate                        | T            | Solid         | 7471B  |            |
| 460-75854-A-1-C MS               | Matrix Spike                     | T            | Solid         | 7471B  |            |
| <b>Analysis Batch:460-223808</b> |                                  |              |               |        |            |
| LCSSRM 460-223739/11-A ^50       | LCS-Certified Reference Material | T            | Solid         | 7471B  | 460-223739 |
| MB 460-223739/10-A               | Method Blank                     | T            | Solid         | 7471B  | 460-223739 |
| 460-75841-1                      | Fill - Sand                      | T            | Solid         | 7471B  | 460-223739 |
| 460-75841-2                      | Fill - item#4                    | T            | Solid         | 7471B  | 460-223739 |
| 460-75854-A-1-B DU               | Duplicate                        | T            | Solid         | 7471B  | 460-223739 |
| 460-75854-A-1-C MS               | Matrix Spike                     | T            | Solid         | 7471B  | 460-223739 |
| <b>Analysis Batch:460-223942</b> |                                  |              |               |        |            |
| LCSSRM 460-223622/2-A            | LCS-Certified Reference Material | T            | Solid         | 6010C  | 460-223622 |
| MB 460-223622/1-A ^2             | Method Blank                     | T            | Solid         | 6010C  | 460-223622 |
| 460-75841-1                      | Fill - Sand                      | T            | Solid         | 6010C  | 460-223622 |
| 460-75841-1DU                    | Duplicate                        | T            | Solid         | 6010C  | 460-223622 |
| 460-75841-1MS                    | Matrix Spike                     | T            | Solid         | 6010C  | 460-223622 |
| 460-75841-2                      | Fill - item#4                    | T            | Solid         | 6010C  | 460-223622 |
| <b>Analysis Batch:460-224465</b> |                                  |              |               |        |            |
| 460-75841-2                      | Fill - item#4                    | T            | Solid         | 6010C  | 460-223622 |

#### Report Basis

T = Total

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### QC Association Summary

| Lab Sample ID                    | Client Sample ID | Report Basis | Client Matrix | Method   | Prep Batch |
|----------------------------------|------------------|--------------|---------------|----------|------------|
| <b>General Chemistry</b>         |                  |              |               |          |            |
| <b>Analysis Batch:460-223613</b> |                  |              |               |          |            |
| 460-75841-1                      | Fill - Sand      | T            | Solid         | Moisture |            |
| 460-75841-2                      | Fill - item#4    | T            | Solid         | Moisture |            |
| 460-75841-2DU                    | Duplicate        | T            | Solid         | Moisture |            |

#### Report Basis

T = Total

Client: New York State D.E.C.

Job Number: 460-75841-1

**Surrogate Recovery Report****8260C Volatile Organic Compounds by GC/MS****Client Matrix: Solid**

| Lab Sample ID      | Client Sample ID | DCA<br>%Rec | BFB<br>%Rec | DBFM<br>%Rec | TOL<br>%Rec |
|--------------------|------------------|-------------|-------------|--------------|-------------|
| 460-75841-1        | Fill - Sand      | 114         | 104         | 116          | 104         |
| 460-75841-2        | Fill - item#4    | 118         | 112         | 66*          | 111         |
| MB 460-223925/6    |                  | 107         | 103         | 104          | 101         |
| LB3 460-223546/1-A |                  | 106         | 103         | 110          | 102         |
| LCS 460-223925/3   |                  | 97          | 101         | 99           | 102         |
| LCSD 460-223925/4  |                  | 93          | 100         | 93           | 99          |

| Surrogate                          | Acceptance Limits |
|------------------------------------|-------------------|
| DCA = 1,2-Dichloroethane-d4 (Surr) | 70-130            |
| BFB = 4-Bromofluorobenzene         | 70-130            |
| DBFM = Dibromofluoromethane (Surr) | 70-130            |
| TOL = Toluene-d8 (Surr)            | 70-130            |

Client: New York State D.E.C.

Job Number: 460-75841-1

**Surrogate Recovery Report****8270D Semivolatile Organic Compounds (GC/MS)****Client Matrix: Solid**

| Lab Sample ID           | Client Sample ID | TBP<br>%Rec | FBP<br>%Rec | 2FP<br>%Rec | NBZ<br>%Rec | PHL<br>%Rec | TPH<br>%Rec |
|-------------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 460-75841-1             | Fill - Sand      | 81          | 107         | 72          | 101         | 65          | 92          |
| 460-75841-2             | Fill - item#4    | 24          | 69          | 29*         | 67          | 42*         | 57          |
| MB 460-223788/1-A       |                  | 86          | 99          | 80          | 98          | 78          | 115         |
| LCS 460-223788/2-A      |                  | 97          | 102         | 85          | 102         | 82          | 116         |
| LCS 460-223788/3-A      |                  | 65          | 80          | 59          | 74          | 58          | 72          |
| 460-75842-E-10-C<br>MS  |                  | 66          | 95          | 63          | 85          | 60          | 72          |
| 460-75842-E-10-D<br>MSD |                  | 56          | 85          | 58          | 77          | 55          | 66          |

| Surrogate                         | Acceptance Limits |
|-----------------------------------|-------------------|
| TBP = 2,4,6-Tribromophenol (Surr) | 19-114            |
| FBP = 2-Fluorobiphenyl            | 49-112            |
| 2FP = 2-Fluorophenol (Surr)       | 39-103            |
| NBZ = Nitrobenzene-d5 (Surr)      | 40-106            |
| PHL = Phenol-d5 (Surr)            | 44-104            |
| TPH = Terphenyl-d14 (Surr)        | 41-145            |

Client: New York State D.E.C.

Job Number: 460-75841-1

**Surrogate Recovery Report****8081B Organochlorine Pesticides (GC)****Client Matrix: Solid**

| Lab Sample ID           | Client Sample ID | DCB1<br>%Rec | DCB2<br>%Rec | TCX1<br>%Rec | TCX2<br>%Rec |
|-------------------------|------------------|--------------|--------------|--------------|--------------|
| 460-75841-1             | Fill - Sand      | 114          | 116          | 104          | 117          |
| 460-75841-2             | Fill - item#4    | 113          | 109          | 95           | 108          |
| MB 460-223747/1-A       |                  | 108          | 104          | 107          | 108          |
| LCS 460-223747/2-A      |                  | 109          | 103          | 99           | 97           |
| 460-75444-C-20-M<br>MS  |                  | 109          | 111          | 105          | 108          |
| 460-75444-C-20-N<br>MSD |                  | 113          | 116          | 110          | 115          |

| Surrogate                    | Acceptance Limits |
|------------------------------|-------------------|
| DCB = DCB Decachlorobiphenyl | 76-149            |
| TCX = Tetrachloro-m-xylene   | 72-136            |



## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Surrogate Recovery Report

#### 8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography

##### Client Matrix: Solid

| Lab Sample ID           | Client Sample ID | DCB1<br>%Rec | DCB2<br>%Rec |
|-------------------------|------------------|--------------|--------------|
| 460-75841-1             | Fill - Sand      | 111          | 91           |
| 460-75841-2             | Fill - item#4    | 115          | 104          |
| MB 460-223758/1-A       |                  | 111          | 95           |
| LCS 460-223758/2-A      |                  | 110          | 98           |
| 460-75444-C-20-P<br>MS  |                  | 115          | 101          |
| 460-75444-C-20-Q<br>MSD |                  | 119          | 104          |

| Surrogate                    | Acceptance Limits |
|------------------------------|-------------------|
| DCB = DCB Decachlorobiphenyl | 53-150            |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Neutral Leach or MeOH Extraction Blank - Batch: 460-223546

Method: 8260C  
Preparation: 5035

Lab Sample ID: LB3 460-223546/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/12/2014 1823  
Prep Date: 05/09/2014 2216  
Leach Date: N/A

Analysis Batch: 460-223925  
Prep Batch: 460-223546  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CVOAMS4  
Lab File ID: D1000.D  
Initial Weight/Volume: 5 g  
Final Weight/Volume: 5 mL

| Analyte                               | Result | Qual | MDL   | RL  |
|---------------------------------------|--------|------|-------|-----|
| 1,1,1-Trichloroethane                 | 1.0    | U    | 0.13  | 1.0 |
| 1,1,2,2-Tetrachloroethane             | 1.0    | U    | 0.090 | 1.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.0    | U    | 0.11  | 1.0 |
| 1,1,2-Trichloroethane                 | 1.0    | U    | 0.14  | 1.0 |
| 1,1-Dichloroethane                    | 1.0    | U    | 0.11  | 1.0 |
| 1,1-Dichloroethene                    | 1.0    | U    | 0.19  | 1.0 |
| 1,2,3-Trichlorobenzene                | 1.0    | U    | 0.16  | 1.0 |
| 1,2,4-Trichlorobenzene                | 1.0    | U    | 0.19  | 1.0 |
| 1,2-Dichloropropane                   | 1.0    | U    | 0.15  | 1.0 |
| 1,3-Dichlorobenzene                   | 1.0    | U    | 0.16  | 1.0 |
| 1,4-Dichlorobenzene                   | 1.0    | U    | 0.11  | 1.0 |
| 1,4-Dioxane                           | 20     | U    | 13    | 20  |
| 2-Butanone (MEK)                      | 5.0    | U    | 0.63  | 5.0 |
| 2-Hexanone                            | 5.0    | U    | 0.13  | 5.0 |
| 4-Methyl-2-pentanone (MIBK)           | 5.0    | U    | 0.20  | 5.0 |
| Acetone                               | 4.34   | J    | 1.7   | 5.0 |
| Benzene                               | 1.0    | U    | 0.15  | 1.0 |
| Bromoform                             | 1.0    | U    | 0.17  | 1.0 |
| Bromomethane                          | 1.0    | U    | 0.43  | 1.0 |
| Carbon disulfide                      | 1.0    | U    | 0.15  | 1.0 |
| Carbon tetrachloride                  | 1.0    | U    | 0.15  | 1.0 |
| Chlorobenzene                         | 1.0    | U    | 0.18  | 1.0 |
| Chlorobromomethane                    | 1.0    | U    | 0.11  | 1.0 |
| Chlorodibromomethane                  | 1.0    | U    | 0.10  | 1.0 |
| Chloroethane                          | 1.0    | U    | 0.33  | 1.0 |
| Chloroform                            | 1.0    | U    | 0.24  | 1.0 |
| Chloromethane                         | 1.0    | U    | 0.16  | 1.0 |
| cis-1,2-Dichloroethene                | 1.0    | U    | 0.11  | 1.0 |
| cis-1,3-Dichloropropene               | 1.0    | U    | 0.14  | 1.0 |
| Cyclohexane                           | 1.0    | U    | 0.13  | 1.0 |
| Dichlorobromomethane                  | 1.0    | U    | 0.32  | 1.0 |
| Dichlorodifluoromethane               | 1.0    | U    | 0.22  | 1.0 |
| Ethylbenzene                          | 1.0    | U    | 0.17  | 1.0 |
| Ethylene Dibromide                    | 1.0    | U    | 0.15  | 1.0 |
| Isopropylbenzene                      | 1.0    | U    | 0.11  | 1.0 |
| Methyl acetate                        | 5.0    | U    | 0.32  | 5.0 |
| Methyl tert-butyl ether               | 1.0    | U    | 0.11  | 1.0 |
| Methylcyclohexane                     | 1.0    | U    | 0.10  | 1.0 |
| Methylene Chloride                    | 1.0    | U    | 0.15  | 1.0 |
| m-Xylene & p-Xylene                   | 1.0    | U    | 0.59  | 1.0 |
| o-Xylene                              | 1.0    | U    | 0.19  | 1.0 |
| Styrene                               | 1.0    | U    | 0.28  | 1.0 |
| Tetrachloroethene                     | 1.0    | U    | 0.12  | 1.0 |
| Toluene                               | 1.0    | U    | 0.14  | 1.0 |
| trans-1,2-Dichloroethene              | 1.0    | U    | 0.13  | 1.0 |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Neutral Leach or MeOH Extraction Blank - Batch: 460-223546

Method: 8260C

Preparation: 5035

Lab Sample ID: LB3 460-223546/1-A  
 Client Matrix: Solid  
 Dilution: 1.0  
 Analysis Date: 05/12/2014 1823  
 Prep Date: 05/09/2014 2216  
 Leach Date: N/A

Analysis Batch: 460-223925  
 Prep Batch: 460-223546  
 Leach Batch: N/A  
 Units: ug/Kg

Instrument ID: CVOAMS4  
 Lab File ID: D1000.D  
 Initial Weight/Volume: 5 g  
 Final Weight/Volume: 5 mL

| Analyte                     | Result | Qual | MDL  | RL  |
|-----------------------------|--------|------|------|-----|
| trans-1,3-Dichloropropene   | 1.0    | U    | 0.10 | 1.0 |
| Trichloroethene             | 1.0    | U    | 0.12 | 1.0 |
| Trichlorofluoromethane      | 1.0    | U    | 0.16 | 1.0 |
| Vinyl chloride              | 1.0    | U    | 0.34 | 1.0 |
| 1,2-Dichloroethane          | 1.0    | U    | 0.18 | 1.0 |
| 1,2-Dichlorobenzene         | 1.0    | U    | 0.10 | 1.0 |
| 1,2-Dibromo-3-Chloropropane | 1.0    | U    | 0.44 | 1.0 |

| Surrogate                    | % Rec | Acceptance Limits |
|------------------------------|-------|-------------------|
| 1,2-Dichloroethane-d4 (Surr) | 106   | 70 - 130          |
| 4-Bromofluorobenzene         | 103   | 70 - 130          |
| Dibromofluoromethane (Surr)  | 110   | 70 - 130          |
| Toluene-d8 (Surr)            | 102   | 70 - 130          |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Method Blank - Batch: 460-223925

## Method: 8260C Preparation: N/A

Lab Sample ID: MB 460-223925/6  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/12/2014 1606  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 460-223925  
Prep Batch: N/A  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CVOAMS4  
Lab File ID: D0994.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

| Analyte                               | Result | Qual | MDL   | RL  |
|---------------------------------------|--------|------|-------|-----|
| 1,1,1-Trichloroethane                 | 1.0    | U    | 0.13  | 1.0 |
| 1,1,2,2-Tetrachloroethane             | 1.0    | U    | 0.090 | 1.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.0    | U    | 0.11  | 1.0 |
| 1,1,2-Trichloroethane                 | 1.0    | U    | 0.14  | 1.0 |
| 1,1-Dichloroethane                    | 1.0    | U    | 0.11  | 1.0 |
| 1,1-Dichloroethene                    | 1.0    | U    | 0.19  | 1.0 |
| 1,2,3-Trichlorobenzene                | 1.0    | U    | 0.16  | 1.0 |
| 1,2,4-Trichlorobenzene                | 1.0    | U    | 0.19  | 1.0 |
| 1,2-Dichloropropane                   | 1.0    | U    | 0.15  | 1.0 |
| 1,3-Dichlorobenzene                   | 1.0    | U    | 0.16  | 1.0 |
| 1,4-Dichlorobenzene                   | 1.0    | U    | 0.11  | 1.0 |
| 1,4-Dioxane                           | 20     | U    | 13    | 20  |
| 2-Butanone (MEK)                      | 5.0    | U    | 0.63  | 5.0 |
| 2-Hexanone                            | 5.0    | U    | 0.13  | 5.0 |
| 4-Methyl-2-pentanone (MIBK)           | 5.0    | U    | 0.20  | 5.0 |
| Acetone                               | 6.98   |      | 1.7   | 5.0 |
| Benzene                               | 1.0    | U    | 0.15  | 1.0 |
| Bromoform                             | 1.0    | U    | 0.17  | 1.0 |
| Bromomethane                          | 1.0    | U    | 0.43  | 1.0 |
| Carbon disulfide                      | 1.0    | U    | 0.15  | 1.0 |
| Carbon tetrachloride                  | 1.0    | U    | 0.15  | 1.0 |
| Chlorobenzene                         | 1.0    | U    | 0.18  | 1.0 |
| Chlorobromomethane                    | 1.0    | U    | 0.11  | 1.0 |
| Chlorodibromomethane                  | 1.0    | U    | 0.10  | 1.0 |
| Chloroethane                          | 1.0    | U    | 0.33  | 1.0 |
| Chloroform                            | 1.0    | U    | 0.24  | 1.0 |
| Chloromethane                         | 1.0    | U    | 0.16  | 1.0 |
| cis-1,2-Dichloroethene                | 1.0    | U    | 0.11  | 1.0 |
| cis-1,3-Dichloropropene               | 1.0    | U    | 0.14  | 1.0 |
| Cyclohexane                           | 1.0    | U    | 0.13  | 1.0 |
| Dichlorobromomethane                  | 1.0    | U    | 0.32  | 1.0 |
| Dichlorodifluoromethane               | 1.0    | U    | 0.22  | 1.0 |
| Ethylbenzene                          | 1.0    | U    | 0.17  | 1.0 |
| Ethylene Dibromide                    | 1.0    | U    | 0.15  | 1.0 |
| Isopropylbenzene                      | 1.0    | U    | 0.11  | 1.0 |
| Methyl acetate                        | 5.0    | U    | 0.32  | 5.0 |
| Methyl tert-butyl ether               | 1.0    | U    | 0.11  | 1.0 |
| Methylcyclohexane                     | 1.0    | U    | 0.10  | 1.0 |
| Methylene Chloride                    | 1.0    | U    | 0.15  | 1.0 |
| m-Xylene & p-Xylene                   | 1.0    | U    | 0.59  | 1.0 |
| o-Xylene                              | 1.0    | U    | 0.19  | 1.0 |
| Styrene                               | 1.0    | U    | 0.28  | 1.0 |
| Tetrachloroethene                     | 1.0    | U    | 0.12  | 1.0 |
| Toluene                               | 1.0    | U    | 0.14  | 1.0 |
| trans-1,2-Dichloroethene              | 1.0    | U    | 0.13  | 1.0 |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Method Blank - Batch: 460-223925

### Method: 8260C Preparation: N/A

Lab Sample ID: MB 460-223925/6  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/12/2014 1606  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 460-223925  
Prep Batch: N/A  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CVOAMS4  
Lab File ID: D0994.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

| Analyte                     | Result | Qual | MDL  | RL  |
|-----------------------------|--------|------|------|-----|
| trans-1,3-Dichloropropene   | 1.0    | U    | 0.10 | 1.0 |
| Trichloroethene             | 1.0    | U    | 0.12 | 1.0 |
| Trichlorofluoromethane      | 1.0    | U    | 0.16 | 1.0 |
| Vinyl chloride              | 1.0    | U    | 0.34 | 1.0 |
| 1,2-Dichloroethane          | 1.0    | U    | 0.18 | 1.0 |
| 1,2-Dichlorobenzene         | 1.0    | U    | 0.10 | 1.0 |
| 1,2-Dibromo-3-Chloropropane | 1.0    | U    | 0.44 | 1.0 |

| Surrogate                    | % Rec | Acceptance Limits |
|------------------------------|-------|-------------------|
| 1,2-Dichloroethane-d4 (Surr) | 107   | 70 - 130          |
| 4-Bromofluorobenzene         | 103   | 70 - 130          |
| Dibromofluoromethane (Surr)  | 104   | 70 - 130          |
| Toluene-d8 (Surr)            | 101   | 70 - 130          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 460-223925**

**Method: 8260C  
Preparation: N/A**

|                                     |                            |                             |
|-------------------------------------|----------------------------|-----------------------------|
| LCS Lab Sample ID: LCS 460-223925/3 | Analysis Batch: 460-223925 | Instrument ID: CVOAMS4      |
| Client Matrix: Solid                | Prep Batch: N/A            | Lab File ID: D0991.D        |
| Dilution: 1.0                       | Leach Batch: N/A           | Initial Weight/Volume: 5 mL |
| Analysis Date: 05/12/2014 1443      | Units: ug/Kg               | Final Weight/Volume: 5 mL   |
| Prep Date: N/A                      |                            | 5 mL                        |
| Leach Date: N/A                     |                            |                             |

|                                       |                            |                             |
|---------------------------------------|----------------------------|-----------------------------|
| LCSD Lab Sample ID: LCSD 460-223925/4 | Analysis Batch: 460-223925 | Instrument ID: CVOAMS4      |
| Client Matrix: Solid                  | Prep Batch: N/A            | Lab File ID: D0992.D        |
| Dilution: 1.0                         | Leach Batch: N/A           | Initial Weight/Volume: 5 mL |
| Analysis Date: 05/12/2014 1506        | Units: ug/Kg               | Final Weight/Volume: 5 mL   |
| Prep Date: N/A                        |                            | 5 mL                        |
| Leach Date: N/A                       |                            |                             |

| Analyte                               | % Rec. |      | Limit    | RPD | RPD Limit | LCS Qual | LCSD Qual |
|---------------------------------------|--------|------|----------|-----|-----------|----------|-----------|
|                                       | LCS    | LCSD |          |     |           |          |           |
| 1,1,1-Trichloroethane                 | 90     | 84   | 82 - 129 | 6   | 30        |          |           |
| 1,1,2,2-Tetrachloroethane             | 85     | 90   | 66 - 121 | 5   | 30        |          |           |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 95     | 88   | 73 - 134 | 8   | 30        |          |           |
| 1,1,2-Trichloroethane                 | 87     | 93   | 74 - 116 | 7   | 30        |          |           |
| 1,1-Dichloroethane                    | 93     | 89   | 78 - 125 | 4   | 30        |          |           |
| 1,1-Dichloroethene                    | 93     | 89   | 74 - 128 | 5   | 30        |          |           |
| 1,2,3-Trichlorobenzene                | 89     | 91   | 81 - 123 | 1   | 30        |          |           |
| 1,2,4-Trichlorobenzene                | 92     | 92   | 81 - 127 | 1   | 30        |          |           |
| 1,2-Dichloropropane                   | 91     | 89   | 72 - 123 | 3   | 30        |          |           |
| 1,3-Dichlorobenzene                   | 86     | 86   | 78 - 120 | 0   | 30        |          |           |
| 1,4-Dichlorobenzene                   | 84     | 84   | 77 - 120 | 0   | 30        |          |           |
| 1,4-Dioxane                           | 88     | 89   | 69 - 142 | 1   | 30        |          |           |
| 2-Butanone (MEK)                      | 91     | 93   | 58 - 140 | 3   | 30        |          |           |
| 2-Hexanone                            | 82     | 92   | 52 - 134 | 12  | 30        |          |           |
| 4-Methyl-2-pentanone (MIBK)           | 87     | 92   | 55 - 133 | 6   | 30        |          |           |
| Acetone                               | 93     | 88   | 58 - 139 | 6   | 30        |          |           |
| Benzene                               | 91     | 90   | 75 - 123 | 1   | 30        |          |           |
| Bromoform                             | 77     | 79   | 70 - 130 | 2   | 30        |          |           |
| Bromomethane                          | 89     | 89   | 62 - 150 | 0   | 30        |          |           |
| Carbon disulfide                      | 91     | 86   | 73 - 127 | 5   | 30        |          |           |
| Carbon tetrachloride                  | 92     | 86   | 77 - 137 | 7   | 30        |          |           |
| Chlorobenzene                         | 86     | 86   | 80 - 120 | 0   | 30        |          |           |
| Chlorobromomethane                    | 90     | 90   | 82 - 127 | 0   | 30        |          |           |
| Chlorodibromomethane                  | 83     | 87   | 74 - 124 | 5   | 30        |          |           |
| Chloroethane                          | 94     | 95   | 60 - 140 | 0   | 30        |          |           |
| Chloroform                            | 90     | 87   | 77 - 122 | 4   | 30        |          |           |
| Chloromethane                         | 88     | 85   | 48 - 144 | 3   | 30        |          |           |
| cis-1,2-Dichloroethene                | 93     | 92   | 82 - 121 | 1   | 30        |          |           |
| cis-1,3-Dichloropropene               | 91     | 92   | 75 - 119 | 1   | 30        |          |           |
| Cyclohexane                           | 98     | 89   | 66 - 128 | 9   | 30        |          |           |
| Dichlorobromomethane                  | 88     | 84   | 77 - 122 | 4   | 30        |          |           |
| Dichlorodifluoromethane               | 96     | 90   | 52 - 145 | 7   | 30        |          |           |
| Ethylbenzene                          | 91     | 90   | 80 - 120 | 2   | 30        |          |           |
| Ethylene Dibromide                    | 83     | 89   | 78 - 117 | 7   | 30        |          |           |
| Isopropylbenzene                      | 99     | 96   | 80 - 120 | 3   | 30        |          |           |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 460-223925**

**Method: 8260C  
Preparation: N/A**

|                    |                  |                 |            |                        |         |
|--------------------|------------------|-----------------|------------|------------------------|---------|
| LCS Lab Sample ID: | LCS 460-223925/3 | Analysis Batch: | 460-223925 | Instrument ID:         | CVOAMS4 |
| Client Matrix:     | Solid            | Prep Batch:     | N/A        | Lab File ID:           | D0991.D |
| Dilution:          | 1.0              | Leach Batch:    | N/A        | Initial Weight/Volume: | 5 mL    |
| Analysis Date:     | 05/12/2014 1443  | Units:          | ug/Kg      | Final Weight/Volume:   | 5 mL    |
| Prep Date:         | N/A              |                 |            |                        | 5 mL    |
| Leach Date:        | N/A              |                 |            |                        |         |

|                     |                   |                 |            |                        |         |
|---------------------|-------------------|-----------------|------------|------------------------|---------|
| LCSD Lab Sample ID: | LCSD 460-223925/4 | Analysis Batch: | 460-223925 | Instrument ID:         | CVOAMS4 |
| Client Matrix:      | Solid             | Prep Batch:     | N/A        | Lab File ID:           | D0992.D |
| Dilution:           | 1.0               | Leach Batch:    | N/A        | Initial Weight/Volume: | 5 mL    |
| Analysis Date:      | 05/12/2014 1506   | Units:          | ug/Kg      | Final Weight/Volume:   | 5 mL    |
| Prep Date:          | N/A               |                 |            |                        | 5 mL    |
| Leach Date:         | N/A               |                 |            |                        |         |

| Analyte                     | % Rec. |      | Limit    | RPD | RPD Limit | LCS Qual | LCSD Qual |
|-----------------------------|--------|------|----------|-----|-----------|----------|-----------|
|                             | LCS    | LCSD |          |     |           |          |           |
| Methyl acetate              | 84     | 84   | 61 - 137 | 0   | 30        |          |           |
| Methyl tert-butyl ether     | 87     | 86   | 75 - 124 | 2   | 30        |          |           |
| Methylcyclohexane           | 98     | 89   | 80 - 125 | 9   | 30        |          |           |
| Methylene Chloride          | 91     | 88   | 75 - 124 | 3   | 30        |          |           |
| m-Xylene & p-Xylene         | 92     | 90   | 79 - 120 | 2   | 30        |          |           |
| o-Xylene                    | 97     | 97   | 77 - 120 | 0   | 30        |          |           |
| Styrene                     | 94     | 93   | 78 - 120 | 0   | 30        |          |           |
| Tetrachloroethene           | 89     | 88   | 80 - 127 | 2   | 30        |          |           |
| Toluene                     | 90     | 90   | 82 - 117 | 0   | 30        |          |           |
| trans-1,2-Dichloroethene    | 95     | 88   | 83 - 124 | 8   | 30        |          |           |
| trans-1,3-Dichloropropene   | 85     | 87   | 74 - 119 | 2   | 30        |          |           |
| Trichloroethene             | 91     | 89   | 78 - 122 | 2   | 30        |          |           |
| Trichlorofluoromethane      | 95     | 86   | 63 - 147 | 10  | 30        |          |           |
| Vinyl chloride              | 87     | 89   | 62 - 132 | 2   | 30        |          |           |
| 1,2-Dichloroethane          | 86     | 86   | 79 - 120 | 0   | 30        |          |           |
| 1,2-Dichlorobenzene         | 86     | 91   | 77 - 120 | 5   | 30        |          |           |
| 1,2-Dibromo-3-Chloropropane | 73     | 88   | 61 - 125 | 18  | 30        |          |           |

| Surrogate                    | LCS % Rec | LCSD % Rec | Acceptance Limits |
|------------------------------|-----------|------------|-------------------|
| 1,2-Dichloroethane-d4 (Surr) | 97        | 93         | 70 - 130          |
| 4-Bromofluorobenzene         | 101       | 100        | 70 - 130          |
| Dibromofluoromethane (Surr)  | 99        | 93         | 70 - 130          |
| Toluene-d8 (Surr)            | 102       | 99         | 70 - 130          |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Method Blank - Batch: 460-223788

## Method: 8270D Preparation: 3541

Lab Sample ID: MB 460-223788/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/13/2014 0440  
Prep Date: 05/12/2014 0845  
Leach Date: N/A

Analysis Batch: 460-223977  
Prep Batch: 460-223788  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CBNAMS5  
Lab File ID: x1119.D  
Initial Weight/Volume: 15.00 g  
Final Weight/Volume: 1 mL  
Injection Volume: 1 uL

| Analyte                      | Result | Qual | MDL | RL  |
|------------------------------|--------|------|-----|-----|
| 1,1'-Biphenyl                | 330    | U    | 44  | 330 |
| 1,2,4,5-Tetrachlorobenzene   | 330    | U    | 45  | 330 |
| 2,2'-oxybis[1-chloropropane] | 330    | U    | 37  | 330 |
| 2,3,4,6-Tetrachlorophenol    | 330    | U    | 43  | 330 |
| 2,4,5-Trichlorophenol        | 330    | U    | 43  | 330 |
| 2,4,6-Trichlorophenol        | 330    | U    | 39  | 330 |
| 2,4-Dichlorophenol           | 330    | U    | 48  | 330 |
| 2,4-Dimethylphenol           | 330    | U    | 82  | 330 |
| 2,4-Dinitrophenol            | 670    | U    | 190 | 670 |
| 2,4-Dinitrotoluene           | 67     | U    | 11  | 67  |
| 2,6-Dinitrotoluene           | 67     | U    | 10  | 67  |
| 2-Chloronaphthalene          | 330    | U    | 37  | 330 |
| 2-Chlorophenol               | 330    | U    | 44  | 330 |
| 2-Methylnaphthalene          | 330    | U    | 43  | 330 |
| 2-Methylphenol               | 330    | U    | 56  | 330 |
| 2-Nitroaniline               | 330    | U    | 140 | 330 |
| 2-Nitrophenol                | 330    | U    | 37  | 330 |
| 3,3'-Dichlorobenzidine       | 330    | U    | 120 | 330 |
| 3-Nitroaniline               | 330    | U    | 120 | 330 |
| 4,6-Dinitro-2-methylphenol   | 670    | U    | 90  | 670 |
| 4-Bromophenyl phenyl ether   | 330    | U    | 33  | 330 |
| 4-Chloro-3-methylphenol      | 330    | U    | 50  | 330 |
| 4-Chloroaniline              | 330    | U    | 88  | 330 |
| 4-Chlorophenyl phenyl ether  | 330    | U    | 39  | 330 |
| 4-Methylphenol               | 330    | U    | 65  | 330 |
| 4-Nitroaniline               | 670    | U    | 100 | 670 |
| 4-Nitrophenol                | 330    | U    | 210 | 330 |
| Acenaphthene                 | 330    | U    | 48  | 330 |
| Acenaphthylene               | 330    | U    | 39  | 330 |
| Acetophenone                 | 330    | U    | 51  | 330 |
| Anthracene                   | 330    | U    | 40  | 330 |
| Atrazine                     | 330    | U    | 51  | 330 |
| Benzaldehyde                 | 330    | U    | 39  | 330 |
| Benzo[a]anthracene           | 33     | U    | 2.3 | 33  |
| Benzo[a]pyrene               | 33     | U    | 2.3 | 33  |
| Benzo[b]fluoranthene         | 33     | U    | 2.1 | 33  |
| Benzo[g,h,i]perylene         | 330    | U    | 25  | 330 |
| Benzo[k]fluoranthene         | 33     | U    | 2.5 | 33  |
| Bis(2-chloroethoxy)methane   | 330    | U    | 43  | 330 |
| Bis(2-chloroethyl)ether      | 33     | U    | 4.5 | 33  |
| Bis(2-ethylhexyl) phthalate  | 330    | U    | 110 | 330 |
| Butyl benzyl phthalate       | 330    | U    | 30  | 330 |
| Caprolactam                  | 330    | U    | 76  | 330 |
| Carbazole                    | 330    | U    | 39  | 330 |
| Chrysene                     | 330    | U    | 39  | 330 |



# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Method Blank - Batch: 460-223788

## Method: 8270D Preparation: 3541

Lab Sample ID: MB 460-223788/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/13/2014 0440  
Prep Date: 05/12/2014 0845  
Leach Date: N/A

Analysis Batch: 460-223977  
Prep Batch: 460-223788  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CBNAMS5  
Lab File ID: x1119.D  
Initial Weight/Volume: 15.00 g  
Final Weight/Volume: 1 mL  
Injection Volume: 1 uL

| Analyte                   | Result | Qual | MDL | RL  |
|---------------------------|--------|------|-----|-----|
| Dibenz(a,h)anthracene     | 33     | U    | 4.2 | 33  |
| Dibenzofuran              | 330    | U    | 39  | 330 |
| Diethyl phthalate         | 330    | U    | 39  | 330 |
| Dimethyl phthalate        | 330    | U    | 39  | 330 |
| Di-n-butyl phthalate      | 330    | U    | 41  | 330 |
| Di-n-octyl phthalate      | 330    | U    | 21  | 330 |
| Fluoranthene              | 330    | U    | 44  | 330 |
| Fluorene                  | 330    | U    | 42  | 330 |
| Hexachlorobenzene         | 33     | U    | 4.5 | 33  |
| Hexachlorobutadiene       | 67     | U    | 8.1 | 67  |
| Hexachlorocyclopentadiene | 330    | U    | 39  | 330 |
| Hexachloroethane          | 33     | U    | 3.7 | 33  |
| Indeno[1,2,3-cd]pyrene    | 33     | U    | 6.2 | 33  |
| Isophorone                | 330    | U    | 40  | 330 |
| Naphthalene               | 330    | U    | 38  | 330 |
| Nitrobenzene              | 33     | U    | 4.7 | 33  |
| N-Nitrosodi-n-propylamine | 33     | U    | 5.5 | 33  |
| N-Nitrosodiphenylamine    | 330    | U    | 33  | 330 |
| Pentachlorophenol         | 670    | U    | 99  | 670 |
| Phenanthrene              | 330    | U    | 42  | 330 |
| Phenol                    | 330    | U    | 44  | 330 |
| Pyrene                    | 330    | U    | 28  | 330 |

| Surrogate                   | % Rec | Acceptance Limits |
|-----------------------------|-------|-------------------|
| 2,4,6-Tribromophenol (Surr) | 86    | 19 - 114          |
| 2-Fluorobiphenyl            | 99    | 49 - 112          |
| 2-Fluorophenol (Surr)       | 80    | 39 - 103          |
| Nitrobenzene-d5 (Surr)      | 98    | 40 - 106          |
| Phenol-d5 (Surr)            | 78    | 44 - 104          |
| Terphenyl-d14 (Surr)        | 115   | 41 - 145          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Lab Control Sample - Batch: 460-223788

**Method: 8270D**  
**Preparation: 3541**

|                |                    |                 |            |                        |         |
|----------------|--------------------|-----------------|------------|------------------------|---------|
| Lab Sample ID: | LCS 460-223788/2-A | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAM5  |
| Client Matrix: | Solid              | Prep Batch:     | 460-223788 | Lab File ID:           | x1120.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g |
| Analysis Date: | 05/13/2014 0507    | Units:          | ug/Kg      | Final Weight/Volume:   | 1 mL    |
| Prep Date:     | 05/12/2014 0845    |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:    | N/A                |                 |            |                        |         |

| Analyte                     | Spike Amount | Result | % Rec.            | Limit    | Qual |
|-----------------------------|--------------|--------|-------------------|----------|------|
| Benzaldehyde                | 6670         | 4410   | 66                | 10 - 139 |      |
| Surrogate                   | % Rec        |        | Acceptance Limits |          |      |
| 2,4,6-Tribromophenol (Surr) |              | 97     |                   | 19 - 114 |      |
| 2-Fluorobiphenyl            |              | 102    |                   | 49 - 112 |      |
| 2-Fluorophenol (Surr)       |              | 85     |                   | 39 - 103 |      |
| Nitrobenzene-d5 (Surr)      |              | 102    |                   | 40 - 106 |      |
| Phenol-d5 (Surr)            |              | 82     |                   | 44 - 104 |      |
| Terphenyl-d14 (Surr)        |              | 116    |                   | 41 - 145 |      |

### Lab Control Sample - Batch: 460-223788

**Method: 8270D**  
**Preparation: 3541**

|                |                    |                 |            |                        |         |
|----------------|--------------------|-----------------|------------|------------------------|---------|
| Lab Sample ID: | LCS 460-223788/3-A | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAM5  |
| Client Matrix: | Solid              | Prep Batch:     | 460-223788 | Lab File ID:           | x1121.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g |
| Analysis Date: | 05/13/2014 0534    | Units:          | ug/Kg      | Final Weight/Volume:   | 1 mL    |
| Prep Date:     | 05/12/2014 0845    |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:    | N/A                |                 |            |                        |         |

| Analyte                      | Spike Amount | Result | % Rec. | Limit    | Qual |
|------------------------------|--------------|--------|--------|----------|------|
| 1,1'-Biphenyl                | 3330         | 2910   | 87     | 10 - 134 |      |
| 1,2,4,5-Tetrachlorobenzene   | 3330         | 2920   | 88     | 45 - 95  |      |
| 2,2'-oxybis[1-chloropropane] | 3330         | 2520   | 76     | 31 - 101 |      |
| 2,3,4,6-Tetrachlorophenol    | 3330         | 2410   | 72     | 49 - 104 |      |
| 2,4,5-Trichlorophenol        | 3330         | 2450   | 73     | 49 - 96  |      |
| 2,4,6-Trichlorophenol        | 3330         | 2510   | 75     | 49 - 96  |      |
| 2,4-Dichlorophenol           | 3330         | 2490   | 75     | 50 - 100 |      |
| 2,4-Dimethylphenol           | 3330         | 2460   | 74     | 46 - 95  |      |
| 2,4-Dinitrophenol            | 6670         | 3950   | 59     | 10 - 139 |      |
| 2,4-Dinitrotoluene           | 3330         | 2690   | 81     | 49 - 102 |      |
| 2,6-Dinitrotoluene           | 3330         | 2640   | 79     | 52 - 104 |      |
| 2-Chloronaphthalene          | 3330         | 2790   | 84     | 49 - 93  |      |
| 2-Chlorophenol               | 3330         | 2190   | 66     | 49 - 96  |      |
| 2-Methylnaphthalene          | 3330         | 2840   | 85     | 52 - 100 |      |
| 2-Methylphenol               | 3330         | 2160   | 65     | 47 - 99  |      |
| 2-Nitroaniline               | 3330         | 2480   | 74     | 35 - 92  |      |
| 2-Nitrophenol                | 3330         | 2520   | 76     | 51 - 98  |      |
| 3,3'-Dichlorobenzidine       | 3330         | 1630   | 49     | 9 - 89   |      |
| 3-Nitroaniline               | 3330         | 1550   | 46     | 19 - 90  |      |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Lab Control Sample - Batch: 460-223788

## Method: 8270D Preparation: 3541

|                |                    |                 |            |                        |         |
|----------------|--------------------|-----------------|------------|------------------------|---------|
| Lab Sample ID: | LCS 460-223788/3-A | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAM55 |
| Client Matrix: | Solid              | Prep Batch:     | 460-223788 | Lab File ID:           | x1121.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g |
| Analysis Date: | 05/13/2014 0534    | Units:          | ug/Kg      | Final Weight/Volume:   | 1 mL    |
| Prep Date:     | 05/12/2014 0845    |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:    | N/A                |                 |            |                        |         |

| Analyte                     | Spike Amount | Result | % Rec. | Limit    | Qual |
|-----------------------------|--------------|--------|--------|----------|------|
| 4,6-Dinitro-2-methylphenol  | 6670         | 4520   | 68     | 14 - 128 |      |
| 4-Bromophenyl phenyl ether  | 3330         | 2750   | 83     | 50 - 103 |      |
| 4-Chloro-3-methylphenol     | 3330         | 2410   | 72     | 50 - 102 |      |
| 4-Chloroaniline             | 3330         | 1110   | 33     | 10 - 86  |      |
| 4-Chlorophenyl phenyl ether | 3330         | 2740   | 82     | 49 - 95  |      |
| 4-Methylphenol              | 3330         | 2250   | 68     | 43 - 100 |      |
| 4-Nitroaniline              | 3330         | 2140   | 64     | 33 - 102 |      |
| 4-Nitrophenol               | 6670         | 4460   | 67     | 34 - 112 |      |
| Acenaphthene                | 3330         | 2800   | 84     | 48 - 99  |      |
| Acenaphthylene              | 3330         | 2770   | 83     | 49 - 97  |      |
| Acetophenone                | 3330         | 2310   | 69     | 10 - 126 |      |
| Anthracene                  | 3330         | 2680   | 80     | 51 - 97  |      |
| Atrazine                    | 3330         | 2170   | 65     | 10 - 147 |      |
| Benzo[a]anthracene          | 3330         | 2730   | 82     | 51 - 97  |      |
| Benzo[a]pyrene              | 3330         | 2960   | 89     | 59 - 116 |      |
| Benzo[b]fluoranthene        | 3330         | 2880   | 86     | 55 - 115 |      |
| Benzo[g,h,i]perylene        | 3330         | 3010   | 90     | 46 - 120 |      |
| Benzo[k]fluoranthene        | 3330         | 2910   | 87     | 53 - 113 |      |
| Bis(2-chloroethoxy)methane  | 3330         | 2550   | 77     | 48 - 95  |      |
| Bis(2-chloroethyl)ether     | 3330         | 2460   | 74     | 45 - 92  |      |
| Bis(2-ethylhexyl) phthalate | 3330         | 2930   | 88     | 47 - 102 |      |
| Butyl benzyl phthalate      | 3330         | 2710   | 81     | 47 - 107 |      |
| Caprolactam                 | 3330         | 2370   | 71     | 10 - 120 |      |
| Carbazole                   | 3330         | 2570   | 77     | 50 - 102 |      |
| Chrysene                    | 3330         | 2610   | 78     | 50 - 94  |      |
| Dibenz(a,h)anthracene       | 3330         | 2910   | 87     | 48 - 115 |      |
| Dibenzofuran                | 3330         | 2710   | 81     | 50 - 96  |      |
| Diethyl phthalate           | 3330         | 2650   | 80     | 46 - 100 |      |
| Dimethyl phthalate          | 3330         | 2640   | 79     | 51 - 99  |      |
| Di-n-butyl phthalate        | 3330         | 2740   | 82     | 50 - 99  |      |
| Di-n-octyl phthalate        | 3330         | 3000   | 90     | 43 - 120 |      |
| Fluoranthene                | 3330         | 2630   | 79     | 45 - 101 |      |
| Fluorene                    | 3330         | 2830   | 85     | 50 - 95  |      |
| Hexachlorobenzene           | 3330         | 2910   | 87     | 50 - 104 |      |
| Hexachlorobutadiene         | 3330         | 2890   | 87     | 49 - 97  |      |
| Hexachlorocyclopentadiene   | 3330         | 2370   | 71     | 43 - 115 |      |
| Hexachloroethane            | 3330         | 2570   | 77     | 47 - 88  |      |
| Indeno[1,2,3-cd]pyrene      | 3330         | 3050   | 91     | 47 - 124 |      |
| Isophorone                  | 3330         | 2530   | 76     | 51 - 100 |      |
| Naphthalene                 | 3330         | 2680   | 81     | 48 - 92  |      |
| Nitrobenzene                | 3330         | 2770   | 83     | 33 - 72  | *    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Lab Control Sample - Batch: 460-223788

**Method: 8270D**  
**Preparation: 3541**

|                |                    |                 |            |                        |         |
|----------------|--------------------|-----------------|------------|------------------------|---------|
| Lab Sample ID: | LCS 460-223788/3-A | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAMS5 |
| Client Matrix: | Solid              | Prep Batch:     | 460-223788 | Lab File ID:           | x1121.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g |
| Analysis Date: | 05/13/2014 0534    | Units:          | ug/Kg      | Final Weight/Volume:   | 1 mL    |
| Prep Date:     | 05/12/2014 0845    |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:    | N/A                |                 |            |                        |         |

| Analyte                     | Spike Amount | Result | % Rec.            | Limit    | Qual |
|-----------------------------|--------------|--------|-------------------|----------|------|
| N-Nitrosodi-n-propylamine   | 3330         | 2520   | 76                | 49 - 99  |      |
| N-Nitrosodiphenylamine      | 3330         | 2820   | 84                | 51 - 103 |      |
| Pentachlorophenol           | 6670         | 4430   | 66                | 37 - 99  |      |
| Phenanthrene                | 3330         | 2720   | 82                | 51 - 97  |      |
| Phenol                      | 3330         | 2080   | 62                | 46 - 97  |      |
| Pyrene                      | 3330         | 2600   | 78                | 39 - 119 |      |
| Surrogate                   | % Rec        |        | Acceptance Limits |          |      |
| 2,4,6-Tribromophenol (Surr) | 65           |        | 19 - 114          |          |      |
| 2-Fluorobiphenyl            | 80           |        | 49 - 112          |          |      |
| 2-Fluorophenol (Surr)       | 59           |        | 39 - 103          |          |      |
| Nitrobenzene-d5 (Surr)      | 74           |        | 40 - 106          |          |      |
| Phenol-d5 (Surr)            | 58           |        | 44 - 104          |          |      |
| Terphenyl-d14 (Surr)        | 72           |        | 41 - 145          |          |      |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 460-223788

Method: 8270D  
Preparation: 3541

|                   |                     |                 |            |                        |         |
|-------------------|---------------------|-----------------|------------|------------------------|---------|
| MS Lab Sample ID: | 460-75842-E-10-C MS | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAMS5 |
| Client Matrix:    | Solid               | Prep Batch:     | 460-223788 | Lab File ID:           | x1129.D |
| Dilution:         | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.02 g |
| Analysis Date:    | 05/13/2014 0907     |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:        | 05/12/2014 0845     |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:       | N/A                 |                 |            |                        |         |

|                    |                      |                 |            |                        |         |
|--------------------|----------------------|-----------------|------------|------------------------|---------|
| MSD Lab Sample ID: | 460-75842-E-10-D MSD | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAMS5 |
| Client Matrix:     | Solid                | Prep Batch:     | 460-223788 | Lab File ID:           | x1130.D |
| Dilution:          | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.01 g |
| Analysis Date:     | 05/13/2014 0933      |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:         | 05/12/2014 0845      |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:        | N/A                  |                 |            |                        |         |

| Analyte                      | % Rec. |     | Limit    | RPD | RPD Limit | MS Qual | MSD Qual |
|------------------------------|--------|-----|----------|-----|-----------|---------|----------|
|                              | MS     | MSD |          |     |           |         |          |
| 1,1'-Biphenyl                | 96     | 88  | 10 - 134 | 9   | 30        |         |          |
| 1,2,4,5-Tetrachlorobenzene   | 94     | 83  | 45 - 95  | 12  | 30        |         |          |
| 2,2'-oxybis[1-chloropropane] | 76     | 69  | 31 - 101 | 9   | 30        |         |          |
| 2,3,4,6-Tetrachlorophenol    | 54     | 50  | 49 - 104 | 8   | 30        |         |          |
| 2,4,5-Trichlorophenol        | 76     | 69  | 49 - 96  | 9   | 30        |         |          |
| 2,4,6-Trichlorophenol        | 75     | 67  | 49 - 96  | 12  | 30        |         |          |
| 2,4-Dichlorophenol           | 72     | 65  | 50 - 100 | 10  | 30        |         |          |
| 2,4-Dimethylphenol           | 73     | 68  | 46 - 95  | 7   | 30        |         |          |
| 2,4-Dinitrophenol            | 21     | 13  | 10 - 139 | 49  | 30        |         | *        |
| 2,4-Dinitrotoluene           | 85     | 76  | 49 - 102 | 11  | 30        |         |          |
| 2,6-Dinitrotoluene           | 85     | 80  | 52 - 104 | 6   | 30        |         |          |
| 2-Chloronaphthalene          | 91     | 82  | 49 - 93  | 10  | 30        |         |          |
| 2-Chlorophenol               | 65     | 59  | 49 - 96  | 10  | 30        |         |          |
| 2-Methylnaphthalene          | 83     | 75  | 52 - 100 | 10  | 30        |         |          |
| 2-Methylphenol               | 65     | 57  | 47 - 99  | 12  | 30        |         |          |
| 2-Nitroaniline               | 82     | 74  | 35 - 92  | 10  | 30        |         |          |
| 2-Nitrophenol                | 77     | 69  | 51 - 98  | 11  | 30        |         |          |
| 3,3'-Dichlorobenzidine       | 87     | 84  | 9 - 89   | 4   | 30        |         |          |
| 3-Nitroaniline               | 70     | 71  | 19 - 90  | 1   | 30        |         |          |
| 4,6-Dinitro-2-methylphenol   | 42     | 26  | 14 - 128 | 46  | 30        |         | *        |
| 4-Bromophenyl phenyl ether   | 85     | 74  | 50 - 103 | 14  | 30        |         |          |
| 4-Chloro-3-methylphenol      | 69     | 63  | 50 - 102 | 10  | 30        |         |          |
| 4-Chloroaniline              | 49     | 51  | 10 - 86  | 5   | 30        |         |          |
| 4-Chlorophenyl phenyl ether  | 82     | 74  | 49 - 95  | 10  | 30        |         |          |
| 4-Methylphenol               | 66     | 60  | 43 - 100 | 9   | 30        |         |          |
| 4-Nitroaniline               | 73     | 68  | 33 - 102 | 8   | 30        |         |          |
| 4-Nitrophenol                | 69     | 63  | 34 - 112 | 8   | 30        |         |          |
| Acenaphthene                 | 87     | 78  | 48 - 99  | 10  | 30        |         |          |
| Acenaphthylene               | 88     | 80  | 49 - 97  | 10  | 30        |         |          |
| Acetophenone                 | 69     | 63  | 10 - 126 | 10  | 30        |         |          |
| Anthracene                   | 82     | 72  | 51 - 97  | 13  | 30        |         |          |
| Atrazine                     | 74     | 65  | 10 - 147 | 13  | 30        |         |          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 460-223788**

**Method: 8270D  
Preparation: 3541**

MS Lab Sample ID: 460-75842-E-10-C MS  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/13/2014 0907  
Prep Date: 05/12/2014 0845  
Leach Date: N/A

Analysis Batch: 460-223977  
Prep Batch: 460-223788  
Leach Batch: N/A

Instrument ID: CBNAMS5  
Lab File ID: x1129.D  
Initial Weight/Volume: 15.02 g  
Final Weight/Volume: 1 mL  
Injection Volume: 1 uL

MSD Lab Sample ID: 460-75842-E-10-D MSD  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/13/2014 0933  
Prep Date: 05/12/2014 0845  
Leach Date: N/A

Analysis Batch: 460-223977  
Prep Batch: 460-223788  
Leach Batch: N/A

Instrument ID: CBNAMS5  
Lab File ID: x1130.D  
Initial Weight/Volume: 15.01 g  
Final Weight/Volume: 1 mL  
Injection Volume: 1 uL

| Analyte                     | % Rec. |     | Limit    | RPD | RPD Limit | MS Qual | MSD Qual |
|-----------------------------|--------|-----|----------|-----|-----------|---------|----------|
|                             | MS     | MSD |          |     |           |         |          |
| Benzaldehyde                | 82     | 69  | 10 - 139 | 17  | 30        |         |          |
| Benzo[a]anthracene          | 85     | 77  | 51 - 97  | 10  | 30        |         |          |
| Benzo[a]pyrene              | 90     | 80  | 59 - 116 | 12  | 30        |         |          |
| Benzo[b]fluoranthene        | 87     | 77  | 55 - 115 | 13  | 30        |         |          |
| Benzo[g,h,i]perylene        | 101    | 87  | 46 - 120 | 15  | 30        |         |          |
| Benzo[k]fluoranthene        | 85     | 74  | 53 - 113 | 14  | 30        |         |          |
| Bis(2-chloroethoxy)methane  | 79     | 72  | 48 - 95  | 9   | 30        |         |          |
| Bis(2-chloroethyl)ether     | 74     | 67  | 45 - 92  | 10  | 30        |         |          |
| Bis(2-ethylhexyl) phthalate | 94     | 85  | 47 - 102 | 10  | 30        |         |          |
| Butyl benzyl phthalate      | 83     | 74  | 47 - 107 | 11  | 30        |         |          |
| Caprolactam                 | 66     | 58  | 10 - 120 | 13  | 30        |         |          |
| Carbazole                   | 83     | 76  | 50 - 102 | 9   | 30        |         |          |
| Chrysene                    | 81     | 75  | 50 - 94  | 7   | 30        |         |          |
| Dibenz(a,h)anthracene       | 93     | 84  | 48 - 115 | 11  | 30        |         |          |
| Dibenzofuran                | 83     | 77  | 50 - 96  | 8   | 30        |         |          |
| Diethyl phthalate           | 86     | 77  | 46 - 100 | 12  | 30        |         |          |
| Dimethyl phthalate          | 88     | 78  | 51 - 99  | 11  | 30        |         |          |
| Di-n-butyl phthalate        | 89     | 81  | 50 - 99  | 9   | 30        |         |          |
| Di-n-octyl phthalate        | 82     | 76  | 43 - 120 | 8   | 30        |         |          |
| Fluoranthene                | 84     | 76  | 45 - 101 | 10  | 30        |         |          |
| Fluorene                    | 86     | 80  | 50 - 95  | 7   | 30        |         |          |
| Hexachlorobenzene           | 88     | 79  | 50 - 104 | 11  | 30        |         |          |
| Hexachlorobutadiene         | 91     | 80  | 49 - 97  | 12  | 30        |         |          |
| Hexachlorocyclopentadiene   | 65     | 55  | 43 - 115 | 16  | 30        |         |          |
| Hexachloroethane            | 78     | 71  | 47 - 88  | 9   | 30        |         |          |
| Indeno[1,2,3-cd]pyrene      | 92     | 83  | 47 - 124 | 10  | 30        |         |          |
| Isophorone                  | 80     | 71  | 51 - 100 | 11  | 30        |         |          |
| Naphthalene                 | 83     | 74  | 48 - 92  | 12  | 30        |         |          |
| Nitrobenzene                | 88     | 80  | 33 - 72  | 9   | 30        | *       | *        |
| N-Nitrosodi-n-propylamine   | 74     | 68  | 49 - 99  | 9   | 30        |         |          |
| N-Nitrosodiphenylamine      | 94     | 84  | 51 - 103 | 11  | 30        |         |          |
| Pentachlorophenol           | 38     | 36  | 37 - 99  | 5   | 30        |         | *        |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 460-223788**

**Method: 8270D  
Preparation: 3541**

|                   |                     |                 |            |                        |         |
|-------------------|---------------------|-----------------|------------|------------------------|---------|
| MS Lab Sample ID: | 460-75842-E-10-C MS | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAMS5 |
| Client Matrix:    | Solid               | Prep Batch:     | 460-223788 | Lab File ID:           | x1129.D |
| Dilution:         | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.02 g |
| Analysis Date:    | 05/13/2014 0907     |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:        | 05/12/2014 0845     |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:       | N/A                 |                 |            |                        |         |

|                    |                      |                 |            |                        |         |
|--------------------|----------------------|-----------------|------------|------------------------|---------|
| MSD Lab Sample ID: | 460-75842-E-10-D MSD | Analysis Batch: | 460-223977 | Instrument ID:         | CBNAMS5 |
| Client Matrix:     | Solid                | Prep Batch:     | 460-223788 | Lab File ID:           | x1130.D |
| Dilution:          | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.01 g |
| Analysis Date:     | 05/13/2014 0933      |                 |            | Final Weight/Volume:   | 1 mL    |
| Prep Date:         | 05/12/2014 0845      |                 |            | Injection Volume:      | 1 uL    |
| Leach Date:        | N/A                  |                 |            |                        |         |

| Analyte      | % Rec. |     | Limit    | RPD | RPD Limit | MS Qual | MSD Qual |
|--------------|--------|-----|----------|-----|-----------|---------|----------|
|              | MS     | MSD |          |     |           |         |          |
| Phenanthrene | 84     | 77  | 51 - 97  | 9   | 30        |         |          |
| Phenol       | 60     | 56  | 46 - 97  | 7   | 30        |         |          |
| Pyrene       | 70     | 64  | 39 - 119 | 8   | 30        |         |          |

| Surrogate                   | MS % Rec | MSD % Rec | Acceptance Limits |
|-----------------------------|----------|-----------|-------------------|
| 2,4,6-Tribromophenol (Surr) | 66       | 56        | 19 - 114          |
| 2-Fluorobiphenyl            | 95       | 85        | 49 - 112          |
| 2-Fluorophenol (Surr)       | 63       | 58        | 39 - 103          |
| Nitrobenzene-d5 (Surr)      | 85       | 77        | 40 - 106          |
| Phenol-d5 (Surr)            | 60       | 55        | 44 - 104          |
| Terphenyl-d14 (Surr)        | 72       | 66        | 41 - 145          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Method Blank - Batch: 460-223747

### Method: 8081B Preparation: 3546

Lab Sample ID: MB 460-223747/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/12/2014 0948  
Prep Date: 05/12/2014 0614  
Leach Date: N/A

Analysis Batch: 460-223777  
Prep Batch: 460-223747  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CPESTGC1  
Lab File ID: XR151398.D  
Initial Weight/Volume: 15.00 g  
Final Weight/Volume: 10 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

| Analyte               | Result | Qual | MDL | RL  |
|-----------------------|--------|------|-----|-----|
| 4,4'-DDD              | 6.7    | U    | 1.3 | 6.7 |
| 4,4'-DDE              | 6.7    | U    | 1.3 | 6.7 |
| 4,4'-DDT              | 6.7    | U    | 1.6 | 6.7 |
| Aldrin                | 6.7    | U    | 1.4 | 6.7 |
| alpha-BHC             | 6.7    | U    | 1.5 | 6.7 |
| beta-BHC              | 6.7    | U    | 1.6 | 6.7 |
| Chlordane (technical) | 67     | U    | 19  | 67  |
| delta-BHC             | 6.7    | U    | 1.2 | 6.7 |
| Dieldrin              | 6.7    | U    | 1.2 | 6.7 |
| Endosulfan I          | 6.7    | U    | 1.5 | 6.7 |
| Endosulfan II         | 6.7    | U    | 1.3 | 6.7 |
| Endosulfan sulfate    | 6.7    | U    | 1.3 | 6.7 |
| Endrin                | 6.7    | U    | 1.6 | 6.7 |
| Endrin aldehyde       | 6.7    | U    | 1.0 | 6.7 |
| Endrin ketone         | 6.7    | U    | 1.3 | 6.7 |
| gamma-BHC (Lindane)   | 6.7    | U    | 1.2 | 6.7 |
| Heptachlor            | 6.7    | U    | 1.6 | 6.7 |
| Heptachlor epoxide    | 6.7    | U    | 1.5 | 6.7 |
| Methoxychlor          | 6.7    | U    | 1.6 | 6.7 |
| Toxaphene             | 67     | U    | 18  | 67  |

| Surrogate              | % Rec | Acceptance Limits |
|------------------------|-------|-------------------|
| DCB Decachlorobiphenyl | 108   | 76 - 149          |
| Tetrachloro-m-xylene   | 108   | 72 - 136          |
| Surrogate              | % Rec | Acceptance Limits |
| DCB Decachlorobiphenyl | 104   | 76 - 149          |
| Tetrachloro-m-xylene   | 107   | 72 - 136          |



## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Lab Control Sample - Batch: 460-223747

**Method: 8081B**  
**Preparation: 3546**

|                |                    |                 |            |                        |            |
|----------------|--------------------|-----------------|------------|------------------------|------------|
| Lab Sample ID: | LCS 460-223747/2-A | Analysis Batch: | 460-223777 | Instrument ID:         | CPESTGC1   |
| Client Matrix: | Solid              | Prep Batch:     | 460-223747 | Lab File ID:           | XR151399.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g    |
| Analysis Date: | 05/12/2014 1004    | Units:          | ug/Kg      | Final Weight/Volume:   | 10 mL      |
| Prep Date:     | 05/12/2014 0614    |                 |            | Injection Volume:      | 1 uL       |
| Leach Date:    | N/A                |                 |            | Column ID:             | PRIMARY    |

| Analyte                | Spike Amount | Result | % Rec.            | Limit    | Qual |
|------------------------|--------------|--------|-------------------|----------|------|
| 4,4'-DDD               | 133          | 140    | 105               | 50 - 131 |      |
| 4,4'-DDE               | 133          | 143    | 107               | 49 - 130 |      |
| 4,4'-DDT               | 133          | 130    | 97                | 48 - 132 |      |
| Aldrin                 | 133          | 123    | 93                | 53 - 126 |      |
| alpha-BHC              | 133          | 125    | 94                | 50 - 129 |      |
| beta-BHC               | 133          | 126    | 94                | 51 - 131 |      |
| delta-BHC              | 133          | 131    | 98                | 40 - 130 |      |
| Dieldrin               | 133          | 126    | 95                | 48 - 126 |      |
| Endosulfan I           | 133          | 125    | 94                | 53 - 127 |      |
| Endosulfan II          | 133          | 125    | 94                | 52 - 127 |      |
| Endosulfan sulfate     | 133          | 129    | 97                | 52 - 124 |      |
| Endrin                 | 133          | 126    | 95                | 48 - 126 |      |
| Endrin aldehyde        | 133          | 124    | 93                | 57 - 124 |      |
| Endrin ketone          | 133          | 120    | 90                | 55 - 124 |      |
| gamma-BHC (Lindane)    | 133          | 129    | 97                | 52 - 129 |      |
| Heptachlor             | 133          | 125    | 93                | 52 - 128 |      |
| Heptachlor epoxide     | 133          | 122    | 92                | 53 - 122 |      |
| Methoxychlor           | 133          | 123    | 92                | 47 - 126 |      |
| Surrogate              | % Rec        |        | Acceptance Limits |          |      |
| DCB Decachlorobiphenyl | 109          |        | 76 - 149          |          |      |
| Tetrachloro-m-xylene   | 99           |        | 72 - 136          |          |      |

### Lab Control Sample - Batch: 460-223747

**Method: 8081B**  
**Preparation: 3546**

|                |                    |                 |            |                        |            |
|----------------|--------------------|-----------------|------------|------------------------|------------|
| Lab Sample ID: | LCS 460-223747/2-A | Analysis Batch: | 460-223777 | Instrument ID:         | CPESTGC1   |
| Client Matrix: | Solid              | Prep Batch:     | 460-223747 | Lab File ID:           | XR151399.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g    |
| Analysis Date: | 05/12/2014 1004    | Units:          | ug/Kg      | Final Weight/Volume:   | 10 mL      |
| Prep Date:     | 05/12/2014 0614    |                 |            | Injection Volume:      | 1 uL       |
| Leach Date:    | N/A                |                 |            | Column ID:             | SECONDARY  |

| Analyte   | Spike Amount | Result | % Rec. | Limit    | Qual |
|-----------|--------------|--------|--------|----------|------|
| 4,4'-DDD  | 133          | 136    | 102    | 50 - 131 |      |
| 4,4'-DDE  | 133          | 130    | 97     | 49 - 130 |      |
| 4,4'-DDT  | 133          | 126    | 94     | 48 - 132 |      |
| Aldrin    | 133          | 122    | 92     | 53 - 126 |      |
| alpha-BHC | 133          | 123    | 92     | 50 - 129 |      |
| beta-BHC  | 133          | 125    | 94     | 51 - 131 |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Lab Control Sample - Batch: 460-223747

Method: 8081B

Preparation: 3546

Lab Sample ID: LCS 460-223747/2-A  
 Client Matrix: Solid  
 Dilution: 1.0  
 Analysis Date: 05/12/2014 1004  
 Prep Date: 05/12/2014 0614  
 Leach Date: N/A

Analysis Batch: 460-223777  
 Prep Batch: 460-223747  
 Leach Batch: N/A  
 Units: ug/Kg

Instrument ID: CPESTGC1  
 Lab File ID: XR151399.D  
 Initial Weight/Volume: 15.00 g  
 Final Weight/Volume: 10 mL  
 Injection Volume: 1 uL  
 Column ID: SECONDARY

| Analyte                | Spike Amount | Result | % Rec.            | Limit    | Qual |
|------------------------|--------------|--------|-------------------|----------|------|
| delta-BHC              | 133          | 131    | 98                | 40 - 130 |      |
| Dieldrin               | 133          | 124    | 93                | 48 - 126 |      |
| Endosulfan I           | 133          | 122    | 91                | 53 - 127 |      |
| Endosulfan II          | 133          | 120    | 90                | 52 - 127 |      |
| Endosulfan sulfate     | 133          | 120    | 90                | 52 - 124 |      |
| Endrin                 | 133          | 125    | 94                | 48 - 126 |      |
| Endrin aldehyde        | 133          | 123    | 92                | 57 - 124 |      |
| Endrin ketone          | 133          | 120    | 90                | 55 - 124 |      |
| gamma-BHC (Lindane)    | 133          | 127    | 95                | 52 - 129 |      |
| Heptachlor             | 133          | 121    | 91                | 52 - 128 |      |
| Heptachlor epoxide     | 133          | 118    | 89                | 53 - 122 |      |
| Methoxychlor           | 133          | 122    | 92                | 47 - 126 |      |
| Surrogate              | % Rec        |        | Acceptance Limits |          |      |
| DCB Decachlorobiphenyl | 103          |        | 76 - 149          |          |      |
| Tetrachloro-m-xylene   | 97           |        | 72 - 136          |          |      |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

## Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 460-223747

Method: 8081B  
Preparation: 3546

|                   |                     |                 |            |                        |            |
|-------------------|---------------------|-----------------|------------|------------------------|------------|
| MS Lab Sample ID: | 460-75444-C-20-M MS | Analysis Batch: | 460-223777 | Instrument ID:         | CPESTGC1   |
| Client Matrix:    | Solid               | Prep Batch:     | 460-223747 | Lab File ID:           | XR151400.D |
| Dilution:         | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.03 g    |
| Analysis Date:    | 05/12/2014 1019     |                 |            | Final Weight/Volume:   | 10 mL      |
| Prep Date:        | 05/12/2014 0614     |                 |            | Injection Volume:      | 1 uL       |
| Leach Date:       | N/A                 |                 |            | Column ID:             | PRIMARY    |

|                    |                      |                 |            |                        |            |
|--------------------|----------------------|-----------------|------------|------------------------|------------|
| MSD Lab Sample ID: | 460-75444-C-20-N MSD | Analysis Batch: | 460-223777 | Instrument ID:         | CPESTGC1   |
| Client Matrix:     | Solid                | Prep Batch:     | 460-223747 | Lab File ID:           | XR151401.D |
| Dilution:          | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.01 g    |
| Analysis Date:     | 05/12/2014 1034      |                 |            | Final Weight/Volume:   | 10 mL      |
| Prep Date:         | 05/12/2014 0614      |                 |            | Injection Volume:      | 1 uL       |
| Leach Date:        | N/A                  |                 |            | Column ID:             | PRIMARY    |

| Analyte                | % Rec.   |     | Limit     | RPD               | RPD Limit | MS Qual | MSD Qual |
|------------------------|----------|-----|-----------|-------------------|-----------|---------|----------|
|                        | MS       | MSD |           |                   |           |         |          |
| 4,4'-DDD               | 120      | 128 | 69 - 150  | 7                 | 30        |         |          |
| 4,4'-DDE               | 132      | 142 | 70 - 147  | 7                 | 30        |         |          |
| 4,4'-DDT               | 110      | 116 | 63 - 146  | 5                 | 30        |         |          |
| Aldrin                 | 102      | 109 | 69 - 138  | 7                 | 30        |         |          |
| alpha-BHC              | 105      | 112 | 68 - 133  | 7                 | 30        |         |          |
| beta-BHC               | 102      | 108 | 67 - 137  | 6                 | 30        |         |          |
| delta-BHC              | 111      | 119 | 65 - 141  | 7                 | 30        |         |          |
| Dieldrin               | 101      | 107 | 63 - 129  | 7                 | 30        |         |          |
| Endosulfan I           | 102      | 108 | 69 - 140  | 6                 | 30        |         |          |
| Endosulfan II          | 102      | 109 | 66 - 136  | 7                 | 30        |         |          |
| Endosulfan sulfate     | 102      | 112 | 65 - 137  | 10                | 30        |         |          |
| Endrin                 | 107      | 112 | 67 - 142  | 5                 | 30        |         |          |
| Endrin aldehyde        | 100      | 109 | 67 - 134  | 8                 | 30        |         |          |
| Endrin ketone          | 99       | 107 | 68 - 146  | 7                 | 30        |         |          |
| gamma-BHC (Lindane)    | 108      | 115 | 68 - 134  | 7                 | 30        |         |          |
| Heptachlor             | 101      | 108 | 67 - 136  | 7                 | 30        |         |          |
| Heptachlor epoxide     | 99       | 105 | 68 - 136  | 6                 | 30        |         |          |
| Methoxychlor           | 101      | 107 | 52 - 150  | 5                 | 30        |         |          |
| Surrogate              | MS % Rec |     | MSD % Rec | Acceptance Limits |           |         |          |
| DCB Decachlorobiphenyl | 111      |     | 116       | 76 - 149          |           |         |          |
| Tetrachloro-m-xylene   | 108      |     | 115       | 72 - 136          |           |         |          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 460-223747**

**Method: 8081B  
Preparation: 3546**

|                                       |                            |                                |
|---------------------------------------|----------------------------|--------------------------------|
| MS Lab Sample ID: 460-75444-C-20-M MS | Analysis Batch: 460-223777 | Instrument ID: CPESTGC1        |
| Client Matrix: Solid                  | Prep Batch: 460-223747     | Lab File ID: XR151400.D        |
| Dilution: 1.0                         | Leach Batch: N/A           | Initial Weight/Volume: 15.03 g |
| Analysis Date: 05/12/2014 1019        |                            | Final Weight/Volume: 10 mL     |
| Prep Date: 05/12/2014 0614            |                            | Injection Volume: 1 uL         |
| Leach Date: N/A                       |                            | Column ID: SECONDARY           |

|                                         |                            |                                |
|-----------------------------------------|----------------------------|--------------------------------|
| MSD Lab Sample ID: 460-75444-C-20-N MSD | Analysis Batch: 460-223777 | Instrument ID: CPESTGC1        |
| Client Matrix: Solid                    | Prep Batch: 460-223747     | Lab File ID: XR151401.D        |
| Dilution: 1.0                           | Leach Batch: N/A           | Initial Weight/Volume: 15.01 g |
| Analysis Date: 05/12/2014 1034          |                            | Final Weight/Volume: 10 mL     |
| Prep Date: 05/12/2014 0614              |                            | Injection Volume: 1 uL         |
| Leach Date: N/A                         |                            | Column ID: SECONDARY           |

| Analyte                | % Rec.   |     | Limit     | RPD               | RPD Limit | MS Qual | MSD Qual |
|------------------------|----------|-----|-----------|-------------------|-----------|---------|----------|
|                        | MS       | MSD |           |                   |           |         |          |
| 4,4'-DDD               | 110      | 124 | 69 - 150  | 12                | 30        |         |          |
| 4,4'-DDE               | 109      | 117 | 70 - 147  | 7                 | 30        |         |          |
| 4,4'-DDT               | 93       | 106 | 63 - 146  | 13                | 30        |         |          |
| Aldrin                 | 100      | 105 | 69 - 138  | 5                 | 30        |         |          |
| alpha-BHC              | 99       | 104 | 68 - 133  | 5                 | 30        |         |          |
| beta-BHC               | 102      | 108 | 67 - 137  | 6                 | 30        |         |          |
| delta-BHC              | 107      | 113 | 65 - 141  | 6                 | 30        |         |          |
| Dieldrin               | 89       | 105 | 63 - 129  | 17                | 30        |         |          |
| Endosulfan I           | 96       | 105 | 69 - 140  | 9                 | 30        |         |          |
| Endosulfan II          | 89       | 100 | 66 - 136  | 11                | 30        |         |          |
| Endosulfan sulfate     | 99       | 105 | 65 - 137  | 7                 | 30        |         |          |
| Endrin                 | 98       | 107 | 67 - 142  | 9                 | 30        |         |          |
| Endrin aldehyde        | 92       | 103 | 67 - 134  | 11                | 30        |         |          |
| Endrin ketone          | 96       | 102 | 68 - 146  | 6                 | 30        |         |          |
| gamma-BHC (Lindane)    | 103      | 109 | 68 - 134  | 6                 | 30        |         |          |
| Heptachlor             | 98       | 102 | 67 - 136  | 5                 | 30        |         |          |
| Heptachlor epoxide     | 98       | 105 | 68 - 136  | 7                 | 30        |         |          |
| Methoxychlor           | 95       | 104 | 52 - 150  | 9                 | 30        |         |          |
| Surrogate              | MS % Rec |     | MSD % Rec | Acceptance Limits |           |         |          |
| DCB Decachlorobiphenyl | 109      |     | 113       | 76 - 149          |           |         |          |
| Tetrachloro-m-xylene   | 105      |     | 110       | 72 - 136          |           |         |          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Method Blank - Batch: 460-223758

### Method: 8082A Preparation: 3546

Lab Sample ID: MB 460-223758/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/12/2014 1300  
Prep Date: 05/12/2014 0648  
Leach Date: N/A

Analysis Batch: 460-223864  
Prep Batch: 460-223758  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CPESTGC11  
Lab File ID: T006604.D  
Initial Weight/Volume: 15.00 g  
Final Weight/Volume: 10 mL  
Injection Volume: 1 uL  
Column ID: PRIMARY

| Analyte                          | Result | Qual | MDL | RL |
|----------------------------------|--------|------|-----|----|
| Aroclor 1016                     | 67     | U    | 15  | 67 |
| Aroclor 1221                     | 67     | U    | 15  | 67 |
| Aroclor 1232                     | 67     | U    | 15  | 67 |
| Aroclor 1242                     | 67     | U    | 15  | 67 |
| Aroclor 1248                     | 67     | U    | 15  | 67 |
| Aroclor 1254                     | 67     | U    | 19  | 67 |
| Aroclor 1260                     | 67     | U    | 19  | 67 |
| Aroclor-1262                     | 67     | U    | 19  | 67 |
| Aroclor 1268                     | 67     | U    | 19  | 67 |
| Polychlorinated biphenyls, Total | 67     | U    | 19  | 67 |

| Surrogate              | % Rec | Acceptance Limits |
|------------------------|-------|-------------------|
| DCB Decachlorobiphenyl | 111   | 53 - 150          |
| Surrogate              | % Rec | Acceptance Limits |
| DCB Decachlorobiphenyl | 95    | 53 - 150          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Lab Control Sample - Batch: 460-223758

**Method: 8082A**  
**Preparation: 3546**

|                |                    |                 |            |                        |           |
|----------------|--------------------|-----------------|------------|------------------------|-----------|
| Lab Sample ID: | LCS 460-223758/2-A | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Client Matrix: | Solid              | Prep Batch:     | 460-223758 | Lab File ID:           | T006605.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g   |
| Analysis Date: | 05/12/2014 1319    | Units:          | ug/Kg      | Final Weight/Volume:   | 10 mL     |
| Prep Date:     | 05/12/2014 0648    |                 |            | Injection Volume:      | 1 uL      |
| Leach Date:    | N/A                |                 |            | Column ID:             | PRIMARY   |

| Analyte                | Spike Amount | Result | % Rec.            | Limit    | Qual |
|------------------------|--------------|--------|-------------------|----------|------|
| Aroclor 1016           | 333          | 353    | 106               | 64 - 145 |      |
| Aroclor 1260           | 333          | 371    | 111               | 59 - 150 |      |
| Surrogate              | % Rec        |        | Acceptance Limits |          |      |
| DCB Decachlorobiphenyl | 110          |        | 53 - 150          |          |      |

### Lab Control Sample - Batch: 460-223758

**Method: 8082A**  
**Preparation: 3546**

|                |                    |                 |            |                        |           |
|----------------|--------------------|-----------------|------------|------------------------|-----------|
| Lab Sample ID: | LCS 460-223758/2-A | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Client Matrix: | Solid              | Prep Batch:     | 460-223758 | Lab File ID:           | T006605.D |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g   |
| Analysis Date: | 05/12/2014 1319    | Units:          | ug/Kg      | Final Weight/Volume:   | 10 mL     |
| Prep Date:     | 05/12/2014 0648    |                 |            | Injection Volume:      | 1 uL      |
| Leach Date:    | N/A                |                 |            | Column ID:             | SECONDARY |

| Analyte                | Spike Amount | Result | % Rec.            | Limit    | Qual |
|------------------------|--------------|--------|-------------------|----------|------|
| Aroclor 1016           | 333          | 340    | 102               | 64 - 145 |      |
| Aroclor 1260           | 333          | 325    | 98                | 59 - 150 |      |
| Surrogate              | % Rec        |        | Acceptance Limits |          |      |
| DCB Decachlorobiphenyl | 98           |        | 53 - 150          |          |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 460-223758

Method: 8082A  
Preparation: 3546

|                   |                     |                 |            |                        |           |
|-------------------|---------------------|-----------------|------------|------------------------|-----------|
| MS Lab Sample ID: | 460-75444-C-20-P MS | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Client Matrix:    | Solid               | Prep Batch:     | 460-223758 | Lab File ID:           | T006608.D |
| Dilution:         | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.02 g   |
| Analysis Date:    | 05/12/2014 1416     |                 |            | Final Weight/Volume:   | 10 mL     |
| Prep Date:        | 05/12/2014 0648     |                 |            | Injection Volume:      | 1 uL      |
| Leach Date:       | N/A                 |                 |            | Column ID:             | PRIMARY   |

|                    |                      |                 |            |                        |           |
|--------------------|----------------------|-----------------|------------|------------------------|-----------|
| MSD Lab Sample ID: | 460-75444-C-20-Q MSD | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Client Matrix:     | Solid                | Prep Batch:     | 460-223758 | Lab File ID:           | T006609.D |
| Dilution:          | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g   |
| Analysis Date:     | 05/12/2014 1431      |                 |            | Final Weight/Volume:   | 10 mL     |
| Prep Date:         | 05/12/2014 0648      |                 |            | Injection Volume:      | 1 uL      |
| Leach Date:        | N/A                  |                 |            | Column ID:             | PRIMARY   |

| Analyte                | % Rec.   |     | Limit     | RPD               | RPD Limit | MS Qual | MSD Qual |
|------------------------|----------|-----|-----------|-------------------|-----------|---------|----------|
|                        | MS       | MSD |           |                   |           |         |          |
| Aroclor 1016           | 105      | 110 | 64 - 145  | 4                 | 30        |         |          |
| Aroclor 1260           | 112      | 118 | 59 - 150  | 5                 | 30        |         |          |
| Surrogate              | MS % Rec |     | MSD % Rec | Acceptance Limits |           |         |          |
| DCB Decachlorobiphenyl | 115      |     | 119       | 53 - 150          |           |         |          |

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 460-223758

Method: 8082A  
Preparation: 3546

|                   |                     |                 |            |                        |           |
|-------------------|---------------------|-----------------|------------|------------------------|-----------|
| MS Lab Sample ID: | 460-75444-C-20-P MS | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Client Matrix:    | Solid               | Prep Batch:     | 460-223758 | Lab File ID:           | T006608.D |
| Dilution:         | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.02 g   |
| Analysis Date:    | 05/12/2014 1416     |                 |            | Final Weight/Volume:   | 10 mL     |
| Prep Date:        | 05/12/2014 0648     |                 |            | Injection Volume:      | 1 uL      |
| Leach Date:       | N/A                 |                 |            | Column ID:             | SECONDARY |

|                    |                      |                 |            |                        |           |
|--------------------|----------------------|-----------------|------------|------------------------|-----------|
| MSD Lab Sample ID: | 460-75444-C-20-Q MSD | Analysis Batch: | 460-223864 | Instrument ID:         | CPESTGC11 |
| Client Matrix:     | Solid                | Prep Batch:     | 460-223758 | Lab File ID:           | T006609.D |
| Dilution:          | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 15.00 g   |
| Analysis Date:     | 05/12/2014 1431      |                 |            | Final Weight/Volume:   | 10 mL     |
| Prep Date:         | 05/12/2014 0648      |                 |            | Injection Volume:      | 1 uL      |
| Leach Date:        | N/A                  |                 |            | Column ID:             | SECONDARY |

| Analyte                | % Rec.   |     | Limit     | RPD               | RPD Limit | MS Qual | MSD Qual |
|------------------------|----------|-----|-----------|-------------------|-----------|---------|----------|
|                        | MS       | MSD |           |                   |           |         |          |
| Aroclor 1016           | 99       | 105 | 64 - 145  | 7                 | 30        |         |          |
| Aroclor 1260           | 102      | 107 | 59 - 150  | 5                 | 30        |         |          |
| Surrogate              | MS % Rec |     | MSD % Rec | Acceptance Limits |           |         |          |
| DCB Decachlorobiphenyl | 101      |     | 104       | 53 - 150          |           |         |          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Method Blank - Batch: 460-223622

### Method: 6010C

### Preparation: 3050B

Lab Sample ID: MB 460-223622/1-A ^2  
 Client Matrix: Solid  
 Dilution: 2.0  
 Analysis Date: 05/12/2014 1238  
 Prep Date: 05/10/2014 1547  
 Leach Date: N/A

Analysis Batch: 460-223942  
 Prep Batch: 460-223622  
 Leach Batch: N/A  
 Units: mg/Kg

Instrument ID: ICP4  
 Lab File ID: 223620.asc  
 Initial Weight/Volume: 1.00 g  
 Final Weight/Volume: 50 mL

| Analyte   | Result | Qual | MDL  | RL   |
|-----------|--------|------|------|------|
| Silver    | 1.0    | U    | 0.19 | 1.0  |
| Aluminum  | 20.0   | U    | 11.1 | 20.0 |
| Arsenic   | 1.5    | U    | 0.41 | 1.5  |
| Barium    | 20.0   | U    | 0.87 | 20.0 |
| Beryllium | 0.20   | U    | 0.14 | 0.20 |
| Calcium   | 500    | U    | 38.3 | 500  |
| Cadmium   | 0.40   | U    | 0.14 | 0.40 |
| Cobalt    | 5.0    | U    | 0.45 | 5.0  |
| Chromium  | 1.0    | U    | 0.40 | 1.0  |
| Copper    | 2.5    | U    | 0.88 | 2.5  |
| Iron      | 15.0   | U    | 12.5 | 15.0 |
| Potassium | 500    | U    | 13.8 | 500  |
| Magnesium | 500    | U    | 33.2 | 500  |
| Manganese | 1.5    | U    | 0.43 | 1.5  |
| Sodium    | 500    | U    | 37.8 | 500  |
| Nickel    | 4.0    | U    | 0.90 | 4.0  |
| Lead      | 1.0    | U    | 0.41 | 1.0  |
| Antimony  | 2.0    | U    | 0.76 | 2.0  |
| Selenium  | 2.0    | U    | 0.57 | 2.0  |
| Thallium  | 2.0    | U    | 0.98 | 2.0  |
| Vanadium  | 5.0    | U    | 0.41 | 5.0  |
| Zinc      | 3.0    | U    | 0.86 | 3.0  |



## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**LCS-Certified Reference Material - Batch: 460-223622**

**Method: 6010C**

**Preparation: 3050B**

|                |                       |                 |            |                        |            |
|----------------|-----------------------|-----------------|------------|------------------------|------------|
| Lab Sample ID: | LCSSRM 460-223622/2-A | Analysis Batch: | 460-223942 | Instrument ID:         | ICP4       |
| Client Matrix: | Solid                 | Prep Batch:     | 460-223622 | Lab File ID:           | 223620.asc |
| Dilution:      | 4.0                   | Leach Batch:    | N/A        | Initial Weight/Volume: | 1.00 g     |
| Analysis Date: | 05/12/2014 1242       | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL      |
| Prep Date:     | 05/10/2014 1547       |                 |            |                        |            |
| Leach Date:    | N/A                   |                 |            |                        |            |

| Analyte   | Spike Amount | Result | % Rec. | Limit        | Qual |
|-----------|--------------|--------|--------|--------------|------|
| Silver    | 42.3         | 38.00  | 89.8   | 66.2 - 134.0 |      |
| Aluminum  | 9310         | 8322   | 89.4   | 43.3 - 156.8 |      |
| Arsenic   | 168          | 163.8  | 97.5   | 70.8 - 129.8 |      |
| Barium    | 213          | 222.8  | 104.6  | 73.2 - 126.8 |      |
| Beryllium | 110          | 106.5  | 96.9   | 75.1 - 125.5 |      |
| Calcium   | 6870         | 6722   | 97.8   | 74.4 - 125.8 |      |
| Cadmium   | 103          | 102.4  | 99.5   | 73.0 - 126.2 |      |
| Cobalt    | 131          | 136.1  | 103.9  | 74.4 - 125.2 |      |
| Chromium  | 119          | 118.0  | 99.1   | 69.7 - 129.4 |      |
| Copper    | 118          | 112.6  | 95.4   | 74.6 - 124.6 |      |
| Iron      | 13000        | 13330  | 102.5  | 32.2 - 167.7 |      |
| Potassium | 3130         | 2758   | 88.1   | 62.9 - 136.7 |      |
| Magnesium | 2780         | 2636   | 94.8   | 65.1 - 135.3 |      |
| Manganese | 338          | 351.0  | 103.8  | 75.4 - 125.1 |      |
| Sodium    | 350          | 293.6  | 83.9   | 42.9 - 156.9 | J    |
| Nickel    | 70.0         | 73.22  | 104.6  | 70.9 - 129.0 |      |
| Lead      | 76.9         | 79.24  | 103.0  | 68.7 - 131.3 |      |
| Antimony  | 120          | 65.50  | 54.6   | 20.8 - 252.5 |      |
| Selenium  | 126          | 122.1  | 96.9   | 66.7 - 134.1 |      |
| Thallium  | 208          | 228.8  | 110.0  | 69.2 - 130.8 |      |
| Vanadium  | 87.1         | 84.78  | 97.3   | 63.1 - 136.6 |      |
| Zinc      | 276          | 286.6  | 103.8  | 71.4 - 128.6 |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Matrix Spike - Batch: 460-223622**

**Method: 6010C**

**Preparation: 3050B**

|                |                 |                 |            |                        |            |
|----------------|-----------------|-----------------|------------|------------------------|------------|
| Lab Sample ID: | 460-75841-1     | Analysis Batch: | 460-223942 | Instrument ID:         | ICP4       |
| Client Matrix: | Solid           | Prep Batch:     | 460-223622 | Lab File ID:           | 223620.asc |
| Dilution:      | 4.0             | Leach Batch:    | N/A        | Initial Weight/Volume: | 1.10 g     |
| Analysis Date: | 05/12/2014 1256 | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL      |
| Prep Date:     | 05/10/2014 1547 |                 |            |                        |            |
| Leach Date:    | N/A             |                 |            |                        |            |

| Analyte   | Sample Result/Qual |   | Spike Amount | Result | % Rec. | Limit    | Qual |
|-----------|--------------------|---|--------------|--------|--------|----------|------|
| Silver    | 1.9                | U | 4.75         | 4.08   | 86     | 75 - 125 |      |
| Aluminum  | 823                |   | 190          | 1019   | 104    | 75 - 125 | 4    |
| Arsenic   | 0.92               | J | 190          | 152.9  | 80     | 75 - 125 |      |
| Barium    | 3.8                | J | 190          | 174.8  | 90     | 75 - 125 |      |
| Beryllium | 0.38               | U | 4.75         | 4.04   | 85     | 75 - 125 |      |
| Calcium   | 414                | J | 1900         | 1670   | 66     | 75 - 125 | N    |
| Cadmium   | 0.76               | U | 4.75         | 4.13   | 87     | 75 - 125 |      |
| Cobalt    | 9.5                | U | 47.5         | 42.71  | 90     | 75 - 125 |      |
| Chromium  | 3.8                |   | 19.0         | 17.07  | 70     | 75 - 125 | N    |
| Copper    | 4.8                | U | 23.8         | 20.33  | 86     | 75 - 125 |      |
| Iron      | 3130               |   | 95.1         | 1951   | -1242  | 75 - 125 | 4    |
| Potassium | 91.6               | J | 1900         | 1540   | 76     | 75 - 125 |      |
| Magnesium | 181                | J | 1900         | 1671   | 78     | 75 - 125 |      |
| Manganese | 35.7               |   | 47.5         | 67.31  | 67     | 75 - 125 | N    |
| Sodium    | 951                | U | 1900         | 1550   | 82     | 75 - 125 |      |
| Nickel    | 7.6                | U | 47.5         | 44.38  | 93     | 75 - 125 |      |
| Lead      | 0.97               | J | 47.5         | 44.09  | 91     | 75 - 125 |      |
| Antimony  | 3.8                | U | 47.5         | 36.68  | 77     | 75 - 125 |      |
| Selenium  | 3.8                | U | 190          | 152.4  | 80     | 75 - 125 |      |
| Thallium  | 3.8                | U | 190          | 176.5  | 93     | 75 - 125 |      |
| Vanadium  | 3.6                | J | 47.5         | 41.60  | 80     | 75 - 125 |      |
| Zinc      | 4.1                | J | 47.5         | 45.39  | 87     | 75 - 125 |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Duplicate - Batch: 460-223622**

**Method: 6010C**

**Preparation: 3050B**

Lab Sample ID: 460-75841-1

Analysis Batch: 460-223942

Instrument ID: ICP4

Client Matrix: Solid

Prep Batch: 460-223622

Lab File ID: 223620.asc

Dilution: 4.0

Leach Batch: N/A

Initial Weight/Volume: 1.15 g

Analysis Date: 05/12/2014 1245

Units: mg/Kg

Final Weight/Volume: 50 mL

Prep Date: 05/10/2014 1547

Leach Date: N/A

| Analyte   | Sample Result/Qual |   | Result | RPD  | Limit | Qual |
|-----------|--------------------|---|--------|------|-------|------|
| Silver    | 1.9                | U | 1.8    | NC   | 20    | U    |
| Aluminum  | 823                |   | 807.7  | 2    | 20    |      |
| Arsenic   | 0.92               | J | 0.895  | 3    | 20    | J    |
| Barium    | 3.8                | J | 3.66   | 3    | 20    | J    |
| Beryllium | 0.38               | U | 0.36   | NC   | 20    | U    |
| Calcium   | 414                | J | 413.8  | 0.09 | 20    | J    |
| Cadmium   | 0.76               | U | 0.73   | NC   | 20    | U    |
| Cobalt    | 9.5                | U | 9.1    | NC   | 20    | U    |
| Chromium  | 3.8                |   | 3.83   | 1    | 20    |      |
| Copper    | 4.8                | U | 4.5    | NC   | 20    | U    |
| Iron      | 3130               |   | 3079   | 2    | 20    |      |
| Potassium | 91.6               | J | 90.52  | 1    | 20    | J    |
| Magnesium | 181                | J | 178.5  | 1    | 20    | J    |
| Manganese | 35.7               |   | 35.23  | 1    | 20    |      |
| Sodium    | 951                | U | 909    | NC   | 20    | U    |
| Nickel    | 7.6                | U | 7.3    | NC   | 20    | U    |
| Lead      | 0.97               | J | 0.982  | 0.9  | 20    | J    |
| Antimony  | 3.8                | U | 3.6    | NC   | 20    | U    |
| Selenium  | 3.8                | U | 3.6    | NC   | 20    | U    |
| Thallium  | 3.8                | U | 3.6    | NC   | 20    | U    |
| Vanadium  | 3.6                | J | 3.58   | 0.2  | 20    | J    |
| Zinc      | 4.1                | J | 4.04   | 2    | 20    | J    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Method Blank - Batch: 460-223739

Method: 7471B  
Preparation: 7471B

|                |                    |                 |            |                        |               |
|----------------|--------------------|-----------------|------------|------------------------|---------------|
| Lab Sample ID: | MB 460-223739/10-A | Analysis Batch: | 460-223808 | Instrument ID:         | LEEMAN5       |
| Client Matrix: | Solid              | Prep Batch:     | 460-223739 | Lab File ID:           | 223739HG1.PRN |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.60 g        |
| Analysis Date: | 05/12/2014 0842    | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL         |
| Prep Date:     | 05/12/2014 0530    |                 |            |                        |               |
| Leach Date:    | N/A                |                 |            |                        |               |

| Analyte | Result | Qual | MDL   | RL    |
|---------|--------|------|-------|-------|
| Mercury | 0.017  | U    | 0.012 | 0.017 |

### LCS-Certified Reference Material - Batch: 460-223739

Method: 7471B  
Preparation: 7471B

|                |                        |                 |            |                        |               |
|----------------|------------------------|-----------------|------------|------------------------|---------------|
| Lab Sample ID: | LCSSRM 460-223739/11-A | Analysis Batch: | 460-223808 | Instrument ID:         | LEEMAN5       |
| Client Matrix: | Solid                  | Prep Batch:     | 460-223739 | Lab File ID:           | 223739HG1.PRN |
| Dilution:      | 50                     | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.60 g        |
| Analysis Date: | 05/12/2014 0844        | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL         |
| Prep Date:     | 05/12/2014 0530        |                 |            |                        |               |
| Leach Date:    | N/A                    |                 |            |                        |               |

| Analyte | Spike Amount | Result | % Rec. | Limit        | Qual |
|---------|--------------|--------|--------|--------------|------|
| Mercury | 25.1         | 24.42  | 97.3   | 51.4 - 148.2 |      |

### Matrix Spike - Batch: 460-223739

Method: 7471B  
Preparation: 7471B

|                |                    |                 |            |                        |               |
|----------------|--------------------|-----------------|------------|------------------------|---------------|
| Lab Sample ID: | 460-75854-A-1-C MS | Analysis Batch: | 460-223808 | Instrument ID:         | LEEMAN5       |
| Client Matrix: | Solid              | Prep Batch:     | 460-223739 | Lab File ID:           | 223739HG1.PRN |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.63 g        |
| Analysis Date: | 05/12/2014 0849    | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL         |
| Prep Date:     | 05/12/2014 0530    |                 |            |                        |               |
| Leach Date:    | N/A                |                 |            |                        |               |

| Analyte | Sample Result/Qual | Spike Amount | Result | % Rec. | Limit    | Qual |
|---------|--------------------|--------------|--------|--------|----------|------|
| Mercury | 0.017 U            | 0.0820       | 0.0828 | 101    | 75 - 125 |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

**Duplicate - Batch: 460-223739**

**Method: 7471B**

**Preparation: 7471B**

Lab Sample ID: 460-75854-A-1-B DU  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 05/12/2014 0847  
Prep Date: 05/12/2014 0530  
Leach Date: N/A

Analysis Batch: 460-223808  
Prep Batch: 460-223739  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: LEEMAN5  
Lab File ID: 223739HG1.PRN  
Initial Weight/Volume: 0.63 g  
Final Weight/Volume: 50 mL

| Analyte | Sample Result/Qual |   | Result | RPD | Limit | Qual |
|---------|--------------------|---|--------|-----|-------|------|
| Mercury | 0.017              | U | 0.017  | NC  | 20    | U    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-75841-1

### Duplicate - Batch: 460-223613

### Method: Moisture

### Preparation: N/A

|                |                 |                 |            |                        |                       |
|----------------|-----------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | 460-75841-2     | Analysis Batch: | 460-223613 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid           | Prep Batch:     | N/A        | Lab File ID:           | N/A                   |
| Dilution:      | 1.0             | Leach Batch:    | N/A        | Initial Weight/Volume: |                       |
| Analysis Date: | 05/10/2014 1551 | Units:          | %          | Final Weight/Volume:   |                       |
| Prep Date:     | N/A             |                 |            |                        |                       |
| Leach Date:    | N/A             |                 |            |                        |                       |

| Analyte          | Sample Result/Qual | Result | RPD | Limit | Qual |
|------------------|--------------------|--------|-----|-------|------|
| Percent Moisture | 13.1               | 12.7   | 4   | 20    |      |
| Percent Solids   | 86.9               | 87.3   | 0.5 | 20    |      |

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## CHAIN OF CUSTODY

460-75841 Chain of Custody



777 New Durham Road  
Edison, New Jersey 08817  
Phone: (732) 549-3900 Fax: (732) 549-3679

Page 1 of 1

Name (for report and invoice)

J. Lawrence

Samplers Name (Printed)

EARLES

Site/Project Identification

DEC-Lindbergh-269

Company

EAR

P. O. #

State (Location of site): NJ: ☐ NY: ☒ Other:

Regulatory Program:

Address

225 Atlantic Ave

Analysis Turnaround Time

Standard ☐

Rush Charges Authorized For:

2 Week ☐

1 Week ☐

Other ☒ 72 Hr.

ANALYSIS REQUESTED (ENTER X BELOW TO INDICATE REQUEST)

TCL VOCs

Pesticides, TCL Metals

TCL VOCs, PCBs

LAB USE ONLY

Project No:

Job No:

75841

Sample Numbers

1

2

Sample Identification

Date

Time

Matrix

No. of Cont.

Sample Numbers

Fill Sand

5/8/14

1420

Soil

2

1

Fill - Item #4

5/8/14

1410

Soil

2

2

3-DAY RUSH

Preservation Used: 1 = ICE, 2 = HCl, 3 = H<sub>2</sub>SO<sub>4</sub>, 4 = HNO<sub>3</sub>, 5 = NaOH

Soil:

6 = Other \_\_\_\_\_, 7 = Other \_\_\_\_\_

Water:

Special Instructions Category A Deliverables

Water Metals Filtered (Yes/No)?

Relinquished by

EAR

Company

Date / Time

5/8/14 1515

Received by

1) EAR Fricke

Company

EAR

Relinquished by

EAR

Company

Date / Time

5-09-14-0948

Received by

Phyllis A. Valente

Company

EAR

Relinquished by

EAR

Company

Date / Time

5-09-14-0948

Received by

Phyllis A. Valente

Company

EAR

Relinquished by

EAR

Company

Date / Time

5-09-14-0948

Received by

Phyllis A. Valente

Company

EAR

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (No. 578)

6-7/11-5-ER #5 WCL

TAL-0016 (0-06)

25841

IR Gun #

Temp. Cooler #4 (Deg C) (Raw/Corrected)

Temp. Cooler #7 (Deg C) (Raw/Corrected)

Temp. Cooler #5 (Deg C) (Raw/Corrected)

Temp. Cooler #3 (Deg C) (Raw/Corrected)

Temp. Cooler #6 (Deg C) (Raw/Corrected)

Temp. Cooler #9 (Deg C) (Raw/Corrected)

**If pH adjustments are required record the information below:**

1

---

Volume of Preservative used (ml):

\_\_\_\_\_

**Expiration Date:**

*\* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*



## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-75841-1

**Login Number: 75841**

**List Source: TestAmerica Edison**

**List Number: 1**

**Creator: Hall, Alonzo**

| Question                                                                                 | Answer | Comment                                                 |
|------------------------------------------------------------------------------------------|--------|---------------------------------------------------------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |                                                         |
| The cooler's custody seal, if present, is intact.                                        | N/A    | Not present                                             |
| Sample custody seals, if present, are intact.                                            | N/A    |                                                         |
| The cooler or samples do not appear to have been compromised or tampered with.           | True   |                                                         |
| Samples were received on ice.                                                            | True   |                                                         |
| Cooler Temperature is acceptable.                                                        | True   |                                                         |
| Cooler Temperature is recorded.                                                          | True   | 1.5° C IR #5                                            |
| COC is present.                                                                          | True   |                                                         |
| COC is filled out in ink and legible.                                                    | True   |                                                         |
| COC is filled out with all pertinent information.                                        | True   |                                                         |
| Is the Field Sampler's name present on COC?                                              | True   |                                                         |
| There are no discrepancies between the containers received and the COC.                  | True   |                                                         |
| Samples are received within Holding Time.                                                | True   |                                                         |
| Sample containers have legible labels.                                                   | True   |                                                         |
| Containers are not broken or leaking.                                                    | True   |                                                         |
| Sample collection date/times are provided.                                               | True   |                                                         |
| Appropriate sample containers are used.                                                  | True   |                                                         |
| Sample bottles are completely filled.                                                    | True   |                                                         |
| Sample Preservation Verified.                                                            | True   |                                                         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |                                                         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | N/A    |                                                         |
| Multiphasic samples are not present.                                                     | N/A    |                                                         |
| Samples do not require splitting or compositing.                                         | N/A    |                                                         |
| Residual Chlorine Checked.                                                               | N/A    | No analysis requiring residual chlorine check assigned. |



## **APPENDIX B: PHOTOGRAPHS**



Photo 1: Beginning CP-5 Excavation



Photo 2: Excavating Around CP-5







Photo 3: CP-5 Lid Exposed



Photo 4: Collapsed CP-5





Photo 5: Excavation w/ CP-5 Removed



Photo 6: Lateral Line Capped by EAR







Photo 7: Backfilled Excavation



Photo 8: 11/18/14 Completed Backfill





Photo 9: 1/5/15 Grading





## **APPENDIX C: LAB ANALYTICAL REPORT (WASTE CHARACTERIZATION)**



## ANALYTICAL REPORT

Job Number: 460-86402-2

Job Description: DEC-Copiague1305; Site 152201

For:  
New York State D.E.C.  
625 Broadway  
12th Floor  
Albany, NY 12233-7017  
Attention: Robert Corcoran



Approved for release.  
Shalini Isaac  
Project Management Assistant II  
11/24/2014 10:00 AM

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Designee for  
Melissa Haas, Project Manager I  
777 New Durham Road, Edison, NJ, 08817  
(203)944-1310  
melissa.haas@testamericainc.com  
11/24/2014

cc: Mr. John Hofmann

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

**TestAmerica Laboratories, Inc.**

TestAmerica Edison 777 New Durham Road, Edison, NJ 08817  
Tel (732) 549-3900 Fax (732) 549-3679 [www.testamericainc.com](http://www.testamericainc.com)



## CASE NARRATIVE

**Client: New York State D.E.C.**

**Project: DEC-Copiague1305; Site 152201**

**Report Number: 460-86402-2**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 11/17/2014 6:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

Except:

Received limited sample volume for MSD Terracores, Sample #3

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Total cyanide was not listed on the COC but is required by the client.

Due to the different turnaround time and deliverable requirements, the following sample was placed on a separate job number than the rest of the samples on the COC, to be reported separately: Soil Waste (460-86402-4).

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC did not list the following tests that are required for sample "SOIL WASTE": Total cyanide, Reactive cyanide, Reactive sulfide, Ignitability, pH. The tests were added per client request.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

### **VOLATILE ORGANICS**

Sample Soil Waste (460-86402-4) was analyzed for Volatile organics in accordance with EPA SW-846 Methods 8260C. The samples were prepared on 11/18/2014 and analyzed on 11/20/2014.

The continuing calibration verification (CCV) associated with batch 264083 recovered outside control limits for 1,4-Dioxane, 1,2,4-Trichlorobenzene, and 1,2-Dibromo-3-chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 264083 recovered outside control limits for the following analytes: 1,4-Dioxane and 1,2,4-Trichlorobenzene. These analytes were not detected in the associated samples; therefore, the data have been reported.

1,2,4-Trichlorobenzene failed the recovery criteria low for LCS 460-264083/3. 1,4-Dioxane failed the recovery criteria high. 1,4-Dioxane failed the recovery criteria high for LCSD 460-264083/4. 1,2-Dichloroethane-d4 (Surr), 4-Bromofluorobenzene, Dibromofluoromethane (Surr) and Toluene-d8 (Surr) failed the surrogate recovery criteria low for Soil Waste (460-86402-4).

Refer to the QC report for details.

The following sample was diluted due to the abundance of target analytes: Soil Waste (460-86402-4). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the Volatile organics analysis.

All other quality control parameters were within the acceptance limits.

#### **METALS**

Sample Soil Waste (460-86402-4) was analyzed for Metals in accordance with EPA SW-846 6010C. The samples were prepared and analyzed on 11/20/2014.

Antimony and Iron failed the recovery criteria low for the MS of sample 460-86282-2 in batch 460-264376. Aluminum failed the recovery criteria high.

Refer to the QC report for details.

Sample Soil Waste (460-86402-4)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Metals analysis.

All other quality control parameters were within the acceptance limits.

#### **TOTAL MERCURY**

Sample Soil Waste (460-86402-4) was analyzed for total mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared and analyzed on 11/20/2014.

Mercury failed the recovery criteria high for the MS of sample 460-86036-5 in batch 460-264139.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Sample Soil Waste (460-86402-4)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the Hg analysis.

All other quality control parameters were within the acceptance limits.

#### **IGNITABILITY**

Sample Soil Waste (460-86402-4) was analyzed for Ignitability in accordance with EPA SW-846 Method 1030. The samples were analyzed on 11/20/2014.

No difficulties were encountered during the Ignitability analysis.

All quality control parameters were within the acceptance limits.

#### **TOTAL CYANIDE**

Sample Soil Waste (460-86402-4) was analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The samples were prepared and analyzed on 11/20/2014.

No difficulties were encountered during the cyanide analysis.

All quality control parameters were within the acceptance limits.

#### **REACTIVE CYANIDE**

Sample Soil Waste (460-86402-4) was analyzed for reactive cyanide in accordance with EPA SW-846 Method 7.3.3/9014. The samples were prepared and analyzed on 11/20/2014.

No difficulties were encountered during the reactive cyanide analysis.

All quality control parameters were within the acceptance limits.

#### **REACTIVE SULFIDE**

Sample Soil Waste (460-86402-4) was analyzed for reactive sulfide in accordance with EPA SW-846 Method 7.3.4/9034. The samples were prepared and analyzed on 11/20/2014.

No difficulties were encountered during the reactive sulfide analysis.

All quality control parameters were within the acceptance limits.

#### **CORROSIVITY (PH)**

Sample Soil Waste (460-86402-4) was analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045D. The samples were analyzed on 11/20/2014.

No difficulties were encountered during the corrosivity (pH) analysis.

All quality control parameters were within the acceptance limits.

**PERCENT SOLIDS/PERCENT MOISTURE**

Sample Soil Waste (460-86402-4) was analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D). The samples were analyzed on 11/19/2014.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

## EXECUTIVE SUMMARY - Detections

Client: New York State D.E.C.

Job Number: 460-86402-2

| Lab Sample ID<br>Analyte              | Client Sample ID | Result  | Qualifier | Reporting<br>Limit | Units | Method   |
|---------------------------------------|------------------|---------|-----------|--------------------|-------|----------|
| <b>460-86402-4 SOIL WASTE</b>         |                  |         |           |                    |       |          |
| 1,1,1-Trichloroethane                 |                  | 3500000 |           | 12000              | ug/Kg | 8260C    |
| 1,1,2-Trichloro-1,2,2-trifluoroethane |                  | 680000  |           | 12000              | ug/Kg | 8260C    |
| 1,1-Dichloroethane                    |                  | 45000   |           | 12000              | ug/Kg | 8260C    |
| 1,1-Dichloroethene                    |                  | 6800    | J         | 12000              | ug/Kg | 8260C    |
| 1,4-Dichlorobenzene                   |                  | 26000   |           | 12000              | ug/Kg | 8260C    |
| cis-1,2-Dichloroethene                |                  | 4300    | J         | 12000              | ug/Kg | 8260C    |
| Ethylbenzene                          |                  | 59000   |           | 12000              | ug/Kg | 8260C    |
| m-Xylene & p-Xylene                   |                  | 230000  |           | 12000              | ug/Kg | 8260C    |
| o-Xylene                              |                  | 20000   |           | 12000              | ug/Kg | 8260C    |
| Tetrachloroethene                     |                  | 4500    | J         | 12000              | ug/Kg | 8260C    |
| Toluene                               |                  | 15000   |           | 12000              | ug/Kg | 8260C    |
| Trichloroethene                       |                  | 750000  |           | 12000              | ug/Kg | 8260C    |
| Silver                                |                  | 7.4     |           | 2.3                | mg/Kg | 6010C    |
| Aluminum                              |                  | 2850    |           | 45.0               | mg/Kg | 6010C    |
| Arsenic                               |                  | 1.1     | J         | 3.4                | mg/Kg | 6010C    |
| Barium                                |                  | 46.3    |           | 45.0               | mg/Kg | 6010C    |
| Calcium                               |                  | 6690    |           | 1130               | mg/Kg | 6010C    |
| Cadmium                               |                  | 3.5     |           | 0.90               | mg/Kg | 6010C    |
| Cobalt                                |                  | 1.1     | J         | 11.3               | mg/Kg | 6010C    |
| Chromium                              |                  | 51.5    |           | 2.3                | mg/Kg | 6010C    |
| Copper                                |                  | 306     |           | 5.6                | mg/Kg | 6010C    |
| Iron                                  |                  | 4690    |           | 33.8               | mg/Kg | 6010C    |
| Potassium                             |                  | 104     | J         | 1130               | mg/Kg | 6010C    |
| Magnesium                             |                  | 548     | J         | 1130               | mg/Kg | 6010C    |
| Manganese                             |                  | 24.1    |           | 3.4                | mg/Kg | 6010C    |
| Nickel                                |                  | 6.7     | J         | 9.0                | mg/Kg | 6010C    |
| Lead                                  |                  | 124     |           | 2.3                | mg/Kg | 6010C    |
| Vanadium                              |                  | 9.2     | J         | 11.3               | mg/Kg | 6010C    |
| Zinc                                  |                  | 129     |           | 6.8                | mg/Kg | 6010C    |
| Mercury                               |                  | 1.2     |           | 0.041              | mg/Kg | 7471B    |
| Cyanide, Total                        |                  | 0.073   | J         | 0.12               | mg/Kg | 9012B    |
| pH                                    |                  | 6.91    | HF        |                    | SU    | 9045D    |
| Corrosivity                           |                  | 6.91    | HF        |                    | SU    | 9045D    |
| Percent Moisture                      |                  | 18.5    |           | 1.0                | %     | Moisture |
| Percent Solids                        |                  | 81.5    |           | 1.0                | %     | Moisture |

## METHOD SUMMARY

Client: New York State D.E.C.

Job Number: 460-86402-2

| Description                                                       | Lab Location | Method       | Preparation Method |
|-------------------------------------------------------------------|--------------|--------------|--------------------|
| <b>Matrix: Solid</b>                                              |              |              |                    |
| Volatile Organic Compounds by GC/MS                               | TAL EDI      | SW846 8260C  |                    |
| Closed System Purge and Trap                                      | TAL EDI      |              | SW846 5035         |
| Metals (ICP)                                                      | TAL EDI      | SW846 6010C  |                    |
| Preparation, Metals                                               | TAL EDI      |              | SW846 3050B        |
| Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) | TAL EDI      | SW846 7471B  |                    |
| Preparation, Mercury                                              | TAL EDI      |              | SW846 7471B        |
| Ignitability, Solids                                              | TAL EDI      | SW846 1030   |                    |
| Cyanide, Total and/or Amenable                                    | TAL EDI      | SW846 9012B  |                    |
| Cyanide, Total and/or Amenable, Distillation                      | TAL EDI      |              | SW846 9012B        |
| Cyanide, Reactive                                                 | TAL EDI      | SW846 9014   |                    |
| Cyanide, Reactive                                                 | TAL EDI      |              | SW846 7.3.3        |
| Sulfide, Reactive                                                 | TAL EDI      | SW846 9034   |                    |
| Sulfide, Reactive                                                 | TAL EDI      |              | SW846 7.3.4        |
| pH                                                                | TAL EDI      | SW846 9045D  |                    |
| Percent Moisture                                                  | TAL EDI      | EPA Moisture |                    |

### Lab References:

TAL EDI = TestAmerica Edison

### Method References:

EPA = US Environmental Protection Agency

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

## METHOD / ANALYST SUMMARY

Client: New York State D.E.C.

Job Number: 460-86402-2

| Method       | Analyst            | Analyst ID |
|--------------|--------------------|------------|
| SW846 8260C  | Desai, Saurab      | SZD        |
| SW846 6010C  | Huang, Yixin       | YZH        |
| SW846 7471B  | Staib, Thomas      | TJS        |
| SW846 1030   | Kowalski, Joseph A | JAK        |
| SW846 9012B  | Vu, Huan           | HTV        |
| SW846 9014   | Kowalski, Joseph A | JAK        |
| SW846 9034   | Kowalski, Joseph A | JAK        |
| SW846 9045D  | Hu, Youhao         | YAH        |
| EPA Moisture | Armbruster, Chris  | CJA        |

## SAMPLE SUMMARY

Client: New York State D.E.C.

Job Number: 460-86402-2

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time<br>Sampled | Date/Time<br>Received |
|---------------|------------------|---------------|----------------------|-----------------------|
| 460-86402-4   | Soil Waste       | Solid         | 11/17/2014 1245      | 11/17/2014 1850       |



# **SAMPLE RESULTS**

# Analytical Data

Client: New York State D.E.C.

Job Number: 460-86402-2

Client Sample ID: Soil Waste

Lab Sample ID: 460-86402-4

Date Sampled: 11/17/2014 1245

Client Matrix: Solid

% Moisture: 18.5

Date Received: 11/17/2014 1850

## 8260C Volatile Organic Compounds by GC/MS

|                  |                 |                 |            |                        |          |
|------------------|-----------------|-----------------|------------|------------------------|----------|
| Analysis Method: | 8260C           | Analysis Batch: | 460-264083 | Instrument ID:         | CVOAMS2  |
| Prep Method:     | 5035            | Prep Batch:     | 460-263583 | Lab File ID:           | B76254.D |
| Dilution:        | 5000            |                 |            | Initial Weight/Volume: | 5.05 g   |
| Analysis Date:   | 11/20/2014 1742 |                 |            | Final Weight/Volume:   | 10 mL    |
| Prep Date:       | 11/18/2014 1521 |                 |            |                        |          |

| Analyte                               | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL    | RL     |
|---------------------------------------|--------------------|----------------|-----------|--------|--------|
| 1,1,1-Trichloroethane                 |                    | 3500000        |           | 760    | 12000  |
| 1,1,2,2-Tetrachloroethane             |                    | 12000          | U         | 1900   | 12000  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane |                    | 680000         |           | 1000   | 12000  |
| 1,1,2-Trichloroethane                 |                    | 12000          | U         | 2300   | 12000  |
| 1,1-Dichloroethane                    |                    | 45000          |           | 1600   | 12000  |
| 1,1-Dichloroethene                    |                    | 6800           | J         | 1100   | 12000  |
| 1,2,3-Trichlorobenzene                |                    | 12000          | U         | 6200   | 12000  |
| 1,2,4-Trichlorobenzene                |                    | 12000          | U *       | 4200   | 12000  |
| 1,2-Dibromo-3-Chloropropane           |                    | 12000          | U         | 4900   | 12000  |
| 1,2-Dichlorobenzene                   |                    | 12000          | U         | 2500   | 12000  |
| 1,2-Dichloroethane                    |                    | 12000          | U         | 2300   | 12000  |
| 1,2-Dichloropropane                   |                    | 12000          | U         | 1000   | 12000  |
| 1,3-Dichlorobenzene                   |                    | 12000          | U         | 1600   | 12000  |
| 1,4-Dichlorobenzene                   |                    | 26000          |           | 2800   | 12000  |
| 1,4-Dioxane                           |                    | 300000         | U *       | 440000 | 300000 |
| 2-Butanone (MEK)                      |                    | 61000          | U         | 28000  | 61000  |
| 2-Hexanone                            |                    | 61000          | U         | 6100   | 61000  |
| 4-Methyl-2-pentanone (MIBK)           |                    | 61000          | U         | 12000  | 61000  |
| Acetone                               |                    | 61000          | U         | 33000  | 61000  |
| Benzene                               |                    | 12000          | U         | 1000   | 12000  |
| Bromoform                             |                    | 12000          | U         | 2300   | 12000  |
| Bromomethane                          |                    | 12000          | U         | 2200   | 12000  |
| Carbon disulfide                      |                    | 12000          | U         | 1500   | 12000  |
| Carbon tetrachloride                  |                    | 12000          | U         | 690    | 12000  |
| Chlorobenzene                         |                    | 12000          | U         | 1300   | 12000  |
| Chlorobromomethane                    |                    | 12000          | U         | 3300   | 12000  |
| Chlorodibromomethane                  |                    | 12000          | U         | 2400   | 12000  |
| Chloroethane                          |                    | 12000          | U         | 2100   | 12000  |
| Chloroform                            |                    | 12000          | U         | 960    | 12000  |
| Chloromethane                         |                    | 12000          | U         | 1200   | 12000  |
| cis-1,2-Dichloroethene                |                    | 4300           | J         | 2200   | 12000  |
| cis-1,3-Dichloropropene               |                    | 12000          | U         | 2200   | 12000  |
| Cyclohexane                           |                    | 12000          | U         | 1900   | 12000  |
| Dichlorobromomethane                  |                    | 12000          | U         | 1500   | 12000  |
| Dichlorodifluoromethane               |                    | 12000          | U         | 2600   | 12000  |
| Ethylbenzene                          |                    | 59000          |           | 1200   | 12000  |
| Ethylene Dibromide                    |                    | 12000          | U         | 3300   | 12000  |
| Isopropylbenzene                      |                    | 12000          | U         | 930    | 12000  |
| Methyl acetate                        |                    | 61000          | U         | 4100   | 61000  |
| Methyl tert-butyl ether               |                    | 12000          | U         | 1700   | 12000  |
| Methylcyclohexane                     |                    | 12000          | U         | 1600   | 12000  |
| Methylene Chloride                    |                    | 12000          | U         | 2200   | 12000  |
| m-Xylene & p-Xylene                   |                    | 230000         |           | 3000   | 12000  |
| o-Xylene                              |                    | 20000          |           | 1600   | 12000  |
| Styrene                               |                    | 12000          | U         | 1400   | 12000  |
| Tetrachloroethene                     |                    | 4500           | J         | 1200   | 12000  |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-86402-2

**Client Sample ID: Soil Waste**

Lab Sample ID: 460-86402-4

Date Sampled: 11/17/2014 1245

Client Matrix: Solid

% Moisture: 18.5

Date Received: 11/17/2014 1850

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method: 8260C

Analysis Batch: 460-264083

Instrument ID: CVOAMS2

Prep Method: 5035

Prep Batch: 460-263583

Lab File ID: B76254.D

Dilution: 5000

Initial Weight/Volume: 5.05 g

Analysis Date: 11/20/2014 1742

Final Weight/Volume: 10 mL

Prep Date: 11/18/2014 1521

| Analyte                      | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL               | RL    |
|------------------------------|--------------------|----------------|-----------|-------------------|-------|
| Toluene                      |                    | 15000          |           | 1800              | 12000 |
| trans-1,2-Dichloroethene     |                    | 12000          | U         | 1600              | 12000 |
| trans-1,3-Dichloropropene    |                    | 12000          | U         | 2900              | 12000 |
| Trichloroethene              |                    | 750000         |           | 1100              | 12000 |
| Trichlorofluoromethane       |                    | 12000          | U         | 1800              | 12000 |
| Vinyl chloride               |                    | 12000          | U         | 1800              | 12000 |
| Surrogate                    |                    | %Rec           | Qualifier | Acceptance Limits |       |
| 1,2-Dichloroethane-d4 (Surr) |                    | 0              | D         | 75 - 135          |       |
| 4-Bromofluorobenzene         |                    | 0              | D         | 72 - 133          |       |
| Dibromofluoromethane (Surr)  |                    | 0              | D         | 70 - 130          |       |
| Toluene-d8 (Surr)            |                    | 0              | D         | 59 - 150          |       |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-86402-2

**Client Sample ID:** Soil Waste

Lab Sample ID: 460-86402-4

Date Sampled: 11/17/2014 1245

Client Matrix: Solid

% Moisture: 18.5

Date Received: 11/17/2014 1850

---

**8260C Volatile Organic Compounds by GC/MS**

Analysis Method: 8260C

Analysis Batch: 460-264083

Instrument ID: CVOAMS2

Prep Method: 5035

Prep Batch: 460-263583

Lab File ID: B76254.D

Dilution: 5000

Initial Weight/Volume: 5.05 g

Analysis Date: 11/20/2014 1742

Final Weight/Volume: 10 mL

Prep Date: 11/18/2014 1521

**Tentatively Identified Compounds****Number TIC's Found: 2**

| Cas Number | Analyte  | RT    | Est. Result (ug/Kg) | Qualifier |
|------------|----------|-------|---------------------|-----------|
| 1120-21-4  | Undecane | 10.99 | 65000               | J N       |
| 112-40-3   | Dodecane | 11.82 | 68000               | J N       |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-86402-2

**Client Sample ID: Soil Waste**

Lab Sample ID: 460-86402-4

Date Sampled: 11/17/2014 1245

Client Matrix: Solid

% Moisture: 18.5

Date Received: 11/17/2014 1850

**6010C Metals (ICP)**

Analysis Method: 6010C

Analysis Batch: 460-264376

Instrument ID: ICP4

Prep Method: 3050B

Prep Batch: 460-264050

Lab File ID: 264050.asc

Dilution: 4.0

Initial Weight/Volume: 1.09 g

Analysis Date: 11/20/2014 1540

Final Weight/Volume: 50 mL

Prep Date: 11/20/2014 0708

| Analyte   | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL  | RL   |
|-----------|--------------------|----------------|-----------|------|------|
| Silver    |                    | 7.4            |           | 0.44 | 2.3  |
| Aluminum  |                    | 2850           |           | 24.9 | 45.0 |
| Arsenic   |                    | 1.1            | J         | 0.92 | 3.4  |
| Barium    |                    | 46.3           |           | 1.9  | 45.0 |
| Beryllium |                    | 0.45           | U         | 0.31 | 0.45 |
| Calcium   |                    | 6690           |           | 86.1 | 1130 |
| Cadmium   |                    | 3.5            |           | 0.32 | 0.90 |
| Cobalt    |                    | 1.1            | J         | 1.0  | 11.3 |
| Chromium  |                    | 51.5           |           | 0.90 | 2.3  |
| Copper    |                    | 306            |           | 2.0  | 5.6  |
| Iron      |                    | 4690           |           | 28.0 | 33.8 |
| Potassium |                    | 104            | J         | 31.1 | 1130 |
| Magnesium |                    | 548            | J         | 74.8 | 1130 |
| Manganese |                    | 24.1           |           | 0.97 | 3.4  |
| Sodium    |                    | 1130           | U         | 85.1 | 1130 |
| Nickel    |                    | 6.7            | J         | 2.0  | 9.0  |
| Lead      |                    | 124            |           | 0.92 | 2.3  |
| Antimony  |                    | 4.5            | U         | 1.7  | 4.5  |
| Selenium  |                    | 4.5            | U         | 1.3  | 4.5  |
| Thallium  |                    | 4.5            | U         | 2.2  | 4.5  |
| Vanadium  |                    | 9.2            | J         | 0.93 | 11.3 |
| Zinc      |                    | 129            |           | 1.9  | 6.8  |

**7471B Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)**

Analysis Method: 7471B

Analysis Batch: 460-264139

Instrument ID: LEEMAN5

Prep Method: 7471B

Prep Batch: 460-264034

Lab File ID: 264034HG1.PRN

Dilution: 2.0

Initial Weight/Volume: 0.61 g

Analysis Date: 11/20/2014 1027

Final Weight/Volume: 50 mL

Prep Date: 11/20/2014 0538

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL   | RL    |
|---------|--------------------|----------------|-----------|-------|-------|
| Mercury |                    | 1.2            |           | 0.029 | 0.041 |

**Analytical Data**

Client: New York State D.E.C.

Job Number: 460-86402-2

**General Chemistry****Client Sample ID: Soil Waste**

Lab Sample ID: 460-86402-4

Date Sampled: 11/17/2014 1245

Client Matrix: Solid

% Moisture: 18.5

Date Received: 11/17/2014 1850

| Analyte           | Result                     | Qual                           | Units  | MDL   | RL   | Dil | Method             |
|-------------------|----------------------------|--------------------------------|--------|-------|------|-----|--------------------|
| Cyanide, Total    | 0.073                      | J                              | mg/Kg  | 0.067 | 0.12 | 1.0 | 9012B              |
|                   | Analysis Batch: 460-264213 | Analysis Date: 11/20/2014 1533 |        |       |      |     | DryWt Corrected: Y |
|                   | Prep Batch: 460-264163     | Prep Date: 11/20/2014 0230     |        |       |      |     |                    |
| Analyte           | Result                     | Qual                           | Units  |       |      | Dil | Method             |
| pH                | 6.91                       | HF                             | SU     |       |      | 1.0 | 9045D              |
|                   | Analysis Batch: 460-264203 | Analysis Date: 11/20/2014 1521 |        |       |      |     | DryWt Corrected: N |
| Corrosivity       | 6.91                       | HF                             | SU     |       |      | 1.0 | 9045D              |
|                   | Analysis Batch: 460-264203 | Analysis Date: 11/20/2014 1521 |        |       |      |     | DryWt Corrected: N |
| Analyte           | Result                     | Qual                           | Units  | RL    | RL   | Dil | Method             |
| Burn Rate         | 2.20                       | U                              | mm/sec | 2.20  | 2.20 | 1.0 | 1030               |
|                   | Analysis Batch: 460-264048 | Analysis Date: 11/20/2014 0600 |        |       |      |     | DryWt Corrected: N |
| Cyanide, Reactive | 25.0                       | U                              | mg/Kg  | 25.0  | 25.0 | 1.0 | 9014               |
|                   | Analysis Batch: 460-264128 | Analysis Date: 11/20/2014 1000 |        |       |      |     | DryWt Corrected: N |
|                   | Prep Batch: 460-264122     | Prep Date: 11/20/2014 0900     |        |       |      |     |                    |
| Sulfide, Reactive | 20.0                       | U                              | mg/Kg  | 20.0  | 20.0 | 1.0 | 9034               |
|                   | Analysis Batch: 460-264125 | Analysis Date: 11/20/2014 1000 |        |       |      |     | DryWt Corrected: N |
|                   | Prep Batch: 460-264121     | Prep Date: 11/20/2014 0900     |        |       |      |     |                    |
| Percent Moisture  | 18.5                       |                                | %      | 1.0   | 1.0  | 1.0 | Moisture           |
|                   | Analysis Batch: 460-263804 | Analysis Date: 11/19/2014 1058 |        |       |      |     | DryWt Corrected: N |
| Percent Solids    | 81.5                       |                                | %      | 1.0   | 1.0  | 1.0 | Moisture           |
|                   | Analysis Batch: 460-263804 | Analysis Date: 11/19/2014 1058 |        |       |      |     | DryWt Corrected: N |

## DATA REPORTING QUALIFIERS

Client: New York State D.E.C.

Job Number: 460-86402-2

| Lab Section       | Qualifier | Description                                                                                                                                               |
|-------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| GC/MS VOA         | U         | Analyzed for but not detected.                                                                                                                            |
|                   | J         | Indicates an estimated value.                                                                                                                             |
|                   | *         | LCS or LCSD exceeds the control limits                                                                                                                    |
|                   | D         | The reported value is from a dilution.                                                                                                                    |
|                   | N         | This flag indicates the presumptive evidence of a compound.                                                                                               |
| Metals            | U         | Indicates analyzed for but not detected.                                                                                                                  |
|                   | 4         | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
|                   | J         | Sample result is greater than the MDL but below the CRDL                                                                                                  |
|                   | N         | Spiked sample recovery is not within control limits.                                                                                                      |
| General Chemistry | HF        | Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.                                                      |
|                   | U         | Indicates analyzed for but not detected.                                                                                                                  |
|                   | J         | Sample result is greater than the MDL but below the CRDL                                                                                                  |

# **QUALITY CONTROL RESULTS**



## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### QC Association Summary

| Lab Sample ID                    | Client Sample ID                 | Report Basis | Client Matrix | Method | Prep Batch |
|----------------------------------|----------------------------------|--------------|---------------|--------|------------|
| <b>GC/MS VOA</b>                 |                                  |              |               |        |            |
| <b>Prep Batch: 460-263583</b>    |                                  |              |               |        |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 5035   |            |
| <b>Analysis Batch:460-264083</b> |                                  |              |               |        |            |
| LCS 460-264083/3                 | Lab Control Sample               | T            | Solid         | 8260C  |            |
| LCSD 460-264083/4                | Lab Control Sample Duplicate     | T            | Solid         | 8260C  |            |
| MB 460-264083/6                  | Method Blank                     | T            | Solid         | 8260C  |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 8260C  | 460-263583 |
| <b>Report Basis</b>              |                                  |              |               |        |            |
| T = Total                        |                                  |              |               |        |            |
| <b>Metals</b>                    |                                  |              |               |        |            |
| <b>Prep Batch: 460-264034</b>    |                                  |              |               |        |            |
| LCSSRM 460-264034/11-A ^20       | LCS-Certified Reference Material | T            | Solid         | 7471B  |            |
| MB 460-264034/10-A               | Method Blank                     | T            | Solid         | 7471B  |            |
| 460-86036-C-5-K DU               | Duplicate                        | T            | Solid         | 7471B  |            |
| 460-86036-C-5-L MS               | Matrix Spike                     | T            | Solid         | 7471B  |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 7471B  |            |
| <b>Prep Batch: 460-264050</b>    |                                  |              |               |        |            |
| LCSSRM 460-264050/2-A            | LCS-Certified Reference Material | T            | Solid         | 3050B  |            |
| MB 460-264050/1-A ^2             | Method Blank                     | T            | Solid         | 3050B  |            |
| 460-86282-D-2-I DU ^4            | Duplicate                        | T            | Solid         | 3050B  |            |
| 460-86282-D-2-J MS ^4            | Matrix Spike                     | T            | Solid         | 3050B  |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 3050B  |            |
| <b>Analysis Batch:460-264139</b> |                                  |              |               |        |            |
| LCSSRM 460-264034/11-A ^20       | LCS-Certified Reference Material | T            | Solid         | 7471B  | 460-264034 |
| MB 460-264034/10-A               | Method Blank                     | T            | Solid         | 7471B  | 460-264034 |
| 460-86036-C-5-K DU               | Duplicate                        | T            | Solid         | 7471B  | 460-264034 |
| 460-86036-C-5-L MS               | Matrix Spike                     | T            | Solid         | 7471B  | 460-264034 |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 7471B  | 460-264034 |
| <b>Analysis Batch:460-264376</b> |                                  |              |               |        |            |
| LCSSRM 460-264050/2-A            | LCS-Certified Reference Material | T            | Solid         | 6010C  | 460-264050 |
| MB 460-264050/1-A ^2             | Method Blank                     | T            | Solid         | 6010C  | 460-264050 |
| 460-86282-D-2-I DU ^4            | Duplicate                        | T            | Solid         | 6010C  | 460-264050 |
| 460-86282-D-2-J MS ^4            | Matrix Spike                     | T            | Solid         | 6010C  | 460-264050 |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 6010C  | 460-264050 |

### Report Basis

T = Total

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## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### QC Association Summary

| Lab Sample ID                    | Client Sample ID                 | Report Basis | Client Matrix | Method   | Prep Batch |
|----------------------------------|----------------------------------|--------------|---------------|----------|------------|
| <b>General Chemistry</b>         |                                  |              |               |          |            |
| <b>Analysis Batch:460-263804</b> |                                  |              |               |          |            |
| 460-86180-B-2 DU                 | Duplicate                        | T            | Solid         | Moisture |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | Moisture |            |
| <b>Analysis Batch:460-264048</b> |                                  |              |               |          |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 1030     |            |
| 460-86402-4DU                    | Duplicate                        | T            | Solid         | 1030     |            |
| <b>Prep Batch: 460-264121</b>    |                                  |              |               |          |            |
| LCSSRM 460-264121/2-A            | LCS-Certified Reference Material | T            | Solid         | 7.3.4    |            |
| MB 460-264121/1-A                | Method Blank                     | T            | Solid         | 7.3.4    |            |
| 460-86310-C-1-B MS               | Matrix Spike                     | T            | Solid         | 7.3.4    |            |
| 460-86310-C-1-C MSD              | Matrix Spike Duplicate           | T            | Solid         | 7.3.4    |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 7.3.4    |            |
| <b>Prep Batch: 460-264122</b>    |                                  |              |               |          |            |
| LCS 460-264122/2-A               | Lab Control Sample               | T            | Solid         | 7.3.3    |            |
| MB 460-264122/1-A                | Method Blank                     | T            | Solid         | 7.3.3    |            |
| 460-86310-C-1-E DU               | Duplicate                        | T            | Solid         | 7.3.3    |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 7.3.3    |            |
| <b>Analysis Batch:460-264125</b> |                                  |              |               |          |            |
| LCSSRM 460-264121/2-A            | LCS-Certified Reference Material | T            | Solid         | 9034     | 460-264121 |
| MB 460-264121/1-A                | Method Blank                     | T            | Solid         | 9034     | 460-264121 |
| 460-86310-C-1-B MS               | Matrix Spike                     | T            | Solid         | 9034     | 460-264121 |
| 460-86310-C-1-C MSD              | Matrix Spike Duplicate           | T            | Solid         | 9034     | 460-264121 |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 9034     | 460-264121 |
| <b>Analysis Batch:460-264128</b> |                                  |              |               |          |            |
| LCS 460-264122/2-A               | Lab Control Sample               | T            | Solid         | 9014     | 460-264122 |
| MB 460-264122/1-A                | Method Blank                     | T            | Solid         | 9014     | 460-264122 |
| 460-86310-C-1-E DU               | Duplicate                        | T            | Solid         | 9014     | 460-264122 |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 9014     | 460-264122 |
| <b>Prep Batch: 460-264163</b>    |                                  |              |               |          |            |
| HLCS 460-264163/34-A             | High Level Control Sample        | T            | Solid         | 9012B    |            |
| LLCS 460-264163/33-A             | Low Level Control Sample         | T            | Solid         | 9012B    |            |
| MB 460-264163/1-A                | Method Blank                     | T            | Solid         | 9012B    |            |
| MB 460-264163/32-A               | Method Blank                     | T            | Solid         | 9012B    |            |
| 460-85857-D-15-C MS              | Matrix Spike                     | T            | Solid         | 9012B    |            |
| 460-85857-D-15-D MSD             | Matrix Spike Duplicate           | T            | Solid         | 9012B    |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 9012B    |            |

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## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### QC Association Summary

| Lab Sample ID                    | Client Sample ID                 | Report Basis | Client Matrix | Method | Prep Batch |
|----------------------------------|----------------------------------|--------------|---------------|--------|------------|
| <b>General Chemistry</b>         |                                  |              |               |        |            |
| <b>Analysis Batch:460-264203</b> |                                  |              |               |        |            |
| LCSSRM 460-264203/3              | LCS-Certified Reference Material | T            | Solid         | 9045D  |            |
| MB 460-264203/2                  | Method Blank                     | T            | Solid         | 9045D  |            |
| 460-86314-C-2 DU                 | Duplicate                        | T            | Solid         | 9045D  |            |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 9045D  |            |
| <b>Analysis Batch:460-264213</b> |                                  |              |               |        |            |
| HLCS 460-264163/34-A             | High Level Control Sample        | T            | Solid         | 9012B  | 460-264163 |
| LLCS 460-264163/33-A             | Low Level Control Sample         | T            | Solid         | 9012B  | 460-264163 |
| MB 460-264163/1-A                | Method Blank                     | T            | Solid         | 9012B  | 460-264163 |
| MB 460-264163/32-A               | Method Blank                     | T            | Solid         | 9012B  | 460-264163 |
| 460-85857-D-15-C MS              | Matrix Spike                     | T            | Solid         | 9012B  | 460-264163 |
| 460-85857-D-15-D MSD             | Matrix Spike Duplicate           | T            | Solid         | 9012B  | 460-264163 |
| 460-86402-4                      | Soil Waste                       | T            | Solid         | 9012B  | 460-264163 |

#### Report Basis

T = Total

Client: New York State D.E.C.

Job Number: 460-86402-2

**Surrogate Recovery Report****8260C Volatile Organic Compounds by GC/MS****Client Matrix: Solid**

| Lab Sample ID     | Client Sample ID | DCA<br>%Rec | BFB<br>%Rec | DBFM<br>%Rec | TOL<br>%Rec |
|-------------------|------------------|-------------|-------------|--------------|-------------|
| 460-86402-4       | Soil Waste       | 0D          | 0D          | 0D           | 0D          |
| MB 460-264083/6   |                  | 91          | 97          | 94           | 98          |
| LCS 460-264083/3  |                  | 92          | 94          | 100          | 97          |
| LCSD 460-264083/4 |                  | 92          | 94          | 98           | 96          |

| Surrogate                          | Acceptance Limits |
|------------------------------------|-------------------|
| DCA = 1,2-Dichloroethane-d4 (Surr) | 75-135            |
| BFB = 4-Bromofluorobenzene         | 72-133            |
| DBFM = Dibromofluoromethane (Surr) | 70-130            |
| TOL = Toluene-d8 (Surr)            | 59-150            |

# Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

## Method Blank - Batch: 460-264083

## Method: 8260C Preparation: N/A

Lab Sample ID: MB 460-264083/6  
Client Matrix: Solid  
Dilution: 50  
Analysis Date: 11/20/2014 1045  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 460-264083  
Prep Batch: N/A  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CVOAMS2  
Lab File ID: B76237.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

| Analyte                               | Result | Qual | MDL  | RL   |
|---------------------------------------|--------|------|------|------|
| 1,1,1-Trichloroethane                 | 50     | U    | 3.1  | 50   |
| 1,1,2,2-Tetrachloroethane             | 50     | U    | 7.9  | 50   |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50     | U    | 4.1  | 50   |
| 1,1,2-Trichloroethane                 | 50     | U    | 9.4  | 50   |
| 1,1-Dichloroethane                    | 50     | U    | 6.5  | 50   |
| 1,1-Dichloroethene                    | 50     | U    | 4.4  | 50   |
| 1,2,3-Trichlorobenzene                | 50     | U    | 26   | 50   |
| 1,2,4-Trichlorobenzene                | 50     | U    | 17   | 50   |
| 1,2-Dibromo-3-Chloropropane           | 50     | U    | 20   | 50   |
| 1,2-Dichlorobenzene                   | 50     | U    | 10   | 50   |
| 1,2-Dichloroethane                    | 50     | U    | 9.5  | 50   |
| 1,2-Dichloropropane                   | 50     | U    | 4.3  | 50   |
| 1,3-Dichlorobenzene                   | 50     | U    | 6.8  | 50   |
| 1,4-Dichlorobenzene                   | 50     | U    | 12   | 50   |
| 1,4-Dioxane                           | 1300   | U    | 1800 | 1300 |
| 2-Butanone (MEK)                      | 250    | U    | 120  | 250  |
| 2-Hexanone                            | 250    | U    | 25   | 250  |
| 4-Methyl-2-pentanone (MIBK)           | 250    | U    | 49   | 250  |
| Acetone                               | 250    | U    | 130  | 250  |
| Benzene                               | 50     | U    | 4.1  | 50   |
| Bromoform                             | 50     | U    | 9.6  | 50   |
| Bromomethane                          | 50     | U    | 9.1  | 50   |
| Carbon disulfide                      | 50     | U    | 6.3  | 50   |
| Carbon tetrachloride                  | 50     | U    | 2.9  | 50   |
| Chlorobenzene                         | 50     | U    | 5.5  | 50   |
| Chlorobromomethane                    | 50     | U    | 14   | 50   |
| Chlorodibromomethane                  | 50     | U    | 10   | 50   |
| Chloroethane                          | 50     | U    | 8.5  | 50   |
| Chloroform                            | 50     | U    | 3.9  | 50   |
| Chloromethane                         | 50     | U    | 4.8  | 50   |
| cis-1,2-Dichloroethene                | 50     | U    | 8.9  | 50   |
| cis-1,3-Dichloropropene               | 50     | U    | 9.2  | 50   |
| Cyclohexane                           | 50     | U    | 7.9  | 50   |
| Dichlorobromomethane                  | 50     | U    | 6.3  | 50   |
| Dichlorodifluoromethane               | 50     | U    | 11   | 50   |
| Ethylbenzene                          | 50     | U    | 4.8  | 50   |
| Ethylene Dibromide                    | 50     | U    | 14   | 50   |
| Isopropylbenzene                      | 50     | U    | 3.8  | 50   |
| Methyl acetate                        | 250    | U    | 17   | 250  |
| Methyl tert-butyl ether               | 50     | U    | 6.9  | 50   |
| Methylcyclohexane                     | 50     | U    | 6.8  | 50   |
| Methylene Chloride                    | 50     | U    | 9.1  | 50   |
| m-Xylene & p-Xylene                   | 50     | U    | 12   | 50   |
| o-Xylene                              | 50     | U    | 6.5  | 50   |
| Styrene                               | 50     | U    | 5.9  | 50   |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264083

Method: 8260C  
Preparation: N/A

Lab Sample ID: MB 460-264083/6  
Client Matrix: Solid  
Dilution: 50  
Analysis Date: 11/20/2014 1045  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 460-264083  
Prep Batch: N/A  
Leach Batch: N/A  
Units: ug/Kg

Instrument ID: CVOAMS2  
Lab File ID: B76237.D  
Initial Weight/Volume: 5 mL  
Final Weight/Volume: 5 mL

| Analyte                   | Result | Qual | MDL | RL |
|---------------------------|--------|------|-----|----|
| Tetrachloroethene         | 50     | U    | 4.9 | 50 |
| Toluene                   | 50     | U    | 7.5 | 50 |
| trans-1,2-Dichloroethene  | 50     | U    | 6.4 | 50 |
| trans-1,3-Dichloropropene | 50     | U    | 12  | 50 |
| Trichloroethene           | 50     | U    | 4.6 | 50 |
| Trichlorofluoromethane    | 50     | U    | 7.3 | 50 |
| Vinyl chloride            | 50     | U    | 7.2 | 50 |

| Surrogate                    | % Rec | Acceptance Limits |
|------------------------------|-------|-------------------|
| 1,2-Dichloroethane-d4 (Surr) | 91    | 75 - 135          |
| 4-Bromofluorobenzene         | 97    | 72 - 133          |
| Dibromofluoromethane (Surr)  | 94    | 70 - 130          |
| Toluene-d8 (Surr)            | 98    | 59 - 150          |

### Method Blank TICs - Batch: 460-264083

| Cas Number | Analyte                         | RT | Est. Result (ug/K) | Qual |
|------------|---------------------------------|----|--------------------|------|
|            | Tentatively Identified Compound |    | None               |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 460-264083**

**Method: 8260C  
Preparation: N/A**

|                                     |                            |                             |
|-------------------------------------|----------------------------|-----------------------------|
| LCS Lab Sample ID: LCS 460-264083/3 | Analysis Batch: 460-264083 | Instrument ID: CVOAMS2      |
| Client Matrix: Solid                | Prep Batch: N/A            | Lab File ID: B76234.D       |
| Dilution: 50                        | Leach Batch: N/A           | Initial Weight/Volume: 5 mL |
| Analysis Date: 11/20/2014 0933      | Units: ug/Kg               | Final Weight/Volume: 5 mL   |
| Prep Date: N/A                      |                            | 5 mL                        |
| Leach Date: N/A                     |                            |                             |

|                                       |                            |                             |
|---------------------------------------|----------------------------|-----------------------------|
| LCSD Lab Sample ID: LCSD 460-264083/4 | Analysis Batch: 460-264083 | Instrument ID: CVOAMS2      |
| Client Matrix: Solid                  | Prep Batch: N/A            | Lab File ID: B76235.D       |
| Dilution: 50                          | Leach Batch: N/A           | Initial Weight/Volume: 5 mL |
| Analysis Date: 11/20/2014 0957        | Units: ug/Kg               | Final Weight/Volume: 5 mL   |
| Prep Date: N/A                        |                            | 5 mL                        |
| Leach Date: N/A                       |                            |                             |

| Analyte                               | % Rec. |      | Limit    | RPD | RPD Limit | LCS Qual | LCSD Qual |
|---------------------------------------|--------|------|----------|-----|-----------|----------|-----------|
|                                       | LCS    | LCSD |          |     |           |          |           |
| 1,1,1-Trichloroethane                 | 88     | 85   | 75 - 125 | 4   | 30        |          |           |
| 1,1,2,2-Tetrachloroethane             | 86     | 86   | 69 - 128 | 1   | 30        |          |           |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 87     | 83   | 51 - 145 | 5   | 30        |          |           |
| 1,1,2-Trichloroethane                 | 82     | 86   | 76 - 120 | 5   | 30        |          |           |
| 1,1-Dichloroethane                    | 91     | 85   | 78 - 125 | 8   | 30        |          |           |
| 1,1-Dichloroethene                    | 85     | 78   | 66 - 135 | 9   | 30        |          |           |
| 1,2,3-Trichlorobenzene                | 83     | 86   | 60 - 144 | 3   | 30        |          |           |
| 1,2,4-Trichlorobenzene                | 66     | 68   | 67 - 135 | 2   | 30        | *        |           |
| 1,2-Dibromo-3-Chloropropane           | 68     | 75   | 57 - 128 | 10  | 30        |          |           |
| 1,2-Dichlorobenzene                   | 83     | 83   | 80 - 120 | 0   | 30        |          |           |
| 1,2-Dichloroethane                    | 85     | 83   | 77 - 121 | 2   | 30        |          |           |
| 1,2-Dichloropropane                   | 87     | 88   | 75 - 126 | 0   | 30        |          |           |
| 1,3-Dichlorobenzene                   | 88     | 83   | 80 - 120 | 5   | 30        |          |           |
| 1,4-Dichlorobenzene                   | 89     | 84   | 80 - 120 | 5   | 30        |          |           |
| 1,4-Dioxane                           | 183    | 206  | 50 - 150 | 12  | 30        | *        | *         |
| 2-Butanone (MEK)                      | 104    | 107  | 69 - 138 | 3   | 30        |          |           |
| 2-Hexanone                            | 89     | 97   | 54 - 145 | 9   | 30        |          |           |
| 4-Methyl-2-pentanone (MIBK)           | 91     | 91   | 58 - 140 | 1   | 30        |          |           |
| Acetone                               | 88     | 90   | 46 - 150 | 2   | 30        |          |           |
| Benzene                               | 85     | 83   | 74 - 126 | 3   | 30        |          |           |
| Bromoform                             | 80     | 83   | 49 - 131 | 4   | 30        |          |           |
| Bromomethane                          | 93     | 90   | 10 - 150 | 3   | 30        |          |           |
| Carbon disulfide                      | 81     | 75   | 60 - 132 | 8   | 30        |          |           |
| Carbon tetrachloride                  | 87     | 80   | 63 - 131 | 9   | 30        |          |           |
| Chlorobenzene                         | 89     | 87   | 80 - 120 | 2   | 30        |          |           |
| Chlorobromomethane                    | 91     | 94   | 82 - 122 | 3   | 30        |          |           |
| Chlorodibromomethane                  | 82     | 84   | 63 - 124 | 3   | 30        |          |           |
| Chloroethane                          | 93     | 88   | 53 - 150 | 6   | 30        |          |           |
| Chloroform                            | 88     | 86   | 80 - 120 | 3   | 30        |          |           |
| Chloromethane                         | 94     | 86   | 50 - 144 | 10  | 30        |          |           |
| cis-1,2-Dichloroethene                | 94     | 86   | 81 - 122 | 9   | 30        |          |           |
| cis-1,3-Dichloropropene               | 85     | 86   | 76 - 124 | 1   | 30        |          |           |
| Cyclohexane                           | 84     | 83   | 58 - 142 | 1   | 30        |          |           |
| Dichlorobromomethane                  | 87     | 83   | 75 - 119 | 5   | 30        |          |           |
| Dichlorodifluoromethane               | 92     | 91   | 37 - 143 | 2   | 30        |          |           |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 460-264083**

**Method: 8260C  
Preparation: N/A**

|                    |                  |                 |            |                        |          |
|--------------------|------------------|-----------------|------------|------------------------|----------|
| LCS Lab Sample ID: | LCS 460-264083/3 | Analysis Batch: | 460-264083 | Instrument ID:         | CVOAMS2  |
| Client Matrix:     | Solid            | Prep Batch:     | N/A        | Lab File ID:           | B76234.D |
| Dilution:          | 50               | Leach Batch:    | N/A        | Initial Weight/Volume: | 5 mL     |
| Analysis Date:     | 11/20/2014 0933  | Units:          | ug/Kg      | Final Weight/Volume:   | 5 mL     |
| Prep Date:         | N/A              |                 |            |                        | 5 mL     |
| Leach Date:        | N/A              |                 |            |                        |          |

|                     |                   |                 |            |                        |          |
|---------------------|-------------------|-----------------|------------|------------------------|----------|
| LCSD Lab Sample ID: | LCSD 460-264083/4 | Analysis Batch: | 460-264083 | Instrument ID:         | CVOAMS2  |
| Client Matrix:      | Solid             | Prep Batch:     | N/A        | Lab File ID:           | B76235.D |
| Dilution:           | 50                | Leach Batch:    | N/A        | Initial Weight/Volume: | 5 mL     |
| Analysis Date:      | 11/20/2014 0957   | Units:          | ug/Kg      | Final Weight/Volume:   | 5 mL     |
| Prep Date:          | N/A               |                 |            |                        | 5 mL     |
| Leach Date:         | N/A               |                 |            |                        |          |

| Analyte                      | % Rec.    |      | Limit      | RPD | RPD Limit         | LCS Qual | LCSD Qual |
|------------------------------|-----------|------|------------|-----|-------------------|----------|-----------|
|                              | LCS       | LCSD |            |     |                   |          |           |
| Ethylbenzene                 | 86        | 83   | 80 - 120   | 4   | 30                |          |           |
| Ethylene Dibromide           | 86        | 87   | 80 - 120   | 1   | 30                |          |           |
| Isopropylbenzene             | 83        | 84   | 78 - 129   | 1   | 30                |          |           |
| Methyl acetate               | 92        | 92   | 60 - 139   | 0   | 30                |          |           |
| Methyl tert-butyl ether      | 88        | 86   | 68 - 128   | 2   | 30                |          |           |
| Methylcyclohexane            | 78        | 74   | 54 - 150   | 6   | 30                |          |           |
| Methylene Chloride           | 88        | 84   | 72 - 126   | 5   | 30                |          |           |
| m-Xylene & p-Xylene          | 90        | 88   | 80 - 120   | 3   | 30                |          |           |
| o-Xylene                     | 86        | 86   | 80 - 120   | 1   | 30                |          |           |
| Styrene                      | 89        | 87   | 80 - 120   | 2   | 30                |          |           |
| Tetrachloroethene            | 83        | 83   | 78 - 125   | 0   | 30                |          |           |
| Toluene                      | 80        | 82   | 79 - 121   | 2   | 30                |          |           |
| trans-1,2-Dichloroethene     | 89        | 80   | 76 - 125   | 11  | 30                |          |           |
| trans-1,3-Dichloropropene    | 83        | 85   | 70 - 125   | 3   | 30                |          |           |
| Trichloroethene              | 89        | 83   | 79 - 120   | 6   | 30                |          |           |
| Trichlorofluoromethane       | 97        | 95   | 52 - 146   | 2   | 30                |          |           |
| Vinyl chloride               | 89        | 84   | 59 - 140   | 7   | 30                |          |           |
| Surrogate                    | LCS % Rec |      | LCSD % Rec |     | Acceptance Limits |          |           |
| 1,2-Dichloroethane-d4 (Surr) | 92        |      | 92         |     | 75 - 135          |          |           |
| 4-Bromofluorobenzene         | 94        |      | 94         |     | 72 - 133          |          |           |
| Dibromofluoromethane (Surr)  | 100       |      | 98         |     | 70 - 130          |          |           |
| Toluene-d8 (Surr)            | 97        |      | 96         |     | 59 - 150          |          |           |



## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264050

### Method: 6010C

### Preparation: 3050B

Lab Sample ID: MB 460-264050/1-A ^2  
Client Matrix: Solid  
Dilution: 2.0  
Analysis Date: 11/20/2014 1344  
Prep Date: 11/20/2014 0708  
Leach Date: N/A

Analysis Batch: 460-264376  
Prep Batch: 460-264050  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: ICP4  
Lab File ID: 264050.asc  
Initial Weight/Volume: 1.00 g  
Final Weight/Volume: 50 mL

| Analyte   | Result | Qual | MDL  | RL   |
|-----------|--------|------|------|------|
| Silver    | 1.0    | U    | 0.19 | 1.0  |
| Aluminum  | 20.0   | U    | 11.1 | 20.0 |
| Arsenic   | 1.5    | U    | 0.41 | 1.5  |
| Barium    | 20.0   | U    | 0.87 | 20.0 |
| Beryllium | 0.20   | U    | 0.14 | 0.20 |
| Calcium   | 500    | U    | 38.3 | 500  |
| Cadmium   | 0.40   | U    | 0.14 | 0.40 |
| Cobalt    | 5.0    | U    | 0.45 | 5.0  |
| Chromium  | 1.0    | U    | 0.40 | 1.0  |
| Copper    | 2.5    | U    | 0.88 | 2.5  |
| Iron      | 15.0   | U    | 12.5 | 15.0 |
| Potassium | 500    | U    | 13.8 | 500  |
| Magnesium | 500    | U    | 33.2 | 500  |
| Manganese | 1.5    | U    | 0.43 | 1.5  |
| Sodium    | 500    | U    | 37.8 | 500  |
| Nickel    | 4.0    | U    | 0.90 | 4.0  |
| Lead      | 1.0    | U    | 0.41 | 1.0  |
| Antimony  | 2.0    | U    | 0.76 | 2.0  |
| Selenium  | 2.0    | U    | 0.57 | 2.0  |
| Thallium  | 2.0    | U    | 0.98 | 2.0  |
| Vanadium  | 5.0    | U    | 0.41 | 5.0  |
| Zinc      | 3.0    | U    | 0.86 | 3.0  |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### LCS-Certified Reference Material - Batch: 460-264050

Method: 6010C

Preparation: 3050B

|                |                       |                 |            |                        |            |
|----------------|-----------------------|-----------------|------------|------------------------|------------|
| Lab Sample ID: | LCSSRM 460-264050/2-A | Analysis Batch: | 460-264376 | Instrument ID:         | ICP4       |
| Client Matrix: | Solid                 | Prep Batch:     | 460-264050 | Lab File ID:           | 264050.asc |
| Dilution:      | 4.0                   | Leach Batch:    | N/A        | Initial Weight/Volume: | 1.00 g     |
| Analysis Date: | 11/20/2014 1728       | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL      |
| Prep Date:     | 11/20/2014 0708       |                 |            |                        |            |
| Leach Date:    | N/A                   |                 |            |                        |            |

| Analyte   | Spike Amount | Result | % Rec. | Limit        | Qual |
|-----------|--------------|--------|--------|--------------|------|
| Silver    | 40.2         | 33.36  | 83.0   | 74.9 - 125.4 |      |
| Aluminum  | 7460         | 5534   | 74.2   | 47.1 - 152.8 |      |
| Arsenic   | 139          | 116.8  | 84.0   | 78.4 - 121.6 |      |
| Barium    | 203          | 177.8  | 87.6   | 82.8 - 117.7 |      |
| Beryllium | 96.1         | 82.22  | 85.6   | 82.8 - 117.6 |      |
| Calcium   | 6040         | 4892   | 81.0   | 80.6 - 119.4 |      |
| Cadmium   | 96.0         | 82.46  | 85.9   | 81.7 - 117.7 |      |
| Cobalt    | 148          | 133.3  | 90.0   | 83.1 - 116.9 |      |
| Chromium  | 136          | 126.3  | 92.9   | 78.7 - 120.6 |      |
| Copper    | 168          | 149.4  | 89.0   | 81.5 - 118.5 |      |
| Iron      | 14100        | 14560  | 103.3  | 43.0 - 156.7 |      |
| Potassium | 2540         | 2020   | 79.5   | 68.9 - 131.1 |      |
| Magnesium | 2800         | 2284   | 81.6   | 75.4 - 125.0 |      |
| Manganese | 297          | 269.8  | 90.8   | 80.5 - 119.2 |      |
| Sodium    | 761          | 611.0  | 80.3   | 70.3 - 129.6 | J    |
| Nickel    | 123          | 111.2  | 90.4   | 82.1 - 118.7 |      |
| Lead      | 133          | 119.8  | 90.1   | 82.0 - 118.8 |      |
| Antimony  | 88.8         | 139.8  | 157.5  | 0.0 - 209.5  |      |
| Selenium  | 177          | 151.5  | 85.6   | 77.4 - 122.6 |      |
| Thallium  | 138          | 133.3  | 96.6   | 78.3 - 121.7 |      |
| Vanadium  | 107          | 99.80  | 93.3   | 76.6 - 123.4 |      |
| Zinc      | 189          | 169.1  | 89.4   | 81.5 - 118.5 |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Matrix Spike - Batch: 460-264050

Method: 6010C  
Preparation: 3050B

Lab Sample ID: 460-86282-D-2-J MS ^4  
Client Matrix: Solid  
Dilution: 4.0  
Analysis Date: 11/20/2014 1402  
Prep Date: 11/20/2014 0708  
Leach Date: N/A

Analysis Batch: 460-264376  
Prep Batch: 460-264050  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: ICP4  
Lab File ID: 264050.asc  
Initial Weight/Volume: 1.08 g  
Final Weight/Volume: 50 mL

| Analyte   | Sample Result/Qual |   | Spike Amount | Result | % Rec. | Limit    | Qual |
|-----------|--------------------|---|--------------|--------|--------|----------|------|
| Silver    | 2.1                | U | 4.92         | 4.52   | 92     | 75 - 125 |      |
| Aluminum  | 1270               |   | 197          | 3127   | 945    | 75 - 125 | 4    |
| Arsenic   | 2.3                | J | 197          | 181.4  | 91     | 75 - 125 |      |
| Barium    | 6.6                | J | 197          | 210.5  | 104    | 75 - 125 |      |
| Beryllium | 0.41               | U | 4.92         | 4.74   | 96     | 75 - 125 |      |
| Calcium   | 398                | J | 1970         | 2089   | 86     | 75 - 125 |      |
| Cadmium   | 0.83               | U | 4.92         | 4.69   | 95     | 75 - 125 |      |
| Cobalt    | 1.2                | J | 49.2         | 50.73  | 101    | 75 - 125 |      |
| Chromium  | 3.8                |   | 19.7         | 22.69  | 96     | 75 - 125 |      |
| Copper    | 12.3               |   | 24.6         | 34.58  | 91     | 75 - 125 |      |
| Iron      | 4400               |   | 98.5         | 4464   | 63     | 75 - 125 | 4    |
| Potassium | 115                | J | 1970         | 1818   | 86     | 75 - 125 |      |
| Magnesium | 1030               | U | 1970         | 1881   | 96     | 75 - 125 |      |
| Manganese | 20.2               |   | 49.2         | 65.83  | 93     | 75 - 125 |      |
| Sodium    | 1030               | U | 1970         | 1814   | 92     | 75 - 125 |      |
| Nickel    | 8.3                | U | 49.2         | 52.95  | 108    | 75 - 125 |      |
| Lead      | 12.1               |   | 49.2         | 60.38  | 98     | 75 - 125 |      |
| Antimony  | 4.1                | U | 49.2         | 35.90  | 73     | 75 - 125 | N    |
| Selenium  | 4.1                | U | 197          | 180.5  | 92     | 75 - 125 |      |
| Thallium  | 4.1                | U | 197          | 204.8  | 104    | 75 - 125 |      |
| Vanadium  | 7.5                | J | 49.2         | 53.41  | 93     | 75 - 125 |      |
| Zinc      | 6.1                | J | 49.2         | 53.96  | 97     | 75 - 125 |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

**Duplicate - Batch: 460-264050**

**Method: 6010C**

**Preparation: 3050B**

Lab Sample ID: 460-86282-D-2-I DU ^4  
 Client Matrix: Solid  
 Dilution: 4.0  
 Analysis Date: 11/20/2014 1351  
 Prep Date: 11/20/2014 0708  
 Leach Date: N/A

Analysis Batch: 460-264376  
 Prep Batch: 460-264050  
 Leach Batch: N/A  
 Units: mg/Kg

Instrument ID: ICP4  
 Lab File ID: 264050.asc  
 Initial Weight/Volume: 1.06 g  
 Final Weight/Volume: 50 mL

| Analyte   | Sample Result/Qual |   | Result | RPD  | Limit | Qual |
|-----------|--------------------|---|--------|------|-------|------|
| Silver    | 2.1                | U | 2.0    | NC   | 20    | U    |
| Aluminum  | 1270               |   | 1253   | 0.9  | 20    |      |
| Arsenic   | 2.3                | J | 2.31   | 0.8  | 20    | J    |
| Barium    | 6.6                | J | 6.40   | 3    | 20    | J    |
| Beryllium | 0.41               | U | 0.40   | NC   | 20    | U    |
| Calcium   | 398                | J | 387.6  | 3    | 20    | J    |
| Cadmium   | 0.83               | U | 0.80   | NC   | 20    | U    |
| Cobalt    | 1.2                | J | 1.13   | 3    | 20    | J    |
| Chromium  | 3.8                |   | 3.84   | 0.06 | 20    |      |
| Copper    | 12.3               |   | 12.50  | 2    | 20    |      |
| Iron      | 4400               |   | 4296   | 2    | 20    |      |
| Potassium | 115                | J | 112.4  | 2    | 20    | J    |
| Magnesium | 1030               | U | 1000   | NC   | 20    | U    |
| Manganese | 20.2               |   | 19.81  | 2    | 20    |      |
| Sodium    | 1030               | U | 1000   | NC   | 20    | U    |
| Nickel    | 8.3                | U | 8.0    | NC   | 20    | U    |
| Lead      | 12.1               |   | 11.49  | 5    | 20    |      |
| Antimony  | 4.1                | U | 4.0    | NC   | 20    | U    |
| Selenium  | 4.1                | U | 4.0    | NC   | 20    | U    |
| Thallium  | 4.1                | U | 4.0    | NC   | 20    | U    |
| Vanadium  | 7.5                | J | 7.44   | 0.9  | 20    | J    |
| Zinc      | 6.1                | J | 5.95   | 3    | 20    | J    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264034

Method: 7471B

Preparation: 7471B

Lab Sample ID: MB 460-264034/10-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 11/20/2014 0938  
Prep Date: 11/20/2014 0538  
Leach Date: N/A

Analysis Batch: 460-264139  
Prep Batch: 460-264034  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: LEEMAN5  
Lab File ID: 264034HG1.PRN  
Initial Weight/Volume: 0.60 g  
Final Weight/Volume: 50 mL

| Analyte | Result | Qual | MDL   | RL    |
|---------|--------|------|-------|-------|
| Mercury | 0.017  | U    | 0.012 | 0.017 |

### LCS-Certified Reference Material - Batch: 460-264034

Method: 7471B

Preparation: 7471B

Lab Sample ID: LCSSRM 460-264034/11-A  
Client Matrix: Solid  
Dilution: 20  
Analysis Date: 11/20/2014 0940  
Prep Date: 11/20/2014 0538  
Leach Date: N/A

Analysis Batch: 460-264139  
Prep Batch: 460-264034  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: LEEMAN5  
Lab File ID: 264034HG1.PRN  
Initial Weight/Volume: 0.60 g  
Final Weight/Volume: 50 mL

| Analyte | Spike Amount | Result | % Rec. | Limit        | Qual |
|---------|--------------|--------|--------|--------------|------|
| Mercury | 12.9         | 12.63  | 97.9   | 72.9 - 127.1 |      |

### Matrix Spike - Batch: 460-264034

Method: 7471B

Preparation: 7471B

Lab Sample ID: 460-86036-C-5-L MS  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 11/20/2014 0947  
Prep Date: 11/20/2014 0538  
Leach Date: N/A

Analysis Batch: 460-264139  
Prep Batch: 460-264034  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: LEEMAN5  
Lab File ID: 264034HG1.PRN  
Initial Weight/Volume: 0.62 g  
Final Weight/Volume: 50 mL

| Analyte | Sample Result/Qual | Spike Amount | Result | % Rec. | Limit    | Qual |
|---------|--------------------|--------------|--------|--------|----------|------|
| Mercury | 0.072              | 0.0972       | 0.234  | 167    | 80 - 120 | N    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Duplicate - Batch: 460-264034

### Method: 7471B Preparation: 7471B

Lab Sample ID: 460-86036-C-5-K DU  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 11/20/2014 0945  
Prep Date: 11/20/2014 0538  
Leach Date: N/A

Analysis Batch: 460-264139  
Prep Batch: 460-264034  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: LEEMAN5  
Lab File ID: 264034HG1.PRN  
Initial Weight/Volume: 0.62 g  
Final Weight/Volume: 50 mL

| Analyte | Sample Result/Qual | Result | RPD | Limit | Qual |
|---------|--------------------|--------|-----|-------|------|
| Mercury | 0.072              | 0.0714 | 0.7 | 20    |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

**Duplicate - Batch: 460-264048**

**Method: 1030**  
**Preparation: N/A**

|                |                 |                 |            |                        |                       |
|----------------|-----------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | 460-86402-4     | Analysis Batch: | 460-264048 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid           | Prep Batch:     | N/A        | Lab File ID:           | N/A                   |
| Dilution:      | 1.0             | Leach Batch:    | N/A        | Initial Weight/Volume: |                       |
| Analysis Date: | 11/20/2014 0600 | Units:          | mm/sec     | Final Weight/Volume:   |                       |
| Prep Date:     | N/A             |                 |            |                        |                       |
| Leach Date:    | N/A             |                 |            |                        |                       |

| Analyte   | Sample Result/Qual |   | Result | RPD | Limit | Qual |
|-----------|--------------------|---|--------|-----|-------|------|
| Burn Rate | 2.20               | U | 2.20   | NC  | 10    | U    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264163

### Method: 9012B Preparation: 9012B

Lab Sample ID: MB 460-264163/32-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 11/20/2014 1508  
Prep Date: 11/20/2014 0230  
Leach Date: N/A

Analysis Batch: 460-264213  
Prep Batch: 460-264163  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: Lachat3  
Lab File ID: OM\_11-20-2014\_02-57-18  
Initial Weight/Volume: 0.50 mL  
Final Weight/Volume: 5.00 mL

| Analyte        | Result | Qual | MDL   | RL   |
|----------------|--------|------|-------|------|
| Cyanide, Total | 0.10   | U    | 0.055 | 0.10 |

### Method Blank - Batch: 460-264163

### Method: 9012B Preparation: 9012B

Lab Sample ID: MB 460-264163/1-A  
Client Matrix: Solid  
Dilution: 1.0  
Analysis Date: 11/20/2014 1534  
Prep Date: 11/20/2014 0230  
Leach Date: N/A

Analysis Batch: 460-264213  
Prep Batch: 460-264163  
Leach Batch: N/A  
Units: mg/Kg

Instrument ID: Lachat3  
Lab File ID: OM\_11-20-2014\_02-57-18  
Initial Weight/Volume: 0.50 g  
Final Weight/Volume: 5.00 mL

| Analyte        | Result | Qual | MDL   | RL   |
|----------------|--------|------|-------|------|
| Cyanide, Total | 0.10   | U    | 0.055 | 0.10 |



## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Low Level Control Sample - Batch: 460-264163

Method: 9012B

Preparation: 9012B

|                |                      |                 |            |                        |                        |
|----------------|----------------------|-----------------|------------|------------------------|------------------------|
| Lab Sample ID: | LLCS 460-264163/33-A | Analysis Batch: | 460-264213 | Instrument ID:         | Lachat3                |
| Client Matrix: | Solid                | Prep Batch:     | 460-264163 | Lab File ID:           | OM_11-20-2014_02-57-18 |
| Dilution:      | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.50 mL                |
| Analysis Date: | 11/20/2014 1509      | Units:          | mg/Kg      | Final Weight/Volume:   | 5.00 mL                |
| Prep Date:     | 11/20/2014 0230      |                 |            |                        |                        |
| Leach Date:    | N/A                  |                 |            |                        |                        |

| Analyte        | Spike Amount | Result | % Rec. | Limit    | Qual |
|----------------|--------------|--------|--------|----------|------|
| Cyanide, Total | 1.00         | 1.01   | 101    | 90 - 110 |      |

### High Level Control Sample - Batch: 460-264163

Method: 9012B

Preparation: 9012B

|                |                      |                 |            |                        |                        |
|----------------|----------------------|-----------------|------------|------------------------|------------------------|
| Lab Sample ID: | HLCS 460-264163/34-A | Analysis Batch: | 460-264213 | Instrument ID:         | Lachat3                |
| Client Matrix: | Solid                | Prep Batch:     | 460-264163 | Lab File ID:           | OM_11-20-2014_02-57-18 |
| Dilution:      | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.50 mL                |
| Analysis Date: | 11/20/2014 1510      | Units:          | mg/Kg      | Final Weight/Volume:   | 5.00 mL                |
| Prep Date:     | 11/20/2014 0230      |                 |            |                        |                        |
| Leach Date:    | N/A                  |                 |            |                        |                        |

| Analyte        | Spike Amount | Result | % Rec. | Limit    | Qual |
|----------------|--------------|--------|--------|----------|------|
| Cyanide, Total | 2.00         | 1.92   | 96     | 90 - 110 |      |

### Matrix Spike/

### Matrix Spike Duplicate Recovery Report - Batch: 460-264163

Method: 9012B

Preparation: 9012B

|                   |                     |                 |            |                        |                        |
|-------------------|---------------------|-----------------|------------|------------------------|------------------------|
| MS Lab Sample ID: | 460-85857-D-15-C MS | Analysis Batch: | 460-264213 | Instrument ID:         | Lachat3                |
| Client Matrix:    | Solid               | Prep Batch:     | 460-264163 | Lab File ID:           | OM_11-20-2014_02-57-18 |
| Dilution:         | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.53 g                 |
| Analysis Date:    | 11/20/2014 1538     |                 |            | Final Weight/Volume:   | 5.00 mL                |
| Prep Date:        | 11/20/2014 0230     |                 |            |                        |                        |
| Leach Date:       | N/A                 |                 |            |                        |                        |

|                    |                      |                 |            |                        |                        |
|--------------------|----------------------|-----------------|------------|------------------------|------------------------|
| MSD Lab Sample ID: | 460-85857-D-15-D MSD | Analysis Batch: | 460-264213 | Instrument ID:         | Lachat3                |
| Client Matrix:     | Solid                | Prep Batch:     | 460-264163 | Lab File ID:           | OM_11-20-2014_02-57-18 |
| Dilution:          | 1.0                  | Leach Batch:    | N/A        | Initial Weight/Volume: | 0.49 g                 |
| Analysis Date:     | 11/20/2014 1539      |                 |            | Final Weight/Volume:   | 5.00 mL                |
| Prep Date:         | 11/20/2014 0230      |                 |            |                        |                        |
| Leach Date:        | N/A                  |                 |            |                        |                        |

| Analyte        | % Rec. |     | Limit    | RPD | RPD Limit | MS Qual | MSD Qual |
|----------------|--------|-----|----------|-----|-----------|---------|----------|
|                | MS     | MSD |          |     |           |         |          |
| Cyanide, Total | 68     | 58  | 40 - 130 | 7   | 32        |         |          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264122

**Method: 9014**  
**Preparation: 7.3.3**

|                |                   |                 |            |                        |                       |
|----------------|-------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | MB 460-264122/1-A | Analysis Batch: | 460-264128 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid             | Prep Batch:     | 460-264122 | Lab File ID:           | N/A                   |
| Dilution:      | 1.0               | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date: | 11/20/2014 1000   | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL                 |
| Prep Date:     | 11/20/2014 0900   |                 |            |                        |                       |
| Leach Date:    | N/A               |                 |            |                        |                       |

| Analyte           | Result | Qual | RL   | RL   |
|-------------------|--------|------|------|------|
| Cyanide, Reactive | 25.0   | U    | 25.0 | 25.0 |

### Lab Control Sample - Batch: 460-264122

**Method: 9014**  
**Preparation: 7.3.3**

|                |                    |                 |            |                        |                       |
|----------------|--------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | LCS 460-264122/2-A | Analysis Batch: | 460-264128 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid              | Prep Batch:     | 460-264122 | Lab File ID:           | N/A                   |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date: | 11/20/2014 1000    | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL                 |
| Prep Date:     | 11/20/2014 0900    |                 |            |                        |                       |
| Leach Date:    | N/A                |                 |            |                        |                       |

| Analyte           | Spike Amount | Result | % Rec. | Limit    | Qual |
|-------------------|--------------|--------|--------|----------|------|
| Cyanide, Reactive | 40.0         | 25.0   | 12     | 10 - 100 | U    |

### Duplicate - Batch: 460-264122

**Method: 9014**  
**Preparation: 7.3.3**

|                |                    |                 |            |                        |                       |
|----------------|--------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | 460-86310-C-1-E DU | Analysis Batch: | 460-264128 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid              | Prep Batch:     | 460-264122 | Lab File ID:           | N/A                   |
| Dilution:      | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date: | 11/20/2014 1000    | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL                 |
| Prep Date:     | 11/20/2014 0900    |                 |            |                        |                       |
| Leach Date:    | N/A                |                 |            |                        |                       |

| Analyte           | Sample Result/Qual | Result | RPD | Limit | Qual |
|-------------------|--------------------|--------|-----|-------|------|
| Cyanide, Reactive | 25.0 U             | 25.0   | NC  | 10    | U    |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264121

### Method: 9034 Preparation: 7.3.4

|                |                   |                 |            |                        |                       |
|----------------|-------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | MB 460-264121/1-A | Analysis Batch: | 460-264125 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid             | Prep Batch:     | 460-264121 | Lab File ID:           | N/A                   |
| Dilution:      | 1.0               | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date: | 11/20/2014 1000   | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL                 |
| Prep Date:     | 11/20/2014 0900   |                 |            |                        |                       |
| Leach Date:    | N/A               |                 |            |                        |                       |

| Analyte           | Result | Qual | RL   | RL   |
|-------------------|--------|------|------|------|
| Sulfide, Reactive | 20.0   | U    | 20.0 | 20.0 |

### LCS-Certified Reference Material - Batch: 460-264121

### Method: 9034 Preparation: 7.3.4

|                |                       |                 |            |                        |                       |
|----------------|-----------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | LCSSRM 460-264121/2-A | Analysis Batch: | 460-264125 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid                 | Prep Batch:     | 460-264121 | Lab File ID:           | N/A                   |
| Dilution:      | 1.0                   | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date: | 11/20/2014 1000       | Units:          | mg/Kg      | Final Weight/Volume:   | 50 mL                 |
| Prep Date:     | 11/20/2014 0900       |                 |            |                        |                       |
| Leach Date:    | N/A                   |                 |            |                        |                       |

| Analyte           | Spike Amount | Result | % Rec. | Limit        | Qual |
|-------------------|--------------|--------|--------|--------------|------|
| Sulfide, Reactive | 34.9         | 30.91  | 88.6   | 49.3 - 139.0 |      |

### Matrix Spike/

### Matrix Spike Duplicate Recovery Report - Batch: 460-264121

### Method: 9034 Preparation: 7.3.4

|                   |                    |                 |            |                        |                       |
|-------------------|--------------------|-----------------|------------|------------------------|-----------------------|
| MS Lab Sample ID: | 460-86310-C-1-B MS | Analysis Batch: | 460-264125 | Instrument ID:         | No Equipment Assigned |
| Client Matrix:    | Solid              | Prep Batch:     | 460-264121 | Lab File ID:           | N/A                   |
| Dilution:         | 1.0                | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date:    | 11/20/2014 1000    |                 |            | Final Weight/Volume:   | 50 mL                 |
| Prep Date:        | 11/20/2014 0900    |                 |            |                        |                       |
| Leach Date:       | N/A                |                 |            |                        |                       |

|                    |                     |                 |            |                        |                       |
|--------------------|---------------------|-----------------|------------|------------------------|-----------------------|
| MSD Lab Sample ID: | 460-86310-C-1-C MSD | Analysis Batch: | 460-264125 | Instrument ID:         | No Equipment Assigned |
| Client Matrix:     | Solid               | Prep Batch:     | 460-264121 | Lab File ID:           | N/A                   |
| Dilution:          | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 10 g                  |
| Analysis Date:     | 11/20/2014 1000     |                 |            | Final Weight/Volume:   | 50 mL                 |
| Prep Date:         | 11/20/2014 0900     |                 |            |                        |                       |
| Leach Date:        | N/A                 |                 |            |                        |                       |

| Analyte           | % Rec. |     | Limit    | RPD | RPD Limit | MS Qual | MSD Qual |
|-------------------|--------|-----|----------|-----|-----------|---------|----------|
|                   | MS     | MSD |          |     |           |         |          |
| Sulfide, Reactive | 46     | 43  | 28 - 110 | 7   | 10        |         |          |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Method Blank - Batch: 460-264203

**Method: 9045D**  
**Preparation: N/A**

|                |                 |                 |            |                        |                       |
|----------------|-----------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | MB 460-264203/2 | Analysis Batch: | 460-264203 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid           | Prep Batch:     | N/A        | Lab File ID:           | N/A                   |
| Dilution:      | 1.0             | Leach Batch:    | N/A        | Initial Weight/Volume: | 20 mL                 |
| Analysis Date: | 11/20/2014 1502 | Units:          | SU         | Final Weight/Volume:   | 20 mL                 |
| Prep Date:     | N/A             |                 |            |                        |                       |
| Leach Date:    | N/A             |                 |            |                        |                       |

| Analyte     | Result | Qual | NONE | NONE |
|-------------|--------|------|------|------|
| pH          | 5.710  |      |      |      |
| Corrosivity | 5.710  |      |      |      |

### LCS-Certified Reference Material - Batch: 460-264203

**Method: 9045D**  
**Preparation: N/A**

|                |                     |                 |            |                        |                       |
|----------------|---------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | LCSSRM 460-264203/3 | Analysis Batch: | 460-264203 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid               | Prep Batch:     | N/A        | Lab File ID:           | N/A                   |
| Dilution:      | 1.0                 | Leach Batch:    | N/A        | Initial Weight/Volume: | 20 mL                 |
| Analysis Date: | 11/20/2014 1504     | Units:          | SU         | Final Weight/Volume:   | 20 mL                 |
| Prep Date:     | N/A                 |                 |            |                        |                       |
| Leach Date:    | N/A                 |                 |            |                        |                       |

| Analyte     | Spike Amount | Result | % Rec. | Limit        | Qual |
|-------------|--------------|--------|--------|--------------|------|
| pH          | 6.03         | 6.020  | 99.8   | 97.5 - 102.2 |      |
| Corrosivity | 6.03         | 6.020  | 99.8   | 97.5 - 102.2 |      |

### Duplicate - Batch: 460-264203

**Method: 9045D**  
**Preparation: N/A**

|                |                  |                 |            |                        |                       |
|----------------|------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | 460-86314-C-2 DU | Analysis Batch: | 460-264203 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid            | Prep Batch:     | N/A        | Lab File ID:           | N/A                   |
| Dilution:      | 1.0              | Leach Batch:    | N/A        | Initial Weight/Volume: | 20 g                  |
| Analysis Date: | 11/20/2014 1507  | Units:          | SU         | Final Weight/Volume:   | 20 mL                 |
| Prep Date:     | N/A              |                 |            |                        |                       |
| Leach Date:    | N/A              |                 |            |                        |                       |

| Analyte     | Sample Result/Qual | Result | RPD  | Limit | Qual |
|-------------|--------------------|--------|------|-------|------|
| pH          | 10.7               | 10.66  | 0.09 | 10    |      |
| Corrosivity | 10.7               | 10.66  | 0.09 | 10    |      |

## Quality Control Results

Client: New York State D.E.C.

Job Number: 460-86402-2

### Duplicate - Batch: 460-263804

### Method: Moisture

### Preparation: N/A

|                |                  |                 |            |                        |                       |
|----------------|------------------|-----------------|------------|------------------------|-----------------------|
| Lab Sample ID: | 460-86180-B-2 DU | Analysis Batch: | 460-263804 | Instrument ID:         | No Equipment Assigned |
| Client Matrix: | Solid            | Prep Batch:     | N/A        | Lab File ID:           | N/A                   |
| Dilution:      | 1.0              | Leach Batch:    | N/A        | Initial Weight/Volume: |                       |
| Analysis Date: | 11/19/2014 1058  | Units:          | %          | Final Weight/Volume:   |                       |
| Prep Date:     | N/A              |                 |            |                        |                       |
| Leach Date:    | N/A              |                 |            |                        |                       |

| Analyte          | Sample Result/Qual | Result | RPD | Limit | Qual |
|------------------|--------------------|--------|-----|-------|------|
| Percent Moisture | 19.1               | 18.0   | 6   | 20    |      |
| Percent Solids   | 80.9               | 82.0   | 1   | 20    |      |

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road  
Edison, New Jersey 08817  
Phone: (732) 549-3900 Fax: (732) 549-3679

Page 1 of 2

|                                                                                                                                                                                                                                                               |          |                                                                                                                                                                                                                           |      |                                                                                                                                |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------|--------------|
| Name (for report and invoice)<br><u>John DeFina</u>                                                                                                                                                                                                           |          | Samplers Name (Printed)<br><u>EAQ-SG</u>                                                                                                                                                                                  |      | Site/Project Identification<br><u>DEC-1081Ave 1305 / ST-152-201</u>                                                            |              |
| Company<br><u>EM</u>                                                                                                                                                                                                                                          |          | P. O. #                                                                                                                                                                                                                   |      | Regulatory Program:                                                                                                            |              |
| Address<br><u>225 Atlantic Ave</u>                                                                                                                                                                                                                            |          | Analysis Turnaround Time<br>Standard <input checked="" type="checkbox"/> (10 DAY)<br>Rush Charges Authorized For:<br>2 Week <input type="checkbox"/><br>1 Week <input type="checkbox"/><br>Other <input type="checkbox"/> |      | ANALYSIS REQUESTED (ENTER X BELOW TO INDICATE REQUEST)                                                                         |              |
| City<br><u>Atlantic City</u>                                                                                                                                                                                                                                  |          | State<br><u>NJ</u>                                                                                                                                                                                                        |      | State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other: <input type="checkbox"/> |              |
| Phone<br><u>631-447-6400</u>                                                                                                                                                                                                                                  |          | Fax<br><u>631-447-6402</u>                                                                                                                                                                                                |      | Job No:<br><u>80402</u>                                                                                                        |              |
| Sample Identification                                                                                                                                                                                                                                         |          | Date                                                                                                                                                                                                                      | Time | Matrix                                                                                                                         | No. of Cont. |
| CP-5 SE SW                                                                                                                                                                                                                                                    | 11/17/14 | 13:55                                                                                                                                                                                                                     | S    | 6                                                                                                                              | X            |
| CP-5 SW SW                                                                                                                                                                                                                                                    | 13:25    | ↓                                                                                                                                                                                                                         | 6    | ↓                                                                                                                              | X            |
| CP-5 BOT                                                                                                                                                                                                                                                      | 14:10    | ↓                                                                                                                                                                                                                         | 12   | ↓                                                                                                                              | X            |
| <div style="display: flex; justify-content: space-between;"> <div> <p>TAL VOC's 8260</p> <p>TAL SVOC's 8270</p> <p>METALS (TAL)</p> <p>PESTICIDES/HERBICIDES</p> <p>PCB'S</p> <p>MMSD</p> </div> <div> <p>LAB USE ONLY</p> <p>Project No:</p> </div> </div>   |          |                                                                                                                                                                                                                           |      |                                                                                                                                |              |
| <div style="display: flex; justify-content: space-between;"> <div> <p>Sample Numbers</p> <p>1</p> <p>2</p> <p>3</p> </div> <div>  </div> </div>                            |          |                                                                                                                                                                                                                           |      |                                                                                                                                |              |
| <p>Preservation Used: 1 = ICE, 2 = HCl, 3 = H<sub>2</sub>SO<sub>4</sub>, 4 = HNO<sub>3</sub>, 5 = NaOH</p> <p>Soil: <input type="checkbox"/> Water: <input type="checkbox"/></p> <p>6 = Other <input type="checkbox"/> 7 = Other <input type="checkbox"/></p> |          |                                                                                                                                                                                                                           |      |                                                                                                                                |              |

### Special Instructions

ATTENTION: DELIVERABLES REQUESTED

Water Metals Filtered (Yes/No)?

|                                       |                        |                                      |                                   |                               |
|---------------------------------------|------------------------|--------------------------------------|-----------------------------------|-------------------------------|
| Relinquished by<br><u>Steph Gault</u> | Company<br><u>EM</u>   | Date / Time<br><u>11/17/14 1:50</u>  | Received by<br><u>[Signature]</u> | Company<br><u>[Signature]</u> |
| Relinquished by<br><u>[Signature]</u> | Company<br><u>F.A.</u> | Date / Time<br><u>11/17/14 18:50</u> | Received by<br><u>[Signature]</u> | Company<br><u>TA Edison</u>   |
| Relinquished by                       | Company                | Date / Time                          | Received by                       | Company                       |
| Relinquished by                       | Company                | Date / Time                          | Received by                       | Company                       |

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NU312), North Carolina (No. 578) / 1.5 (3.5 J&T J-

TAL - 0016 (0408)

## Page 2 of 2

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## Water Metals Filtered (Yes/No)?

Massachusetts (M-NJ312), North Carolina (No. 578)

86402

IR Gun #

| COOL       | CONNECTED TANK | RAW        | CONNECTED TANK | RAW        | CONNECTED |
|------------|----------------|------------|----------------|------------|-----------|
| Cooler #1: | 18 °C          | Cooler #4: | °C             | Cooler #7: | °C        |
| Cooler #2: | °C             | Cooler #5: | °C             | Cooler #8: | °C        |
| Cooler #3: | °C             | Cooler #6: | °C             | Cooler #9: | °C        |

**If pH adjustments are required record the information below**



## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-86402-2

**Login Number: 86402**

**List Source: TestAmerica Edison**

**List Number: 1**

**Creator: Meyers, Gary**

| Question                                                                                 | Answer | Comment                                                 |
|------------------------------------------------------------------------------------------|--------|---------------------------------------------------------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | N/A    |                                                         |
| The cooler's custody seal, if present, is intact.                                        | N/A    | Not present                                             |
| Sample custody seals, if present, are intact.                                            | True   |                                                         |
| The cooler or samples do not appear to have been compromised or tampered with.           | True   |                                                         |
| Samples were received on ice.                                                            | True   |                                                         |
| Cooler Temperature is acceptable.                                                        | True   |                                                         |
| Cooler Temperature is recorded.                                                          | True   | 3.5 ° C IR #5                                           |
| COC is present.                                                                          | True   |                                                         |
| COC is filled out in ink and legible.                                                    | True   |                                                         |
| COC is filled out with all pertinent information.                                        | True   |                                                         |
| Is the Field Sampler's name present on COC?                                              | True   |                                                         |
| There are no discrepancies between the containers received and the COC.                  | True   |                                                         |
| Samples are received within Holding Time.                                                | True   |                                                         |
| Sample containers have legible labels.                                                   | True   |                                                         |
| Containers are not broken or leaking.                                                    | True   |                                                         |
| Sample collection date/times are provided.                                               | True   |                                                         |
| Appropriate sample containers are used.                                                  | True   |                                                         |
| Sample bottles are completely filled.                                                    | True   |                                                         |
| Sample Preservation Verified.                                                            | True   |                                                         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | False  | received limited sample volume for voa msd              |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |                                                         |
| Multiphasic samples are not present.                                                     | True   |                                                         |
| Samples do not require splitting or compositing.                                         | True   |                                                         |
| Residual Chlorine Checked.                                                               | N/A    | No analysis requiring residual chlorine check assigned. |



## **APPENDIX D: WASTE TRANSPORTER PERMITS (Freehold Cartage, Inc.)**



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**  
**WASTE TRANSPORTER PERMIT NO. NJ-113**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

FREEHOLD CARTAGE, INC.  
P.O. BOX 5010  
825 HIGHWAY 33  
FREEHOLD, NJ 07728

**PERMIT TYPE:**

☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: JACK FITZSIMMONS  
COUNTY: OUT OF STATE  
TELEPHONE NO: (732)462-1001

EFFECTIVE DATE: 07/01/2014  
EXPIRATION DATE: **06/30/2015**  
US EPA ID NUMBER: NJD054126164

**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 |
|-------------------------------------------|----------------------|-------------------------------------------------------------------------------------|------|
| 110 Sand Company Clean Fill Disposal Site | Melville , NY        | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil      |      |
| ACM TECHNOLOGIES                          | FOREST HILL , MD     | Hazardous Industrial/Commercial                                                     |      |
| ADVANCED CHEMICAL COMPANY                 | WARWICK , RI         | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial              |      |
| ADVANCED RECYCLING TECHNOLOGY             | CHAMBERSBURG , PA    | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial              |      |
| ADVANCED WASTE AND WATER TECHNOLOGY       | FARMINGDALE , NY     | Non-Hazardous Industrial/Commercial                                                 |      |
| AERC RECYCLING SOLUTIONS                  | ALLENTOWN , PA       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial              |      |
| AGMET METALS, INC.                        | OAKWOOD VILLAGE , OH | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial              |      |
| ALPHA & OMEGA                             | LONGVIEW , TX        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial              |      |
| AMERADA HESS                              | PORT READING , NJ    | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| AMERICAN BIO MASS                         | WALTERBORO , SC      | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated 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 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

AUTHORIZED SIGNATURE: \_\_\_\_\_

Date: 4 / 24 / 14

**NOTICE**

PAGE 1 OF 24

This permit is not valid until the  
effective date listed on the permit

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**  
**WASTE TRANSPORTER PERMIT NO. NJ-113**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

FREEHOLD CARTAGE, INC.  
P.O. BOX 5010  
825 HIGHWAY 33  
FREEHOLD, NJ 07728

**PERMIT TYPE:**

☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: JACK FITZSIMMONS  
COUNTY: OUT OF STATE  
TELEPHONE NO: (732)462-1001

EFFECTIVE DATE: 07/01/2014  
EXPIRATION DATE: 06/30/2015  
US EPA ID NUMBER: NJD054126164

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility                     | Location           | Waste Type(s)                                                                                                                        | Note |
|------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------|------|
| AMERICAN BIO MASS                        | WALTERBORO , SC    | Waste Oil                                                                                                                            |      |
| AMERICAN ENVIRONMENTAL                   | MORGANTOWN , WV    | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil       |      |
| AMERICAN ENVIRONMENTAL SERVICES          | CALVERT CITY , KY  | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| AMERICAN LAMP RECYCLING LLC              | MARLBORO , NY      | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| AMERICAN REF-FUEL (COVANTA) OF HEMPSTEAD | WESTBURY , NY      | Non-Hazardous Industrial/Commercial                                                                                                  |      |
| BATH LANDFILL                            | BATH , NY          | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant |      |
| BAYSHORE RECYCLING                       | WOODBIDGE , NJ     | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil                                                                   |      |
| BERGEN POINT STP                         | WEST BABYLON , NY  | Non-Hazardous Industrial/Commercial<br>Septage only (residential)<br>Residential Raw Sewage including Portable Toilet Waste          |      |
| BETHLEHEM APPARATUS                      | HELLERTOWN , PA    | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| BETHLEHEM APPARATUS COMP.                | BETHLEHEM , PA     | Hazardous Industrial/Commercial                                                                                                      |      |
| BFI Waste Systems of North America       | IMPERIAL , PA      | Non-Hazardous Industrial/Commercial                                                                                                  |      |
| BROOKFIELD RESOURCE                      | ELMSFORD , NY      | Non-Hazardous Industrial/Commercial                                                                                                  |      |
| BUICK RESOURCE RECYCLING                 | BOSS , MO          | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| C.R.I. ENVIRONMENT, INC.                 | COTEAU DU LAC , QC | Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil                                     |      |
| CARBON LIMESTONE LANDFILL                | LOWELLVILLE , OH   | Non-Hazardous Industrial/Commercial                                                                                                  |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**

**WASTE TRANSPORTER PERMIT NO. NJ-113**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

FREEHOLD CARTAGE, INC.  
P.O. BOX 5010  
825 HIGHWAY 33  
FREEHOLD, NJ 07728

**PERMIT TYPE:**

☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: JACK FITZSIMMONS  
COUNTY: OUT OF STATE  
TELEPHONE NO: (732)462-1001

EFFECTIVE DATE: 07/01/2014  
EXPIRATION DATE: **06/30/2015**  
US EPA ID NUMBER: NJD054126164

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility             | Location         | Waste Type(s)                                                                                                                                       | Note |
|----------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|
| CARBON LIMESTONE LANDFILL, LLC   | LOWELVILLE , OH  | Waste Oil                                                                                                                                           |      |
| CASELLA WASTE SERVICES OF NY     | NEWFIELD , NY    | Non-Hazardous Industrial/Commercial                                                                                                                 |      |
| CASIE ECOLOGY OIL SALVAGE INC    | VINELAND , NJ    | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                  |      |
| CHEMICAL WASTE MANAGEMENT        | EMELLE , AL      | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| CHEMICAL WASTE MANAGEMENT, INC.  | SULPHUR , LA     | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                      |      |
| CHEMREC INC                      | COWANSVILLE , QC | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| CHEMTRON CORPORATION             | AVON , OH        | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| CHEMUNG LANDFILL LLC             | ELMIRA , NY      | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant                            |      |
| CHESAPEAKE WASTE SOLUTIONS, INC. | MANHEIM , PA     | Non-Hazardous Industrial/Commercial                                                                                                                 |      |
| CLEAN EARTH CLAREMONT            | JERSEY CITY , NJ | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                      |      |
| CLEAN EARTH OF CARTERET          | CARTERET , NJ    | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil                                                                                  |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

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

| Destination Facility                                         | Location           | Waste Type(s)                                                                                                                                                                                                                                                         | Note |
|--------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| CLEAN HARBORS ENV. SERVICES, INC.                            | CLEVELAND , OH     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                                                                                                                                                |      |
| CLEAN HARBORS OF BALTIMORE                                   | BALTIMORE , MD     | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                        |      |
| CLEAN HARBORS OF CONNECTICUT                                 | BRISTOL , CT       | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Non-Residential Raw Sewage or Sewage-Contaminated Wastes<br>Sludge from Sewage or Water Supply Treatment Plant<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| CLEAN HARBORS PPM, LLC                                       | TWINSBURG , OH     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                                                                   |      |
| CLEAN HARBORS PPM, LLC                                       | PHILADELPHIA , PA  | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                                                                   |      |
| CLEAN HARBORS PPM, LLC.                                      | ASHTABULA , OH     | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                                    |      |
| CLEAN WATER OF NEW YORK, INC.                                | STATEN ISLAND , NY | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Waste Oil                                                                                                                                                                                       |      |
| CLEAR BROOK (FORMERLY RESIDUAL<br>MANAGEMENT SERVICES, INC.) | DEER PARK , NY     | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Residential Raw Sewage including Portable Toilet Waste                                                                                                                     |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility                          | Location           | Waste Type(s)                                                                                                                                       | Note |
|-----------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|
| CYCLE CHEM (NJ)                               | ELIZABETH , NJ     | Waste Oil                                                                                                                                           |      |
| CYCLE CHEM (PA)                               | LEWISBERRY , PA    | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| DETREX CORPORATION                            | CHARLOTTE , NC     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| DISPOSAL CONSULTANT SERVICES, INC.            | PISCATAWAY , NJ    | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                  |      |
| DUTCHESS COUNTY RESOURCE<br>RECOVERY FACILITY | POUGHKEEPSIE , NY  | Non-Hazardous Industrial/Commercial                                                                                                                 |      |
| DYNECOL, INC.                                 | DETROIT , MI       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                 |      |
| E. I. DUPONT DENEMOURS AND<br>COMPANY         | DEEPWATER , NJ     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| EAST PENN MANUFACTURE                         | LYON STATION , PA  | Non-Hazardous Industrial/Commercial                                                                                                                 |      |
| EASTMAN KODAK COMPANY                         | ROCHESTER , NY     | Hazardous Industrial/Commercial                                                                                                                     |      |
| ECOFLO                                        | GREENSBORO , NC    | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                 |      |
| ENGLOBE CORP                                  | MONTREAL-EAST , QC | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial                                               |      |
| ENPRO SERVICES OF VERMONT, INC.               | WILLISTON , VT     | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                      |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*



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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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| Destination Facility                                       | Location           | Waste Type(s)                                                                                                                  | Note |
|------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------|------|
| EQ OF CANTON (FORMERLY ENVIRITE OF CANTON , OH OHIO, INC.) |                    | Waste Oil                                                                                                                      |      |
| EQ RESOURCE RECOVERY INC                                   | ROMULUS , MI       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                            |      |
| EQIS                                                       | INDIANAPOLIS , IN  | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| ESMI OF NEW YORK                                           | FORT EDWARD , NY   | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil                                                             |      |
| EVERCLEAR                                                  | AUSTINTOWN , OH    | Non-Hazardous Industrial/Commercial<br>Waste Oil                                                                               |      |
| EWS ALABAMA INC                                            | GLENCOE , AL       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                            |      |
| EXIDE CORPORATION                                          | READING , PA       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                         |      |
| EXIDE TECHNOLOGIES                                         | MUNCIE , IN        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                         |      |
| FALCONBRIDGE LIMITED-HORNE SMELTER DIVISION                | ROUYN NORANDA , QC | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial                          |      |
| FIELDING CHEMICAL TECHNOLOGIES INC.                        | MISSISSAUGA , ON   | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                            |      |
| FREEHOLD RECYCLING CENTER                                  | FREEHOLD , NJ      | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Waste Tires                                              |      |
| G & S TECHNOLOGIES                                         | KEARNY , NJ        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                            |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*



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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility                     | Location            | Waste Type(s)                                                                                                                        | Note |
|------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|------|
| HERITAGE ENVIRONMENTAL SERVICES, LLC     | INDIANAPOLIS , IN   | Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil                         |      |
| HERITAGE TECHNOLOGES LLC                 | INDIANAPOLIS , IN   | Hazardous Industrial/Commercial                                                                                                      |      |
| HERITAGE WTI, INC.                       | EAST LIVERPOOL , OH | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| HESSTECH                                 | EDISON , NJ         | Non-Hazardous Industrial/Commercial                                                                                                  |      |
| HI-BRETT / PURATEX                       | PENNSAUKEN , NJ     | Non-Hazardous Industrial/Commercial                                                                                                  |      |
| HIGH ACRES WESTERN EXPANSION LANDFILL    | FAIRPORT , NY       | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant |      |
| HIGHLAND ASSOCIATES                      | ANGELICA , NY       | Non-Hazardous Industrial/Commercial                                                                                                  |      |
| HORIZON                                  | QUEBEC , QC         | Hazardous Industrial/Commercial                                                                                                      |      |
| HUBBARD HALL                             | SYRACUSE , NY       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| HUKILL CHEMICAL CORPORATION              | BEDFORD , OH        | Non-Hazardous Industrial/Commercial<br>Waste Oil<br>Hazardous Industrial/Commercial                                                  |      |
| INMETCO                                  | ELLWOOD CITY , PA   | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| INTERNATIONAL MARINE SALVAGE             | BUFFALO , NY        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                               |      |
| INTERNATIONAL PETROLEUM CORPORATION      | WILMINGTON , DE     | Non-Hazardous Industrial/Commercial<br>Waste Oil                                                                                     |      |
| J.P. MASCARO & SONS/WHITE PINES LANDFILL | AUDUBON , PA        | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Waste Tires                                        |      |
| KEYSTONE CEMENT CO.                      | BATH , PA           | Non-Hazardous Industrial/Commercial                                                                                                  |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

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**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility                                       | Location                 | Waste Type(s)                                                                                                                                                                                                                | Note |
|------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| MISSISSAUGUA METALS                                        | BRANFORD , ON            | Hazardous Industrial/Commercial                                                                                                                                                                                              |      |
| MODERN LANDFILL                                            | YORK , PA                | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant                                                                                         |      |
| MODERN LANDFILL, INC.                                      | MODEL CITY , NY          | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Waste Tires<br>Non-Residential Raw Sewage or Sewage-Contaminated Wastes<br>Sludge from Sewage or Water Supply Treatment Plant<br>Waste Oil |      |
| MXI ENVIRONMENTAL SERVICES                                 | ABINGDON , VA            | Non-Hazardous Industrial/Commercial                                                                                                                                                                                          |      |
| NEXEO SOLUTIONS LLC (FORMERLY<br>ASHLAND CHEMICAL COMPANY) | BINGHAMTON , NY          | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                          |      |
| NORLITE, LLC                                               | COHOES , NY              | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                          |      |
| NORTHEAST LAMP RECYCLING, INC                              | EAST WINDSOR , CT        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                                                                                                       |      |
| NOVA PB INC                                                | VILLE STE CATHERINE , QC | Non-Hazardous Industrial/Commercial<br>Waste Tires<br>Sludge from Sewage or Water Supply Treatment Plant<br>Hazardous Industrial/Commercial                                                                                  |      |
| OGDEN MARTIN                                               | HAVERVILLE , MA          | Non-Hazardous Industrial/Commercial                                                                                                                                                                                          |      |
| OLD BRIDGE CHEMICAL                                        | OLD BRIDGE , NJ          | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                                                                                                       |      |
| ONTARIO COUNTY LANDFILL                                    | STANLEY , NY             | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant                                                                                         |      |

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

| Destination Facility                        | Location            | Waste Type(s)                                                                                                                                       | Note |
|---------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|
| PIONEER CROSSING LANDFILL                   | BIRDSBORO , PA      | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant                |      |
| POLLUTION CONTROL INDUSTRIES                | MILLINGTON , TN     | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                  |      |
| PORT JEFFERSON STP                          | PORT JEFFERSON , NY | Non-Hazardous Industrial/Commercial                                                                                                                 |      |
| PSC FORMERLY CHEMICAL POLLUTION CONTROL INC | BAY SHORE , NY      | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                  |      |
| PURE EARTH RECYCLING                        | VINELAND , NJ       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                 |      |
| PURE SOIL TECHNOLOGIES                      | JACKSON , NJ        | Petroleum Contaminated Soil<br>Sludge from Sewage or Water Supply Treatment Plant                                                                   |      |
| RECYCLING COORDINATORS                      | AKRON , OH          | Non-Hazardous Industrial/Commercial                                                                                                                 |      |
| RELDAN METALS REFINING & MANUFACTURING      | PHILADELPHIA , PA   | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| REPUBLIC ENVIRONMENTAL SYSTEMS (PA) INC.    | HATFIELD , PA       | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| RESERVE ENVIRONMENTAL SERVICES              | ASHTABULLA , OH     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| REVERE SMELTING & REFINING CORPORATION      | MIDDLETOWN , NY     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| RGM EARTHCARE OF NY                         | DEER PARK , NY      | Non-Hazardous Industrial/Commercial                                                                                                                 |      |

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|---------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| SOLVENTS & PETROLEUM SERVICE                      | SYRACUSE , NY     | Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                                                                                                                                                  |      |
| SPECIALTY WASTE SOLUTIONS                         | CONSHOHOCKEN , PA | Non-Hazardous Industrial/Commercial                                                                                                                                                                                                                                                                           |      |
| Stablex Canada Inc.                               | Blainville , QC   | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial                                                                                                                                                                                             |      |
| STEELWAYS, INC.                                   | NEWBURGH , NY     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                                                                                                                                                                                        |      |
| STERICYCLE, INC.                                  | INDIANAPOLIS , IN | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                                                                                                                                                                                        |      |
| SUBURBAN SOUTH RECYCLING                          | GLENFORD , OH     | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Septage only (residential)<br>Residential Raw Sewage including Portable Toilet Waste<br>Non-Residential Raw Sewage or Sewage-Contaminated Wastes<br>Sludge from Sewage or Water Supply Treatment Plant |      |
| SYSTECH ENVIRONMENTAL                             | PAULDING , OH     | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                                                                                                           |      |
| TECHNIC, INC.                                     | CRANSTON , RI     | Hazardous Industrial/Commercial                                                                                                                                                                                                                                                                               |      |
| TERIS LLC                                         | EL DORADO , AR    | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                                                                                                                                            |      |
| THE PENN OHIO CORPORATION                         | ASHTABULA , OH    | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Waste Oil                                                                                                                                                                                                                               |      |
| TRADEBE TREATMENT AND RECYCLING<br>NORTHEAST, LLC | MERIDAN , CT      | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                                                                                                                                                                                        |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**  
**WASTE TRANSPORTER PERMIT NO. NJ-113**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

FREEHOLD CARTAGE, INC.  
P.O. BOX 5010  
825 HIGHWAY 33  
FREEHOLD, NJ 07728

**PERMIT TYPE:**

☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: JACK FITZSIMMONS  
COUNTY: OUT OF STATE  
TELEPHONE NO: (732)462-1001

EFFECTIVE DATE: 07/01/2014  
EXPIRATION DATE: 06/30/2015  
US EPA ID NUMBER: NJD054126164

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility                             | Location              | Waste Type(s)                                                                                                                                       | Note |
|--------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------|
| VEOLIA ES TECHNICAL SOLUTIONS<br>(FORMERLY ONYX) | FLANDERS , NJ         | Waste Oil                                                                                                                                           |      |
| VEOLIA ES TECHNICAL SOLUTIONS LLC                | STOUGHTON , MA        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| VEOLIA ES TECHNICAL SOLUTIONS LLC                | WEST BRIDGEWATER , MA | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                                                              |      |
| VEOLIA ES TECHNICAL SOLUTIONS, LLC               | LATHAM , NY           | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| VEOLIA ES TECHNICAL SOLUTIONS, LLC               | MIDDLESEX , NJ        | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                 |      |
| VEOLIA ES TECHNICAL SOLUTIONS, LLC               | SAUGET , IL           | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                  |      |
| VEOLIA ES TECHNICAL SOLUTIONS, LLC               | WEST CARROLLTON , OH  | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Grease Trap Waste<br>Hazardous Industrial/Commercial<br>Waste Oil |      |
| VEOLIA ES TECHNICAL SOLUTIONS, LLC               | PORT WASHINGTON , WI  | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial<br>Waste Oil                                  |      |
| VEOLIA ES TECHNICAL SOLUTIONS, LLC               | SCHENECTADY , NY      | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial<br>Waste Oil                                                                 |      |
| VEOLIA GREENTREE LANDFILL -<br>FORMERLY ONYX     | KERSEY , PA           | Non-Hazardous Industrial/Commercial                                                                                                                 |      |

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

**PART 364**

**WASTE TRANSPORTER PERMIT NO. NJ-113**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

FREEHOLD CARTAGE, INC.  
P.O. BOX 5010  
825 HIGHWAY 33  
FREEHOLD, NJ 07728

**PERMIT TYPE:**

☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: JACK FITZSIMMONS  
COUNTY: OUT OF STATE  
TELEPHONE NO: (732)462-1001

EFFECTIVE DATE: 07/01/2014  
EXPIRATION DATE: 06/30/2015  
US EPA ID NUMBER: NJD054126164

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)**

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

| Destination Facility           | Location          | Waste Type(s)                                                                                                     | Note |
|--------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------|------|
| WASTE RECOVERY SOLUTIONS       | MYERSTOWN , PA    | Waste Oil                                                                                                         |      |
| WAYNE DISPOSAL, INC            | BELLEVILLE , MI   | Non-Hazardous Industrial/Commercial<br>Asbestos<br>Petroleum Contaminated Soil<br>Hazardous Industrial/Commercial |      |
| WHEELABRATOR FALLS INC         | MORRISVILLE , PA  | Non-Hazardous Industrial/Commercial                                                                               |      |
| WHEELABRATOR HUDSON FALLS, LLC | HUDSON FALLS , NY | Non-Hazardous Industrial/Commercial                                                                               |      |
| WHEELABRATOR WESTCHESTER, LP   | PEEKSKILL , NY    | Non-Hazardous Industrial/Commercial                                                                               |      |
| WM AMERICAN LANDFILL           | WAYNESBURG , OH   | Non-Hazardous Industrial/Commercial<br>Petroleum Contaminated Soil                                                |      |
| WORLD RESOURCES COMPANY        | POTTSVILLE , PA   | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                            |      |
| XSTARTA HORNE SMELTER          | QUEBEC , QC       | Non-Hazardous Industrial/Commercial<br>Hazardous Industrial/Commercial                                            |      |

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

PART 364

WASTE TRANSPORTER PERMIT NO. NJ-113

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

FREEHOLD CARTAGE, INC.  
P.O. BOX 5010  
825 HIGHWAY 33  
FREEHOLD, NJ 07728

PERMIT TYPE:

☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: JACK FITZSIMMONS  
COUNTY: OUT OF STATE  
TELEPHONE NO: (732)462-1001

EFFECTIVE DATE: 07/01/2014  
EXPIRATION DATE: **06/30/2015**  
US EPA ID NUMBER: NJD054126164

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 and/or Septage only)

472 (Four Hundred and Seventy Two) Permitted Vehicle(s)

|            |            |            |            |            |
|------------|------------|------------|------------|------------|
| ME 1642751 | ME 164911E | ME 1658306 | ME 1662364 | ME 1668702 |
| ME 1642752 | ME 1649364 | ME 1658326 | ME 1662461 | ME 1668703 |
| ME 1643004 | ME 164949E | ME 1658378 | ME 1662462 | ME 1675099 |
| ME 1643005 | ME 1649531 | ME 1658417 | ME 1662463 | ME 167678C |
| ME 1643045 | ME 1649930 | ME 1658418 | ME 1663701 | ME 167759B |
| ME 1643049 | ME 1651059 | ME 1658444 | ME 1663728 | ME 167827A |
| ME 1644148 | ME 165117A | ME 165851C | ME 1663731 | ME 168038A |
| ME 1644149 | ME 1652265 | ME 1658660 | ME 1663732 | ME 168039A |
| ME 1644150 | ME 1652266 | ME 1658853 | ME 1663733 | ME 168061C |
| ME 1644151 | ME 1652267 | ME 1658904 | ME 1663736 | ME 168062C |
| ME 1644803 | ME 1652268 | ME 1658905 | ME 1663804 | ME 168063C |
| ME 1645198 | ME 1652378 | ME 1658906 | ME 1663805 | ME 168064C |
| ME 164555E | ME 1652745 | ME 1658955 | ME 1663806 | ME 168065C |
| ME 164556E | ME 1652746 | ME 1658956 | ME 1663807 | ME 168066C |
| ME 164557E | ME 1652747 | ME 1658957 | ME 1663832 | ME 1691266 |
| ME 164558E | ME 1653268 | ME 1658958 | ME 1663833 | ME 1691267 |
| ME 164559E | ME 1653937 | ME 1658959 | ME 1663834 | ME 1691268 |
| ME 164560E | ME 1653938 | ME 1658960 | ME 1663835 | ME 169656B |
| ME 164561E | ME 1653939 | ME 1659018 | ME 1663836 | ME 172622A |
| ME 164562E | ME 1653940 | ME 1659065 | ME 1663874 | ME 172623A |
| ME 164563E | ME 1654330 | ME 1659084 | ME 1663875 | ME 172624A |
| ME 164564E | ME 1655517 | ME 1659099 | ME 1663876 | ME 172625A |
| ME 164565E | ME 1655567 | ME 1659137 | ME 1663878 | ME 1726597 |
| ME 164566E | ME 1655568 | ME 1659138 | ME 1665167 | ME 1735910 |
| ME 164567E | ME 1655570 | ME 1659229 | ME 166608C | ME 1739469 |
| ME 164568E | ME 165569E | ME 1659613 | ME 166609D | ME 1739471 |
| ME 164569E | ME 1655723 | ME 1659782 | ME 1666892 | ME 1739472 |
| ME 164570E | ME 165609E | ME 1659910 | ME 1666893 | ME 1739473 |
| ME 164571E | ME 165624E | ME 166022C | ME 1666894 | ME 1739474 |
| ME 164572E | ME 1656668 | ME 166023C | ME 1666895 | ME 2440988 |
| ME 164573E | ME 165692C | ME 166024C | ME 1666896 | ME 2440989 |
| ME 164574E | ME 165693C | ME 166025C | ME 1666897 | ME 2440990 |
| ME 1646705 | ME 165694C | ME 166026C | ME 166758C | ME 2440991 |
| ME 1646706 | ME 165695C | ME 166027C | ME 166759C | ME 2440992 |
| ME 1646839 | ME 165696C | ME 1660392 | ME 166760C | ME 2440993 |
| ME 1646840 | ME 165697C | ME 1660462 | ME 166761C | ME 2440994 |
| ME 1646843 | ME 165698C | ME 1660463 | ME 166762C | ME 2440995 |
| ME 1647092 | ME 165699C | ME 1660464 | ME 166763C | ME 2440996 |
| ME 1647094 | ME 165700C | ME 1660465 | ME 166764C | ME 2440997 |
| ME 1647095 | ME 165701C | ME 1660600 | ME 166765C | ME 2440998 |
| ME 1647149 | ME 165702C | ME 1660601 | ME 166766C | ME 2440999 |
| ME 1647213 | ME 165786C | ME 1660939 | ME 166767C | ME 2441000 |
| ME 1647217 | ME 1658151 | ME 1660959 | ME 166823D | ME 2441001 |
| ME 1647464 | ME 1658154 | ME 1662362 | ME 1668700 | ME 2441002 |
| ME 1647465 | ME 1658305 | ME 1662363 | ME 1668701 | ME 2441003 |

\*\*\* AUTHORIZED VEHICLES LISTING (continued on next page) \*\*\*



TRANSLATION

Montreal, November 9, 2010

**PERMIT**  
(Sections 70.11 and 70.14)

---

Freehold Cartage, inc.  
825, Highway 33  
PO box 5010  
Freehold, New Jersey, 07728  
USA

Our file : 7610-06-01-01765-10  
400765873

SUBJECT: Residual Hazardous Materials Transport

---

Dear Sir :  
Dear Madam :

Further to your application for the renewal of an operating permit dated September 10, 2010, received on September 14, 2010, and completed last November 8, 2010, you are hereby being issued, under sections 70.11 and 70.14 of the Environment Quality Act (R.S.Q., chapter Q-2), an operating permit with regard to the following activity :

- Transport of residual hazardous materials covered by the Quebec regulation respecting hazardous materials and amending various regulatory provisions with the exception of the explosive residual hazardous materials and the radioactive residual hazardous materials.



**PERMIT**  
**(Sections 70.11 and 70.14)**

---

-2-

Our file : 7610-06-01-01765-10  
400765873

The place of storage of the transport vehicles is located at :

There is no place of storage in Quebec

The valid term of the operating permit is of 5 years as of the date of this document.

Furthermore, this permit does not relieve the holder of the obligation to obtain any other authorisation required by law or regulation, where applicable.

For the Minister,

PR/IL/sc

Pierre Robert  
Directeur régional de l'analyse  
et de l'expertise de Montréal,  
Laval, Lanaudière et Laurentides



State of New Jersey  
Department of Environmental Protection  
Solid Waste and Pesticides Enforcement  
9 Ewing Street, Mail Code 09-01  
PO Box 420  
Trenton, NJ 08625-0420  
(609) 292-7081

**LICENSED SOLID WASTE**

*NUDEP Registered Transporter:*

**FREEHOLD CARTAGE INC  
PO BOX 5010  
EAST FREEHOLD, NJ 07728**

607

NUDEP Transporter Vehicle Registration Card

Expiration Date: 6/30/2015  
Decal Number: SWL-15-001620  
Vin ID#: INPFLU0X3VN440853 NJ  
License Plate #: AA394E  
Vehicle Type: Single Unit Vehicle  
Vehicle leased?: Y  
If Yes, lessor's name:  
FCI TRANSPORT INC  
NUDEP Registered Transporter:  
FREEHOLD CARTAGE INC  
NUDEP #: 15939

This card must be carried in the cab of the vehicle at all times.  
This registration card & decal are valid for use only by the listed registrant.  
Leased equipment can only be used to transport waste by the listed registrant.

NUDEP Transporter Vehicle Registration Card

STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOLID WASTE TRANSPORTER

**A-901 LICENSED**

**01620**

**EXPIRES JUNE 30, 2015**



Let's protect our earth  
State of New Jersey  
Department of Environmental Protection  
Solid Waste and Pesticides Enforcement  
9 Ewing Street, Mail Code 09-01  
PO Box 420  
TRENTON, NJ 08646-0420  
LICENSED TRANSPORTER  
(609) 292-7081

NJDEP Registered Transporter:

FREEHOLD CARTAGE INC  
PO BOX 5010  
EAST FREEHOLD, NJ 07728

607

Decal Number: HWL-15-402151  
Vin ID#: INPFLU0X3VN440853 NJ

License Plate #: AA394E

Vehicle Type: Cab

Vehicle leased?: Y

If Yes, lessor's name:

FCI TRANSPORT INC

NJDEP Registered Transporter:

FREEHOLD CARTAGE INC

NJDEP #: 02265

This card must be carried in the cab of the vehicle at all times.  
This registration card & decal are valid for use only by the listed registrant.  
Leased equipment can only be used to transport waste by the listed registrant.

STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
HAZARDOUS WASTE TRANSPORTER  
A-901 LICENSED

402151

EXPIRES JUNE 30, 2015



## **APPENDIX E: WASTE MANIFESTS**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------|-------------------|
| <b>UNIFORM HAZARDOUS WASTE MANIFEST</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                        | 1. Generator ID Number<br><b>NYD106835143</b>                                                                  | 2. Page 1 of<br><b>1</b>                                                        | 3. Emergency Response Phone<br><b>(631) 586-5900</b>         | 4. Manifest Tracking Number<br><b>013394405 JJK</b> |                   |
| 5. Generator's Name and Mailing Address<br><b>Levey Property</b><br><b>1305 South Strong Avenue Copiague NY 11726</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 | Generator's Site Address (if different than mailing address) |                                                     |                   |
| Generator's Phone: <b>(631) 586-5900</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| 6. Transporter 1 Company Name<br><b>Freehold Cartage, Inc.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 | U.S. EPA ID Number<br><b>NYD054126164</b>                    |                                                     |                   |
| 7. Transporter 2 Company Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 | U.S. EPA ID Number                                           |                                                     |                   |
| 8. Designated Facility Name and Site Address<br><b>EnGlobe Corp.</b><br><b>8365 Avenue Broadway Nord, Montreal-East, Quebec, H1B 5X7</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 | U.S. EPA ID Number<br><b>1167280206</b>                      |                                                     |                   |
| Facility's Phone: <b>514 644-1405</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| GENERATOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9a. HM                                                                                                                                                                                                                                                 | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers                                                                  |                                                              | 11. Total Quantity                                  | 12. Unit Wt./Vol. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                        |                                                                                                                | No.                                                                             | Type                                                         |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>X</b>                                                                                                                                                                                                                                               | <b>1. UN3077, RQ, Waste Environmentally hazardous substances, Solid, n.o.s. 9, PGIII (Tetrachloroethylene)</b> | <b>001</b>                                                                      | <b>CM</b>                                                    | <b>EST. 4,100</b>                                   | <b>K</b>          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                        | <b>2.</b>                                                                                                      |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                        | <b>3.</b>                                                                                                      |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                        | <b>4.</b>                                                                                                      |                                                                                 |                                                              |                                                     |                   |
| 13. Waste Codes<br><b>F002 D039 D040</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| 14. Special Handling Instructions and Additional Information<br><b>Innovative Recycling Technologies, Inc. acting as intermediary arranging for export. Soil contaminated with tetrachloroethylene.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| Generator's/Officer's Printed/Typed Name<br><b>As Agent for NYSDOC Police Department</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                        | Signature<br><i>[Signature]</i>                                                                                |                                                                                 | Month Day Year<br><b>1 6 15</b>                              |                                                     |                   |
| TRANSPORTER INTL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 16. International Shipments<br><input type="checkbox"/> Import to U.S. <input checked="" type="checkbox"/> Export from U.S.                                                                                                                            |                                                                                                                | Port of entry/exit: <b>Rouses Point, NY</b><br>Date leaving U.S.: <b>1-7-15</b> |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Transporter signature (for exports only): <i>[Signature]</i>                                                                                                                                                                                           |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| TRANSPORTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 17. Transporter Acknowledgment of Receipt of Materials                                                                                                                                                                                                 |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Transporter 1 Printed/Typed Name<br><b>ROBERT SMITH</b>                                                                                                                                                                                                | Signature<br><i>[Signature]</i>                                                                                | Month Day Year<br><b>1 6 15</b>                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Transporter 2 Printed/Typed Name                                                                                                                                                                                                                       |                                                                                                                | Signature<br><i>[Signature]</i>                                                 |                                                              |                                                     |                   |
| DESIGNATED FACILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 18. Discrepancy                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 18a. Discrepancy Indication Space<br><input checked="" type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection<br><b>12520 KG</b> |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Manifest Reference Number: <b>P-1205</b>                                                                                                                                                                                                               |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 18b. Alternate Facility (or Generator) U.S. EPA ID Number                                                                                                                                                                                              |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Facility's Phone:                                                                                                                                                                                                                                      |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 18c. Signature of Alternate Facility (or Generator)                                                                                                                                                                                                    |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Month Day Year                                                                                                                                                                                                                                         |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                        | 2.                                                                                                             |                                                                                 | 3.                                                           |                                                     | 4.                |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                        |                                                                                                                |                                                                                 |                                                              |                                                     |                   |
| Printed/Typed Name<br><b>WILLIE LOBS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                        | Signature<br><i>[Signature]</i>                                                                                |                                                                                 | Month Day Year<br><b>1 6 15</b>                              |                                                     |                   |

**SOLUTION**

CENTRE DE TRAITEMENT DE SOL

Centre de traitement de sol / Soil Treatment Facility  
8365, Broadway Nord, Montréal (Québec) H1B 5X7**SOLUTION**

SOIL TREATMENT FACILITY

P-15

7265

N° d'autorisation / Authorization No.: M/1242

Plage de contamination / Contamination level:

☐ AB ☐ BC ☐ >C ☒ >RESC (>D)☐ à caractériser / sampling on arrival (n° échantillon / sample ID): \_\_\_\_\_☐ Autres / Other: \_\_\_\_\_Transporteur / Carrier: Freehold Cartage inc.

Immatriculation / Truck ID: \_\_\_\_\_



Signature du conducteur / Driver's signature



Acceptation des sols / Soil acceptance

Remarques / Remarks:

S012-2452 A#5 (10-12)  
Sable limon  
Holopneux

Vente de sable / Sand purchase:

Classe / Class

☐ A☐ B

Autres / Other: \_\_\_\_\_

Pesée / Weighing:

ID 162719  
GROSS 28640 kgID 162719  
GROSS 28640 kg

TARE 16120 kg

NET 12520 kg

962/862-3  
01394455JR

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------|-----------------------------------------------------|-----------------------------------|---------------------------------|--|
| <b>UNIFORM HAZARDOUS WASTE MANIFEST</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                | 1. Generator ID Number<br><b>NYD106835143</b>                                                                  | 2. Page 1 of<br><b>1</b> | 3. Emergency Response Phone<br><b>(631) 586-5900</b>         | 4. Manifest Tracking Number<br><b>013394404 JJK</b> |                                   |                                 |  |
| 5. Generator's Name and Mailing Address<br><b>Levey Property</b><br><b>1305 South Strong Avenue Copiague NY 11726</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          | Generator's Site Address (if different than mailing address) |                                                     |                                   |                                 |  |
| Generator's Phone: <b>(631) 586-5900</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| 6. Transporter 1 Company Name<br><b>Freehold Cartage, Inc.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          | U.S. EPA ID Number<br><b>NJD054126164</b>                    |                                                     |                                   |                                 |  |
| 7. Transporter 2 Company Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          | U.S. EPA ID Number                                           |                                                     |                                   |                                 |  |
| 8. Designated Facility Name and Site Address<br><b>EnGlobe Corp.</b><br><b>8365 Avenue Broadway Nord, Montreal-East, Quebec, H1B 5X7</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          | U.S. EPA ID Number<br><b>1167280206</b>                      |                                                     |                                   |                                 |  |
| Facility's Phone: <b>514 644-1405</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| GENERATOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 9a. HM                                                                                                                                                                                                                                                                                         | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers           |                                                              | 11. Total Quantity                                  | 12. Unit Wt./Vol.                 | 13. Waste Codes                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                |                                                                                                                | No.                      | Type                                                         |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>X</b>                                                                                                                                                                                                                                                                                       | <b>1. UN3077, RQ, Waste Environmentally hazardous substances, Solid, n.o.s. 9, PGIII (Tetrachloroethylene)</b> | <b>001</b>               | <b>CM</b><br><b>DI</b>                                       | <b>EST. @</b><br><b>4,100</b><br><b>24,000</b>      | <b>@</b><br><b>PK</b>             | <b>F002 D039 D040</b>           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                | <b>2.</b>                                                                                                      |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                | <b>3.</b>                                                                                                      |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                | <b>4.</b>                                                                                                      |                          |                                                              |                                                     |                                   |                                 |  |
| 14. Special Handling Instructions and Additional Information<br><br><b>Innovative Recycling Technologies, Inc. acting as intermediary arranging for export. Soil contaminated with tetrachloroethylene.</b><br><br><b>Box # 1718</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.<br>I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| Generator's/Officer's Printed/Typed Name<br><b>AS Agent for NYSDEC Pk-Land</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          | Signature<br>                                                |                                                     | Month Day Year<br><b>1 5 15</b>   |                                 |  |
| INT'L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16. International Shipments<br><input checked="" type="checkbox"/> Import to U.S. <input checked="" type="checkbox"/> Export from U.S. Port of entry/exit: <b>Rouses Point, NY</b><br>Transporter signature (for exports only):  Date leaving U.S.: <b>1-5-15</b>                              |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 17. Transporter Acknowledgment of Receipt of Materials                                                                                                                                                                                                                                         |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Transporter 1 Printed/Typed Name<br><b>Timothy B Conklin</b>                                                                                                                                                                                                                                   |                                                                                                                |                          |                                                              | Signature<br>                                       |                                   | Month Day Year<br><b>1 5 15</b> |  |
| TRANSPORTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Transporter 2 Printed/Typed Name                                                                                                                                                                                                                                                               |                                                                                                                |                          |                                                              | Signature                                           |                                   | Month Day Year                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 18. Discrepancy                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 18a. Discrepancy Indication Space<br><input checked="" type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection<br><b>5720 KG</b> Manifest Reference Number: <b>P-7264</b> |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| DESIGNATED FACILITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 18b. Alternate Facility (or Generator)<br><br>U.S. EPA ID Number                                                                                                                                                                                                                               |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Facility's Phone:                                                                                                                                                                                                                                                                              |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 18c. Signature of Alternate Facility (or Generator)<br><br>Month Day Year                                                                                                                                                                                                                      |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                | 2.                                                                                                             |                          | 3.                                                           |                                                     | 4.                                |                                 |  |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item #8a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          |                                                              |                                                     |                                   |                                 |  |
| Printed/Typed Name<br><b>KARINE DEBE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                |                                                                                                                |                          | Signature<br>                                                |                                                     | Month Day Year<br><b>01 06 14</b> |                                 |  |



**SOLUTION**

CENTRE DE TRAITEMENT DE SOL

Centre de traitement de sol / Soil Treatment Facility  
8365, Broadway Nord, Montréal (Québec) H1B 5X7**SOLUTION**

SOIL TREATMENT FACILITY

P- 7264

N° d'autorisation / Authorization No.: M11742

Plage de contamination / Contamination level:

☐ AB ☐ BC ☒ >C ☐ >RESC (>D)☐ à caractériser / sampling on arrival (n° échantillon / sample ID): \_\_\_\_\_☐ Autres / Other: \_\_\_\_\_Transporteur / Carrier: Freehold Cartage

Immatriculation / Truck ID: \_\_\_\_\_

[Signature]  
Signature du conducteur / Driver's signature[Signature]  
Acceptation des sols / Soil acceptance

Remarques / Remarks:

Sol 2-2452 AH#5 10A  
Sable limoneux  
Polyphène UK

Vente de sable / Sand purchase:

Classe / Class

☐ A☐ B

Autres / Other: \_\_\_\_\_

Pesée / Weighing:

ID 167678.  
GROSS 22870 kgID 167678.  
GROSS 22870 kgTARE 17120 kg  
NET 5750 kg962/861-5  
013394404/JJK





## **APPENDIX F: DISPOSAL FACILITY CERTIFICATES OF AUTHORIZATION (Solution EAS)**

Montréal, October 1, 1997

## CERTIFICATE OF AUTHORIZATION

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Solution Eau Air Sol (EAS) inc.  
350, rue Franquet  
Sainte-Foy (Québec) G1P 4P3

N/Réf. : 7610-06-01-0158418  
1150957

Subject: Biotreatment of contaminated soils by PCP

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Dear Sirs,

Following your request for certificate of authorization dated on March 28, 1997, received on March 28, 1997 and completed on September 26, 1997, I hereby authorize, in accordance with section 22 of the Environment Quality Act, the holder above mentioned to carry out the project describes below :

Biotreatment of soils contaminated by PCP

The project will be realized on the lot 244 of the official land register of the parish of Pointe-aux-Trembles at Montréal-Est on the territory of the Communauté urbaine de Montréal. The lot is situated in the civil number 8365, of the Broadway Nord street.



# CERTIFICATE OF AUTHORIZATION

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-2-

N/Réf. : 7610-06-01-0158418  
1150957

October 1, 1997

The following documents form integral part of this modification:

- Letter to Robert Brisebois, dated on April 29, 1997, signed by André Carange ;
- Letter to Guylaine Pépin, dated on March 18, 1996 and signed by Luc Dussault;
- Letter to Guylaine Pépin, dated on April 15, 1996 and signed by Luc Dussault;
- Report entitled « Biotraitement de sols contaminés par des agents organiques servant à la préservation du bois » prepared by the firm Solution Eau Air Sol (EAS) Inc, dated on May 1995.

In the event of divergence between these documents, the information contained with the most recent document will prevail.

The project will have to be carried out in accordance with these documents.

Furthermore, this certificate of authorization does not relieve the holder of the obligation to obtain any other authorization required by law or regulation, where applicable.

For the Minister,

Daniel Leblanc, ing.  
Directeur régional  
de Montréal

|                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|
| If there is a difference between the French original version and the English translation, the French version has precedence. |
|------------------------------------------------------------------------------------------------------------------------------|



Montréal, July 8, 1993 -

## CERTIFICATE OF AUTHORIZATION

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Solution Eau Air Sol (EAS) inc.  
12 698, boulevard Industriel  
Montréal (Québec) H1A 3V2

N/Réf. : 7610-06-01-0158410  
1075774

Subject: Construction and exploitation of a recycling center of soils  
containing light hydrocarbons

---

Dear Sirs,

Following your request for certificate of authorization received on Mai 14, 1993 and completed on June 30, 1993, I hereby authorize, in accordance with section 22 of the Environment Quality Act, the holder above mentioned to carry out the project describes below :

- Construction of a treatment surface for contaminated soils of a capacity of 2 500 cubic meter;
- Exploitation of the surface of treatment

The installations are located on lot 244 of the official land register of the parish of Pointe-aux-Trembles at Montréal-Est on the territory of the Communauté urbaine de Montréal.



# CERTIFICATE OF AUTHORIZATION

-2-

N/Réf. : 7610-06-01-0158410  
1075774

July 8, 1993

The request for certificate of authorization and the documents following form integral part of this certificate of authorization:

| TYPE OF DOCUMENT                                                                                                                                         | DATES         | SIGNATORY      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|
| Letter in Kathleen Carrière                                                                                                                              | May 13, 1993  | Benoit Cyr     |
| Lettre in Robert Brisebois                                                                                                                               | June 1, 1993  | Benoit Cyr     |
| Lettre in Robert Brisebois                                                                                                                               | June 7 1993   | J.L.Sansregret |
| Letter in Robert Brisebois                                                                                                                               | June 25, 1993 | Benoit Cyr     |
| Report: Implantation d'une station de biotraitement de sols contenant des hydrocarbures légers à Montréal-Est - Request for certificate of authorization | May 1993      | Solution Inc   |

The project will have to be carried out and exploited in accordance with this request for certificate and documents.

The authorized activity and work can be undertaken as from the date of present.

Furthermore, this certificate of authorization does not relieve the holder of the obligation to obtain any other authorization required by law or regulation, where applicable.

For the Minister,

Kathleen Carrière  
Directrice régionale  
de Montréal et de Lanaudière

If there is a difference between the French original version and the English translation, the French version has precedence.

Montréal, October 17 2002

## MODIFICATION

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Solution Eau Air Sol (EAS) inc.  
350, rue Franquet  
Sainte-Foy (Québec) G1P 4P3

N/Réf. : 7610-06-01-0158410  
400053501

Subject: Construction and exploitation of a center of recycling of soils  
containing of light hydrocarbons

---

Dear Sirs,

The present modification relates to the certificate of authorization delivered on July 8, 1993 (7610-06-01-0158410 061075774) under the terms of section 22 of the Environment Quality Act, with regard to the project describes below:

- Construction of a treatment surface for contaminated soils of a capacity of 2 500 cubic meter;
- Exploitation of the surface of treatment

The installations are located on lot 244 of the official land register of the parish of Pointe-aux-Trembles at Montréal-Est on the territory of the Communauté urbaine de Montréal.

Following your request dated on October 10, 2002, received on October 15, 2002 and duly supplemented, I authorize, in accordance with section 122.2 of the aforementioned law, the following modifications:

To modify the profile of the floor of the treatment surfaces #1 and #2 of the biological treatment center of the contaminated soils.



## MODIFICATION

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-2-

N/Réf. : 7610-06-01-0158410  
400053501

October 17, 2002

The following documents form integral part of this modification:

- Letter to ministère de l'Environnement dated on October 10, 2002 and signed by Jean-Luc Sansregret, v.-p., constituting the request for modification of a certificate of authorization, 1 page and appendices;
- Plan SOL2-10-CA01, Revision 1, heading « Détails de bourrelet et de voirie Type 1 – Aires AT-01, AT-02, AT-03, AT-04 et AT-05 », signed and sealed by Andre Carange, ing. and Stephan Richard, ing., of the firm Solution Eau Air Sol (EAS) inc, October 7, 2002

In the event of divergence between these documents, the information contained with the most recent document will prevail.

The modification will have to be carried out in accordance with these documents.

Moreover, the aforementioned modification of certificate of authorization does not exempt to you to obtain any other authorization required by any law or any payment if necessary.

For the Minister,

Jean Rivet  
Directeur régional  
de Montréal

|                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|
| If there is a difference between the French original version and the English translation, the French version has precedence. |
|------------------------------------------------------------------------------------------------------------------------------|



Montréal, July 25, 2003

## MODIFICATION

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Solution Eau Air Sol (EAS) inc.  
350, rue Franquet  
Sainte-Foy (Québec) G1P 4P3

N/Réf. : 7610-06-01-0158410  
400097128

Subject: Construction and exploitation of a recycling center of soils  
containing of light hydrocarbons

---

Dear Sirs,

The present modification respectively relates to the certificate of authorization delivered on 8 July 1993 (7610-06-01-0158410 061075774) and modified on October 17, 2002 (7610-06-01-0158420 400053501) under the terms of sections 22 and 122.2 of the Environment Quality Act, with regard to the project describes below:

To modify the profile of the floor of the treatment surfaces #1 and #2 of the biological treatment center of the contaminated soils.

Following your request dated on June 25, 2003, received on July 7, 2003 and duly supplemented on July 22, 2003, I authorize, in accordance with section 122.2 of the aforementioned law, following modification:

To allow the use of the surfaces treatment #1 and #2 for storage or treatment of contaminated soils and to integrate this mode of management into the whole of the treatment surfaces of the treatment center. The treatment surfaces can be used as surface of storage at a rate of 40 % of the total volume which is 29 800 m<sup>3</sup>. The whole will be carried out on a part of lots 1 250 930, 1 508 791, 2 209 893 and 2 209 894 of the land register of Quebec of the district of Rivière-des-Prairies / Pointe-aux-Tremble / Montréal-Est of the town of Montréal.



## MODIFICATION

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-2-

N/Réf. : 7610-06-01-0158410  
400097128

July 25, 2003

The following documents form integral part of this modification:

- Letter to ministère de l'Environnement dated on June 25, 2003 and signed by Martin Plants, ing., constituting the request for modification of a certificate of authorization, 1 page and appendices;
- Letter to ministère de l'Environnement dated on July 22, 2003 and signed by Martin Plante, ing., concerning the request for modification of a certificate of authorization, 1 page and appendices.

In the event of divergence between these documents, the information contained with the most recent document will prevail.

The modification will have to be carried out in accordance with these documents.

Moreover, the aforementioned modification of certificate of authorization does not exempt to you to obtain any other authorization required by any law or any payment if necessary.

For the Minister

Jean Rivet  
Directeur régional  
de Montréal

|                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|
| If there is a difference between the French original version and the English translation, the French version has precedence. |
|------------------------------------------------------------------------------------------------------------------------------|

Montréal, le 20 mai 2005

**MODIFICATION**

Solution Eau Air Sol (EAS) inc.  
350, rue Franquet  
Sainte-Foy (Québec) G1P 4P3

N/Réf. : 7610-06-01-0158411  
400214954

Objet : Agrandissement du centre de recyclage de sols contenant  
des hydrocarbures légers et traitement de sols contaminés  
par des huiles de transformateur

Mesdames,  
Messieurs,

La présente modification concerne le certificat d'autorisation délivré le 6 juin 1994 et modifié les 17 octobre 2002 et 25 juillet 2003 en vertu respectivement des articles 22 et 122.2 de la Loi sur la qualité de l'environnement (L.R.Q., chapitre Q-2), à l'égard du projet décrit ci-dessous :

- Ajout d'une aire de traitement d'une capacité de 2 000 mètres cubes.
- Traitement de sols contaminés par les huiles de transformateur.
- Modifier le profil du plancher de l'aire de traitement #3 du centre de traitement biologique des sols contaminés.
- Diminuer la capacité de l'aire de traitement à 2 550 m<sup>3</sup> et permettre l'utilisation de l'aire de traitement #3 à des fins d'entreposage ou de traitement des sols contaminés et intégrer ce mode de gestion à l'ensemble des aires du centre de traitement. Les aires de traitement peuvent servir d'aire d'entreposage à raison de 40 % du volume total qui est de 1 250 930, 1 508 791, 2 209 893, et 2 209 894 du cadastre du Québec de l'arrondissement de Rivière-des-Prairies—Pointe-aux-Tremble—Montréal-Est de la Ville de Montréal.



## MODIFICATION

- 2 -

N/Réf. : 7610-06-01-0158411  
400214954

Le 20 mai 2005

À la suite de votre demande datée du 18 mars 2005, reçue le même jour et dûment complétée le 2 mai 2005, j'autorise, conformément à l'article 122.2 de ladite loi, la modification suivante :

- Permettre la réception de sols ayant une contamination mixte, soit des huiles de transformateur et des métaux et métalloïdes dont la concentration est supérieure à l'annexe II du Règlement sur la protection et la réhabilitation des terrains.

Les documents suivants font partie intégrante de la présente modification :

- Lettre au ministère du Développement durable, de l'Environnement et des Parcs datée du 18 mars 2005 et signée par Martin Plante, ing. constituant la demande de modification d'un certificat d'autorisation, une page;
- Envoi par courriel au ministère du Développement durable, de l'Environnement et des Parcs daté du 18 mars 2005 et signé par Danny Gagné, concernant la demande de modification d'un certificat d'autorisation, une page et annexes;
- Lettre au ministère du Développement durable, de l'Environnement et des Parcs datée du 28 avril 2005 et signée par Danny Gagné, concernant la demande de modification d'un certificat d'autorisation, deux pages.

En cas de divergence entre ces documents, l'information contenue au document le plus récent prévaudra.

La modification devra être réalisée conformément à ces documents.

En outre, ladite modification de certificat d'autorisation ne vous dispense pas d'obtenir toute autre autorisation requise par toute loi ou tout règlement le cas échéant.

Pour le ministre,



Jean Rivet  
Directeur régional de l'analyse et de  
l'expertise de Montréal, Laval,  
Lanaudière et Laurentides

JR/HT/md



Montréal, July 14, 1995

## **CERTIFICATE OF AUTHORIZATION**

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Solution Eau Air Sol (EAS) inc.  
12 698, boulevard Industriel  
Montréal (Québec) H1A 3V2

N/Réf. : 7610-06-01-0158412  
1095874

Subject: Addition of the used oils to the list of the contaminants which  
can be present in the acceptable soils at the treatment center of  
contaminated soils

---

Dear Sirs,

Following your request for certificate of authorization dated on October 25, 1994, received on October 27, 1994 and completed on Novembre 17, 1994, I hereby authorize, in accordance with section 22 of the Environment Quality Act, the holder above mentioned to carry out the project describes below :

Traitement of contaminated soils by used oils on the lot 244 of the official land register of the parish of Pointe-aux-Trembles at Montréal-Est on the territory of the Communauté urbaine de Montréal.



# CERTIFICATE OF AUTHORIZATION

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-2-

N/Réf. : 7610-06-01-0158412  
1095874

July 14, 1995

The request for certificate of authorization and the documents following form integral part of this certificate of authorization:

- Letter to Robert Brisebois, dated on October 25, 1994 and signed by Luc Dussault;
- Letter to Pierre Robert, dated on November 17, 1994 and signed by Benoit Cyr;
- Report entitled « Agrandissement de la station et biotraitement de sols contenant des huiles usées » prepared by the firm Solution Eau Air Sol (EAS) Inc, dated on January 1994.

In the event of divergence between these documents, the information contained with the most recent document will prevail.

The project must be carried out and operated in accordance with these documents.

Furthermore, this certificate of authorization does not relieve the holder of the obligation to obtain any other authorization required by law or regulation, where applicable.

For the Minister,

Robert Tétreault, ing.  
Directeur régional  
de Montréal et de Lanaudière

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| If there is a difference between the French original version and the English translation, the French version has precedence. |
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Montréal, April 29, 1996

## CERTIFICATE OF AUTHORIZATION

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Solution Eau Air Sol (EAS) inc.  
12 698, boulevard Industriel  
Montréal (Québec) H1A 3V2

N/Réf. : 7610-06-01-0158416  
1094571

Subject: Biotreatment of contaminated soils by polycyclic aromatic hydrocarbons (HAP)

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Dear Sirs,

Following your request for certificate of authorization dated on March 18, 1996, received on March 22, 1996 and completed on April 16, 1996, I hereby authorize, in accordance with section 22 of the Environment Quality Act, the holder above mentioned to carry out the project describes below :

Biotreatment of contaminated soils by polycyclic aromatic hydrocarbons (HAP) on the lot 244 of the official land register of the parish of Pointe-aux-Trembles at Montréal-Est on the territory of the Communauté urbaine de Montréal.



# CERTIFICATE OF AUTHORIZATION

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-2-

N/Réf. : 7610-06-01-0158416  
1094571

April 29, 1996

The following documents form integral part of this modification:

- Letter to Robert Brisebois, dated on October 20, 1995 and signed by Luc Dussault;
- Letter to Guylaine Pépin, dated on March 18, 1996 and signed by Luc Dussault;
- Letter to Guylaine Pépin, dated on April 15, 1996 and signed by Luc Dussault;
- Report entitled « Biotraitement de sols contaminés par des agents organiques servant à la préservation du bois » prepared by the firm Solution Eau Air Sol (EAS) Inc, dated on May 1995.

In the event of divergence between these documents, the information contained with the most recent document will prevail.

The project must be carried out and operated in accordance with these documents.

Furthermore, this certificate of authorization does not relieve the holder of the obligation to obtain any other authorization required by law or regulation, where applicable..

For the Minister,

Robert Tétreault, ing.  
Directeur régional  
de Montréal

If there is a difference between the French original version and the English translation, the French version has precedence.



Montréal, June 13, 2003

## MODIFICATION

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Solution Eau Air Sol (EAS) inc.  
350, rue Franquet  
Sainte-Foy (Québec) G1P 4P3

N/Réf. : 7610-06-01-0158422  
400084361

Subject : Biological treatment of the « Chlorinated aliphatic volatile,  
organic compounds »

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Dear Sirs,

The present modification relates to the certificate of authorization delivered on January 31, 2002 (7610-06-01-0158422 060006933) under the terms of section 22 of the Environment Quality Act, with regard to the project describes below:

To treat biologically the 29 substances mentioned under the section « Chlorinated aliphatic volatile, organic compounds » of Schedule I of the Regulation respecting the burial of contaminated soils in the biological treatment center located on a part of the lots 1 250 930 and 2 209 893 of the official cadastral designation of Quebec of the Town of Montréal (district Rivière-des-Prairies/Pointe-aux-Trembles/Montréal-Est) on the territory of the Communauté Métropolitaine de Montréal

Following your request dated on May 15, on 2003 and received on May 16, 2003, I authorize, in accordance with section 122.2 of the aforementioned law, the following modifications:

To add chlorobenzenes to the list of the substances being able to be treated at the biological treatment center of the contaminated soils of the holder.



## MODIFICATION

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- 2 -

N/Réf. : 7610-06-01-0158422  
400084361

June 13, 2003

The following documents form integral part of this modification :

- Letter to ministère de l'Environnement, dated on May 15, 2003, signed by Jean-Luc Sansregret, constituting the request for modification of the certificate of authorization delivered on January 31, 2002, 2 pages;
- Report entitled « Traitement biologique des sols contaminés par des chlorobenzènes au Centre Solution Eau Air Sol (EAS) inc. de Montréal » prepared by the firm Biogénie, March 2003, 15 pages and appendix.

In the event of discrepancy between these documents, the information contained in the most recent document shall prevail.

The project must be carried out and operated in accordance with these documents.

Furthermore, this modification does not relieve the holder of the obligation to obtain any other authorization required by law or regulation, where applicable.

For the minister,

Jean Rivet  
Directeur régional  
de Montréal

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| If there is a difference between the French original version and the English translation, the French version has precedence. |
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Montréal, January 31, 2002

## CERTIFICATE OF AUTHORIZATION

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Solution Eau Air Sol (EAS) inc.  
350, rue Franquet  
Sainte-Foy (Québec) G1P 4P3

N/Réf. : 7610-06-01-0158422  
060006933

Subject : Biological treatment of the « Chlorinated aliphatic volatile,  
organic compounds »

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Dear Sirs,

Following your request for certificate of authorization dated on May 24, 2001, received on May 29, 2001 and completed on January 18, 2002, I hereby authorize, in accordance with section 22 of the Environment Quality Act, the holder above mentioned to carry out the project describes below :

To treat biologically the 29 substances mentioned under the section « Chlorinated aliphatic volatile, organic compounds » of Schedule I of the Regulation respecting the burial of contaminated soils in the biological treatment center located on a part of the lots 1 250 930 and 2 209 893 of the official cadastral designation of Quebec of the Town of Montréal (district Rivière-des-Prairies/Pointe-aux-Trembles/Montréal-Est) on the territory of the Communauté Métropolitaine de Montréal.

The following documents form integral part of this certificate of authorization:

- Letter to ministère de l'Environnement dated on May 24, 2001, signed by Norman Légaré, constituting the request for certificate of authorization;



## CERTIFICATE OF AUTHORIZATION

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- 2 -

N/Réf. : 7610-06-01-0158422  
060006933

January 31, 2002

- Report entitled « Demande de certificat d'autorisation – Biotraitement des sols contaminés par les hydrocarbures aliphatiques chlorés (HHT) » prepared by the firm Solution Eau Air Sol (EAS) Inc, May 2001, 8 pages and appendices;
- Letter to ministère de l'Environnement, dated on September 19, 2001, signed by Norman Légaré, concerning a modification with the original request, 1 page;
- Letter to ministère de l'Environnement, dated on November 1, 2001, signed by Norman Légaré, concerning a modification with the original request, 1 page.
- Letter to ministère de l'Environnement, dated on January 17, 2002, signed by Norman Légaré, concerning a modification with the original request, 1 page.

In the event of divergence between these documents, the information contained with the most recent document will prevail.

In the event of discrepancy between these documents, the information contained in the most recent document shall prevail.

The project must be carried out and operated in accordance with these documents.

Furthermore, this certificate of authorization does not relieve the holder of the obligation to obtain any other authorization required by law or regulation, where applicable.

For the Minister,

Gérard Cusson  
Directeur régional  
de Montréal par intérim

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| If there is a difference between the French original version and the English translation, the French version has precedence. |
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Montreal, March 15, 2006

Ref.: 7610-06-01-0158422  
400293712

**AMENDMENT**

Solution Eau Air Sol (EAS) inc.  
350 rue Franquet  
Sainte-Foy, Quebec  
G1P 4P3

Dear Sir/Madam:

Subject: Biological treatment of chlorinated aliphatic volatile organic compounds

This amendment applies to the certificate of authorization issued on January 31, 2002, as amended on June 13, 2003 and May 20, 2005, pursuant to Sections 22 and 122.2 of the *Environment Quality Act* (R.S.Q., ch. Q-2), regarding the following project:

Biological treatment of the 29 substances identified under "Chlorinated aliphatic volatile organic compounds" in Schedule I of the *Regulation Respecting the Burial of Contaminated Soils*, at the biological treatment facility located on parts of Lots 1 250 930 and 2 209 893 of the Quebec official cadastre of the City of Montreal (Rivière-des-Prairies/Pointe-aux-Trembles registration division), within the territory of the Montreal Metropolitan Community.

Further to your application dated November 10, 2005, and received on November 11, 2005, and duly completed on March 9, 2006, I hereby authorize the following amendment, pursuant to Section 122.2 of the Act:

Addition of ethylene glycol to the list of substances that may be treated at the holder's biological treatment facility for contaminated soils, located on parts of Lots 1 250 930, 1 508 791, 2 209 893 and 2 209 894 of the Quebec cadastre of Montréal-Est.

The following documents form an integral part of this amendment:

- Letter to the Ministère *du Développement durable, de l'Environnement et des Parcs*, dated November 10, 2005, and signed by Olivier Sylvestre, containing the amendment application (2 pages);
- Letter to the *Ministère du Développement durable, de l'Environnement et des Parcs*, dated March 8, 2006, and signed by Olivier Sylvestre, regarding the amendment application (1 page);
- Report entitled *Traitement biologique des sols contaminés par de l'éthylène glycol*, prepared by Olivier Sylvestre in September 2005 (10 pages and appendices).

In the event of any discrepancies between the original French version and the English translation, the information contained in the French version will prevail.

The amendment shall be carried out in accordance with these documents.

In addition, this amendment to the certificate of authorization does not relieve you of your responsibility to obtain any additional authorization that may be required by law or regulation.

Yours truly,

Hélène Tremblay  
Acting Regional Director of Analysis and Expertise  
for the Montreal, Laval, Lanaudière and Laurentides Regions,  
on behalf of the Minister

# Hazardous Waste Treatment Services

## Summary of Certificates of Authorization for

### SOLUTION Eau Air Sol (EAS) Inc. - Montreal, Quebec Facility



| Date | C of A Modification                                                                                                                        | C of A Number      | QMENV Contaminant Class <sup>1</sup>                                                                                   | Specific Contaminants <sup>1</sup>                                                   |
|------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1993 | Construction and operation of a soil recycling center (biological treatment and volatilization) for soils contaminated light hydrocarbons. | 7610-06-01-0158410 | Integrating Parameters (TPH)                                                                                           | Gasoline, Fuel Oil, Diesel, Crude Oil, etc.<br>C10 to C20                            |
| 1994 | Inclusion of soil contaminated with transformers oils to the authorized list of contaminants.                                              | 7610-06-01-0158411 | Integrating Parameters (TPH)                                                                                           | Transformer Oils<br>C10 to C50                                                       |
| 1995 | Inclusion of soil contaminated with used oils to the authorized list of contaminants.                                                      | 7510-06-01-0158412 | Integrating Parameters (TPH)                                                                                           | Used Oils<br>C10 – C30                                                               |
| 1996 | Inclusion of soil contaminated with all regulated PAH class compounds to the authorized list of contaminants.                              | 7610-06-01-0158416 | Polycyclic Aromatic Hydrocarbons                                                                                       | All 28 regulated PAH compounds                                                       |
| 1997 | Inclusion of soil contaminated with pentachlorophenol (PCP) to the authorized list of contaminants.                                        | 7610-06-01-0158418 | Phenolic Compounds<br><i>Non-chlorinated</i><br><i>Chlorinated</i>                                                     | Pentachlorophenol (PCP)<br>Chlorinated phenolics compounds<br>Cresols and phenol     |
| 2002 | Inclusion of soil contaminated with all regulated VOC class compounds to the authorized list of contaminants.                              | 7610-06-01-0158422 | Volatile Organic Compounds<br><i>Aromatic Monocyclic</i><br><i>Hydrocarbons</i><br><i>Aliphatic Hydrochlorocarbons</i> | All 9 regulated AMH compounds<br>All 15 regulated AH compounds.                      |
| 2003 | Inclusion of soil contaminated with all regulated chlorobenzene class compounds to the authorized list of contaminants.                    | 7610-06-01-0158422 | Chlorobenzenes                                                                                                         | All 12 regulated chlorobenzene compounds                                             |
| 2006 | Inclusion of soil contaminated with all regulated VOC class compounds to the authorized list of contaminants.                              | 7610-06-01-0158422 | Volatile Organic Compounds                                                                                             | Ethylene Glycol                                                                      |
| 2007 | Inclusion of soil contaminated with all chlorinated phenolic compounds, cresol family(ortho,meta,para) and phenol                          | 7610-06-01-0158418 | Chlorinated Phenolic Compounds<br>Cresol (ortho, meta, para)<br>Phenol                                                 | All 17 regulated chlorinated phenolic compounds, Cresol (Ortho, meta, para) , Phenol |

1. List of QMEV Regulated Compounds – QMEV Soil Protection and Contaminated Sites Rehabilitation Policy – Appendix 2/Generic Criteria for Soils and Groundwater; Table 1: Grid of Generic Criteria for Soils