

New York State Department of Environmental Remediation
 Division of Materials Management
 Inactive Landfill Initiative
 Field Activities Summary

Landfill Name: Westchester County Airport LF

Region: 3

SWID:

Date of Field Activities: 04/02-04/18; 4/19/18

Summary of Field Activities

Three monitoring wells, as proposed in the Site-specific Work Plan (Attachment 1) were installed and developed according to the Field Activities Plan (FAP) with no deviations. All three wells were sampled to assess impacts to drinking water sources and nearby receptors. Two additional surface water samples were also taken. Newly installed monitoring wells and surface water sampling locations are shown on Figure 1.

Monitoring Wells Installed

| Monitoring Well ID | Latitude | Longitude | Elevation | Well Development Date | Comments |
|---------------------------|-----------------|------------------|------------------|------------------------------|--|
| PAR-01 | 41.070784 | -73.711865 | 112.694 | 4/04/18 | Removed 5 well volumes, Turbidity dropped below 50 NTU |
| PAR-02 | 41.069989 | -73.713028 | 85.409 | 4/04/18 | Removed 5 well volumes, Turbidity dropped below 50 NTU |
| PAR-03 | 41.069736 | -73.712946 | 88.624 | 4/04/18 | Removed 5 well volumes, Turbidity dropped below 50 NTU |

Monitoring Wells Sampled

| Monitoring Well ID | Date | Sample Collected (yes/no) | Comments |
|--------------------|---------|---------------------------|--|
| PAR-01 | 4/19/18 | Yes | Sampled with peristaltic pump at 100-175 mL/min. Parameters stabilized during purge of 3.75 gallons. |
| PAR-02 | 4/19/18 | Yes | Sampled with peristaltic pump at 200 mL/min. Parameters stabilized during purge of 2 gallons. |
| PAR-03 | 4/19/18 | Yes | Sampled with peristaltic pump at 175 mL/min. Parameters stabilized during purge of 2 gallons. |

Other Samples

| Sample Location | Sample Type | Date | Comments |
|-----------------|---------------|---------|---|
| SW-01 | Surface water | 4/19/18 | Secured surface water samples using dedicated sampling media. Upgradient sample by the grate adjacent to the tarmac. |
| SW-02 | Surface water | 4/19/18 | Secured surface water samples using dedicated sampling media. Sample collected from the stream flowing under the roadway to the wetlands. |

Figures

| | |
|----------|--|
| Figure 1 | Sample Locations & Groundwater Flow Directions |
|----------|--|

Attachments

| | |
|--------------|---|
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| Attachment 2 | Boring and Well Construction Logs |
| Attachment 3 | Groundwater Sample Logs |
| Attachment 4 | Analytical Laboratory Level II Data Deliverable |

ATTACHMENT 1

Westchester County Airport Landfill Work Plan

ATTACHMENT 2

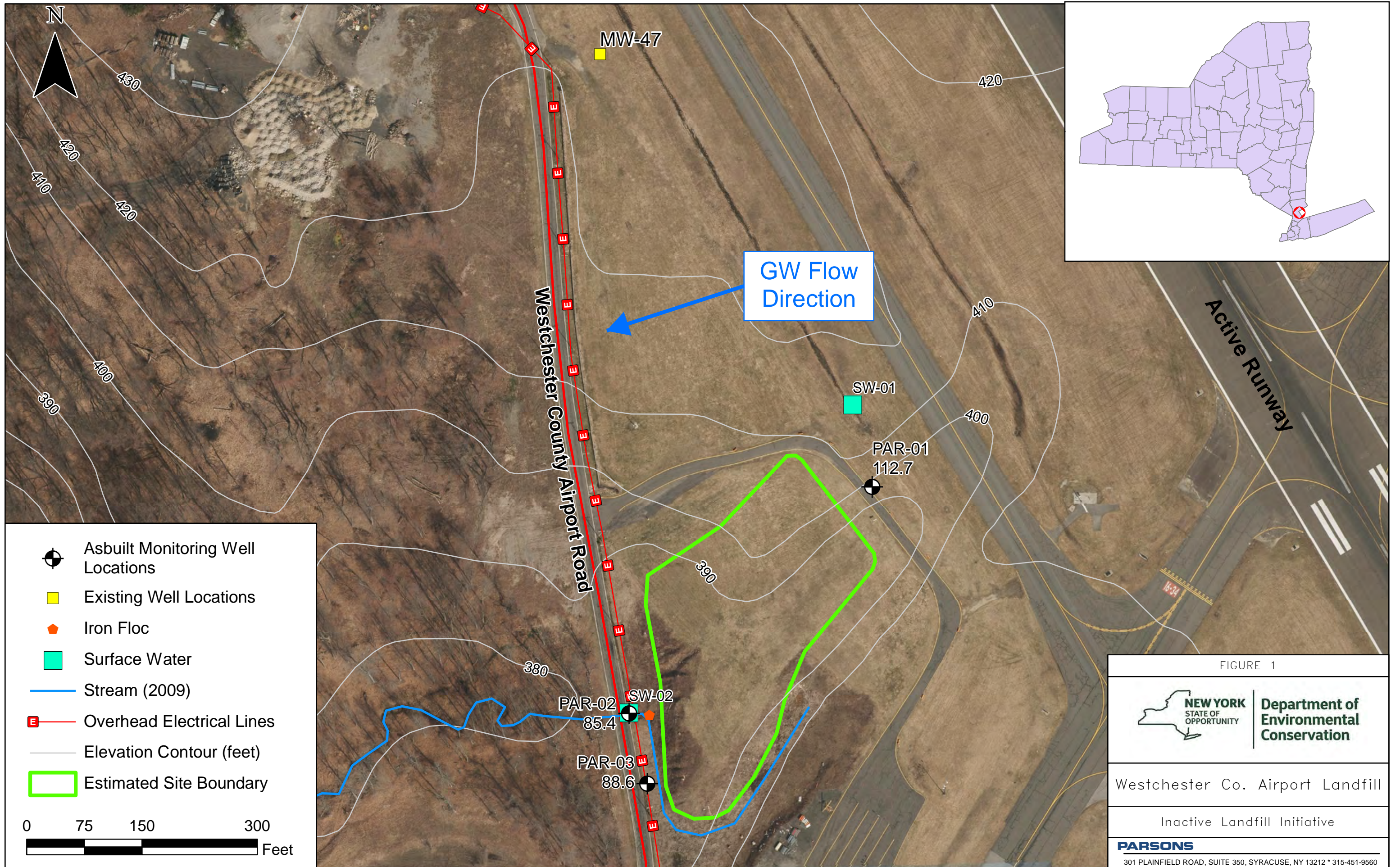
Soil Boring and Well Construction Logs

ATTACHMENT 3

Groundwater Sample Logs

ATTACHMENT 4

Analytical Laboratory Level II Data Deliverable



Plot Date: 7/31/2018 Created By: Sisson, Evan

FIGURE 1


NEW YORK
 STATE OF OPPORTUNITY

Department of Environmental Conservation

Westchester Co. Airport Landfill

Inactive Landfill Initiative

PARSONS

301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

ATTACHMENT 1

Westchester County Airport Landfill Work Plan

Site-Specific Work Plan for:

**HYDROGEOLOGIC INVESTIGATION
AT THE
WESTCHESTER COUNTY AIRPORT LANDFILL SITE
NYSDEC REGION 3 – WESTCHESTER COUNTY
WHITE PLAINS, NEW YORK**

Prepared For:



New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7012

Prepared By:

PARSONS

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**FEBRUARY 2018;
Revised APRIL 2018**

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**Site Specific Work Plan For
Hydrogeologic Investigation
At The Westchester Co. Airport Landfill Site**

1.0 PROJECT BACKGROUND

This hydrogeologic investigation is part of the New York State Department of Environmental Conservation's (NYSDEC's) Inactive Landfills Initiative. The objective of the Initiative is to assess inactive landfills in New York State for potential impacts to drinking water sources and other potential receptors.

2.0 PROJECT OBJECTIVES

The objective of this hydrogeological investigation is to supplement previous investigations, fill data gaps, and provide an assessment of the potential for impacts to groundwater and surface water in the immediate vicinity of the Westchester Co. Airport Landfill. This objective will be accomplished by installing three groundwater monitoring wells, sampling groundwater from the wells and analyzing the samples for a suite of potential organic and inorganic contaminants. The sample data will be evaluated to assess whether groundwater quality has been impacted by the landfill operations.

3.0 SITE SETTING

The landfill is located in Westchester County at 240 Airport Road, White Plains, New York. The airport is surrounded by residential areas/homes, educational institutions, sporting fields, and wetland areas.

Ongoing site investigations have been performed at properties near the Westchester Co. Airport Landfill (WCA) as recently as 2016. These investigations have consisted of groundwater and surface water sampling, iron floc sampling, test pit installation, and sediment sampling.

Field work will be conducted at the Westchester County Airport Landfill site as stated below and in conjunction with the provisions outlined by the County in a letter dated January 11, 2018 (See Attachment 1).

3.1 GROUNDWATER AND SURFACE WATER OCCURRENCE AND FLOW

Based on topographic maps and aerial images of the area the site appears to grade to the southwest. The closest body of water to the site is Rye Lake, located approximately 1,800 feet to the west. Rye Lake is hydraulically connected to the Kensico Reservoir; a New York City water source, as well as a collection point for all Catskill reservoirs.

Prior to landfilling operations, a stream ran through the site area and discharged through the downgradient wetlands and into Rye Lake. The stream bed was later filled-in with construction and demolition debris.

Review of publicly available soil and bedrock data indicates an overburden thickness of between 5 – 20 ft, with an estimated water depth of 1.5 – 2.0 ft (shallower in wetland areas). Overburden is primarily composed of fill material, udorthents, and sun loam soils.

Groundwater flow is presumed to be to the west-southwest based on topographic relief, proximity to surface water features, and data provided by the NYSDEC. Three monitoring wells are proposed for the site: one upgradient and two downgradient as shown on Figure 1. Two surface water samples will be collected to assess the impacts of the landfill on storm water

flowing through the site. An Iron Floc sample will be collected by NYSDEC and submitted to their contract laboratory for analysis.

4.0 HYDROGEOLOGICAL INVESTIGATION SCOPE OF WORK

Field activities will be conducted in accordance with the Quality Assurance Project Plan (QAPP), Field Activities Plan (FAP), and Health and Safety Plan (HASP), which have been prepared and approved specifically for the NYSDEC Inactive Landfill Initiative program. Site-specific elements and specific job safety analyses for soil borings, and monitoring well installations will be added to the Health and Safety Plan specifically for the Westchester County Airport Landfill site.

A Community Air Monitoring Plan will be implemented for real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the upwind and downwind perimeter of each designated work area during invasive activities on-site.

The specific field procedures to be used during this investigation are described in the FAP. That document describes the drilling methods, well installation and sampling methods, and handling of investigation-derived waste. The QAPP describes the analytical procedures to be used by the laboratory in analyzing the groundwater samples.

4.1 SUBSURFACE UTILITY CLEARING

The local DIG SAFE service will be used to mark out subsurface utility lines near the proposed monitoring well locations. Monitoring well boring locations will be adjusted in the field as necessary to avoid subsurface obstructions and utilities. Each well boring location will also be hand-dug to 5 feet prior to advancing the borehole with mechanical equipment. The proposed well locations are shown on Figure 1.

4.2 MONITORING WELL INSTALLATIONS

Following hand-clearing, the borings will be installed into overburden using hollow stem augers, or another acceptable technique based on the conditions present. Alternate drilling techniques are described in the FAP. Soil samples will be collected continuously at each boring location using 2-inch diameter split barrel-samplers in accordance with ASTM Method D1586. Encountered soils will be physically described in the field using both the Burmister and USCS soil classification systems. A photoionization detector will be used to record headspace readings.

The borings will be advanced to the first water-bearing zone that is considered acceptable for placing a monitoring well that will yield a volume of representative groundwater sufficient for sampling. Monitoring wells will be constructed of 2-inch inside-diameter polyvinyl chloride (PVC) casing with a 5 or 10-foot long, #10-slot screen with the screen extending above the water table interface to allow for seasonal fluctuations of the water table. Each well will be completed with a locking protective casing with at least 3 feet of stick-up. Should shallow groundwater or other site conditions dictate, modifications to the well design will be made in the field by the supervising geologist.

Following installation, the new monitoring wells will be developed to remove material which may have settled in and around the well screen. Development will use methods described in the FAP. Following well development, the locations and elevations of the monitoring well PVC casings will be established relative to an arbitrary onsite datum using a Total Station surveying instrument.

Drilling equipment will be decontaminated by pressure washing between borings and before entering or leaving the site.

Drill cuttings from borings will be spread along the ground adjacent to the borehole. However, soils that contain visible wastes, free product, NAPL, or otherwise are grossly contaminated will be containerized for subsequent characterization and disposal. Water generated during the investigation will be discharged to an unpaved area of the site.

4.3 GROUNDWATER AND SURFACE WATER SAMPLING

Once well installation and development are complete, a groundwater sample will be collected and analyzed as described in the FAP. The wells will be purged prior to sampling, and all sampling equipment will be dedicated to that sampling location, or will be decontaminated between sampling locations using the methods provided in the FAP.

The groundwater and surface water samples will be analyzed for modified baseline VOCs, polycyclic aromatic hydrocarbons, 1,4-dioxane, perfluorinated compounds, baseline leachate indicators, and modified baseline metals. A complete list of analytical parameters is provided in Table 1.

5.0 INVESTIGATION REPORTING

Boring logs, groundwater sampling logs, analytical data, and a site work summary will be provided at the completion of field activities for the site.

TABLE 1 – ANALYTICAL PARAMETERS

| Parameter | Method | Parameter | Method |
|----------------------------|--------------------------|---|--------------|
| Leachate Indicators | | PAHs + 1,4-Dioxane | |
| Ammonia | 350.1 / SM20 4500NH3 B/D | Acenaphthene | 8270D SIM |
| Chemical Oxygen Demand | 410.4 | Acenaphthylene | 8270D SIM |
| Total Organic Carbon | EPA 9060 / SM20 5310B/C | Anthracene | 8270D SIM |
| Total Dissolved Solids | SM20 2540C | Benzo(a)anthracene | 8270D SIM |
| Sulfate | 300 | Benzo(a)pyrene | 8270D SIM |
| Alkalinity | SM20 2320B | Benzo(b)fluoranthene | 8270D SIM |
| Chloride | 300 | Benzo(g,h,i)perylene | 8270D SIM |
| Bromide | 300 | Benzo(k)fluoranthene | 8270D SIM |
| Total hardness as CaCO3 | SM20 2340C | Chrysene | 8270D SIM |
| | | Dibenzo(a,h)anthracene | 8270D SIM |
| Inorganics | | Fluoranthene | 8270D SIM |
| Aluminum | SW6010C | Fluorene | 8270D SIM |
| Antimony | SW6010C | Indeno(1,2,3-cd)pyrene | 8270D SIM |
| Arsenic | SW6010C | Naphthalene | 8270D SIM |
| Barium | SW6010C | Phenanthrene | 8270D SIM |
| Boron | SW6010C | Pyrene | 8270D SIM |
| Beryllium | SW6010C | 1-4-Dioxane | 8270D SIM |
| Cadmium | SW6010C | | |
| Calcium | SW6010C | Perfluorinated Compounds | |
| Chromium | SW6010C | N-ethyl perfluorooctane sulfonamidoacetic acid | Modified 537 |
| Cobalt | SW6010C | N-methyl perfluorooctane sulfonamidoacetic acid | Modified 537 |
| Copper | SW6010C | Perfluorobutanesulfonic acid (PFBS) | Modified 537 |
| Iron | SW6010C | Perfluorodecanoic acid (PFDA) | Modified 537 |
| Lead | SW6010C | Perfluorododecanoic acid (PFDoA) | Modified 537 |
| Magnesium | SW6010C | Perfluoroheptanoic acid (PFHpA) | Modified 537 |
| Manganese | SW6010C | Perfluorohexanesulfonic acid (PFHxS) | Modified 537 |
| Nickel | SW6010C | Perfluorohexanoic acid (PFHxA) | Modified 537 |
| Potassium | SW6010C | Perfluorononanoic acid (PFNA) | Modified 537 |
| Selenium | SW6010C | Perfluorooctanesulfonic acid (PFOS) | Modified 537 |
| Silver | SW6010C | Perfluorooctanoic acid (PFOA) | Modified 537 |
| Sodium | SW6010C | Perfluorotetradecanoic acid (PFTeA) | Modified 537 |
| Thallium | SW6010C | Perfluorotridecanoic Acid (PFTriA) | Modified 537 |
| Vanadium | SW6010C | Perfluoroundecanoic acid (PFUnA) | Modified 537 |
| Zinc | SW6010C | | |
| Mercury | SW7470A | | |
| Mercury | E1631 | | |
| Dissolved Mercury | E1631 | | |

**TABLE 1 – ANALYTICAL PARAMETERS
(Continued)**

| Parameter | Method | Parameter | Method |
|--|---------|---|---------|
| Volatiles | | | |
| Acetone | SW8260C | Ethylbenzene | SW8260C |
| Acrylonitrile | SW8260C | 2-Hexanone | SW8260C |
| Benzene | SW8260C | Bromomethane | SW8260C |
| Bromochloromethane | SW8260C | Chloromethane (Methyl chloride) | SW8260C |
| Bromodichloromethane | SW8260C | Dibromomethane | SW8260C |
| Bromoform | SW8260C | Methylene chloride | SW8260C |
| Carbon disulfide | SW8260C | 2-Butanone (Methyl ethyl ketone) | SW8260C |
| Carbon tetrachloride | SW8260C | Idomethane (Methyl iodide) | SW8260C |
| Chlorobenzene | SW8260C | 4-Methyl-2-pentanone (Methyl isobutyl ketone) | SW8260C |
| Chloroethane | SW8260C | Styrene | SW8260C |
| Chloroform | SW8260C | 1,1,1,2-Tetrachloroethane | SW8260C |
| Dibromochloromethane | SW8260C | 1,1,2,2-Tetrachloroethane | SW8260C |
| 1,2-Dibromo-3-chloropropane | SW8260C | Tetrachloroethene | SW8260C |
| 1,2-Dibromoethane (Ethylene dibromide) | SW8260C | Toluene | SW8260C |
| 1,2-Dichlorobenzene | SW8260C | 1,1,1-Trichloroethane | SW8260C |
| 1,4-Dichlorobenzene | SW8260C | 1,1,2-Trichloroethane | SW8260C |
| trans-1,4-Dichloro-2-butene | SW8260C | Trichloroethene | SW8260C |
| 1,1-Dichloroethane | SW8260C | Trichlorofluoromethane | SW8260C |
| 1,2-Dichloroethane | SW8260C | 1,2,3-Trichloropropane | SW8260C |
| 1,1-Dichloroethene | SW8260C | Vinyl acetate | SW8260C |
| cis-1,2-Dichloroethene | SW8260C | Vinyl chloride | SW8260C |
| trans-1,2-Dichloroethene | SW8260C | o-Xylene | SW8260C |
| 1,2-Dichloropropane | SW8260C | m,p-Xylene | SW8260C |
| cis-1,3-Dichlororpropene | SW8260C | Xylenes, Total | SW8260C |
| trans-1,3-Dichlororpropene | SW8260C | | |

FIGURE

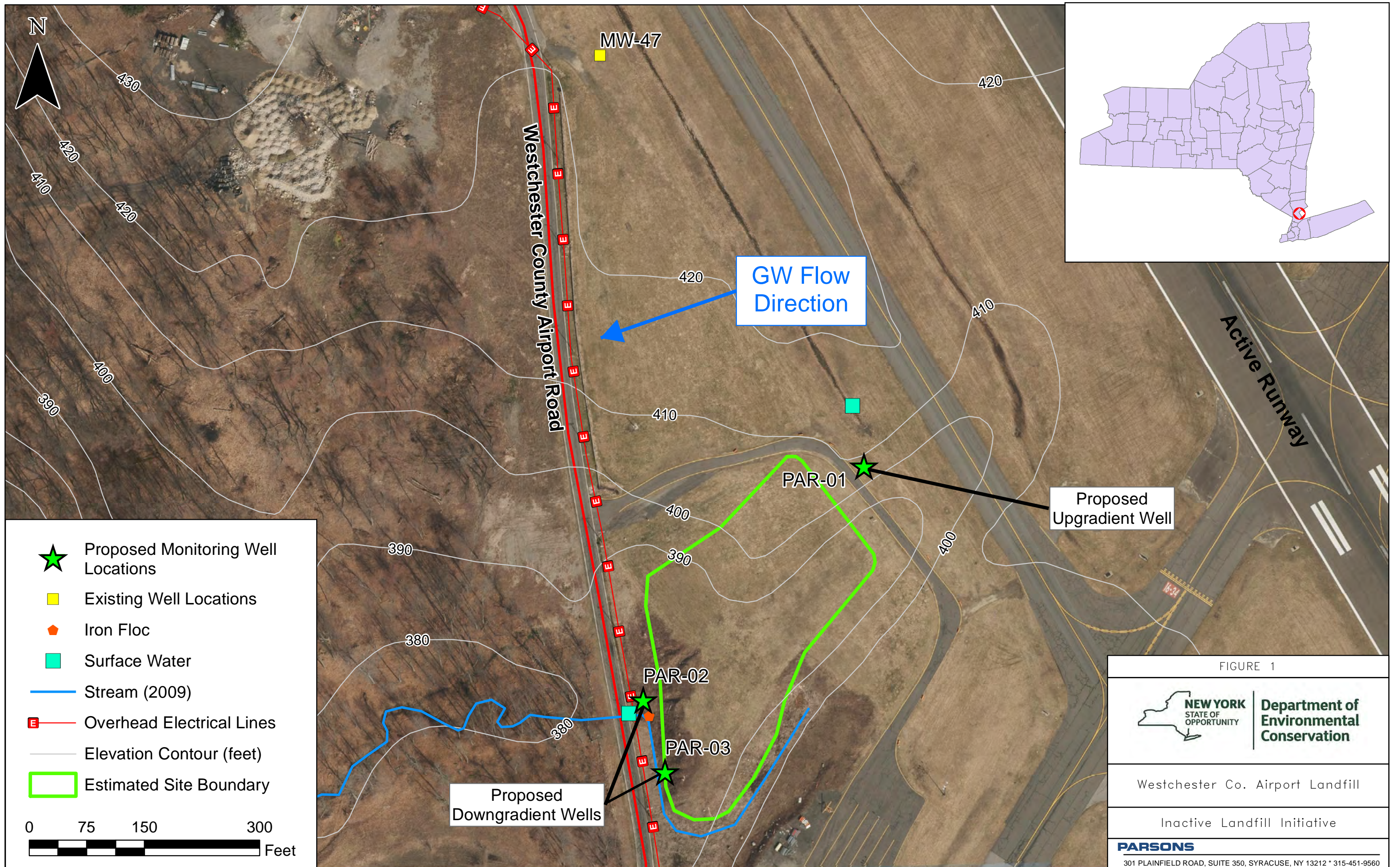


FIGURE 1



Westchester Co. Airport Landfill

Inactive Landfill Initiative

PARSONS

301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

ATTACHMENT 1

GEORGE LATIMER
County Executive

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

VINCENT F. KOPICKI, P.E.
Commissioner

JOSEPH J. NICOLETTI, JR., P.E.
First Deputy Commissioner

BY OVERNIGHT DELIVERY

January 11, 2018

Mr. Steve Parisio
Solid Waste Geologist
New York State Department of Environmental Conservation
Division of Materials Management, Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1620

Re: Inactive Landfill at Westchester County Airport
Tax Parcel ID # 0971.-2

Dear Mr. Parisio,

I am in receipt of your letter dated December 7, 2017 regarding the above referenced matter wherein the Department of Environmental Conservation ("DEC") requests access to the Westchester County Airport ("Airport") for DEC's staff and contractor to conduct "environmental site investigations" which may include, among other things, installation of groundwater monitoring wells, and/or collection of groundwater, surface water, sediment or soil samples (collectively the "Work"), in connection with the filled land in the vicinity of the unnamed stream on the west side of the Westchester County Airport.

The County agrees to allow such access subject to the following:

1. That DEC's staff and contractor will at all times be accompanied and escorted by Airport personnel as required by the Transportation Security Administration regulations;
2. That DEC shall be responsible for costs that it incurs in connection with its investigations;
3. That DEC shall particularize the specific site investigations it wishes to conduct before the date agreed to for sample collection;
4. That the County's hydrogeologist consultant, WSP USA (formerly Leggette, Brashears & Graham), shall be permitted to take split samples with the DEC's contractor and that all sample results obtained by either party shall be exchanged between the parties; and
5. That the DEC will schedule its site visit with the Robert Funicello, Environmental Project Director. Mr. Funicello can be reached at (914)813-5457.

The Work may commence any time. However, please notify the County by contacting Mr. Funicello at least three (3) business days prior to commencement. The Work shall be conducted at reasonable times, and will be promptly completed. Upon completion of the Work (including well installation and periodic monitoring for a duration to be determined by the Department), all equipment shall be removed and the ground surface shall be returned to its prior condition, unless we agree otherwise.

The County is desirous of continuing to cooperate with DEC in this matter as it has done for the past two (2) years.

Thank you.

Very truly yours,



Vincent F. Kopicki, P.E.

Commissioner of Public Works and Transportation

cc: John Nonna, Westchester County Attorney
Robert Funicello, Department of Environmental Facilities

ATTACHMENT 2

Soil Boring and Well Construction Logs

| | | | | | | | | | |
|---|-------------|---|------------------|--------------------|-----------------------|--|--|-------------------------------|---|
| Contractor: Parratt Wolff Driller: I. Greely Oversight: P. Scharfshwerdt Rig Type: CME | | PARSONS DRILLING RECORD | | | | BORING/ WELL NO. PAR-01 Page 1 of 1 | | | |
| PROJECT NAME: Westchester County Airport Landfill PROJECT Location: Rye, NY | | Location Description: Upgradient well located near NE edge of landfill. | | | | | | | |
| GROUNDWATER OBSERVATIONS | | | | | | | | | |
| Apparent Borehole DTW: | - | | | | | ft bls | | | |
| Measured Water Level: | 12.65 | | | | | ft bls | | | |
| Total Depth of Well: | 19 | | | | | ft bls | | | |
| Date/Time Start: 4/2/18 @ 11:30 Date/Time Finish: 4/4/18 @ 14:00 | | | | | | | | | |
| Additional Comments: | | | | | | | | | |
| | | | | | | | | | |
| Sample Type | SPT | Recovery (%) | PID (PPM) | USCS Symbol | Depth (ft bls) | FIELD IDENTIFICATION OF MATERIAL | SCHMATIC Drawing Not to Scale | COMMENTS | |
| | | | | | 1 | Topsoil | | Flush mount road box at grade | |
| | | | | | 2 | | | | |
| | | | | | 3 | FILL Sand & Gravel | | | |
| | | | | | 4 | | | | |
| HC | - | - | 0.0 | SP | 5 | Moist, loose, grey - green F Sand & Clay with some F gravel | | | Grout (0.00 - 4.00 ft) |
| | | | | | 6 | | | | Annular Seal (4.00 - 7.00 ft) |
| SS | 2-2-H-H | 50% | 0.0 | PT | 7 | Moist, soft, black - grey Silt & Clay, fibrous organics | | | 1.00 ft - "00" choker sand 2.00 ft- Bentonite plug |
| | | | | | 8 | | | | |
| SS | H-1-17-9 | 10% | 0.0 | PT | 9 | Above with C gravel fragments | | | PVC Riser (0.00 - 9.00 ft) |
| | | | | | 10 | | | | |
| SS | 1-2-3-2 | 80% | 0.0 | PT | 11 | Dry, soft, black - grey Silt & Clay, with some fibrous organics, F sand & F gravel, with little C sand | | | |
| | | | | | 12 | | | | |
| SS | 1-18-29-9 | 20% | 0.0 | PT - SW | 13 | Dry, very soft, organic Silt & Clay transitioning into a medium dense C Sand and F Gravel with some C gravel fragments. | | | |
| | | | | | 14 | | | | |
| SS | 10-9-12-14 | 60% | 0.0 | SW | 15 | Dry, stiff, grey/green - orange, SILT with some Clay with little M gravel transitions to micaceous medium-dense M-C Sand & F-M Gravel. | | | |
| | | | | | 16 | | | | |
| SS | 57-50 | 0% | 0.0 | GW | 17 | C GRAVEL Fragments, no sample. | | | |
| | | | | | 18 | | | | |
| SS | 14-29-35-16 | 60% | 0.0 | SW | 19 | Dry, dense to medium-dense, M-C SAND with some F gravel and C gravel fragmer | | | .010 Slot PVC Screen (9.00 - 19.00 ft) |
| | | | | | 20 | | | | |
| SS | 50/0 | 5% | 0.0 | SW | 21 | Saturated sand and gravel slough. | | | Sand Pac (7.00 - 21.00 ft) |
| SAMPLING METHOD HC = Hand Cleared (post hole) SS= Split Spoon | | | | | | | COMMENTS: Finished well with flush mount road box. | | |

| | | |
|--|--|--|
| Contractor: Parratt Wolff Driller: I. Greely Oversight: P. Scharfschwerdt Rig Type: CME | PARSONS DRILLING RECORD | BORING/ WELL NO. PAR-02 Page 1 of 1 Location Description: Downgradient Well |
| PROJECT NAME: Westchester County Airport Landfill PROJECT Location: Rye, NY | | |

| GROUNDWATER OBSERVATIONS | | | |
|--------------------------|------|--|--------|
| Apparent Borehole DTW: | 2.95 | | ft bls |
| Measured Water Level: | 3 | | ft bls |
| Total Depth of Well: | 8 | | ft bls |
| Additional Comments: | | | |

Date/Time Start: 4/2/18 @ 11:30
Date/Time Finish: 4/4/18 @ 14:00



| Sample Type | SPT | Recovery (%) | PID (PPM) | USCS Symbol | Depth (ft bls) | FIELD IDENTIFICATION OF MATERIAL | SCHEMATIC | COMMENTS |
|-------------|-----|--------------|-----------|-------------|----------------|---|-----------|--|
| | | | | | 1 | | | Flush Mount Roadbox |
| | | | | | 2 | | | Surface/Annular Seal (0.00 - 2.00 ft) |
| | | | | | 3 | Wet, loose, brown M-F SAND and some M-F gravel FILL | | SCH 40 PVC Riser (-3.00 - 3.00 ft) |
| | | | | | 4 | | | .010 Slot SCH 40 PVC Screen (3.00 - 8.00 ft) |
| HC | - | - | 0.0 | CH | 5 | Wet, soft, blue - grey fatty CLAY and some silt, medium to high plasticity | | |
| | | | | | 6 | | | |
| DP | H | 50% | 0.0 | SM | 7 | Wet, medium-stiff, blue - grey, C-F Sand & Silt with some F gravel | | |
| | | | | | 8 | | | |
| DP | H | 100% | 0.0 | GC | 9 | Above to 8.25 ft transitions to light brown M-F SAND with some M-F gravel, some | | |
| | | | | | 10 | | | |
| SS | | | | | 11 | | | Sand Pack (2.00 - 8.00 ft) |
| | | | | | 12 | | | |
| SS | | | | | 13 | | | |
| | | | | | 14 | | | |
| SS | | | | | 15 | | | |
| | | | | | 16 | | | |
| SS | | | | | 17 | | | |
| | | | | | 18 | | | |
| SS | | | | | 19 | | | |
| | | | | | 20 | | | |
| SS | | | | | 21 | | | |

| | |
|--|--|
| SAMPLING METHOD HC = Hand Cleared (post hole) SS= Split Spoon | COMMENTS: Finished with flush-mounted road box. Utilized 5-ft of .010 slot screen. |
|--|--|

Contractor: Parratt Wolff
 Driller: I. Greely
 Oversight: P. Scharfschwerdt
 Rig Type: CME

PROJECT NAME: Westchester County Airport Landfill
 PROJECT Location: Rye, NY

Location Description:
 Downgradient Well

| GROUNDWATER OBSERVATIONS | | | |
|--------------------------|------|--|--------|
| Apparent Borehole DTW: | 3 | | ft bls |
| Measured Water Level: | 3.25 | | ft bls |
| Total Depth of Well: | 8 | | ft bls |
| Additional Comments: | | | |

Date/Time Start: 4/2/18 @ 11:30
 Date/Time Finish: 4/4/18 @ 14:00



| Sample Type | SPT | Recovery (%) | PID (PPM) | USCS Symbol | Depth (ft bls) | FIELD IDENTIFICATION OF MATERIAL | SCHEMATIC | COMMENTS | |
|-------------|-----|--------------|-----------|-------------|----------------|--|-----------|--|----------------------------|
| | | | | | 1 | | | 3.00 ft stick-up Finished with protective standpipe | |
| | | | | | 2 | | | Surface/Annular Seal (0.00 - 2.00 ft) | |
| | | | | | 3 | | | SCH 40 PVC Riser (-3.00 - 3.00 ft) | |
| | | | | | 4 | | | .010 Slot SCH 40 PVC Screen (3.00 - 8.00 ft) | |
| HC | - | - | 0.0 | PT | 5 | Wet, soft, black - grey Silt & Clay, with some fibrous organics, F sand & F gravel, with little C sand | | | |
| | | | | | 6 | | | | |
| DP | H | 50% | 0.0 | SM | 7 | Wet, medium dense, dark grey - reddish brown, C-F SAND with some F gravel & s | | | |
| | | | | | 8 | | | | |
| DP | H | 25% | 0.0 | SM | 9 | Wet, medium dense, dark grey - reddish brown, C-F SAND with some F gravel & s | | | |
| | | | | | 10 | | | | |
| SS | | | | | 11 | | | | Sand Pack (2.00 - 8.00 ft) |
| | | | | | 12 | | | | |
| SS | | | | | 13 | | | | |
| | | | | | 14 | | | | |
| SS | | | | | 15 | | | | |
| | | | | | 16 | | | | |
| SS | | | | | 17 | | | | |
| | | | | | 18 | | | | |
| SS | | | | | 19 | | | | |
| | | | | | 20 | | | | |
| SS | | | | | 21 | | | | |

SAMPLING METHOD
 HC = Hand Cleared (post hole)
 SS= Split Spoon

COMMENTS:
 Finished with protective standpipe casing. Utilized 5-ft of .010 slot screen.

ATTACHMENT 3

Groundwater Sample Logs

Low Flow Ground Water Sampling Log

Date 4/19/2018 Personnel PRS, MM, CF Weather 32°F, rainy
 Site Name WCA LF Evacuation Method Peri Pump Well # PAR-01
 Site Location Rye, NY Sampling Method Peri Pump Project # 450619.04000

Well information:

Depth of Well 17.89 ft. *Measurements taken from:
 Depth to Water 8.6 ft.  Top of Well Casing
 H_{wc} 9.29 ft. Top of Protective Casing
 Depth to Intake 15.89 ft. (Other, Specify)

Start Purge Time: 10:15

| Elapsed Time (min) | Depth to Water (ft) | 10% Temperature (celsius) | 0.1 pH | 3% Conductivity (ms/cm) | 10 mV Oxidation Reduction Potential | 10% Dissolved Oxygen (mg/L) | 10% Turbidity (NTU) | 100 - 500 mL/min Flow Rate (mL/min) |
|--------------------|---------------------|---------------------------|--------|-------------------------|-------------------------------------|-----------------------------|---------------------|-------------------------------------|
| 0 | 8.92 | 7.61 | 5.96 | 0.555 | 57 | 5.59 | 95.2 | 175 |
| 5 | 9.04 | 8.79 | 6.5 | 0.472 | 23 | 4.62 | 39.1 | 175 |
| 10 | 9.11 | 8.35 | 6.41 | 0.467 | 31 | 1.16 | 94.9 | 175 |
| 15 | 9.21 | 8.64 | 6.37 | 0.463 | 36 | 0 | 250 | 175 |
| 20 | 9.32 | 8.84 | 6.4 | 0.459 | 35 | 0 | 300 | 175 |
| 25 | 9.2 | 8.54 | 6.46 | 0.461 | 29 | 0 | 242 | 100 |
| 30 | 9.19 | 8.73 | 6.41 | 0.46 | 29 | 0 | 233 | 100 |
| 35 | 9.13 | 8.6 | 6.4 | 0.454 | 29 | 0 | 196 | 100 |
| 40 | 9.13 | 8.677 | 6.39 | 0.453 | 36 | 0 | 159 | 100 |
| 45 | 9.16 | 8.63 | 6.41 | 0.451 | 29 | 0 | 73.9 | 100 |
| 50 | 9.18 | 8.65 | 6.39 | 0.449 | 30 | 0 | 65.5 | 100 |
| 55 | 9.18 | 8.62 | 6.42 | 0.445 | 36 | 0 | 40.9 | 100 |
| 60 | 9.19 | 8.68 | 6.38 | 0.441 | 35 | 0 | 30.6 | 100 |
| 65 | 9.17 | 8.62 | 6.4 | 0.442 | 34 | 0 | 21.2 | 100 |
| 70 | 9.12 | 8.5 | 6.4 | 0.438 | 33 | 0 | 18.7 | 100 |
| 75 | 9.15 | 8.63 | 6.39 | 0.436 | 35 | 0 | 17 | 100 |
| 80 | 9.18 | 8.65 | 6.38 | 0.436 | 35 | 0 | 15.9 | 100 |
| 85 | 9.17 | 8.87 | 6.4 | 0.434 | 32 | 0 | 13.5 | 100 |
| | | | | | | | | |
| | | | | | | | | |

End Purge Time: 11:49

Water Sample

Time Collected: 11:40 Total volume of purged water removed: 3.75 (gallons)
 Physical appearance at start: _____ Physical appearance at stop: _____
 Color dark greyish brown Color clear
 Odor none Odor none
 Sheen/Free Product none Sheen/Free Product none

| Sample | Container Type | # Collected | Field Filtered | Preservative | Container pH |
|-----------------------------------|-----------------|-------------|----------------|--------------|--------------|
| PFC_IDA-PFAS | 250 mL Plastic | 2 | no | none | - |
| 8270D SIM PAH + 300.0 Br, SO4, Cl | 250 cc Amber | 2 | no | none | - |
| COD, Ammonia | 60 mL Plastic | 1 | no | none | - |
| Metals, Hg | 250 mL Plastic | 1 | no | H2SO4 | - |
| Hardness | 250 mL Plastic | 1 | no | HNO3 | - |
| VOCs | 250 mL Plastic | 1 | no | HNO3 | - |
| TOC | 40 mL VOA vials | 3 | no | HCl | - |
| Calcd - TDS | 40 mL VOA vials | 2 | no | HCl | - |
| Alkalinity | 500 mL Plastic | 1 | no | none | - |
| | 125 mL Plastic | 1 | no | none | - |

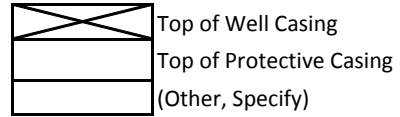
Low Flow Ground Water Sampling Log

Date 4/19/2018 Personnel PRS, MM, CF Weather 32°F, rainy
 Site Name WCA LF Evacuation Method Peri Pump Well # PAR-02
 Site Location Rye, NY Sampling Method Peri Pump Project # 450619.04000

Well information:

Depth of Well 7 ft.
 Depth to Water 1.62 ft.
 H_{wc} 5.38 ft.
 Depth to Intake 6 ft.

*Measurements taken from:



Start Purge Time:

| Elapsed Time (min) | Depth to Water (ft) | 10% Temperature (celsius) | 0.1 pH | 3% Conductivity (ms/cm) | 10 mV Oxidation Reduction Potential | 10% Dissolved Oxygen (mg/L) | 10% Turbidity (NTU) | 100 - 500 mL/min Flow Rate (mL/min) |
|--------------------|---------------------|---------------------------|--------|-------------------------|-------------------------------------|-----------------------------|---------------------|-------------------------------------|
| 0 | 1.62 | 8.87 | 6.46 | 0.205 | 139 | 0 | 10.1 | 200 |
| 5 | 1.63 | 8.95 | 6.33 | 0.205 | 170 | 0 | 5.7 | 200 |
| 10 | 1.64 | 9.17 | 6.17 | 0.203 | 175 | 0 | 4.9 | 200 |
| 15 | 1.65 | 9.25 | 6.13 | 0.202 | 195 | 0 | 1.7 | 200 |
| 20 | 1.67 | 9.2 | 6.16 | 0.202 | 193 | 0 | 1.6 | 200 |
| 25 | 1.68 | 9.1 | 6.16 | 0.202 | 186 | 0 | 1.5 | 200 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

End Purge Time: 13:59

Water Sample

Time Collected: 13:50 Total volume of purged water removed: 2 (gallons)
 Physical appearance at start: Color dark greyish brown Color clear
 Odor none Odor none
 Sheen/Free Product none Sheen/Free Product none

| Sample | Container Type | # Collected | Field Filtered | Preservative | Container pH |
|-------------------|-----------------|-------------|----------------|--------------|--------------|
| PFC_IDA-PFAS | 250 mL Plastic | 2 | no | none | - |
| 8270D SIM PAH + | 250 cc Amber | 2 | no | none | - |
| 300.0 Br, SO4, Cl | 60 mL Plastic | 1 | no | none | - |
| COD, Ammonia | 250 mL Plastic | 1 | no | H2SO4 | - |
| Metals, Hg | 250 mL Plastic | 1 | no | HNO3 | - |
| Hardness | 250 mL Plastic | 1 | no | HNO3 | - |
| VOCs | 40 mL VOA vials | 3 | no | HCl | - |
| TOC | 40 mL VOA vials | 2 | no | HCl | - |
| Calcd - TDS | 500 mL Plastic | 1 | no | none | - |
| Alkalinity | 125 mL Plastic | 1 | no | none | - |

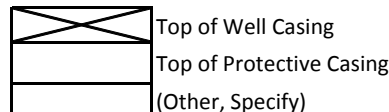
Low Flow Ground Water Sampling Log

Date 4/19/2018 Personnel PRS, MM, CF Weather 32°F, rainy
 Site Name WCA LF Evacuation Method Peri Pump Well # PAR-03
 Site Location Rye, NY Sampling Method Peri Pump Project # 450619.04000

Well information:

Depth of Well 10.5 ft.
 Depth to Water 2.72 ft.
 H_{wc} 7.78 ft.
 Depth to Intake 8.5 ft.

*Measurements taken from:



Start Purge Time:

| Elapsed Time (min) | Depth to Water (ft) | 10% Temperature (celsius) | 0.1 pH | 3% Conductivity (ms/cm) | 10 mV Oxidation Reduction Potential | 10% Dissolved Oxygen (mg/L) | 10% Turbidity (NTU) | 100 - 500 mL/min Flow Rate (mL/min) |
|--------------------|---------------------|---------------------------|--------|-------------------------|-------------------------------------|-----------------------------|---------------------|-------------------------------------|
| 0 | 2.72 | 7.61 | 6.44 | 0.245 | 74 | 0 | 51.5 | 175 |
| 5 | 4 | 7.51 | 6.51 | 0.249 | 71 | 0 | 24.6 | 175 |
| 10 | 4.11 | 7.11 | 6.5 | 0.25 | 66 | 0 | 11.8 | 175 |
| 15 | 4.25 | 7.13 | 6.46 | 0.249 | 82 | 0 | 11.6 | 175 |
| 20 | 4.35 | 7.06 | 6.48 | 0.249 | 67 | 0 | 7.6 | 175 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

End Purge Time: 14:59

Water Sample

Time Collected: 14:50 Total volume of purged water removed: 2 (gallons)
 Physical appearance at start: _____ Physical appearance at stop: _____
 Color dark greyish brown Color clear
 Odor none Odor none
 Sheen/Free Product none Sheen/Free Product none

| Sample | Container Type | # Collected | Field Filtered | Preservative | Container pH |
|-------------------|-----------------|-------------|----------------|--------------|--------------|
| PFC_IDA-PFAS | 250 mL Plastic | 2 | no | none | - |
| 8270D SIM PAH + | 250 cc Amber | 2 | no | none | - |
| 300.0 Br, SO4, Cl | 60 mL Plastic | 1 | no | none | - |
| COD, Ammonia | 250 mL Plastic | 1 | no | H2SO4 | - |
| Metals, Hg | 250 mL Plastic | 1 | no | HNO3 | - |
| Hardness | 250 mL Plastic | 1 | no | HNO3 | - |
| VOCs | 40 mL VOA vials | 3 | no | HCl | - |
| TOC | 40 mL VOA vials | 2 | no | HCl | - |
| Calcd - TDS | 500 mL Plastic | 1 | no | none | - |
| Alkalinity | 125 mL Plastic | 1 | no | none | - |

ATTACHMENT 4

Analytical Laboratory Level II Data Deliverable

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Parsons Engineering Science for ILI

PESNYL: ILI - Region 3, Westchester County Airport Landfill

450619

SGS Job Number: JC64700

Sampling Date: 04/19/18

Report to:

Parsons Engineering Science


Heather.Fettig@parsons.com

ATTN: Heather Fettig

Total number of pages in report: 286



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


A. Paul Ioannidis
General Manager

Client Service contact: Kristin Degraw 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.



May 17, 2018

Ms. Sara Weishaupt
Parsons
301 Plainfield Road, Suite 350
Syracuse, NY 13212

Re: SGS North America – Dayton, NJ Jobs # JC64700 – Reissues

Dear Ms. Weishaupt,

The final reports for SGS jobs number JC64700 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the sample's ID of JC64700-8 has been revised has been revised to "3-WES-002-001-08" per Ms. Heather Fetting's request. The attached revised report incorporates these revisions.

Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.



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EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!



SGS North America Inc. Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200

Member of the SGS Group (SGS SA)



June 25, 2018

Ms. Sara Weishaupt
Parsons
301 Plainfield Road, Suite 350
Syracuse, NY 13212

Re: SGS North America – Dayton, NJ Jobs # JC64700 – Reissue #2

Dear Ms. Weishaupt,

The final reports for SGS jobs number JC64700 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the samples ID for JC64700-8 has been revised to match chain of custody. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.



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EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!



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Sample Summary

Parsons Engineering Science for ILI

Job No: JC64700

PESNYL: ILI - Region 3, Westchester County Airport Landfill
 Project No: 450619

| Sample Number | Collected | | Received | Matrix | | Client Sample ID |
|---------------|-----------|-----------|----------|--------|-------------------|------------------|
| | Date | Time By | | Code | Type | |
| JC64700-1 | 04/19/18 | 11:20 PRS | 04/20/18 | AQ | Field Blank Water | 3-WES-002-001-01 |
| JC64700-2 | 04/19/18 | 11:40 PRS | 04/20/18 | AQ | Ground Water | 3-WES-002-001-02 |
| JC64700-3 | 04/19/18 | 13:50 PRS | 04/20/18 | AQ | Ground Water | 3-WES-002-001-03 |
| JC64700-4 | 04/19/18 | 14:50 PRS | 04/20/18 | AQ | Ground Water | 3-WES-002-001-04 |
| JC64700-5 | 04/19/18 | 11:50 PRS | 04/20/18 | AQ | Equipment Blank | 3-WES-002-001-05 |
| JC64700-6 | 04/19/18 | 14:50 PRS | 04/20/18 | AQ | Trip Blank Water | 3-WES-002-001-06 |
| JC64700-7 | 04/19/18 | 11:55 PRS | 04/20/18 | AQ | Surface Water | 3-WES-002-001-07 |
| JC64700-8 | 04/19/18 | 12:30 PRS | 04/20/18 | AQ | Surface Water | 3-WES-002-001-08 |

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: Parsons Engineering Science for ILI

Job No JC64700

Site: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Report Date 5/14/2018 11:04:54 A

On 04/20/2018, 6 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 4.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC64700 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ

Batch ID: V2A7920

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64700-3DUP, JC64700-4MS were used as the QC samples indicated.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: F:OP69810

- The data for EPA 537M BY ID meets quality control requirements.
- JC64700-3: Analysis performed at SGS Orlando, FL.
- JC64700-2: Analysis performed at SGS Orlando, FL.
- JC64700-8: Analysis performed at SGS Orlando, FL.
- JC64700-7: Analysis performed at SGS Orlando, FL.
- JC64700-1: Analysis performed at SGS Orlando, FL.
- JC64700-5: Analysis performed at SGS Orlando, FL.
- JC64700-4: Analysis performed at SGS Orlando, FL.
- JC64700-7 for Perfluorobutanesulfonic acid: Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.
- JC64700-7 for Perfluoroheptanoic acid: Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.
- JC64700-7 for Perfluorohexanoic acid: Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.
- JC64700-7 for Perfluorohexanesulfonic acid: Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.

Monday, May 14, 2018

Page 1 of 4

MS Semi-volatiles By Method SW846 8270D BY SIM

Matrix: AQ

Batch ID: OP11510A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC64700-8 for Benzo(g,h,i)perylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-3 for Benzo(g,h,i)perylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-3 for Anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-8 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-2 for Anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-4 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-2 for Acenaphthylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-8 for Benzo(b)fluoranthene: Associated CCV outside of control limits high, sample was ND.
- JC64700-8 for Anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-8 for Acenaphthylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-7 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-7 for Benzo(b)fluoranthene: Associated CCV outside of control limits high, sample was ND.
- JC64700-2 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-7 for Acenaphthylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-3 for Benzo(b)fluoranthene: Associated CCV outside of control limits high, sample was ND.
- JC64700-4 for Benzo(g,h,i)perylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-4 for Benzo(b)fluoranthene: Associated CCV outside of control limits high, sample was ND.
- JC64700-4 for Anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-4 for Acenaphthylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-3 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-7 for Anthracene: Associated CCV outside of control limits high, sample was ND.
- JC64700-7 for Benzo(g,h,i)perylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-2 for Benzo(g,h,i)perylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-3 for Acenaphthylene: Associated CCV outside of control limits high, sample was ND.
- JC64700-2 for Benzo(b)fluoranthene: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method SW846 6010C

Matrix: AQ

Batch ID: MP6809

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64764-5MS, JC64764-5MSD, JC64764-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Chromium, Copper, Lead are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JC64700-2 for Lead: Elevated detection limit due to dilution required for high interfering element.
- JC64700-2 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JC64700-2 for Thallium: Elevated detection limit due to dilution required for high interfering element.

Metals Analysis By Method SW846 7470A

Matrix: AQ**Batch ID:** MP6790

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64700-2MS, JC64700-2MSD were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ**Batch ID:** GP12901

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64700-2DUP, JC64700-2MS were used as the QC samples for Bromide, Chloride, Sulfate, Bromide.

General Chemistry By Method SM2320 B-11

Matrix: AQ**Batch ID:** GN79191

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64728-2DUP were used as the QC samples for Alkalinity, Total as CaCO₃.
- JC64700-8 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5.
- JC64700-4 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5.
- JC64700-3 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5.
- JC64700-7 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5.
- JC64700-2 for Alkalinity, Total as CaCO₃: Sample was titrated to a final pH of 4.5.

General Chemistry By Method SM2340 C-11

Matrix: AQ**Batch ID:** GN79057

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64494-1DUP, JC64494-1MS were used as the QC samples for Hardness, Total as CaCO₃.

General Chemistry By Method SM2540 C-11

Matrix: AQ**Batch ID:** GN79083

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64546-1DUP were used as the QC samples for Solids, Total Dissolved.

General Chemistry By Method SM4500NH3 H-11LCHAT

Matrix: AQ**Batch ID:** GP12689

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64630-1DUP, JC64630-1MS, JC64630-1MSD were used as the QC samples for Nitrogen, Ammonia.

General Chemistry By Method SM5220 C-11,HACH8000

| | |
|-------------------|--------------------------|
| Matrix: AQ | Batch ID: GP12636 |
|-------------------|--------------------------|

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) FA53554-4DUP, FA53554-4MS were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SW846 9060A

| | |
|-------------------|--------------------------|
| Matrix: AQ | Batch ID: GP12570 |
|-------------------|--------------------------|

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC64700-2MS, JC64700-2MSD were used as the QC samples for Total Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ **Job:** JC64700
Site: ILINY: PESNYL: ILI - Region 3, Westchester County Airport **Report:** 5/7/2018 3:51:32 PM

6 Samples and 1 Field Blank were collected on 04/19/2018 and were received at SGS North America Inc - Orlando on 04/20/2018 properly preserved, at 2.8 Deg. C and intact. These Samples received an SGS Orlando job number of JC64700. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ **Batch ID:** OP69810

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) JC64700-3MS, JC64700-7MS were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for Perfluorooctanesulfonic acid are outside control limits. Probable cause is due to the ratio of spike to sample concentration < 4.

Sample(s) JC64700-7 have surrogates outside control limits.

JC64700-7: Confirmation run for internal standard areas.

JC64700-7 for Perfluorobutanesulfonic acid: Associated ID Standard outside control limits due to matrix interference.

Insufficient sample for re-extraction.

JC64700-7 for Perfluoroheptanoic acid: Associated ID Standard outside control limits due to matrix interference.

Insufficient sample for re-extraction.

JC64700-7 for Perfluorohexanesulfonic acid: Associated ID Standard outside control limits due to matrix interference.

Insufficient sample for re-extraction.

JC64700-7 for Perfluorohexanoic acid: Associated ID Standard outside control limits due to matrix interference.

Insufficient sample for re-extraction.

JC64700-7 for 13C3-PFBS: Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

JC64700-7 for 13C3-PFHxS: Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

JC64700-7 for 13C4-PFHpA: Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

JC64700-7 for 13C5-PFHxA: Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Svetlana Izosimova, QAO (signature on file)

Summary of Hits

Job Number: JC64700
Account: Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Collected: 04/19/18



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---------------|------------------|-----------------|----|-----|-------|--------|
|---------------|------------------|-----------------|----|-----|-------|--------|

JC64700-1 3-WES-002-001-01

| | | | | | |
|--|--------|-----|------|------|----------------|
| Perfluoropentanoic acid ^a | 1.01 J | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorotetradecanoic acid ^a | 1.08 J | 3.8 | 0.96 | ng/l | EPA 537M BY ID |

JC64700-2 3-WES-002-001-02

| | | | | | |
|---|----------|-------|--------|------|-----------------------|
| Perfluorobutanoic acid ^a | 3.47 J | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Perfluoropentanoic acid ^a | 5.15 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanoic acid ^a | 3.16 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanoic acid ^a | 2.30 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanoic acid ^a | 7.61 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorononanoic acid ^a | 1.01 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorobutanesulfonic acid ^a | 2.18 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanesulfonic acid ^a | 8.03 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanesulfonic acid ^a | 7.56 J | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Barium | 0.0630 J | 0.20 | 0.0013 | mg/l | SW846 6010C |
| Copper | 0.0041 J | 0.010 | 0.0032 | mg/l | SW846 6010C |
| Iron | 10.5 | 0.10 | 0.032 | mg/l | SW846 6010C |
| Manganese | 16.7 | 0.045 | 0.0013 | mg/l | SW846 6010C |
| Nickel | 0.0079 J | 0.010 | 0.0013 | mg/l | SW846 6010C |
| Alkalinity, Total as CaCO ₃ ^b | 228 | 10 | 2.3 | mg/l | SM2320 B-11 |
| Bromide | 0.067 J | 0.50 | 0.060 | mg/l | EPA 300/SW846 9056A |
| Chemical Oxygen Demand | 12.7 J | 20 | 6.3 | mg/l | SM5220 C-11, HACH8000 |
| Chloride | 2.7 | 2.0 | 0.070 | mg/l | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 225 | 4.0 | 2.5 | mg/l | SM2340 C-11 |
| Nitrogen, Ammonia | 1.7 | 0.20 | 0.14 | mg/l | SM4500NH3 H-11LACHAT |
| Solids, Total Dissolved | 264 | 10 | 1.8 | mg/l | SM2540 C-11 |
| Total Organic Carbon | 6.5 | 1.0 | 0.60 | mg/l | SW846 9060A |

JC64700-3 3-WES-002-001-03

| | | | | | |
|--|----------|-------|-------|------|--------------------|
| Perfluorobutanoic acid ^a | 12.7 | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Perfluoropentanoic acid ^a | 29.8 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanoic acid ^a | 20.3 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanoic acid ^a | 11.7 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanoic acid ^a | 16.3 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorononanoic acid ^a | 19.0 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorotetradecanoic acid ^a | 1.14 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorobutanesulfonic acid ^a | 11.7 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanesulfonic acid ^a | 64.1 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanesulfonic acid ^a | 2.24 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanesulfonic acid ^a | 50.8 | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Benzo(a)anthracene | 0.0447 J | 0.055 | 0.025 | ug/l | SW846 8270D BY SIM |
| Naphthalene | 0.227 | 0.11 | 0.032 | ug/l | SW846 8270D BY SIM |

Summary of Hits

Job Number: JC64700
Account: Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Collected: 04/19/18



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---------------|------------------|-----------------|----|-----|-------|--------|
|---------------|------------------|-----------------|----|-----|-------|--------|

| | | | | | | |
|---|--|----------|-------|---------|------|---------------------|
| Barium | | 0.0354 J | 0.20 | 0.0013 | mg/l | SW846 6010C |
| Iron | | 0.0628 J | 0.10 | 0.032 | mg/l | SW846 6010C |
| Manganese | | 0.0620 | 0.015 | 0.00042 | mg/l | SW846 6010C |
| Nickel | | 0.0017 J | 0.010 | 0.0013 | mg/l | SW846 6010C |
| Alkalinity, Total as CaCO ₃ ^b | | 81.6 | 5.0 | 1.1 | mg/l | SM2320 B-11 |
| Chloride | | 3.0 | 2.0 | 0.070 | mg/l | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | | 94.1 | 4.0 | 2.5 | mg/l | SM2340 C-11 |
| Solids, Total Dissolved | | 124 | 10 | 1.8 | mg/l | SM2540 C-11 |
| Sulfate | | 21.8 | 2.0 | 0.53 | mg/l | EPA 300/SW846 9056A |
| Total Organic Carbon | | 1.7 | 1.0 | 0.60 | mg/l | SW846 9060A |

JC64700-4 3-WES-002-001-04

| | | | | | | |
|---|--|-----------|-------|---------|------|---------------------|
| Perfluorobutanoic acid ^a | | 20.7 | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Perfluoropentanoic acid ^a | | 69.7 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanoic acid ^a | | 46.5 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanoic acid ^a | | 23.8 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanoic acid ^a | | 34.2 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorononanoic acid ^a | | 6.59 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorododecanoic acid ^a | | 1.06 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorotetradecanoic acid ^a | | 1.30 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorobutanesulfonic acid ^a | | 14.8 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanesulfonic acid ^a | | 95.4 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanesulfonic acid ^a | | 2.49 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanesulfonic acid ^a | | 24.7 | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| 6:2 Fluorotelomer sulfonate ^a | | 4.02 J | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Benzo(a)anthracene | | 0.0489 J | 0.056 | 0.025 | ug/l | SW846 8270D BY SIM |
| Naphthalene | | 0.0737 J | 0.11 | 0.033 | ug/l | SW846 8270D BY SIM |
| Phenanthrene | | 0.0464 J | 0.11 | 0.026 | ug/l | SW846 8270D BY SIM |
| Barium | | 0.0845 J | 0.20 | 0.0013 | mg/l | SW846 6010C |
| Chromium | | 0.00090 J | 0.010 | 0.00085 | mg/l | SW846 6010C |
| Iron | | 4.65 | 0.10 | 0.032 | mg/l | SW846 6010C |
| Manganese | | 0.849 | 0.015 | 0.00042 | mg/l | SW846 6010C |
| Nickel | | 0.0023 J | 0.010 | 0.0013 | mg/l | SW846 6010C |
| Alkalinity, Total as CaCO ₃ ^b | | 139 | 5.0 | 1.1 | mg/l | SM2320 B-11 |
| Bromide | | 0.092 J | 0.50 | 0.060 | mg/l | EPA 300/SW846 9056A |
| Chloride | | 3.9 | 2.0 | 0.070 | mg/l | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | | 125 | 4.0 | 2.5 | mg/l | SM2340 C-11 |
| Solids, Total Dissolved | | 166 | 10 | 1.8 | mg/l | SM2540 C-11 |
| Total Organic Carbon | | 2.4 | 1.0 | 0.60 | mg/l | SW846 9060A |

JC64700-5 3-WES-002-001-05

| | | | | | | |
|--|--|--------|-----|------|------|----------------|
| Perfluoropentanoic acid ^a | | 1.32 J | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorotetradecanoic acid ^a | | 1.04 J | 3.8 | 0.96 | ng/l | EPA 537M BY ID |

Summary of Hits

Job Number: JC64700
Account: Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Collected: 04/19/18



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---------------|------------------|-----------------|----|-----|-------|--------|
|---------------|------------------|-----------------|----|-----|-------|--------|

JC64700-6 3-WES-002-001-06

No hits reported in this sample.

JC64700-7 3-WES-002-001-07

| | | | | | |
|---|----------|-------|---------|------|---------------------|
| Perfluorobutanoic acid ^a | 19.1 | 7.7 | 1.9 | ng/l | EPA 537M BY ID |
| Perfluoropentanoic acid ^a | 60.0 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorohexanoic acid ^c | 39.7 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluoroheptanoic acid ^c | 18.8 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorooctanoic acid ^a | 17.8 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorononanoic acid ^a | 26.1 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorododecanoic acid ^a | 1.16 J | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorobutanesulfonic acid ^c | 11.1 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorohexanesulfonic acid ^c | 117 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluoroheptanesulfonic acid ^a | 5.30 | 3.8 | 0.96 | ng/l | EPA 537M BY ID |
| Perfluorooctanesulfonic acid ^a | 89.1 | 7.7 | 1.9 | ng/l | EPA 537M BY ID |
| 6:2 Fluorotelomer sulfonate ^a | 6.81 J | 7.7 | 1.9 | ng/l | EPA 537M BY ID |
| Benzo(a)anthracene | 0.0368 J | 0.050 | 0.023 | ug/l | SW846 8270D BY SIM |
| Naphthalene | 0.0585 J | 0.10 | 0.029 | ug/l | SW846 8270D BY SIM |
| Barium | 0.0205 J | 0.20 | 0.0013 | mg/l | SW846 6010C |
| Manganese | 0.0010 J | 0.015 | 0.00042 | mg/l | SW846 6010C |
| Alkalinity, Total as CaCO ₃ ^b | 76.5 | 5.0 | 1.1 | mg/l | SM2320 B-11 |
| Chloride | 2.2 | 2.0 | 0.070 | mg/l | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 86.2 | 4.0 | 2.5 | mg/l | SM2340 C-11 |
| Solids, Total Dissolved | 98.0 | 10 | 1.8 | mg/l | SM2540 C-11 |
| Sulfate | 15.7 | 2.0 | 0.53 | mg/l | EPA 300/SW846 9056A |
| Total Organic Carbon | 2.9 | 1.0 | 0.60 | mg/l | SW846 9060A |

JC64700-8 3-WES-002-001-08

| | | | | | |
|--|----------|-------|-------|------|--------------------|
| Perfluorobutanoic acid ^a | 19.5 | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Perfluoropentanoic acid ^a | 60.7 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanoic acid ^a | 40.6 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanoic acid ^a | 22.7 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanoic acid ^a | 20.3 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorononanoic acid ^a | 8.88 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorododecanoic acid ^a | 1.47 J | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorobutanesulfonic acid ^a | 12.1 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorohexanesulfonic acid ^a | 99.8 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluoroheptanesulfonic acid ^a | 4.97 | 4.0 | 1.0 | ng/l | EPA 537M BY ID |
| Perfluorooctanesulfonic acid ^a | 134 | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| 6:2 Fluorotelomer sulfonate ^a | 3.92 J | 8.0 | 2.0 | ng/l | EPA 537M BY ID |
| Benzo(a)anthracene | 0.0371 J | 0.050 | 0.023 | ug/l | SW846 8270D BY SIM |

Summary of Hits

Job Number: JC64700
Account: Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Collected: 04/19/18

| Lab Sample ID | Client Sample ID | Result/ Analyte | RL | MDL | Units | Method |
|---------------|------------------|---|----------|-------|---------|---------------------------|
| | | Barium | 0.0449 J | 0.20 | 0.0013 | mg/l SW846 6010C |
| | | Iron | 6.99 | 0.10 | 0.032 | mg/l SW846 6010C |
| | | Manganese | 2.11 | 0.015 | 0.00042 | mg/l SW846 6010C |
| | | Alkalinity, Total as CaCO ₃ ^b | 161 | 5.0 | 1.1 | mg/l SM2320 B-11 |
| | | Chloride | 4.7 | 2.0 | 0.070 | mg/l EPA 300/SW846 9056A |
| | | Hardness, Total as CaCO ₃ | 147 | 4.0 | 2.5 | mg/l SM2340 C-11 |
| | | Nitrogen, Ammonia | 0.19 J | 0.20 | 0.14 | mg/l SM4500NH3 H-11LACHAT |
| | | Solids, Total Dissolved | 166 | 10 | 1.8 | mg/l SM2540 C-11 |
| | | Total Organic Carbon | 3.3 | 1.0 | 0.60 | mg/l SW846 9060A |

(a) Analysis performed at SGS Orlando, FL.

(b) Sample was titrated to a final pH of 4.5.

(c) Analysis performed at SGS Orlando, FL. Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.

Sample Results

Report of Analysis

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-01 | | |
| Lab Sample ID: JC64700-1 | | Date Sampled: 04/19/18 |
| Matrix: AQ - Field Blank Water | | Date Received: 04/20/18 |
| Method: EPA 537M BY ID EPA 537 MOD | | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13816.D | 1 | 05/01/18 03:50 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 260 ml | 1.0 ml |
| Run #2 | | |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|--------|-----|------|-------|---|
| 375-22-4 | Perfluorobutanoic acid | ND | 7.7 | 1.9 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 1.01 | 3.8 | 0.96 | ng/l | J |
| 307-24-4 | Perfluorohexanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 1.08 | 3.8 | 0.96 | ng/l | J |
| 375-73-5 | Perfluorobutanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | ND | 7.7 | 1.9 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 754-91-6 | PFOSA | ND | 3.8 | 0.96 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 19 | 3.8 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 19 | 3.8 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | ND | 7.7 | 1.9 | ng/l | |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 7.7 | 1.9 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C4-PFBA | 104% | | 30-140% |
| | 13C5-PFPeA | 100% | | 40-140% |
| | 13C5-PFHxA | 103% | | 50-150% |
| | 13C4-PFHpA | 103% | | 50-150% |
| | 13C8-PFOA | 109% | | 50-150% |
| | 13C9-PFNA | 102% | | 50-150% |
| | 13C6-PFDA | 99% | | 50-150% |
| | 13C7-PFUnDA | 86% | | 50-150% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-01 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-1 | | Date Received: 04/20/18 |
| Matrix: AQ - Field Blank Water | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFDoDA | 84% | | 50-150% |
| | 13C2-PFTeDA | 82% | | 40-150% |
| | 13C3-PFBS | 106% | | 50-150% |
| | 13C3-PFHxS | 104% | | 50-150% |
| | 13C8-PFOS | 91% | | 50-150% |
| | 13C8-FOSA | 82% | | 30-140% |
| | d3-MeFOSAA | 102% | | 50-150% |
| | 13C2-6:2FTS | 112% | | 50-150% |
| | 13C2-8:2FTS | 100% | | 50-150% |

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-02 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-2 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|------------|----|----------------|----|-----------|------------|------------------|
| Run #1 | 2A186774.D | 1 | 04/25/18 10:52 | VP | n/a | n/a | V2A7920 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-02 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-2 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|------------|-----------------------|--------|--------|---------|
| 1868-53-7 | Dibromofluoromethane | 101% | | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 110% | | 81-124% |
| 2037-26-5 | Toluene-D8 | 98% | | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 80-120% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---------|----------------------------------|------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-02 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-2 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | SW846 8270D BY SIM SW846 3510C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 4P26791.D | 1 | 05/02/18 22:31 | JB | 04/24/18 13:20 | OP11510A | E4P1509 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 915 ml | 1.0 ml |
| Run #2 | | |

BN PAH List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|----------|-------------------------------------|--------|-------|-------|-------|---|
| 83-32-9 | Acenaphthene | ND | 0.11 | 0.027 | ug/l | |
| 208-96-8 | Acenaphthylene ^a | ND | 0.11 | 0.023 | ug/l | |
| 120-12-7 | Anthracene ^a | ND | 0.11 | 0.021 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 0.055 | 0.025 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 0.055 | 0.036 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene ^a | ND | 0.11 | 0.047 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene ^a | ND | 0.11 | 0.039 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.11 | 0.036 | ug/l | |
| 218-01-9 | Chrysene | ND | 0.11 | 0.028 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene ^a | ND | 0.11 | 0.040 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 0.11 | 0.024 | ug/l | |
| 86-73-7 | Fluorene | ND | 0.11 | 0.027 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.11 | 0.042 | ug/l | |
| 91-20-3 | Naphthalene | ND | 0.11 | 0.032 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 0.11 | 0.025 | ug/l | |
| 129-00-0 | Pyrene | ND | 0.11 | 0.021 | ug/l | |
| 123-91-1 | 1,4-Dioxane | ND | 0.11 | 0.053 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|-----------|----------------------|--------|--------|---------|
| 4165-60-0 | Nitrobenzene-d5 | 88% | | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 72% | | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 80% | | 22-130% |

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-02 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-2 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | EPA 537M BY ID EPA 537 MOD | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13817.D | 1 | 05/01/18 04:08 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 250 ml | 1.0 ml |
| Run #2 | | |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|--------|-----|-----|-------|---|
| 375-22-4 | Perfluorobutanoic acid | 3.47 | 8.0 | 2.0 | ng/l | J |
| 2706-90-3 | Perfluoropentanoic acid | 5.15 | 4.0 | 1.0 | ng/l | |
| 307-24-4 | Perfluorohexanoic acid | 3.16 | 4.0 | 1.0 | ng/l | J |
| 375-85-9 | Perfluoroheptanoic acid | 2.30 | 4.0 | 1.0 | ng/l | J |
| 335-67-1 | Perfluorooctanoic acid | 7.61 | 4.0 | 1.0 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.01 | 4.0 | 1.0 | ng/l | J |
| 335-76-2 | Perfluorodecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 375-73-5 | Perfluorobutanesulfonic acid | 2.18 | 4.0 | 1.0 | ng/l | J |
| 355-46-4 | Perfluorohexanesulfonic acid | 8.03 | 4.0 | 1.0 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | ND | 4.0 | 1.0 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 7.56 | 8.0 | 2.0 | ng/l | J |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 4.0 | 1.0 | ng/l | |
| 754-91-6 | PFOSA | ND | 4.0 | 1.0 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 20 | 4.0 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 20 | 4.0 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | ND | 8.0 | 2.0 | ng/l | |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 8.0 | 2.0 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C4-PFBA | 62% | | 30-140% |
| | 13C5-PFPeA | 59% | | 40-140% |
| | 13C5-PFHxA | 64% | | 50-150% |
| | 13C4-PFHpA | 69% | | 50-150% |
| | 13C8-PFOA | 76% | | 50-150% |
| | 13C9-PFNA | 77% | | 50-150% |
| | 13C6-PFDA | 77% | | 50-150% |
| | 13C7-PFUnDA | 66% | | 50-150% |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-02 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-2 | | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFDoDA | 71% | | 50-150% |
| | 13C2-PFTeDA | 67% | | 40-150% |
| | 13C3-PFBS | 66% | | 50-150% |
| | 13C3-PFHxS | 70% | | 50-150% |
| | 13C8-PFOS | 71% | | 50-150% |
| | 13C8-FOSA | 53% | | 30-140% |
| | d3-MeFOSAA | 74% | | 50-150% |
| | 13C2-6:2FTS | 83% | | 50-150% |
| | 13C2-8:2FTS | 80% | | 50-150% |

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-02 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-2 | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

Total Metals Analysis

| Analyte | Result | RL | MDL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------------------|----------|---------|---------|-------|----|----------|--------------|--------------------------|--------------------------|
| Arsenic | ND | 0.0030 | 0.0027 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Barium | 0.0630 J | 0.20 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Beryllium | ND | 0.0010 | 0.00040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Boron | ND | 0.10 | 0.013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Chromium | ND | 0.010 | 0.00085 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Copper | 0.0041 J | 0.010 | 0.0032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Iron | 10.5 | 0.10 | 0.032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Lead ^a | ND | 0.0090 | 0.0079 | mg/l | 3 | 04/25/18 | 04/26/18 EAL | SW846 6010C ³ | SW846 3010A ⁵ |
| Manganese | 16.7 | 0.045 | 0.0013 | mg/l | 3 | 04/25/18 | 04/26/18 EAL | SW846 6010C ³ | SW846 3010A ⁵ |
| Mercury | ND | 0.00020 | 0.00013 | mg/l | 1 | 04/24/18 | 04/24/18 JA | SW846 7470A ¹ | SW846 7470A ⁴ |
| Nickel | 0.0079 J | 0.010 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |
| Selenium ^a | ND | 0.030 | 0.020 | mg/l | 3 | 04/25/18 | 04/26/18 EAL | SW846 6010C ³ | SW846 3010A ⁵ |
| Thallium ^a | ND | 0.0060 | 0.0049 | mg/l | 3 | 04/25/18 | 04/26/18 EAL | SW846 6010C ³ | SW846 3010A ⁵ |
| Zinc | ND | 0.020 | 0.0040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁵ |

- (1) Instrument QC Batch: MA44266
- (2) Instrument QC Batch: MA44281
- (3) Instrument QC Batch: MA44289
- (4) Prep QC Batch: MP6790
- (5) Prep QC Batch: MP6809

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

4.2
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-02 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-2 | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

4.2
4

General Chemistry

| Analyte | Result | RL | MDL | Units | DF | Analyzed | By | Method |
|---|---------|------|-------|-------|----|----------------|----|----------------------|
| Alkalinity, Total as CaCO ₃ ^a | 228 | 10 | 2.3 | mg/l | 1 | 04/26/18 13:03 | CD | SM2320 B-11 |
| Bromide | 0.067 J | 0.50 | 0.060 | mg/l | 1 | 05/12/18 04:20 | NV | EPA 300/SW846 9056A |
| Chemical Oxygen Demand | 12.7 J | 20 | 6.3 | mg/l | 1 | 04/26/18 12:25 | MP | SM5220 C-11,HACH8000 |
| Chloride | 2.7 | 2.0 | 0.070 | mg/l | 1 | 05/12/18 04:20 | NV | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 225 | 4.0 | 2.5 | mg/l | 1 | 04/23/18 18:30 | ST | SM2340 C-11 |
| Nitrogen, Ammonia | 1.7 | 0.20 | 0.14 | mg/l | 1 | 04/27/18 14:49 | TG | SM4500NH3 H-11LACHAT |
| Solids, Total Dissolved | 264 | 10 | 1.8 | mg/l | 1 | 04/24/18 15:45 | RI | SM2540 C-11 |
| Sulfate | ND | 2.0 | 0.53 | mg/l | 1 | 05/12/18 04:20 | NV | EPA 300/SW846 9056A |
| Total Organic Carbon | 6.5 | 1.0 | 0.60 | mg/l | 1 | 04/23/18 15:34 | CD | SW846 9060A |

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-03 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-3 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|------------|----|----------------|----|-----------|------------|------------------|
| Run #1 | 2A186775.D | 1 | 04/25/18 11:21 | VP | n/a | n/a | V2A7920 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-03 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-3 | | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: SW846 8260C | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|------------|-----------------------|--------|--------|---------|
| 1868-53-7 | Dibromofluoromethane | 99% | | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 111% | | 81-124% |
| 2037-26-5 | Toluene-D8 | 98% | | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 80-120% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---------|----------------------------------|------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-03 | |
| Lab Sample ID: JC64700-3 | Date Sampled: 04/19/18 |
| Matrix: AQ - Ground Water | Date Received: 04/20/18 |
| Method: SW846 8270D BY SIM SW846 3510C | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 4P26792.D | 1 | 05/02/18 22:55 | JB | 04/24/18 13:20 | OP11510A | E4P1509 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 910 ml | 1.0 ml |
| Run #2 | | |

BN PAH List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|----------|-------------------------------------|--------|-------|-------|-------|---|
| 83-32-9 | Acenaphthene | ND | 0.11 | 0.027 | ug/l | |
| 208-96-8 | Acenaphthylene ^a | ND | 0.11 | 0.023 | ug/l | |
| 120-12-7 | Anthracene ^a | ND | 0.11 | 0.021 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | 0.0447 | 0.055 | 0.025 | ug/l | J |
| 50-32-8 | Benzo(a)pyrene | ND | 0.055 | 0.037 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene ^a | ND | 0.11 | 0.048 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene ^a | ND | 0.11 | 0.039 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.11 | 0.036 | ug/l | |
| 218-01-9 | Chrysene | ND | 0.11 | 0.029 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene ^a | ND | 0.11 | 0.040 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 0.11 | 0.024 | ug/l | |
| 86-73-7 | Fluorene | ND | 0.11 | 0.027 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.11 | 0.042 | ug/l | |
| 91-20-3 | Naphthalene | 0.227 | 0.11 | 0.032 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 0.11 | 0.025 | ug/l | |
| 129-00-0 | Pyrene | ND | 0.11 | 0.021 | ug/l | |
| 123-91-1 | 1,4-Dioxane | ND | 0.11 | 0.054 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|-----------|----------------------|--------|--------|---------|
| 4165-60-0 | Nitrobenzene-d5 | 92% | | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 77% | | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 83% | | 22-130% |

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
 4

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-03 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-3 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | EPA 537M BY ID EPA 537 MOD | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13818.D | 1 | 05/01/18 04:27 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 250 ml | 1.0 ml |
| Run #2 | | |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|--------|-----|-----|-------|---|
| 375-22-4 | Perfluorobutanoic acid | 12.7 | 8.0 | 2.0 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 29.8 | 4.0 | 1.0 | ng/l | |
| 307-24-4 | Perfluorohexanoic acid | 20.3 | 4.0 | 1.0 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 11.7 | 4.0 | 1.0 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 16.3 | 4.0 | 1.0 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 19.0 | 4.0 | 1.0 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 1.14 | 4.0 | 1.0 | ng/l | J |
| 375-73-5 | Perfluorobutanesulfonic acid | 11.7 | 4.0 | 1.0 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 64.1 | 4.0 | 1.0 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | 2.24 | 4.0 | 1.0 | ng/l | J |
| 1763-23-1 | Perfluorooctanesulfonic acid | 50.8 | 8.0 | 2.0 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 4.0 | 1.0 | ng/l | |
| 754-91-6 | PFOSA | ND | 4.0 | 1.0 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 20 | 4.0 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 20 | 4.0 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | ND | 8.0 | 2.0 | ng/l | |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 8.0 | 2.0 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C4-PFBA | 87% | | 30-140% |
| | 13C5-PFPeA | 84% | | 40-140% |
| | 13C5-PFHxA | 89% | | 50-150% |
| | 13C4-PFHpA | 92% | | 50-150% |
| | 13C8-PFOA | 98% | | 50-150% |
| | 13C9-PFNA | 95% | | 50-150% |
| | 13C6-PFDA | 88% | | 50-150% |
| | 13C7-PFUnDA | 79% | | 50-150% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-03 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-3 | | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFDoDA | 82% | | 50-150% |
| | 13C2-PFTeDA | 79% | | 40-150% |
| | 13C3-PFBS | 90% | | 50-150% |
| | 13C3-PFHxS | 93% | | 50-150% |
| | 13C8-PFOS | 82% | | 50-150% |
| | 13C8-FOSA | 62% | | 30-140% |
| | d3-MeFOSAA | 89% | | 50-150% |
| | 13C2-6:2FTS | 102% | | 50-150% |
| | 13C2-8:2FTS | 87% | | 50-150% |

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-03 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-3 | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

Total Metals Analysis

| Analyte | Result | RL | MDL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|----------|---------|---------|-------|----|----------|-------------|--------------------------|--------------------------|
| Arsenic | ND | 0.0030 | 0.0027 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Barium | 0.0354 J | 0.20 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Beryllium | ND | 0.0010 | 0.00040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Boron | ND | 0.10 | 0.013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Chromium | ND | 0.010 | 0.00085 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Copper | ND | 0.010 | 0.0032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Iron | 0.0628 J | 0.10 | 0.032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Lead | ND | 0.0030 | 0.0026 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Manganese | 0.0620 | 0.015 | 0.00042 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Mercury | ND | 0.00020 | 0.00013 | mg/l | 1 | 04/24/18 | 04/24/18 JA | SW846 7470A ¹ | SW846 7470A ³ |
| Nickel | 0.0017 J | 0.010 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Selenium | ND | 0.010 | 0.0066 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Thallium | ND | 0.0020 | 0.0016 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Zinc | ND | 0.020 | 0.0040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |

- (1) Instrument QC Batch: MA44266
- (2) Instrument QC Batch: MA44281
- (3) Prep QC Batch: MP6790
- (4) Prep QC Batch: MP6809

RL = Reporting Limit
 MDL = Method Detection Limit

ND = Not detected
 J = Indicates a result > = MDL but < RL

4.3
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-03 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-3 | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

General Chemistry

| Analyte | Result | RL | MDL | Units | DF | Analyzed | By | Method |
|---|--------|------|-------|-------|----|----------------|----|-----------------------|
| Alkalinity, Total as CaCO ₃ ^a | 81.6 | 5.0 | 1.1 | mg/l | 1 | 04/26/18 13:03 | CD | SM2320 B-11 |
| Bromide | ND | 0.50 | 0.060 | mg/l | 1 | 05/12/18 04:47 | NV | EPA 300/SW846 9056A |
| Chemical Oxygen Demand | ND | 20 | 6.3 | mg/l | 1 | 04/26/18 12:25 | MP | SM5220 C-11, HACH8000 |
| Chloride | 3.0 | 2.0 | 0.070 | mg/l | 1 | 05/12/18 04:47 | NV | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 94.1 | 4.0 | 2.5 | mg/l | 1 | 04/23/18 18:30 | ST | SM2340 C-11 |
| Nitrogen, Ammonia | ND | 0.20 | 0.14 | mg/l | 1 | 04/27/18 14:50 | TG | SM4500NH3 H-11 LACHAT |
| Solids, Total Dissolved | 124 | 10 | 1.8 | mg/l | 1 | 04/24/18 15:45 | RI | SM2540 C-11 |
| Sulfate | 21.8 | 2.0 | 0.53 | mg/l | 1 | 05/12/18 04:47 | NV | EPA 300/SW846 9056A |
| Total Organic Carbon | 1.7 | 1.0 | 0.60 | mg/l | 1 | 04/23/18 16:19 | CD | SW846 9060A |

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

4.3
4

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-04 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-4 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run #1 | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|------------|----|----------------|----|-----------|------------|------------------|
| Run #1 | 2A186776.D | 1 | 04/25/18 11:50 | VP | n/a | n/a | V2A7920 |
| Run #2 | | | | | | | |

| Run #1 | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-04 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-4 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|------------|-----------------------|--------|--------|---------|
| 1868-53-7 | Dibromofluoromethane | 99% | | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 111% | | 81-124% |
| 2037-26-5 | Toluene-D8 | 98% | | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 80-120% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---------|----------------------------------|------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

4.4
4

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-04 | | |
| Lab Sample ID: JC64700-4 | | Date Sampled: 04/19/18 |
| Matrix: AQ - Ground Water | | Date Received: 04/20/18 |
| Method: SW846 8270D BY SIM SW846 3510C | | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 4P26793.D | 1 | 05/02/18 23:18 | JB | 04/24/18 13:20 | OP11510A | E4P1509 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 900 ml | 1.0 ml |
| Run #2 | | |

BN PAH List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|----------|-------------------------------------|--------|-------|-------|-------|---|
| 83-32-9 | Acenaphthene | ND | 0.11 | 0.027 | ug/l | |
| 208-96-8 | Acenaphthylene ^a | ND | 0.11 | 0.023 | ug/l | |
| 120-12-7 | Anthracene ^a | ND | 0.11 | 0.022 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | 0.0489 | 0.056 | 0.025 | ug/l | J |
| 50-32-8 | Benzo(a)pyrene | ND | 0.056 | 0.037 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene ^a | ND | 0.11 | 0.048 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene ^a | ND | 0.11 | 0.040 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.11 | 0.037 | ug/l | |
| 218-01-9 | Chrysene | ND | 0.11 | 0.029 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene ^a | ND | 0.11 | 0.040 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 0.11 | 0.024 | ug/l | |
| 86-73-7 | Fluorene | ND | 0.11 | 0.027 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.11 | 0.042 | ug/l | |
| 91-20-3 | Naphthalene | 0.0737 | 0.11 | 0.033 | ug/l | J |
| 85-01-8 | Phenanthrene | 0.0464 | 0.11 | 0.026 | ug/l | J |
| 129-00-0 | Pyrene | ND | 0.11 | 0.021 | ug/l | |
| 123-91-1 | 1,4-Dioxane | ND | 0.11 | 0.054 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|-----------|----------------------|--------|--------|---------|
| 4165-60-0 | Nitrobenzene-d5 | 81% | | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 66% | | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 77% | | 22-130% |

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-04 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-4 | Date Received: | 04/20/18 |
| Matrix: | AQ - Ground Water | Percent Solids: | n/a |
| Method: | EPA 537M BY ID EPA 537 MOD | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13820.D | 1 | 05/01/18 05:05 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 250 ml | 1.0 ml |
| Run #2 | | |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|--------|-----|-----|-------|---|
| 375-22-4 | Perfluorobutanoic acid | 20.7 | 8.0 | 2.0 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 69.7 | 4.0 | 1.0 | ng/l | |
| 307-24-4 | Perfluorohexanoic acid | 46.5 | 4.0 | 1.0 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 23.8 | 4.0 | 1.0 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 34.2 | 4.0 | 1.0 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 6.59 | 4.0 | 1.0 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | 1.06 | 4.0 | 1.0 | ng/l | J |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 1.30 | 4.0 | 1.0 | ng/l | J |
| 375-73-5 | Perfluorobutanesulfonic acid | 14.8 | 4.0 | 1.0 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 95.4 | 4.0 | 1.0 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | 2.49 | 4.0 | 1.0 | ng/l | J |
| 1763-23-1 | Perfluorooctanesulfonic acid | 24.7 | 8.0 | 2.0 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 4.0 | 1.0 | ng/l | |
| 754-91-6 | PFOSA | ND | 4.0 | 1.0 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 20 | 4.0 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 20 | 4.0 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 4.02 | 8.0 | 2.0 | ng/l | J |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 8.0 | 2.0 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C4-PFBA | 83% | | 30-140% |
| | 13C5-PFPeA | 81% | | 40-140% |
| | 13C5-PFHxA | 82% | | 50-150% |
| | 13C4-PFHpA | 87% | | 50-150% |
| | 13C8-PFOA | 92% | | 50-150% |
| | 13C9-PFNA | 87% | | 50-150% |
| | 13C6-PFDA | 84% | | 50-150% |
| | 13C7-PFUnDA | 77% | | 50-150% |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-04 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-4 | | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFDoDA | 88% | | 50-150% |
| | 13C2-PFTeDA | 79% | | 40-150% |
| | 13C3-PFBS | 88% | | 50-150% |
| | 13C3-PFHxS | 88% | | 50-150% |
| | 13C8-PFOS | 82% | | 50-150% |
| | 13C8-FOSA | 53% | | 30-140% |
| | d3-MeFOSAA | 88% | | 50-150% |
| | 13C2-6:2FTS | 96% | | 50-150% |
| | 13C2-8:2FTS | 85% | | 50-150% |

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-04 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-4 | | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

Total Metals Analysis

| Analyte | Result | RL | MDL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|-----------|---------|---------|-------|----|----------|-------------|--------------------------|--------------------------|
| Arsenic | ND | 0.0030 | 0.0027 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Barium | 0.0845 J | 0.20 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Beryllium | ND | 0.0010 | 0.00040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Boron | ND | 0.10 | 0.013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Chromium | 0.00090 J | 0.010 | 0.00085 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Copper | ND | 0.010 | 0.0032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Iron | 4.65 | 0.10 | 0.032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Lead | ND | 0.0030 | 0.0026 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Manganese | 0.849 | 0.015 | 0.00042 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Mercury | ND | 0.00020 | 0.00013 | mg/l | 1 | 04/24/18 | 04/24/18 JA | SW846 7470A ¹ | SW846 7470A ³ |
| Nickel | 0.0023 J | 0.010 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Selenium | ND | 0.010 | 0.0066 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Thallium | ND | 0.0020 | 0.0016 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Zinc | ND | 0.020 | 0.0040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |

- (1) Instrument QC Batch: MA44266
- (2) Instrument QC Batch: MA44281
- (3) Prep QC Batch: MP6790
- (4) Prep QC Batch: MP6809

RL = Reporting Limit
 MDL = Method Detection Limit

ND = Not detected
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-04 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-4 | Date Received: 04/20/18 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

General Chemistry

| Analyte | Result | RL | MDL | Units | DF | Analyzed | By | Method |
|---|---------|------|-------|-------|----|----------------|----|----------------------|
| Alkalinity, Total as CaCO ₃ ^a | 139 | 5.0 | 1.1 | mg/l | 1 | 04/26/18 13:03 | CD | SM2320 B-11 |
| Bromide | 0.092 J | 0.50 | 0.060 | mg/l | 1 | 05/12/18 06:11 | NV | EPA 300/SW846 9056A |
| Chemical Oxygen Demand | ND | 20 | 6.3 | mg/l | 1 | 04/26/18 12:25 | MP | SM5220 C-11,HACH8000 |
| Chloride | 3.9 | 2.0 | 0.070 | mg/l | 1 | 05/12/18 06:11 | NV | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 125 | 4.0 | 2.5 | mg/l | 1 | 04/23/18 18:30 | ST | SM2340 C-11 |
| Nitrogen, Ammonia | ND | 0.20 | 0.14 | mg/l | 1 | 04/27/18 14:53 | TG | SM4500NH3 H-11LACHAT |
| Solids, Total Dissolved | 166 | 10 | 1.8 | mg/l | 1 | 04/24/18 15:45 | RI | SM2540 C-11 |
| Sulfate | ND | 2.0 | 0.53 | mg/l | 1 | 05/12/18 06:11 | NV | EPA 300/SW846 9056A |
| Total Organic Carbon | 2.4 | 1.0 | 0.60 | mg/l | 1 | 04/23/18 16:31 | CD | SW846 9060A |

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit
 MDL = Method Detection Limit

ND = Not detected
 J = Indicates a result > = MDL but < RL

4.4
4

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-05 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-5 | Date Received: | 04/20/18 |
| Matrix: | AQ - Equipment Blank | Percent Solids: | n/a |
| Method: | EPA 537M BY ID EPA 537 MOD | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13823.D | 1 | 05/01/18 06:01 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 260 ml | 1.0 ml |
| Run #2 | | |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|--------|-----|------|-------|---|
| 375-22-4 | Perfluorobutanoic acid | ND | 7.7 | 1.9 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 1.32 | 3.8 | 0.96 | ng/l | J |
| 307-24-4 | Perfluorohexanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 1.04 | 3.8 | 0.96 | ng/l | J |
| 375-73-5 | Perfluorobutanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | ND | 7.7 | 1.9 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 754-91-6 | PFOSA | ND | 3.8 | 0.96 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 19 | 3.8 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 19 | 3.8 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | ND | 7.7 | 1.9 | ng/l | |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 7.7 | 1.9 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C4-PFBA | 94% | | 30-140% |
| | 13C5-PFPeA | 88% | | 40-140% |
| | 13C5-PFHxA | 92% | | 50-150% |
| | 13C4-PFHpA | 92% | | 50-150% |
| | 13C8-PFOA | 99% | | 50-150% |
| | 13C9-PFNA | 90% | | 50-150% |
| | 13C6-PFDA | 84% | | 50-150% |
| | 13C7-PFUnDA | 80% | | 50-150% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-05 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-5 | | Date Received: 04/20/18 |
| Matrix: AQ - Equipment Blank | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFDoDA | 82% | | 50-150% |
| | 13C2-PFTeDA | 78% | | 40-150% |
| | 13C3-PFBS | 98% | | 50-150% |
| | 13C3-PFHxS | 95% | | 50-150% |
| | 13C8-PFOS | 82% | | 50-150% |
| | 13C8-FOSA | 68% | | 30-140% |
| | d3-MeFOSAA | 92% | | 50-150% |
| | 13C2-6:2FTS | 102% | | 50-150% |
| | 13C2-8:2FTS | 84% | | 50-150% |

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-06 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-6 | Date Received: | 04/20/18 |
| Matrix: | AQ - Trip Blank Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run #1 | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|------------|----|----------------|----|-----------|------------|------------------|
| Run #1 | 2A186784.D | 1 | 04/25/18 15:40 | VP | n/a | n/a | V2A7920 |
| Run #2 | | | | | | | |

| Run #1 | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-06 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-6 | Date Received: | 04/20/18 |
| Matrix: | AQ - Trip Blank Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|------------|-----------------------|--------|--------|---------|
| 1868-53-7 | Dibromofluoromethane | 103% | | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 117% | | 81-124% |
| 2037-26-5 | Toluene-D8 | 97% | | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 80-120% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---------|----------------------------------|------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-07 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-7 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run #1 | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|------------|----|----------------|----|-----------|------------|------------------|
| Run #1 | 2A186777.D | 1 | 04/25/18 12:19 | VP | n/a | n/a | V2A7920 |
| Run #2 | | | | | | | |

| Run #1 | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-07 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-7 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|------------|-----------------------|--------|--------|---------|
| 1868-53-7 | Dibromofluoromethane | 101% | | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 114% | | 81-124% |
| 2037-26-5 | Toluene-D8 | 97% | | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 80-120% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---------|----------------------------------|------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-07 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-7 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | SW846 8270D BY SIM SW846 3510C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 4P26794.D | 1 | 05/02/18 23:42 | JB | 04/24/18 13:20 | OP11510A | E4P1509 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 1000 ml | 1.0 ml |
| Run #2 | | |

BN PAH List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|----------|-------------------------------------|--------|-------|-------|-------|---|
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.025 | ug/l | |
| 208-96-8 | Acenaphthylene ^a | ND | 0.10 | 0.021 | ug/l | |
| 120-12-7 | Anthracene ^a | ND | 0.10 | 0.020 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | 0.0368 | 0.050 | 0.023 | ug/l | J |
| 50-32-8 | Benzo(a)pyrene | ND | 0.050 | 0.033 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene ^a | ND | 0.10 | 0.043 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene ^a | ND | 0.10 | 0.036 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.033 | ug/l | |
| 218-01-9 | Chrysene | ND | 0.10 | 0.026 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene ^a | ND | 0.10 | 0.036 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.022 | ug/l | |
| 86-73-7 | Fluorene | ND | 0.10 | 0.025 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.038 | ug/l | |
| 91-20-3 | Naphthalene | 0.0585 | 0.10 | 0.029 | ug/l | J |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.023 | ug/l | |
| 129-00-0 | Pyrene | ND | 0.10 | 0.019 | ug/l | |
| 123-91-1 | 1,4-Dioxane | ND | 0.10 | 0.049 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|-----------|----------------------|--------|--------|---------|
| 4165-60-0 | Nitrobenzene-d5 | 85% | | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 71% | | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 71% | | 22-130% |

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

MDL = Method Detection Limit
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

J = Indicates an estimated value

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-07 | | |
| Lab Sample ID: JC64700-7 | | Date Sampled: 04/19/18 |
| Matrix: AQ - Surface Water | | Date Received: 04/20/18 |
| Method: EPA 537M BY ID EPA 537 MOD | | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13842.D | 1 | 05/01/18 11:57 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 ^b | 2Q13824.D | 1 | 05/01/18 06:20 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |

| | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 260 ml | 1.0 ml |
| Run #2 | 260 ml | 1.0 ml |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|---|--------|-----|------|-------|---|
| 375-22-4 | Perfluorobutanoic acid | 19.1 | 7.7 | 1.9 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 60.0 | 3.8 | 0.96 | ng/l | |
| 307-24-4 | Perfluorohexanoic acid ^c | 39.7 | 3.8 | 0.96 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid ^c | 18.8 | 3.8 | 0.96 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 17.8 | 3.8 | 0.96 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 26.1 | 3.8 | 0.96 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | 1.16 | 3.8 | 0.96 | ng/l | J |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | ND | 3.8 | 0.96 | ng/l | |
| 375-73-5 | Perfluorobutanesulfonic acid ^c | 11.1 | 3.8 | 0.96 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid ^c | 117 | 3.8 | 0.96 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | 5.30 | 3.8 | 0.96 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 89.1 | 7.7 | 1.9 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 3.8 | 0.96 | ng/l | |
| 754-91-6 | PFOSA | ND | 3.8 | 0.96 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 19 | 3.8 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 19 | 3.8 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 6.81 | 7.7 | 1.9 | ng/l | J |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 7.7 | 1.9 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|------------------|--------|---------|
| | 13C4-PFBA | 42% | 41% | 30-140% |
| | 13C5-PFPeA | 42% | 40% | 40-140% |
| | 13C5-PFHxA | 44% ^d | 43% | 50-150% |
| | 13C4-PFHpA | 45% ^d | 43% | 50-150% |
| | 13C8-PFOA | 50% | 46% | 50-150% |
| | 13C9-PFNA | 51% | 47% | 50-150% |
| | 13C6-PFDA | 57% | 55% | 50-150% |
| | 13C7-PFUnDA | 64% | 56% | 50-150% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
 4

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-07 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-7 | | Date Received: 04/20/18 |
| Matrix: AQ - Surface Water | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|------------------|--------|---------|
| | 13C2-PFDoDA | 70% | 60% | 50-150% |
| | 13C2-PFTeDA | 59% | 51% | 40-150% |
| | 13C3-PFBS | 43% ^d | 43% | 50-150% |
| | 13C3-PFHxS | 44% ^d | 43% | 50-150% |
| | 13C8-PFOS | 51% | 48% | 50-150% |
| | 13C8-FOSA | 43% | 43% | 30-140% |
| | d3-MeFOSAA | 70% | 65% | 50-150% |
| | 13C2-6:2FTS | 50% | 47% | 50-150% |
| | 13C2-8:2FTS | 55% | 53% | 50-150% |

- (a) Analysis performed at SGS Orlando, FL.
- (b) Confirmation run for internal standard areas. Analysis performed at SGS Orlando, FL.
- (c) Associated ID Standard outside control limits due to matrix interference. Insufficient sample for re-extraction.
- (d) Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-07 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-7 | Date Received: 04/20/18 |
| Matrix: AQ - Surface Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

Total Metals Analysis

| Analyte | Result | RL | MDL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|----------|---------|---------|-------|----|----------|-------------|--------------------------|--------------------------|
| Arsenic | ND | 0.0030 | 0.0027 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Barium | 0.0205 J | 0.20 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Beryllium | ND | 0.0010 | 0.00040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Boron | ND | 0.10 | 0.013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Chromium | ND | 0.010 | 0.00085 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Copper | ND | 0.010 | 0.0032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Iron | ND | 0.10 | 0.032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Lead | ND | 0.0030 | 0.0026 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Manganese | 0.0010 J | 0.015 | 0.00042 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Mercury | ND | 0.00020 | 0.00013 | mg/l | 1 | 04/24/18 | 04/24/18 JA | SW846 7470A ¹ | SW846 7470A ³ |
| Nickel | ND | 0.010 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Selenium | ND | 0.010 | 0.0066 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Thallium | ND | 0.0020 | 0.0016 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Zinc | ND | 0.020 | 0.0040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |

- (1) Instrument QC Batch: MA44266
- (2) Instrument QC Batch: MA44281
- (3) Prep QC Batch: MP6790
- (4) Prep QC Batch: MP6809

RL = Reporting Limit
 MDL = Method Detection Limit

ND = Not detected
 J = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-07 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-7 | Date Received: 04/20/18 |
| Matrix: AQ - Surface Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

General Chemistry

| Analyte | Result | RL | MDL | Units | DF | Analyzed | By | Method |
|---|--------|------|-------|-------|----|----------------|----|----------------------|
| Alkalinity, Total as CaCO ₃ ^a | 76.5 | 5.0 | 1.1 | mg/l | 1 | 04/26/18 13:20 | CD | SM2320 B-11 |
| Bromide | ND | 0.50 | 0.060 | mg/l | 1 | 05/12/18 06:39 | NV | EPA 300/SW846 9056A |
| Chemical Oxygen Demand | ND | 20 | 6.3 | mg/l | 1 | 04/26/18 12:25 | MP | SM5220 C-11,HACH8000 |
| Chloride | 2.2 | 2.0 | 0.070 | mg/l | 1 | 05/12/18 06:39 | NV | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 86.2 | 4.0 | 2.5 | mg/l | 1 | 04/23/18 18:30 | ST | SM2340 C-11 |
| Nitrogen, Ammonia | ND | 0.20 | 0.14 | mg/l | 1 | 04/27/18 14:54 | TG | SM4500NH3 H-11LACHAT |
| Solids, Total Dissolved | 98.0 | 10 | 1.8 | mg/l | 1 | 04/24/18 15:45 | RI | SM2540 C-11 |
| Sulfate | 15.7 | 2.0 | 0.53 | mg/l | 1 | 05/12/18 06:39 | NV | EPA 300/SW846 9056A |
| Total Organic Carbon | 2.9 | 1.0 | 0.60 | mg/l | 1 | 04/23/18 16:44 | CD | SW846 9060A |

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-08 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-8 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run #1 | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|------------|----|----------------|----|-----------|------------|------------------|
| Run #1 | 2A186778.D | 1 | 04/25/18 12:47 | VP | n/a | n/a | V2A7920 |
| Run #2 | | | | | | | |

| Run #1 | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-08 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-8 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | SW846 8260C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

VOA Special List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|------------|-----------------------|--------|--------|---------|
| 1868-53-7 | Dibromofluoromethane | 100% | | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 113% | | 81-124% |
| 2037-26-5 | Toluene-D8 | 97% | | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 80-120% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---------|----------------------------------|------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-08 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-8 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | SW846 8270D BY SIM SW846 3510C | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 4P26795.D | 1 | 05/03/18 00:05 | JB | 04/24/18 13:20 | OP11510A | E4P1509 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 1000 ml | 1.0 ml |
| Run #2 | | |

BN PAH List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|----------|-------------------------------------|--------|-------|-------|-------|---|
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.025 | ug/l | |
| 208-96-8 | Acenaphthylene ^a | ND | 0.10 | 0.021 | ug/l | |
| 120-12-7 | Anthracene ^a | ND | 0.10 | 0.020 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | 0.0371 | 0.050 | 0.023 | ug/l | J |
| 50-32-8 | Benzo(a)pyrene | ND | 0.050 | 0.033 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene ^a | ND | 0.10 | 0.043 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene ^a | ND | 0.10 | 0.036 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.033 | ug/l | |
| 218-01-9 | Chrysene | ND | 0.10 | 0.026 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene ^a | ND | 0.10 | 0.036 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.022 | ug/l | |
| 86-73-7 | Fluorene | ND | 0.10 | 0.025 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.038 | ug/l | |
| 91-20-3 | Naphthalene | ND | 0.10 | 0.029 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.023 | ug/l | |
| 129-00-0 | Pyrene | ND | 0.10 | 0.019 | ug/l | |
| 123-91-1 | 1,4-Dioxane | ND | 0.10 | 0.049 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|-----------|----------------------|--------|--------|---------|
| 4165-60-0 | Nitrobenzene-d5 | 98% | | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 84% | | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 62% | | 22-130% |

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|--------------------------|---|------------------------|----------|
| Client Sample ID: | 3-WES-002-001-08 | Date Sampled: | 04/19/18 |
| Lab Sample ID: | JC64700-8 | Date Received: | 04/20/18 |
| Matrix: | AQ - Surface Water | Percent Solids: | n/a |
| Method: | EPA 537M BY ID EPA 537 MOD | | |
| Project: | PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------------|-----|----------------|------------|------------------|
| Run #1 ^a | 2Q13826.D | 1 | 05/01/18 06:57 | AFL | 04/27/18 09:00 | F:OP69810 | F:S2Q256 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 250 ml | 1.0 ml |
| Run #2 | | |

PFAS List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|--------|-----|-----|-------|---|
| 375-22-4 | Perfluorobutanoic acid | 19.5 | 8.0 | 2.0 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 60.7 | 4.0 | 1.0 | ng/l | |
| 307-24-4 | Perfluorohexanoic acid | 40.6 | 4.0 | 1.0 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 22.7 | 4.0 | 1.0 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 20.3 | 4.0 | 1.0 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 8.88 | 4.0 | 1.0 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | 1.47 | 4.0 | 1.0 | ng/l | J |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | ND | 4.0 | 1.0 | ng/l | |
| 375-73-5 | Perfluorobutanesulfonic acid | 12.1 | 4.0 | 1.0 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 99.8 | 4.0 | 1.0 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | 4.97 | 4.0 | 1.0 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 134 | 8.0 | 2.0 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 4.0 | 1.0 | ng/l | |
| 754-91-6 | PFOSA | ND | 4.0 | 1.0 | ng/l | |
| 2355-31-9 | MeFOSAA | ND | 20 | 4.0 | ng/l | |
| 2991-50-6 | EtFOSAA | ND | 20 | 4.0 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 3.92 | 8.0 | 2.0 | ng/l | J |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 8.0 | 2.0 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C4-PFBA | 72% | | 30-140% |
| | 13C5-PFPeA | 70% | | 40-140% |
| | 13C5-PFHxA | 76% | | 50-150% |
| | 13C4-PFHpA | 78% | | 50-150% |
| | 13C8-PFOA | 82% | | 50-150% |
| | 13C9-PFNA | 81% | | 50-150% |
| | 13C6-PFDA | 74% | | 50-150% |
| | 13C7-PFUnDA | 61% | | 50-150% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.8
4

Report of Analysis

| | | |
|---|--|--------------------------------|
| Client Sample ID: 3-WES-002-001-08 | | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-8 | | Date Received: 04/20/18 |
| Matrix: AQ - Surface Water | | Percent Solids: n/a |
| Method: EPA 537M BY ID EPA 537 MOD | | |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | | |

PFAS List

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFDoDA | 65% | | 50-150% |
| | 13C2-PFTeDA | 63% | | 40-150% |
| | 13C3-PFBS | 77% | | 50-150% |
| | 13C3-PFHxS | 80% | | 50-150% |
| | 13C8-PFOS | 73% | | 50-150% |
| | 13C8-FOSA | 48% | | 30-140% |
| | d3-MeFOSAA | 72% | | 50-150% |
| | 13C2-6:2FTS | 92% | | 50-150% |
| | 13C2-8:2FTS | 80% | | 50-150% |

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.8
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-08 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-8 | Date Received: 04/20/18 |
| Matrix: AQ - Surface Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

Total Metals Analysis

| Analyte | Result | RL | MDL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|----------|---------|---------|-------|----|----------|-------------|--------------------------|--------------------------|
| Arsenic | ND | 0.0030 | 0.0027 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Barium | 0.0449 J | 0.20 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Beryllium | ND | 0.0010 | 0.00040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Boron | ND | 0.10 | 0.013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Chromium | ND | 0.010 | 0.00085 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Copper | ND | 0.010 | 0.0032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Iron | 6.99 | 0.10 | 0.032 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Lead | ND | 0.0030 | 0.0026 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Manganese | 2.11 | 0.015 | 0.00042 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Mercury | ND | 0.00020 | 0.00013 | mg/l | 1 | 04/24/18 | 04/24/18 JA | SW846 7470A ¹ | SW846 7470A ³ |
| Nickel | ND | 0.010 | 0.0013 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Selenium | ND | 0.010 | 0.0066 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Thallium | ND | 0.0020 | 0.0016 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |
| Zinc | ND | 0.020 | 0.0040 | mg/l | 1 | 04/25/18 | 04/26/18 GT | SW846 6010C ² | SW846 3010A ⁴ |

- (1) Instrument QC Batch: MA44266
- (2) Instrument QC Batch: MA44281
- (3) Prep QC Batch: MP6790
- (4) Prep QC Batch: MP6809

RL = Reporting Limit
 MDL = Method Detection Limit

ND = Not detected
 J = Indicates a result > = MDL but < RL

4.8
4

Report of Analysis

| | |
|---|--------------------------------|
| Client Sample ID: 3-WES-002-001-08 | Date Sampled: 04/19/18 |
| Lab Sample ID: JC64700-8 | Date Received: 04/20/18 |
| Matrix: AQ - Surface Water | Percent Solids: n/a |
| Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill | |

General Chemistry

| Analyte | Result | RL | MDL | Units | DF | Analyzed | By | Method |
|---|--------|------|-------|-------|----|----------------|----|----------------------|
| Alkalinity, Total as CaCO ₃ ^a | 161 | 5.0 | 1.1 | mg/l | 1 | 04/26/18 13:03 | CD | SM2320 B-11 |
| Bromide | ND | 0.50 | 0.060 | mg/l | 1 | 05/12/18 07:07 | NV | EPA 300/SW846 9056A |
| Chemical Oxygen Demand | ND | 20 | 6.3 | mg/l | 1 | 04/26/18 12:25 | MP | SM5220 C-11,HACH8000 |
| Chloride | 4.7 | 2.0 | 0.070 | mg/l | 1 | 05/12/18 07:07 | NV | EPA 300/SW846 9056A |
| Hardness, Total as CaCO ₃ | 147 | 4.0 | 2.5 | mg/l | 1 | 04/23/18 18:30 | ST | SM2340 C-11 |
| Nitrogen, Ammonia | 0.19 J | 0.20 | 0.14 | mg/l | 1 | 04/27/18 14:56 | TG | SM4500NH3 H-11LACHAT |
| Solids, Total Dissolved | 166 | 10 | 1.8 | mg/l | 1 | 04/24/18 15:45 | RI | SM2540 C-11 |
| Sulfate | ND | 2.0 | 0.53 | mg/l | 1 | 05/12/18 07:07 | NV | EPA 300/SW846 9056A |
| Total Organic Carbon | 3.3 | 1.0 | 0.60 | mg/l | 1 | 04/23/18 17:01 | CD | SW846 9060A |

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit
 MDL = Method Detection Limit

ND = Not detected
 J = Indicates a result > = MDL but < RL

4.8
4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

CHAIN-OF-CUSTODY / Analytical Request Document

| | | | | | | | | | |
|---|--|--|--|---|--|--|--|---|--|
| Section A Laboratory Information | | | | Section B Client Information | | | | COC #: 3-WES-002-001 | |
| Lab Name: SGS - Accutest | | | | Company: Parsons | | | | Project Name: ILI - Region 3 | |
| Attention: Kristin DeGraw | | | | Attention: Sara Weishaupt | | | | Project Site: Westchester County Airport | |
| Address: Route 2235 Route 130; Dayton, NJ 08810 | | | | Address: 301 Plainfield Road, Suite 350 Syracuse, NY 13212 | | | | Project Number: 450619 | |
| Phone: 732-329-0200 x 1294 | | | | Phone: 315-552-9681 | | | | | |
| Email: | | | | Email: Sara.Weishaupt@parsons.com | | | | | |
| Section C Deliverable Requirements | | | | Section D Additional Information | | | | | |
| Report To: Sara.Weishaupt@parsons.com | | | | Purchase Order No: | | | | | |
| Copy To: Lorraine.Weber@parsons.com; Laura.Drachenberg@parsons.com Maryanne.Kosciewicz@parsons.com; Heather.Fettig@parsons.com | | | | TAT - 10 Day | | | | | |
| Deliverables: Level 2, CAT B Report, NYSDEC EQUIS EDD | | | | | | | | | |

| Location ID | Start Depth (ft) | End Depth (ft) | Field Sample ID MUST BE UNIQUE | Sample Date | Sample Time | Sample Purpose | Sample Matrix | Sample Type | # of Cont. | Preservative codes (for water only): | | | | | | | | | | | | | | | | |
|--------------------|------------------|----------------|-----------------------------------|-------------|-------------|----------------|---------------|-------------|------------|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | | | | | | | | | MS/MND | 0 | 1 | 0 | 2 | 3 | 1 | 0 | 0 | 3 | | | | | | | |
| 1 Field QCL | - | - | 3-WES-002-001-01 | 4-19-18 | 11:20 | FB | WG | QL | 2 | | X | | | | | | | | | | | | | | | |
| 2 3-WES-002-Pan-01 | 9.60 | 15.00 | 3-WES-002-001-02 | 4-19-18 | 11:40 | N | WG | GW | 13 | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| 3 3-WES-002-Pan-02 | 1.63 | 7.50 | 3-WES-002-001-03 | 4-19-18 | 13:50 | N | WG | GW | 13 | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| 4 3-WES-002-Pan-03 | 2.72 | 9.60 | 3-WES-002-001-04 | 4-19-18 | 14:50 | N | WG | GW | 13 | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| 5 Field QCL | - | - | 3-WES-002-001-05 | 4-19-18 | 11:50 | FB | WG | QL | 2 | | X | | | | | | | | | | | | | | | |
| 6 Field QCL | - | - | 3-WES-002-001-06 | 4-19-18 | - | TB | WG | QL | 2 | | | X | | | | | | | | | | | | | | |
| 7 3-WES-002-SW-01 | 0.0 | 0.0 | 3-WES-002-001-07 | 4-19-18 | 11:35 | N | WS | SW | 13 | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| 8 3-WES-002-SW-02 | 0.0 | 0.0 | 3-WES-002-001-08 | 4-19-18 | 12:30 | N | WS | SW | 13 | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | |

Special Instructions: Note - Some bottle labels say "Neverink Lf" under Project Site name - Name disregarded. Site is "Westchester County Airport Central".

| | | | | | |
|---------------------------------|------------------------------------|-----------------------------------|--------------------------|--|--|
| Samplers Name: T. Schuttschwert | Company: Parsons | Relinquished By: T. Schuttschwert | Company: Parsons | Cooler Temp.: 930 | Custody Seals Intact: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Shipment Method: FedEx | Date/Time: 4/19/18 17:00 | Accepted By: [Signature] | Date/Time: 4/19/18 17:00 | Rec'd on Ice: Yes <input type="checkbox"/> No <input type="checkbox"/> | Samples Intact: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| | Shipment Tracking No: 435763448119 | | Company: SGS | Cooler Temp.: 930 | Custody Seals Intact: Yes <input type="checkbox"/> No <input type="checkbox"/> |
| | Barcode: 6 435763447112 | | Date/Time: 4/20/18 930 | Rec'd on Ice: Yes <input type="checkbox"/> No <input type="checkbox"/> | Samples Intact: Yes <input type="checkbox"/> No <input type="checkbox"/> |

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (H3PO4)

Rec'd By [Signature] Relinquish by [Signature] 4/20/18 930 Received by [Signature]

temp: 2.0, 3.1, 1.9 °C

5.1
5

E39
A24
G14
C6272
19F1
V261

INITIAL ASSESSMENT
LABEL VERIFICATION

SGS Sample Receipt Summary

Job Number: JC64700

Client: PARSONS

Project: PESNYL: ILI - REGION 3, NEVERSINK LANDFIL

Date / Time Received: 4/20/2018 9:30:00 AM

Delivery Method:

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0); Cooler 2: (3.1); Cooler 3: (1.9);

Cooler Temps (Corrected) °C: Cooler 1: (3.5); Cooler 2: (4.6); Cooler 3: (3.4);

Cooler Security

- | | <u>Y or N</u> | | | <u>Y or N</u> | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

- | | <u>Y or N</u> | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 3 | |

Quality Control Preservation

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---------------------------------|-------------------------------------|-----------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

- | | <u>Y or N</u> | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

- | | <u>Y or N</u> | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| | | | |
|--------------------|-----------------|----------------|------------------|
| Test Strip Lot #s: | pH 1-12: 216017 | pH 12+: 208717 | Other: (Specify) |
|--------------------|-----------------|----------------|------------------|

Comments

SM089-03
Rev. Date 12/7/17

JC64700: Chain of Custody

Page 2 of 5

5.1
5

Job Change Order: JC64700

Requested Date: 4/25/2018 **Received Date:** 4/20/2018
Account Name: Parsons Engineering Science for **Due Date:** 5/4/2018
Project Description: PESNYL: ILI - Region 3, Westchester County Airpo **Deliverable:** NYASPB
C/O Initiated By: michelld **PM:** KD **TAT (Days):** 14

=====
Sample #: JC64700-8 **Change:**
Revise ID to 3-WES-002-08

Dept:
TAT: 14
3-WES-001-08
=====

Above Changes Per: Heather Fittig **Date/Time:** 4/25/2018 3:36:25 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JC64700

Requested Date: 5/17/2018 **Received Date:** 4/20/2018
Account Name: Parsons Engineering Science for **Due Date:** 5/4/2018
Project Description: PESNYL: ILL - Region 3, Westchester County Airpor **Deliverable:** NYASPB
C/O Initiated By: BW **PM:** KD **TAT (Days):** 14

=====
Sample #: JC64700-8 **Change:**
Revise sample ID to 3-WES-002-001-08

Dept:
TAT: 14
3-WES-002-08
=====

JC64700: Chain of Custody
Page 4 of 5

Above Changes Per: Heather Fettig **Date/Time:** 5/17/2018 10:28:09 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JC64700

Requested Date: 6/21/2018 **Received Date:** 4/20/2018
Account Name: Parsons Engineering Science for **Due Date:** 5/4/2018
Project Description: PESNYL: ILL - Region 3, Westchester County Airport **Deliverable:** NYASPB
C/O Initiated By: KD **PM:** KD **TAT (Days):** 1

=====
Sample #: JC64700-8 **Change:**
Please revise sample ID to "3-WES-002-001-08" and reissue report / EDD.
Dept:
TAT: 1
3-WES-001-08
=====

JC64700: Chain of Custody
Page 5 of 5

Above Changes Per: Client / Heather Feitig **Date/Time:** 6/21/2018 4:17:15 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Internal Sample Tracking Chronicle

Parsons Engineering Science for ILI

Job No: JC64700

PESNYL: ILI - Region 3, Westchester County Airport Landfill
 Project No: 450619

5.2
5

| Sample Number | Method | Analyzed | By | Prepped | By | Test Codes |
|---|-----------------------|-----------------|-----|-----------|----|---|
| JC64700-1 Collected: 19-APR-18 11:20 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-01 | | | | | | |
| JC64700-1 | EPA 537M BY ID | 01-MAY-18 03:50 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-2 Collected: 19-APR-18 11:40 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-02 | | | | | | |
| JC64700-2 | SW846 9060A | 23-APR-18 15:34 | CD | 23-APR-18 | CD | TOCSW846 |
| JC64700-2 | SM2340 C-11 | 23-APR-18 18:30 | ST | | | HRD |
| JC64700-2 | SW846 7470A | 24-APR-18 12:08 | JA | 24-APR-18 | JA | HG |
| JC64700-2 | SM2540 C-11 | 24-APR-18 15:45 | RI | | | TDS |
| JC64700-2 | SW846 8260C | 25-APR-18 10:52 | VP | | | V8260SL+ |
| JC64700-2 | SW846 6010C | 26-APR-18 02:38 | GT | 25-APR-18 | CH | AS,B,BA,BE,CR,CU,FE,NI,ZN |
| JC64700-2 | SM5220 C-11,HACH8000 | 26-APR-18 12:25 | MP | 26-APR-18 | MP | COD |
| JC64700-2 | SM2320 B-11 | 26-APR-18 13:03 | CD | | | ALK |
| JC64700-2 | SW846 6010C | 26-APR-18 13:24 | EAL | 25-APR-18 | CH | MN,PB,SE,TL |
| JC64700-2 | SM4500NH3 H-11LACH | 27-APR-18 14:49 | TG | 27-APR-18 | TG | AMN |
| JC64700-2 | EPA 537M BY ID | 01-MAY-18 04:08 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-2 | SW846 8270D BY SIM | 02-MAY-18 22:31 | JB | 24-APR-18 | AF | B8270SIMP AH |
| JC64700-2 | EPA 300/SW846 9056A12 | 02-MAY-18 04:20 | NV | 07-MAY-18 | NV | BRO,CHL,SO4 |
| JC64700-3 Collected: 19-APR-18 13:50 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-03 | | | | | | |
| JC64700-3 | SW846 9060A | 23-APR-18 16:19 | CD | 23-APR-18 | CD | TOCSW846 |
| JC64700-3 | SM2340 C-11 | 23-APR-18 18:30 | ST | | | HRD |
| JC64700-3 | SW846 7470A | 24-APR-18 12:10 | JA | 24-APR-18 | JA | HG |
| JC64700-3 | SM2540 C-11 | 24-APR-18 15:45 | RI | | | TDS |
| JC64700-3 | SW846 8260C | 25-APR-18 11:21 | VP | | | V8260SL+ |
| JC64700-3 | SW846 6010C | 26-APR-18 02:43 | GT | 25-APR-18 | CH | AS,B,BA,BE,CR,CU,FE,MN,NI, PB,SE,TL,ZN |
| JC64700-3 | SM5220 C-11,HACH8000 | 26-APR-18 12:25 | MP | 26-APR-18 | MP | COD |
| JC64700-3 | SM2320 B-11 | 26-APR-18 13:03 | CD | | | ALK |
| JC64700-3 | SM4500NH3 H-11LACH | 27-APR-18 14:50 | TG | 27-APR-18 | TG | AMN |
| JC64700-3 | EPA 537M BY ID | 01-MAY-18 04:27 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-3 | SW846 8270D BY SIM | 02-MAY-18 22:55 | JB | 24-APR-18 | AF | B8270SIMP AH |
| JC64700-3 | EPA 300/SW846 9056A12 | 02-MAY-18 04:47 | NV | 07-MAY-18 | NV | BRO,CHL,SO4 |

Internal Sample Tracking Chronicle

Parsons Engineering Science for ILI

Job No: JC64700

PESNYL: ILI - Region 3, Westchester County Airport Landfill
 Project No: 450619

5.2
5

| Sample Number | Method | Analyzed | By | Prepped | By | Test Codes |
|---------------|--------|----------|----|---------|----|------------|
|---------------|--------|----------|----|---------|----|------------|

| | | | | | | |
|---|-----------------------|-----------------|-----|-----------|----|---|
| JC64700-4 Collected: 19-APR-18 14:50 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-04 | | | | | | |
| JC64700-4 | SW846 9060A | 23-APR-18 16:31 | CD | 23-APR-18 | CD | TOCSW846 |
| JC64700-4 | SM2340 C-11 | 23-APR-18 18:30 | ST | | | HRD |
| JC64700-4 | SW846 7470A | 24-APR-18 12:11 | JA | 24-APR-18 | JA | HG |
| JC64700-4 | SM2540 C-11 | 24-APR-18 15:45 | RI | | | TDS |
| JC64700-4 | SW846 8260C | 25-APR-18 11:50 | VP | | | V8260SL+ |
| JC64700-4 | SW846 6010C | 26-APR-18 02:47 | GT | 25-APR-18 | CH | AS,B,BA,BE,CR,CU,FE,MN,NI, PB,SE,TL,ZN |
| JC64700-4 | SM5220 C-11,HACH8006 | 26-APR-18 12:25 | MP | 26-APR-18 | MP | COD |
| JC64700-4 | SM2320 B-11 | 26-APR-18 13:03 | CD | | | ALK |
| JC64700-4 | SM4500NH3 H-11LACHART | 27-APR-18 14:53 | TG | 27-APR-18 | TG | AMN |
| JC64700-4 | EPA 537M BY ID | 01-MAY-18 05:05 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-4 | SW846 8270D BY SIM | 02-MAY-18 23:18 | JB | 24-APR-18 | AF | B8270SIMPAH |
| JC64700-4 | EPA 300/SW846 9056A12 | 07-MAY-18 06:11 | NV | 07-MAY-18 | NV | BRO,CHL,SO4 |

| | | | | | | |
|---|--|--|--|--|--|--|
| JC64700-5 Collected: 19-APR-18 11:50 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-05 | | | | | | |
|---|--|--|--|--|--|--|

| | | | | | | |
|-----------|----------------|-----------------|-----|-----------|--|-------------|
| JC64700-5 | EPA 537M BY ID | 01-MAY-18 06:01 | AFL | 27-APR-18 | | LCID537NY21 |
|-----------|----------------|-----------------|-----|-----------|--|-------------|

| | | | | | | |
|---|--|--|--|--|--|--|
| JC64700-6 Collected: 19-APR-18 14:50 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-06 | | | | | | |
|---|--|--|--|--|--|--|

| | | | | | | |
|-----------|-------------|-----------------|----|--|--|----------|
| JC64700-6 | SW846 8260C | 25-APR-18 15:40 | VP | | | V8260SL+ |
|-----------|-------------|-----------------|----|--|--|----------|

| | | | | | | |
|---|--|--|--|--|--|--|
| JC64700-7 Collected: 19-APR-18 11:55 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-07 | | | | | | |
|---|--|--|--|--|--|--|

| | | | | | | |
|-----------|----------------------|-----------------|----|-----------|----|---|
| JC64700-7 | SW846 9060A | 23-APR-18 16:44 | CD | 23-APR-18 | CD | TOCSW846 |
| JC64700-7 | SM2340 C-11 | 23-APR-18 18:30 | ST | | | HRD |
| JC64700-7 | SW846 7470A | 24-APR-18 12:16 | JA | 24-APR-18 | JA | HG |
| JC64700-7 | SM2540 C-11 | 24-APR-18 15:45 | RI | | | TDS |
| JC64700-7 | SW846 8260C | 25-APR-18 12:19 | VP | | | V8260SL+ |
| JC64700-7 | SW846 6010C | 26-APR-18 02:51 | GT | 25-APR-18 | CH | ASNJ,B,BA,BE,CR,CU,FE,MN, NI,PB,SE,TLNJ,ZN |
| JC64700-7 | SM5220 C-11,HACH8006 | 26-APR-18 12:25 | MP | 26-APR-18 | MP | COD |
| JC64700-7 | SM2320 B-11 | 26-APR-18 13:20 | CD | | | ALK |

Internal Sample Tracking Chronicle

Parsons Engineering Science for ILI

Job No: JC64700

PESNYL: ILI - Region 3, Westchester County Airport Landfill
 Project No: 450619

| Sample Number | Method | Analyzed | By | Prepped | By | Test Codes |
|---|-----------------------|-----------------|-----|-----------|----|---|
| JC64700-7 | SM4500NH3 H-11LACH | 27-APR-18 14:54 | TG | 27-APR-18 | TG | AMN |
| JC64700-7 | EPA 537M BY ID | 01-MAY-18 06:20 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-7 | EPA 537M BY ID | 01-MAY-18 11:57 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-7 | SW846 8270D BY SIM | 02-MAY-18 23:42 | JB | 24-APR-18 | AF | B8270SIMPAH |
| JC64700-7 | EPA 300/SW846 9056A12 | 12-MAY-18 06:39 | NV | 07-MAY-18 | NV | BRO,CHL,SO4 |
| JC64700-8 Collected: 19-APR-18 12:30 By: PRS Received: 20-APR-18 By: AS 3-WES-002-001-08 | | | | | | |
| JC64700-8 | SW846 9060A | 23-APR-18 17:01 | CD | 23-APR-18 | CD | TOCSW846 |
| JC64700-8 | SM2340 C-11 | 23-APR-18 18:30 | ST | | | HRD |
| JC64700-8 | SW846 7470A | 24-APR-18 12:17 | JA | 24-APR-18 | JA | HG |
| JC64700-8 | SM2540 C-11 | 24-APR-18 15:45 | RI | | | TDS |
| JC64700-8 | SW846 8260C | 25-APR-18 12:47 | VP | | | V8260SL+ |
| JC64700-8 | SW846 6010C | 26-APR-18 02:56 | GT | 25-APR-18 | CH | ASNJ,B,BA,BE,CR,CU,FE,MN, NI,PB,SE,TLNJ,ZN |
| JC64700-8 | SM5220 C-11,HACH8000 | 26-APR-18 12:25 | MP | 26-APR-18 | MP | COD |
| JC64700-8 | SM2320 B-11 | 26-APR-18 13:03 | CD | | | ALK |
| JC64700-8 | SM4500NH3 H-11LACH | 27-APR-18 14:56 | TG | 27-APR-18 | TG | AMN |
| JC64700-8 | EPA 537M BY ID | 01-MAY-18 06:57 | AFL | 27-APR-18 | | LCID537NY21 |
| JC64700-8 | SW846 8270D BY SIM | 03-MAY-18 00:05 | JB | 24-APR-18 | AF | B8270SIMPAH |
| JC64700-8 | EPA 300/SW846 9056A12 | 12-MAY-18 07:07 | NV | 07-MAY-18 | NV | BRO,CHL,SO4 |

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|--------------------------|--------------------------|----------------|----------------------------|
| JC64700-1.1 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-1.1 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-1.2 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-1.2 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-2.1 | Secured Storage | Dave Hunkele | 04/24/18 09:36 | Retrieve from Storage |
| JC64700-2.1 | Dave Hunkele | Secured Staging Area | 04/24/18 09:36 | Return to Storage |
| JC64700-2.1 | Secured Staging Area | Matthew Stoecklin | 04/24/18 11:53 | Retrieve from Storage |
| JC64700-2.1 | Matthew Stoecklin | | 04/25/18 11:40 | Depleted |
| JC64700-2.1.1 | Matthew Stoecklin | Organics Prep | 04/24/18 11:54 | Extract from JC64700-2.1 |
| JC64700-2.1.1 | Amanda Furka | Extract Storage | 04/24/18 22:19 | Return to Storage |
| JC64700-2.1.1 | Organics Prep | Amanda Furka | 04/24/18 22:19 | Extract from JC64700-2.1 |
| JC64700-2.1.1 | Extract Storage | Christine Change | 05/02/18 15:47 | Retrieve from Storage |
| JC64700-2.1.1 | Christine Change | GCMS4P | 05/02/18 15:47 | Load on Instrument |
| JC64700-2.1.1 | GCMS4P | John Boudreau | 05/03/18 10:26 | Unload from Instrument |
| JC64700-2.1.1 | John Boudreau | Extract Storage | 05/03/18 10:26 | Return to Storage |
| JC64700-2.1.1 | Extract Storage | | 06/04/18 09:00 | Disposed |
| JC64700-2.3 | Secured Storage | Todd Shoemaker | 04/23/18 08:55 | Retrieve from Storage |
| JC64700-2.3 | Todd Shoemaker | Secured Staging Area | 04/23/18 08:56 | Return to Storage |
| JC64700-2.3 | Secured Staging Area | Sarvadaman Tripathi | 04/23/18 09:40 | Retrieve from Storage |
| JC64700-2.3 | Sarvadaman Tripathi | Secured Storage | 04/23/18 18:54 | Return to Storage |
| JC64700-2.3 | Secured Storage | Jennifer Voitovitch | 04/23/18 19:30 | Retrieve from Storage |
| JC64700-2.3 | Jennifer Voitovitch | Secured Staging Area | 04/23/18 19:30 | Return to Storage |
| JC64700-2.3 | Secured Staging Area | Deval Patel | 04/24/18 08:23 | Retrieve from Storage |
| JC64700-2.3 | Deval Patel | Secured Storage | 04/24/18 09:46 | Return to Storage |
| JC64700-2.3 | Secured Storage | Todd Shoemaker | 04/25/18 14:23 | Retrieve from Storage |
| JC64700-2.3 | Todd Shoemaker | Secured Staging Area | 04/25/18 14:24 | Return to Storage |
| JC64700-2.3 | Secured Staging Area | Colleen Hill | 04/25/18 16:54 | Retrieve from Storage |
| JC64700-2.3 | Colleen Hill | Secured Storage | 04/25/18 17:02 | Return to Storage |
| JC64700-2.3 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-2.3.1 | Colleen Hill | Metals Digestion | 04/25/18 16:56 | Digestate from JC64700-2.3 |
| JC64700-2.3.1 | Metals Digestion | Colleen Hill | 04/25/18 16:56 | Digestate from JC64700-2.3 |
| JC64700-2.3.1 | Colleen Hill | Metals Digestate Storage | 04/25/18 16:56 | Return to Storage |
| JC64700-2.3.1 | Metals Digestate Storage | | 07/02/18 09:00 | Disposed |
| JC64700-2.4 | Secured Storage | Dave Hunkele | 04/24/18 08:02 | Retrieve from Storage |
| JC64700-2.4 | Dave Hunkele | Secured Staging Area | 04/24/18 08:03 | Return to Storage |
| JC64700-2.4 | Secured Staging Area | Rie Iwasaki | 04/24/18 09:16 | Retrieve from Storage |
| JC64700-2.4 | Rie Iwasaki | Secured Storage | 04/24/18 16:15 | Return to Storage |
| JC64700-2.4 | Secured Storage | Jennifer Voitovitch | 05/08/18 19:09 | Retrieve from Storage |

5.3
5

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|---|----------------------|-------------------------|----------------|-----------------------|
| JC64700-2.4 | Jennifer Voitovitch | Secured Staging Area | 05/08/18 19:09 | Return to Storage |
| JC64700-2.4 | Secured Staging Area | Natasha Verma | 05/09/18 08:19 | Retrieve from Storage |
| JC64700-2.4 | Natasha Verma | Secured Storage | 05/09/18 18:04 | Return to Storage |
| JC64700-2.4 | Secured Storage | Sahara Feliciano | 05/10/18 16:39 | Retrieve from Storage |
| JC64700-2.4 | Sahara Feliciano | Secured Staging Area | 05/10/18 16:39 | Return to Storage |
| JC64700-2.4 | Secured Staging Area | Karthika Sathayamoorthy | 05/11/18 08:56 | Retrieve from Storage |
| JC64700-2.4 | Secured Storage | Dwayne Johnson | 05/15/18 10:01 | Retrieve from Storage |
| Bottle was returned to secure storage, but inadvertently not scanned. | | | | |
| JC64700-2.4 | Dwayne Johnson | Secured Staging Area | 05/15/18 10:01 | Return to Storage |
| JC64700-2.4 | Secured Staging Area | Natasha Verma | 05/15/18 17:19 | Retrieve from Storage |
| JC64700-2.4 | Natasha Verma | Secured Storage | 05/15/18 17:19 | Return to Storage |
| JC64700-2.4 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-2.5 | Secured Storage | Christopher Hall | 04/26/18 06:45 | Retrieve from Storage |
| JC64700-2.5 | Christopher Hall | Secured Staging Area | 04/26/18 06:45 | Return to Storage |
| JC64700-2.5 | Secured Staging Area | Mahendra Patel | 04/26/18 08:20 | Retrieve from Storage |
| JC64700-2.5 | Mahendra Patel | Secured Storage | 04/26/18 17:39 | Return to Storage |
| JC64700-2.5 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-2.6 | Secured Storage | Sahara Feliciano | 04/25/18 16:50 | Retrieve from Storage |
| JC64700-2.6 | Sahara Feliciano | Secured Staging Area | 04/25/18 16:50 | Return to Storage |
| JC64700-2.6 | Secured Staging Area | Courtney Dringus | 04/26/18 07:34 | Retrieve from Storage |
| JC64700-2.6 | Courtney Dringus | Secured Storage | 04/26/18 12:15 | Return to Storage |
| JC64700-2.6 | Secured Storage | Jennifer Voitovitch | 05/06/18 12:17 | Retrieve from Storage |
| JC64700-2.6 | Jennifer Voitovitch | Secured Staging Area | 05/06/18 12:17 | Return to Storage |
| JC64700-2.6 | Secured Staging Area | Natasha Verma | 05/07/18 08:21 | Retrieve from Storage |
| JC64700-2.6 | Natasha Verma | Secured Storage | 05/07/18 17:05 | Return to Storage |
| JC64700-2.6 | Secured Storage | Todd Shoemaker | 05/08/18 08:12 | Retrieve from Storage |
| JC64700-2.6 | Todd Shoemaker | Secured Staging Area | 05/08/18 08:12 | Return to Storage |
| JC64700-2.6 | Secured Staging Area | Natasha Verma | 05/08/18 08:33 | Retrieve from Storage |
| JC64700-2.6 | Natasha Verma | Secured Storage | 05/08/18 17:00 | Return to Storage |
| JC64700-2.6 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-2.7 | Secured Storage | Todd Shoemaker | 04/27/18 10:39 | Retrieve from Storage |
| JC64700-2.7 | Todd Shoemaker | Secured Staging Area | 04/27/18 10:40 | Return to Storage |
| JC64700-2.7 | Secured Staging Area | Thomas Gabriel | 04/27/18 12:47 | Retrieve from Storage |
| JC64700-2.7 | Thomas Gabriel | Secured Storage | 04/27/18 16:14 | Return to Storage |
| JC64700-2.7 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-2.8 | Secured Storage | Todd Shoemaker | 04/23/18 12:29 | Retrieve from Storage |
| JC64700-2.8 | Todd Shoemaker | Secured Staging Area | 04/23/18 12:29 | Return to Storage |
| JC64700-2.8 | Secured Staging Area | Courtney Dringus | 04/23/18 12:32 | Retrieve from Storage |
| JC64700-2.8 | Courtney Dringus | Secured Storage | 04/23/18 13:42 | Return to Storage |
| JC64700-2.8 | Tim Hudson | | 06/18/18 08:42 | Disposed |

5.3
5

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|----------------------|--------------------------|----------------|----------------------------|
| JC64700-2.9 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-2.9 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-2.10 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-2.10 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-2.11 | Secured Storage | Vidish Pandya | 04/25/18 09:21 | Retrieve from Storage |
| JC64700-2.11 | Vidish Pandya | GCMS2A | 04/25/18 09:21 | Load on Instrument |
| JC64700-2.11 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-2.11 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-2.11 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.1 | Secured Storage | Dave Hunkele | 04/24/18 09:36 | Retrieve from Storage |
| JC64700-3.1 | Dave Hunkele | Secured Staging Area | 04/24/18 09:36 | Return to Storage |
| JC64700-3.1 | Secured Staging Area | Matthew Stoecklin | 04/24/18 11:53 | Retrieve from Storage |
| JC64700-3.1 | Matthew Stoecklin | | 04/25/18 11:40 | Depleted |
| JC64700-3.1.1 | Matthew Stoecklin | Organics Prep | 04/24/18 11:54 | Extract from JC64700-3.1 |
| JC64700-3.1.1 | Amanda Furka | Extract Storage | 04/24/18 22:19 | Return to Storage |
| JC64700-3.1.1 | Organics Prep | Amanda Furka | 04/24/18 22:19 | Extract from JC64700-3.1 |
| JC64700-3.1.1 | Extract Storage | Christine Change | 05/02/18 15:47 | Retrieve from Storage |
| JC64700-3.1.1 | Christine Change | GCMS4P | 05/02/18 15:47 | Load on Instrument |
| JC64700-3.1.1 | GCMS4P | John Boudreau | 05/03/18 10:26 | Unload from Instrument |
| JC64700-3.1.1 | John Boudreau | Extract Storage | 05/03/18 10:26 | Return to Storage |
| JC64700-3.1.1 | Extract Storage | | 06/04/18 09:00 | Disposed |
| JC64700-3.3 | Secured Storage | Todd Shoemaker | 04/23/18 08:55 | Retrieve from Storage |
| JC64700-3.3 | Todd Shoemaker | Secured Staging Area | 04/23/18 08:56 | Return to Storage |
| JC64700-3.3 | Secured Staging Area | Sarvadaman Tripathi | 04/23/18 09:40 | Retrieve from Storage |
| JC64700-3.3 | Sarvadaman Tripathi | Secured Storage | 04/23/18 18:54 | Return to Storage |
| JC64700-3.3 | Secured Storage | Jennifer Voitovitch | 04/23/18 19:30 | Retrieve from Storage |
| JC64700-3.3 | Jennifer Voitovitch | Secured Staging Area | 04/23/18 19:30 | Return to Storage |
| JC64700-3.3 | Secured Staging Area | Deval Patel | 04/24/18 08:23 | Retrieve from Storage |
| JC64700-3.3 | Deval Patel | Secured Storage | 04/24/18 09:46 | Return to Storage |
| JC64700-3.3 | Secured Storage | Todd Shoemaker | 04/25/18 14:23 | Retrieve from Storage |
| JC64700-3.3 | Todd Shoemaker | Secured Staging Area | 04/25/18 14:24 | Return to Storage |
| JC64700-3.3 | Secured Staging Area | Colleen Hill | 04/25/18 16:54 | Retrieve from Storage |
| JC64700-3.3 | Colleen Hill | Secured Storage | 04/25/18 17:02 | Return to Storage |
| JC64700-3.3 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.3.1 | Colleen Hill | Metals Digestion | 04/25/18 16:56 | Digestate from JC64700-3.3 |
| JC64700-3.3.1 | Metals Digestion | Colleen Hill | 04/25/18 16:56 | Digestate from JC64700-3.3 |
| JC64700-3.3.1 | Colleen Hill | Metals Digestate Storage | 04/25/18 16:56 | Return to Storage |

5.3
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SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|--------------------------|-------------------------|----------------|-----------------------|
| JC64700-3.3.1 | Metals Digestate Storage | | 07/02/18 09:00 | Disposed |
| JC64700-3.4 | Secured Storage | Dave Hunkele | 04/24/18 08:02 | Retrieve from Storage |
| JC64700-3.4 | Dave Hunkele | Secured Staging Area | 04/24/18 08:03 | Return to Storage |
| JC64700-3.4 | Secured Staging Area | Rie Iwasaki | 04/24/18 09:16 | Retrieve from Storage |
| JC64700-3.4 | Rie Iwasaki | Secured Storage | 04/24/18 16:15 | Return to Storage |
| JC64700-3.4 | Secured Storage | Jennifer Voitovitch | 05/08/18 19:09 | Retrieve from Storage |
| JC64700-3.4 | Jennifer Voitovitch | Secured Staging Area | 05/08/18 19:09 | Return to Storage |
| JC64700-3.4 | Secured Staging Area | Natasha Verma | 05/09/18 08:19 | Retrieve from Storage |
| JC64700-3.4 | Natasha Verma | Secured Storage | 05/09/18 18:04 | Return to Storage |
| JC64700-3.4 | Secured Storage | Sahara Feliciano | 05/10/18 16:39 | Retrieve from Storage |
| JC64700-3.4 | Sahara Feliciano | Secured Staging Area | 05/10/18 16:39 | Return to Storage |
| JC64700-3.4 | Secured Staging Area | Karthika Sathayamoorthy | 05/11/18 08:56 | Retrieve from Storage |
| JC64700-3.4 | Karthika Sathayamoorthy | Secured Storage | 05/16/18 08:01 | Return to Storage |
| JC64700-3.4 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.5 | Secured Storage | Christopher Hall | 04/26/18 06:45 | Retrieve from Storage |
| JC64700-3.5 | Christopher Hall | Secured Staging Area | 04/26/18 06:45 | Return to Storage |
| JC64700-3.5 | Secured Staging Area | Mahendra Patel | 04/26/18 08:20 | Retrieve from Storage |
| JC64700-3.5 | Mahendra Patel | Secured Storage | 04/26/18 17:39 | Return to Storage |
| JC64700-3.5 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.6 | Secured Storage | Sahara Feliciano | 04/25/18 16:50 | Retrieve from Storage |
| JC64700-3.6 | Sahara Feliciano | Secured Staging Area | 04/25/18 16:50 | Return to Storage |
| JC64700-3.6 | Secured Staging Area | Courtney Dringus | 04/26/18 07:34 | Retrieve from Storage |
| JC64700-3.6 | Courtney Dringus | Secured Storage | 04/26/18 12:15 | Return to Storage |
| JC64700-3.6 | Secured Storage | Jennifer Voitovitch | 05/06/18 12:17 | Retrieve from Storage |
| JC64700-3.6 | Jennifer Voitovitch | Secured Staging Area | 05/06/18 12:17 | Return to Storage |
| JC64700-3.6 | Secured Staging Area | Natasha Verma | 05/07/18 08:21 | Retrieve from Storage |
| JC64700-3.6 | Natasha Verma | Secured Storage | 05/07/18 17:05 | Return to Storage |
| JC64700-3.6 | Secured Storage | Todd Shoemaker | 05/08/18 08:12 | Retrieve from Storage |
| JC64700-3.6 | Todd Shoemaker | Secured Staging Area | 05/08/18 08:12 | Return to Storage |
| JC64700-3.6 | Secured Staging Area | Natasha Verma | 05/08/18 08:33 | Retrieve from Storage |
| JC64700-3.6 | Natasha Verma | Secured Storage | 05/08/18 17:00 | Return to Storage |
| JC64700-3.6 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.7 | Secured Storage | Todd Shoemaker | 04/27/18 10:39 | Retrieve from Storage |
| JC64700-3.7 | Todd Shoemaker | Secured Staging Area | 04/27/18 10:40 | Return to Storage |
| JC64700-3.7 | Secured Staging Area | Thomas Gabriel | 04/27/18 12:47 | Retrieve from Storage |
| JC64700-3.7 | Thomas Gabriel | Secured Storage | 04/27/18 16:14 | Return to Storage |
| JC64700-3.7 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.8 | Secured Storage | Todd Shoemaker | 04/23/18 12:29 | Retrieve from Storage |
| JC64700-3.8 | Todd Shoemaker | Secured Staging Area | 04/23/18 12:29 | Return to Storage |

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SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|----------------------|----------------------|----------------|--------------------------|
| JC64700-3.8 | Secured Staging Area | Courtney Dringus | 04/23/18 12:32 | Retrieve from Storage |
| JC64700-3.8 | Courtney Dringus | Secured Storage | 04/23/18 13:42 | Return to Storage |
| JC64700-3.8 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.9 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-3.9 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-3.10 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-3.10 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-3.11 | Secured Storage | Vidish Pandya | 04/25/18 09:21 | Retrieve from Storage |
| JC64700-3.11 | Vidish Pandya | GCMS2A | 04/25/18 09:21 | Load on Instrument |
| JC64700-3.11 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-3.11 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-3.11 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-3.12 | Secured Storage | Eddie Huang | 04/25/18 12:27 | Retrieve from Storage |
| JC64700-3.12 | Eddie Huang | GCMS2A | 04/25/18 12:27 | Load on Instrument |
| JC64700-3.12 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-3.12 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-3.12 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.2 | Secured Storage | Dave Hunkele | 04/24/18 09:36 | Retrieve from Storage |
| JC64700-4.2 | Dave Hunkele | Secured Staging Area | 04/24/18 09:36 | Return to Storage |
| JC64700-4.2 | Secured Staging Area | Matthew Stoecklin | 04/24/18 11:53 | Retrieve from Storage |
| JC64700-4.2 | Matthew Stoecklin | | 04/25/18 11:40 | Depleted |
| JC64700-4.2.1 | Matthew Stoecklin | Organics Prep | 04/24/18 11:54 | Extract from JC64700-4.2 |
| JC64700-4.2.1 | Amanda Furka | Extract Storage | 04/24/18 22:19 | Return to Storage |
| JC64700-4.2.1 | Organics Prep | Amanda Furka | 04/24/18 22:19 | Extract from JC64700-4.2 |
| JC64700-4.2.1 | Extract Storage | Christine Change | 05/02/18 15:47 | Retrieve from Storage |
| JC64700-4.2.1 | Christine Change | GCMS4P | 05/02/18 15:47 | Load on Instrument |
| JC64700-4.2.1 | GCMS4P | John Boudreau | 05/03/18 10:26 | Unload from Instrument |
| JC64700-4.2.1 | John Boudreau | Extract Storage | 05/03/18 10:26 | Return to Storage |
| JC64700-4.2.1 | Extract Storage | | 06/04/18 09:00 | Disposed |
| JC64700-4.3 | Secured Storage | Todd Shoemaker | 04/23/18 08:55 | Retrieve from Storage |
| JC64700-4.3 | Todd Shoemaker | Secured Staging Area | 04/23/18 08:56 | Return to Storage |
| JC64700-4.3 | Secured Staging Area | Sarvadaman Tripathi | 04/23/18 09:40 | Retrieve from Storage |
| JC64700-4.3 | Sarvadaman Tripathi | Secured Storage | 04/23/18 18:54 | Return to Storage |
| JC64700-4.3 | Secured Storage | Jennifer Voitovitch | 04/23/18 19:30 | Retrieve from Storage |
| JC64700-4.3 | Jennifer Voitovitch | Secured Staging Area | 04/23/18 19:30 | Return to Storage |
| JC64700-4.3 | Secured Staging Area | Deval Patel | 04/24/18 08:23 | Retrieve from Storage |
| JC64700-4.3 | Deval Patel | Secured Storage | 04/24/18 09:46 | Return to Storage |

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SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|--------------------------|--------------------------|----------------|----------------------------|
| JC64700-4.3 | Secured Storage | Todd Shoemaker | 04/25/18 14:23 | Retrieve from Storage |
| JC64700-4.3 | Todd Shoemaker | Secured Staging Area | 04/25/18 14:24 | Return to Storage |
| JC64700-4.3 | Secured Staging Area | Colleen Hill | 04/25/18 16:54 | Retrieve from Storage |
| JC64700-4.3 | Colleen Hill | Secured Storage | 04/25/18 17:02 | Return to Storage |
| JC64700-4.3 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.3.1 | Colleen Hill | Metals Digestion | 04/25/18 16:56 | Digestate from JC64700-4.3 |
| JC64700-4.3.1 | Metals Digestion | Colleen Hill | 04/25/18 16:56 | Digestate from JC64700-4.3 |
| JC64700-4.3.1 | Colleen Hill | Metals Digestate Storage | 04/25/18 16:56 | Return to Storage |
| JC64700-4.3.1 | Metals Digestate Storage | | 07/02/18 09:00 | Disposed |
| JC64700-4.4 | Secured Storage | Dave Hunkele | 04/24/18 08:02 | Retrieve from Storage |
| JC64700-4.4 | Dave Hunkele | Secured Staging Area | 04/24/18 08:03 | Return to Storage |
| JC64700-4.4 | Secured Staging Area | Rie Iwasaki | 04/24/18 09:16 | Retrieve from Storage |
| JC64700-4.4 | Rie Iwasaki | Secured Storage | 04/24/18 16:15 | Return to Storage |
| JC64700-4.4 | Secured Storage | Jennifer Voitovitch | 05/08/18 19:09 | Retrieve from Storage |
| JC64700-4.4 | Jennifer Voitovitch | Secured Staging Area | 05/08/18 19:09 | Return to Storage |
| JC64700-4.4 | Secured Staging Area | Natasha Verma | 05/09/18 08:19 | Retrieve from Storage |
| JC64700-4.4 | Natasha Verma | Secured Storage | 05/09/18 18:04 | Return to Storage |
| JC64700-4.4 | Secured Storage | Sahara Feliciano | 05/10/18 16:39 | Retrieve from Storage |
| JC64700-4.4 | Sahara Feliciano | Secured Staging Area | 05/10/18 16:39 | Return to Storage |
| JC64700-4.4 | Secured Staging Area | Karthika Sathayamoorthy | 05/11/18 08:56 | Retrieve from Storage |
| JC64700-4.4 | Karthika Sathayamoorthy | Secured Storage | 05/16/18 08:01 | Return to Storage |
| JC64700-4.4 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.5 | Secured Storage | Christopher Hall | 04/26/18 06:45 | Retrieve from Storage |
| JC64700-4.5 | Christopher Hall | Secured Staging Area | 04/26/18 06:45 | Return to Storage |
| JC64700-4.5 | Secured Staging Area | Mahendra Patel | 04/26/18 08:20 | Retrieve from Storage |
| JC64700-4.5 | Mahendra Patel | Secured Storage | 04/26/18 17:39 | Return to Storage |
| JC64700-4.5 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.6 | Secured Storage | Sahara Feliciano | 04/25/18 16:50 | Retrieve from Storage |
| JC64700-4.6 | Sahara Feliciano | Secured Staging Area | 04/25/18 16:50 | Return to Storage |
| JC64700-4.6 | Secured Staging Area | Courtney Dringus | 04/26/18 07:34 | Retrieve from Storage |
| JC64700-4.6 | Courtney Dringus | Secured Storage | 04/26/18 12:15 | Return to Storage |
| JC64700-4.6 | Secured Storage | Jennifer Voitovitch | 05/06/18 12:17 | Retrieve from Storage |
| JC64700-4.6 | Jennifer Voitovitch | Secured Staging Area | 05/06/18 12:17 | Return to Storage |
| JC64700-4.6 | Secured Staging Area | Natasha Verma | 05/07/18 08:21 | Retrieve from Storage |
| JC64700-4.6 | Natasha Verma | Secured Storage | 05/07/18 17:05 | Return to Storage |
| JC64700-4.6 | Secured Storage | Todd Shoemaker | 05/08/18 08:12 | Retrieve from Storage |
| JC64700-4.6 | Todd Shoemaker | Secured Staging Area | 05/08/18 08:12 | Return to Storage |
| JC64700-4.6 | Secured Staging Area | Natasha Verma | 05/08/18 08:33 | Retrieve from Storage |
| JC64700-4.6 | Natasha Verma | Secured Storage | 05/08/18 17:00 | Return to Storage |
| JC64700-4.6 | Tim Hudson | | 06/18/18 08:42 | Disposed |

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SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|----------------------|----------------------|----------------|------------------------|
| JC64700-4.7 | Secured Storage | Todd Shoemaker | 04/27/18 10:39 | Retrieve from Storage |
| JC64700-4.7 | Todd Shoemaker | Secured Staging Area | 04/27/18 10:40 | Return to Storage |
| JC64700-4.7 | Secured Staging Area | Thomas Gabriel | 04/27/18 12:47 | Retrieve from Storage |
| JC64700-4.7 | Thomas Gabriel | Secured Storage | 04/27/18 16:14 | Return to Storage |
| JC64700-4.7 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.8 | Secured Storage | Todd Shoemaker | 04/23/18 12:29 | Retrieve from Storage |
| JC64700-4.8 | Todd Shoemaker | Secured Staging Area | 04/23/18 12:29 | Return to Storage |
| JC64700-4.8 | Secured Staging Area | Courtney Dringus | 04/23/18 12:32 | Retrieve from Storage |
| JC64700-4.8 | Courtney Dringus | Secured Storage | 04/23/18 13:42 | Return to Storage |
| JC64700-4.8 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.9 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-4.9 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-4.10 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-4.10 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-4.11 | Secured Storage | Vidish Pandya | 04/25/18 09:21 | Retrieve from Storage |
| JC64700-4.11 | Vidish Pandya | GCMS2A | 04/25/18 09:21 | Load on Instrument |
| JC64700-4.11 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-4.11 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-4.11 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-4.12 | Secured Storage | Eddie Huang | 04/25/18 12:27 | Retrieve from Storage |
| JC64700-4.12 | Eddie Huang | GCMS2A | 04/25/18 12:27 | Load on Instrument |
| JC64700-4.12 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-4.12 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-4.12 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-5.1 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-5.1 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-5.2 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-5.2 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-6.1 | Secured Storage | Vidish Pandya | 04/25/18 09:21 | Retrieve from Storage |
| JC64700-6.1 | Vidish Pandya | GCMS2A | 04/25/18 09:21 | Load on Instrument |
| JC64700-6.1 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-6.1 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-6.1 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.2 | Secured Storage | Dave Hunkele | 04/24/18 09:36 | Retrieve from Storage |

5.3
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SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|--------------------------|--------------------------|----------------|----------------------------|
| JC64700-7.2 | Dave Hunkele | Secured Staging Area | 04/24/18 09:36 | Return to Storage |
| JC64700-7.2 | Secured Staging Area | Matthew Stoecklin | 04/24/18 11:53 | Retrieve from Storage |
| JC64700-7.2 | Matthew Stoecklin | | 04/25/18 11:40 | Depleted |
| JC64700-7.2.1 | Matthew Stoecklin | Organics Prep | 04/24/18 11:54 | Extract from JC64700-7.2 |
| JC64700-7.2.1 | Amanda Furka | Extract Storage | 04/24/18 22:19 | Return to Storage |
| JC64700-7.2.1 | Organics Prep | Amanda Furka | 04/24/18 22:19 | Extract from JC64700-7.2 |
| JC64700-7.2.1 | Extract Storage | Christine Change | 05/02/18 15:47 | Retrieve from Storage |
| JC64700-7.2.1 | Christine Change | GCMS4P | 05/02/18 15:47 | Load on Instrument |
| JC64700-7.2.1 | GCMS4P | John Boudreau | 05/03/18 10:26 | Unload from Instrument |
| JC64700-7.2.1 | John Boudreau | Extract Storage | 05/03/18 10:26 | Return to Storage |
| JC64700-7.2.1 | Extract Storage | | 06/04/18 09:00 | Disposed |
| JC64700-7.3 | Secured Storage | Todd Shoemaker | 04/23/18 08:55 | Retrieve from Storage |
| JC64700-7.3 | Todd Shoemaker | Secured Staging Area | 04/23/18 08:56 | Return to Storage |
| JC64700-7.3 | Secured Staging Area | Sarvadaman Tripathi | 04/23/18 09:40 | Retrieve from Storage |
| JC64700-7.3 | Sarvadaman Tripathi | Secured Storage | 04/23/18 18:54 | Return to Storage |
| JC64700-7.3 | Secured Storage | Jennifer Voitovitch | 04/23/18 19:30 | Retrieve from Storage |
| JC64700-7.3 | Jennifer Voitovitch | Secured Staging Area | 04/23/18 19:30 | Return to Storage |
| JC64700-7.3 | Secured Staging Area | Deval Patel | 04/24/18 08:23 | Retrieve from Storage |
| JC64700-7.3 | Deval Patel | Secured Storage | 04/24/18 09:46 | Return to Storage |
| JC64700-7.3 | Secured Storage | Luis Villanueva | 04/24/18 17:10 | Retrieve from Storage |
| JC64700-7.3 | Luis Villanueva | Secured Staging Area | 04/24/18 17:10 | Return to Storage |
| JC64700-7.3 | Secured Staging Area | Radhika Mistry | 04/25/18 07:53 | Retrieve from Storage |
| JC64700-7.3 | Radhika Mistry | Secured Storage | 04/25/18 09:53 | Return to Storage |
| JC64700-7.3 | Secured Storage | Todd Shoemaker | 04/25/18 14:23 | Retrieve from Storage |
| JC64700-7.3 | Todd Shoemaker | Secured Staging Area | 04/25/18 14:24 | Return to Storage |
| JC64700-7.3 | Secured Staging Area | Colleen Hill | 04/25/18 16:54 | Retrieve from Storage |
| JC64700-7.3 | Colleen Hill | Secured Storage | 04/25/18 17:02 | Return to Storage |
| JC64700-7.3 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.3.1 | Colleen Hill | Metals Digestion | 04/25/18 16:56 | Digestate from JC64700-7.3 |
| JC64700-7.3.1 | Metals Digestion | Colleen Hill | 04/25/18 16:56 | Digestate from JC64700-7.3 |
| JC64700-7.3.1 | Colleen Hill | Metals Digestate Storage | 04/25/18 16:56 | Return to Storage |
| JC64700-7.3.1 | Metals Digestate Storage | | 07/02/18 09:00 | Disposed |
| JC64700-7.4 | Secured Storage | Courtney Dringus | 04/26/18 13:04 | Retrieve from Storage |
| JC64700-7.4 | Courtney Dringus | Secured Storage | 04/26/18 13:14 | Return to Storage |
| JC64700-7.4 | Secured Storage | Jennifer Voitovitch | 05/06/18 12:17 | Retrieve from Storage |
| JC64700-7.4 | Jennifer Voitovitch | Secured Staging Area | 05/06/18 12:17 | Return to Storage |
| JC64700-7.4 | Secured Staging Area | Natasha Verma | 05/07/18 08:21 | Retrieve from Storage |
| JC64700-7.4 | Natasha Verma | Secured Storage | 05/07/18 17:05 | Return to Storage |
| JC64700-7.4 | Secured Storage | Todd Shoemaker | 05/08/18 08:12 | Retrieve from Storage |
| JC64700-7.4 | Todd Shoemaker | Secured Staging Area | 05/08/18 08:12 | Return to Storage |

5.3
5

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|-------------------------|-------------------------|----------------|-----------------------|
| JC64700-7.4 | Secured Staging Area | Natasha Verma | 05/08/18 08:33 | Retrieve from Storage |
| JC64700-7.4 | Natasha Verma | Secured Storage | 05/08/18 17:00 | Return to Storage |
| JC64700-7.4 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.5 | Secured Storage | Dave Hunkele | 04/24/18 08:02 | Retrieve from Storage |
| JC64700-7.5 | Dave Hunkele | Secured Staging Area | 04/24/18 08:03 | Return to Storage |
| JC64700-7.5 | Secured Staging Area | Rie Iwasaki | 04/24/18 09:16 | Retrieve from Storage |
| JC64700-7.5 | Rie Iwasaki | Secured Storage | 04/24/18 16:15 | Return to Storage |
| JC64700-7.5 | Secured Storage | Christopher Hall | 04/26/18 06:45 | Retrieve from Storage |
| JC64700-7.5 | Christopher Hall | Secured Staging Area | 04/26/18 06:45 | Return to Storage |
| JC64700-7.5 | Secured Staging Area | Mahendra Patel | 04/26/18 08:20 | Retrieve from Storage |
| JC64700-7.5 | Mahendra Patel | Secured Storage | 04/26/18 17:39 | Return to Storage |
| JC64700-7.5 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.6 | Secured Storage | Sahara Feliciano | 04/25/18 16:50 | Retrieve from Storage |
| JC64700-7.6 | Sahara Feliciano | Secured Staging Area | 04/25/18 16:50 | Return to Storage |
| JC64700-7.6 | Secured Staging Area | Courtney Dringus | 04/26/18 07:34 | Retrieve from Storage |
| JC64700-7.6 | Courtney Dringus | Secured Storage | 04/26/18 12:15 | Return to Storage |
| JC64700-7.6 | Secured Storage | Jennifer Voitovitch | 05/08/18 19:09 | Retrieve from Storage |
| JC64700-7.6 | Jennifer Voitovitch | Secured Staging Area | 05/08/18 19:09 | Return to Storage |
| JC64700-7.6 | Secured Staging Area | Natasha Verma | 05/09/18 08:19 | Retrieve from Storage |
| JC64700-7.6 | Natasha Verma | Secured Storage | 05/09/18 18:04 | Return to Storage |
| JC64700-7.6 | Secured Storage | Sahara Feliciano | 05/10/18 16:39 | Retrieve from Storage |
| JC64700-7.6 | Sahara Feliciano | Secured Staging Area | 05/10/18 16:39 | Return to Storage |
| JC64700-7.6 | Secured Staging Area | Karthika Sathayamoorthy | 05/11/18 08:56 | Retrieve from Storage |
| JC64700-7.6 | Karthika Sathayamoorthy | Secured Storage | 05/16/18 08:01 | Return to Storage |
| JC64700-7.6 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.7 | Secured Storage | Todd Shoemaker | 04/27/18 10:39 | Retrieve from Storage |
| JC64700-7.7 | Todd Shoemaker | Secured Staging Area | 04/27/18 10:40 | Return to Storage |
| JC64700-7.7 | Secured Staging Area | Thomas Gabriel | 04/27/18 12:47 | Retrieve from Storage |
| JC64700-7.7 | Thomas Gabriel | Secured Storage | 04/27/18 16:14 | Return to Storage |
| JC64700-7.7 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.8 | Secured Storage | Todd Shoemaker | 04/23/18 12:29 | Retrieve from Storage |
| JC64700-7.8 | Todd Shoemaker | Secured Staging Area | 04/23/18 12:29 | Return to Storage |
| JC64700-7.8 | Secured Staging Area | Courtney Dringus | 04/23/18 12:32 | Retrieve from Storage |
| JC64700-7.8 | Courtney Dringus | Secured Storage | 04/23/18 13:42 | Return to Storage |
| JC64700-7.8 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-7.9 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-7.9 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-7.10 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |

5.3
5

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|--------------------------|--------------------------|----------------|----------------------------|
| JC64700-7.10 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-7.11 | Secured Storage | Vidish Pandya | 04/25/18 09:21 | Retrieve from Storage |
| JC64700-7.11 | Vidish Pandya | GCMS2A | 04/25/18 09:21 | Load on Instrument |
| JC64700-7.11 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-7.11 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-7.11 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.1 | Secured Storage | Dave Hunkele | 04/24/18 09:36 | Retrieve from Storage |
| JC64700-8.1 | Dave Hunkele | Secured Staging Area | 04/24/18 09:36 | Return to Storage |
| JC64700-8.1 | Secured Staging Area | Matthew Stoecklin | 04/24/18 11:53 | Retrieve from Storage |
| JC64700-8.1 | Matthew Stoecklin | | 04/25/18 11:40 | Depleted |
| JC64700-8.1.1 | Matthew Stoecklin | Organics Prep | 04/24/18 11:54 | Extract from JC64700-8.1 |
| JC64700-8.1.1 | Amanda Furka | Extract Storage | 04/24/18 22:19 | Return to Storage |
| JC64700-8.1.1 | Organics Prep | Amanda Furka | 04/24/18 22:19 | Extract from JC64700-8.1 |
| JC64700-8.1.1 | Extract Storage | Christine Change | 05/02/18 15:47 | Retrieve from Storage |
| JC64700-8.1.1 | Christine Change | GCMS4P | 05/02/18 15:47 | Load on Instrument |
| JC64700-8.1.1 | GCMS4P | John Boudreau | 05/03/18 10:26 | Unload from Instrument |
| JC64700-8.1.1 | John Boudreau | Extract Storage | 05/03/18 10:26 | Return to Storage |
| JC64700-8.1.1 | Extract Storage | | 06/04/18 09:00 | Disposed |
| JC64700-8.3 | Secured Storage | Todd Shoemaker | 04/23/18 08:55 | Retrieve from Storage |
| JC64700-8.3 | Todd Shoemaker | Secured Staging Area | 04/23/18 08:56 | Return to Storage |
| JC64700-8.3 | Secured Staging Area | Sarvadaman Tripathi | 04/23/18 09:40 | Retrieve from Storage |
| JC64700-8.3 | Sarvadaman Tripathi | Secured Storage | 04/23/18 18:54 | Return to Storage |
| JC64700-8.3 | Secured Storage | Jennifer Voitovitch | 04/23/18 19:30 | Retrieve from Storage |
| JC64700-8.3 | Jennifer Voitovitch | Secured Staging Area | 04/23/18 19:30 | Return to Storage |
| JC64700-8.3 | Secured Staging Area | Deval Patel | 04/24/18 08:23 | Retrieve from Storage |
| JC64700-8.3 | Deval Patel | Secured Storage | 04/24/18 09:46 | Return to Storage |
| JC64700-8.3 | Secured Storage | Todd Shoemaker | 04/25/18 14:23 | Retrieve from Storage |
| JC64700-8.3 | Todd Shoemaker | Secured Staging Area | 04/25/18 14:24 | Return to Storage |
| JC64700-8.3 | Secured Staging Area | Colleen Hill | 04/25/18 16:54 | Retrieve from Storage |
| JC64700-8.3 | Colleen Hill | Secured Storage | 04/25/18 17:02 | Return to Storage |
| JC64700-8.3 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.3.1 | Colleen Hill | Metals Digestion | 04/25/18 16:56 | Digestate from JC64700-8.3 |
| JC64700-8.3.1 | Metals Digestion | Colleen Hill | 04/25/18 16:56 | Digestate from JC64700-8.3 |
| JC64700-8.3.1 | Colleen Hill | Metals Digestate Storage | 04/25/18 16:56 | Return to Storage |
| JC64700-8.3.1 | Metals Digestate Storage | | 07/02/18 09:00 | Disposed |
| JC64700-8.4 | Secured Storage | Dave Hunkele | 04/24/18 08:02 | Retrieve from Storage |
| JC64700-8.4 | Dave Hunkele | Secured Staging Area | 04/24/18 08:03 | Return to Storage |
| JC64700-8.4 | Secured Staging Area | Rie Iwasaki | 04/24/18 09:16 | Retrieve from Storage |

5.3
5

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|-------------------------|-------------------------|----------------|-----------------------|
| JC64700-8.4 | Rie Iwasaki | Secured Storage | 04/24/18 16:15 | Return to Storage |
| JC64700-8.4 | Secured Storage | Jennifer Voitovitch | 05/08/18 19:09 | Retrieve from Storage |
| JC64700-8.4 | Jennifer Voitovitch | Secured Staging Area | 05/08/18 19:09 | Return to Storage |
| JC64700-8.4 | Secured Staging Area | Natasha Verma | 05/09/18 08:19 | Retrieve from Storage |
| JC64700-8.4 | Natasha Verma | Secured Storage | 05/09/18 18:04 | Return to Storage |
| JC64700-8.4 | Secured Storage | Sahara Feliciano | 05/10/18 16:39 | Retrieve from Storage |
| JC64700-8.4 | Sahara Feliciano | Secured Staging Area | 05/10/18 16:39 | Return to Storage |
| JC64700-8.4 | Secured Staging Area | Karthika Sathayamoorthy | 05/11/18 08:56 | Retrieve from Storage |
| JC64700-8.4 | Karthika Sathayamoorthy | Secured Storage | 05/16/18 08:01 | Return to Storage |
| JC64700-8.4 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.5 | Secured Storage | Christopher Hall | 04/26/18 06:45 | Retrieve from Storage |
| JC64700-8.5 | Christopher Hall | Secured Staging Area | 04/26/18 06:45 | Return to Storage |
| JC64700-8.5 | Secured Staging Area | Mahendra Patel | 04/26/18 08:20 | Retrieve from Storage |
| JC64700-8.5 | Mahendra Patel | Secured Storage | 04/26/18 17:39 | Return to Storage |
| JC64700-8.5 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.6 | Secured Storage | Sahara Feliciano | 04/25/18 16:50 | Retrieve from Storage |
| JC64700-8.6 | Sahara Feliciano | Secured Staging Area | 04/25/18 16:50 | Return to Storage |
| JC64700-8.6 | Secured Staging Area | Courtney Dringus | 04/26/18 07:34 | Retrieve from Storage |
| JC64700-8.6 | Courtney Dringus | Secured Storage | 04/26/18 12:15 | Return to Storage |
| JC64700-8.6 | Secured Storage | Jennifer Voitovitch | 05/06/18 12:17 | Retrieve from Storage |
| JC64700-8.6 | Jennifer Voitovitch | Secured Staging Area | 05/06/18 12:17 | Return to Storage |
| JC64700-8.6 | Secured Staging Area | Natasha Verma | 05/07/18 08:21 | Retrieve from Storage |
| JC64700-8.6 | Natasha Verma | Secured Storage | 05/07/18 17:05 | Return to Storage |
| JC64700-8.6 | Secured Storage | Todd Shoemaker | 05/08/18 08:12 | Retrieve from Storage |
| JC64700-8.6 | Todd Shoemaker | Secured Staging Area | 05/08/18 08:12 | Return to Storage |
| JC64700-8.6 | Secured Staging Area | Natasha Verma | 05/08/18 08:33 | Retrieve from Storage |
| JC64700-8.6 | Natasha Verma | Secured Storage | 05/08/18 17:00 | Return to Storage |
| JC64700-8.6 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.7 | Secured Storage | Todd Shoemaker | 04/27/18 10:39 | Retrieve from Storage |
| JC64700-8.7 | Todd Shoemaker | Secured Staging Area | 04/27/18 10:40 | Return to Storage |
| JC64700-8.7 | Secured Staging Area | Thomas Gabriel | 04/27/18 12:47 | Retrieve from Storage |
| JC64700-8.7 | Thomas Gabriel | Secured Storage | 04/27/18 16:14 | Return to Storage |
| JC64700-8.7 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.8 | Secured Storage | Todd Shoemaker | 04/23/18 12:29 | Retrieve from Storage |
| JC64700-8.8 | Todd Shoemaker | Secured Staging Area | 04/23/18 12:29 | Return to Storage |
| JC64700-8.8 | Secured Staging Area | Courtney Dringus | 04/23/18 12:32 | Retrieve from Storage |
| JC64700-8.8 | Courtney Dringus | Secured Storage | 04/23/18 13:42 | Return to Storage |
| JC64700-8.8 | Tim Hudson | | 06/18/18 08:42 | Disposed |
| JC64700-8.9 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |

5.3
5

SGS Internal Chain of Custody

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill
Received: 04/20/18

| Sample.Bottle Number | Transfer FROM | Transfer TO | Date/Time | Reason |
|----------------------|-----------------|-----------------|----------------|------------------------|
| JC64700-8.9 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-8.10 | Secured Storage | Robert Lofrano | 04/23/18 13:05 | Retrieve from Storage |
| JC64700-8.10 | Robert Lofrano | | 04/23/18 13:20 | Subcontract |
| JC64700-8.11 | Secured Storage | Vidish Pandya | 04/25/18 09:21 | Retrieve from Storage |
| JC64700-8.11 | Vidish Pandya | GCMS2A | 04/25/18 09:21 | Load on Instrument |
| JC64700-8.11 | GCMS2A | Vidish Pandya | 04/26/18 10:25 | Unload from Instrument |
| JC64700-8.11 | Vidish Pandya | Secured Storage | 04/26/18 10:25 | Return to Storage |
| JC64700-8.11 | Tim Hudson | | 06/18/18 08:42 | Disposed |

5.3
5

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|------------|----|----------|----|-----------|------------|------------------|
| V2A7920-MB | 2A186771.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-----------------------------|--------|------|------|-------|---|
| 67-64-1 | Acetone | ND | 10 | 5.0 | ug/l | |
| 107-13-1 | Acrylonitrile | ND | 10 | 1.9 | ug/l | |
| 71-43-2 | Benzene | ND | 0.50 | 0.17 | ug/l | |
| 74-97-5 | Bromochloromethane | ND | 1.0 | 0.38 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.22 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.42 | ug/l | |
| 74-83-9 | Bromomethane | ND | 2.0 | 1.4 | ug/l | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 4.8 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 0.50 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.34 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.24 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | 0.59 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.29 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | 0.53 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 0.69 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.16 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.21 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | 5.0 | 1.6 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.21 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.20 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | 0.47 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | 0.40 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.24 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.25 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.22 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.22 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 3.3 | ug/l | |
| 74-88-4 | Iodomethane | ND | 2.0 | 0.27 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.0 | 3.0 | ug/l | |
| 74-95-3 | Methylene bromide | ND | 1.0 | 0.45 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 2.0 | 1.0 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.24 | ug/l | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.19 | ug/l | |

Method Blank Summary

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|------------|----|----------|----|-----------|------------|------------------|
| V2A7920-MB | 2A186771.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|---------------------------|--------|-----|------|-------|---|
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.17 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.25 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.25 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.24 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | 0.27 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 2.0 | 0.47 | ug/l | |
| 108-05-4 | Vinyl Acetate | ND | 10 | 3.2 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.62 | ug/l | |
| | m,p-Xylene | ND | 1.0 | 0.43 | ug/l | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.22 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 1.0 | 0.22 | ug/l | |

| CAS No. | Surrogate Recoveries | Limits |
|------------|-----------------------|--------------|
| 1868-53-7 | Dibromofluoromethane | 100% 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 108% 81-124% |
| 2037-26-5 | Toluene-D8 | 98% 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 100% 80-120% |

| CAS No. | Tentatively Identified Compounds | R. T. | Est. Conc. | Units | Q |
|---------|----------------------------------|-------|------------|-------|---|
| | Total TIC, Volatile | | 0 | ug/l | |

6.1.1
6

Blank Spike Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|------------|----|----------|----|-----------|------------|------------------|
| V2A7920-BS | 2A186769.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|------------|-----------------------------|------------|----------|-------|--------|
| 67-64-1 | Acetone | 200 | 179 | 90 | 42-150 |
| 107-13-1 | Acrylonitrile | 50 | 52.2 | 104 | 70-135 |
| 71-43-2 | Benzene | 50 | 47.6 | 95 | 80-120 |
| 74-97-5 | Bromochloromethane | 50 | 53.9 | 108 | 84-121 |
| 75-27-4 | Bromodichloromethane | 50 | 53.2 | 106 | 83-120 |
| 75-25-2 | Bromoform | 50 | 60.4 | 121 | 76-129 |
| 74-83-9 | Bromomethane | 50 | 48.4 | 97 | 57-138 |
| 78-93-3 | 2-Butanone (MEK) | 200 | 215 | 108 | 64-137 |
| 75-15-0 | Carbon disulfide | 50 | 47.8 | 96 | 64-137 |
| 56-23-5 | Carbon tetrachloride | 50 | 56.1 | 112 | 75-135 |
| 108-90-7 | Chlorobenzene | 50 | 50.1 | 100 | 84-117 |
| 75-00-3 | Chloroethane | 50 | 45.7 | 91 | 63-132 |
| 67-66-3 | Chloroform | 50 | 51.0 | 102 | 80-119 |
| 74-87-3 | Chloromethane | 50 | 45.2 | 90 | 46-136 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 50 | 60.0 | 120 | 72-127 |
| 124-48-1 | Dibromochloromethane | 50 | 58.0 | 116 | 80-123 |
| 106-93-4 | 1,2-Dibromoethane | 50 | 52.7 | 105 | 84-117 |
| 95-50-1 | 1,2-Dichlorobenzene | 50 | 52.6 | 105 | 84-119 |
| 106-46-7 | 1,4-Dichlorobenzene | 50 | 51.2 | 102 | 82-117 |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | 50 | 51.0 | 102 | 32-148 |
| 75-34-3 | 1,1-Dichloroethane | 50 | 49.2 | 98 | 79-120 |
| 107-06-2 | 1,2-Dichloroethane | 50 | 51.3 | 103 | 78-126 |
| 75-35-4 | 1,1-Dichloroethene | 50 | 50.1 | 100 | 69-126 |
| 156-59-2 | cis-1,2-Dichloroethene | 50 | 48.9 | 98 | 80-120 |
| 156-60-5 | trans-1,2-Dichloroethene | 50 | 50.5 | 101 | 76-120 |
| 78-87-5 | 1,2-Dichloropropane | 50 | 48.6 | 97 | 82-121 |
| 10061-01-5 | cis-1,3-Dichloropropene | 50 | 51.9 | 104 | 83-120 |
| 10061-02-6 | trans-1,3-Dichloropropene | 50 | 53.2 | 106 | 82-121 |
| 100-41-4 | Ethylbenzene | 50 | 50.0 | 100 | 80-120 |
| 591-78-6 | 2-Hexanone | 200 | 203 | 102 | 65-132 |
| 74-88-4 | Iodomethane | 50 | 53.7 | 107 | 72-128 |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | 200 | 195 | 98 | 71-131 |
| 74-95-3 | Methylene bromide | 50 | 53.6 | 107 | 85-120 |
| 75-09-2 | Methylene chloride | 50 | 48.0 | 96 | 77-120 |
| 100-42-5 | Styrene | 50 | 50.3 | 101 | 82-122 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 50 | 54.7 | 109 | 82-121 |

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|------------|----|----------|----|-----------|------------|------------------|
| V2A7920-BS | 2A186769.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|-----------|---------------------------|------------|----------|-------|--------|
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 50 | 50.4 | 101 | 76-119 |
| 127-18-4 | Tetrachloroethene | 50 | 53.9 | 108 | 70-131 |
| 108-88-3 | Toluene | 50 | 49.3 | 99 | 80-120 |
| 71-55-6 | 1,1,1-Trichloroethane | 50 | 53.2 | 106 | 81-128 |
| 79-00-5 | 1,1,2-Trichloroethane | 50 | 50.8 | 102 | 83-118 |
| 79-01-6 | Trichloroethene | 50 | 51.9 | 104 | 80-120 |
| 75-69-4 | Trichlorofluoromethane | 50 | 51.8 | 104 | 64-136 |
| 96-18-4 | 1,2,3-Trichloropropane | 50 | 53.0 | 106 | 79-120 |
| 108-05-4 | Vinyl Acetate | 50 | 53.1 | 106 | 76-132 |
| 75-01-4 | Vinyl chloride | 50 | 47.1 | 94 | 51-135 |
| | m,p-Xylene | 100 | 101 | 101 | 80-120 |
| 95-47-6 | o-Xylene | 50 | 50.1 | 100 | 80-120 |
| 1330-20-7 | Xylene (total) | 150 | 151 | 101 | 80-120 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|------------|-----------------------|------|---------|
| 1868-53-7 | Dibromofluoromethane | 102% | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 105% | 81-124% |
| 2037-26-5 | Toluene-D8 | 99% | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 80-120% |

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|------------|----|----------|----|-----------|------------|------------------|
| JC64700-4MS | 2A186779.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |
| JC64700-4 | 2A186776.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | JC64700-4 ug/l | Spike Q | ug/l | MS ug/l | MS % | Limits |
|------------|-----------------------------|-------------------|------------|------|------------|---------|--------|
| 67-64-1 | Acetone | ND | | 200 | 148 | 74 | 34-149 |
| 107-13-1 | Acrylonitrile | ND | | 50 | 39.2 | 78 | 62-138 |
| 71-43-2 | Benzene | ND | | 50 | 45.4 | 91 | 54-136 |
| 74-97-5 | Bromochloromethane | ND | | 50 | 49.0 | 98 | 79-124 |
| 75-27-4 | Bromodichloromethane | ND | | 50 | 53.0 | 106 | 79-124 |
| 75-25-2 | Bromoform | ND | | 50 | 53.7 | 107 | 71-130 |
| 74-83-9 | Bromomethane | ND | | 50 | 45.0 | 90 | 53-142 |
| 78-93-3 | 2-Butanone (MEK) | ND | | 200 | 159 | 80 | 54-142 |
| 75-15-0 | Carbon disulfide | ND | | 50 | 43.4 | 87 | 59-145 |
| 56-23-5 | Carbon tetrachloride | ND | | 50 | 60.9 | 122 | 70-143 |
| 108-90-7 | Chlorobenzene | ND | | 50 | 48.2 | 96 | 78-123 |
| 75-00-3 | Chloroethane | ND | | 50 | 42.9 | 86 | 57-141 |
| 67-66-3 | Chloroform | ND | | 50 | 49.3 | 99 | 76-123 |
| 74-87-3 | Chloromethane | ND | | 50 | 40.2 | 80 | 43-141 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | 50 | 48.4 | 97 | 66-130 |
| 124-48-1 | Dibromochloromethane | ND | | 50 | 53.8 | 108 | 76-125 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 50 | 47.0 | 94 | 78-119 |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | 50 | 48.4 | 97 | 77-123 |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | 50 | 48.2 | 96 | 76-122 |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | | 50 | 47.2 | 94 | 17-148 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 50 | 46.6 | 93 | 73-126 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 50 | 51.2 | 102 | 72-131 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 50 | 48.3 | 97 | 63-136 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 50 | 44.8 | 90 | 60-136 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 50 | 47.5 | 95 | 70-126 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 50 | 43.9 | 88 | 78-124 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 50 | 48.8 | 98 | 79-123 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 50 | 48.9 | 98 | 77-123 |
| 100-41-4 | Ethylbenzene | ND | | 50 | 49.3 | 99 | 51-140 |
| 591-78-6 | 2-Hexanone | ND | | 200 | 162 | 81 | 56-139 |
| 74-88-4 | Iodomethane | ND | | 50 | 49.0 | 98 | 67-132 |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | | 200 | 156 | 78 | 66-136 |
| 74-95-3 | Methylene bromide | ND | | 50 | 49.4 | 99 | 81-121 |
| 75-09-2 | Methylene chloride | ND | | 50 | 42.8 | 86 | 73-125 |
| 100-42-5 | Styrene | ND | | 50 | 47.9 | 96 | 75-129 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | 50 | 53.4 | 107 | 77-124 |

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|------------|----|----------|----|-----------|------------|------------------|
| JC64700-4MS | 2A186779.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |
| JC64700-4 | 2A186776.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | JC64700-4 ug/l | Spike Q | ug/l | MS ug/l | MS % | Limits |
|-----------|---------------------------|-------------------|------------|------|------------|---------|--------|
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 50 | 41.3 | 83 | 71-122 | |
| 127-18-4 | Tetrachloroethene | ND | 50 | 56.3 | 113 | 61-139 | |
| 108-88-3 | Toluene | ND | 50 | 47.2 | 94 | 60-135 | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 50 | 56.5 | 113 | 74-138 | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 50 | 45.1 | 90 | 78-121 | |
| 79-01-6 | Trichloroethene | ND | 50 | 51.7 | 103 | 62-141 | |
| 75-69-4 | Trichlorofluoromethane | ND | 50 | 60.5 | 121 | 57-149 | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 50 | 45.8 | 92 | 74-122 | |
| 108-05-4 | Vinyl Acetate | ND | 50 | 42.1 | 84 | 63-135 | |
| 75-01-4 | Vinyl chloride | ND | 50 | 44.8 | 90 | 43-146 | |
| | m,p-Xylene | ND | 100 | 98.6 | 99 | 50-144 | |
| 95-47-6 | o-Xylene | ND | 50 | 49.0 | 98 | 63-134 | |
| 1330-20-7 | Xylene (total) | ND | 150 | 148 | 99 | 56-139 | |

| CAS No. | Surrogate Recoveries | MS | JC64700-4 | Limits |
|------------|-----------------------|------|-----------|---------|
| 1868-53-7 | Dibromofluoromethane | 102% | 99% | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 114% | 111% | 81-124% |
| 2037-26-5 | Toluene-D8 | 97% | 98% | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | 101% | 80-120% |

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------------|------------|----|----------|----|-----------|------------|------------------|
| JC64700-3DUP | 2A186781.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |
| JC64700-3 | 2A186775.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | JC64700-3 DUP | | Q | RPD | Limits |
|------------|-----------------------------|---------------|--------|----|-----|--------|
| | | ug/l | Q ug/l | | | |
| 67-64-1 | Acetone | ND | ND | nc | 20 | |
| 107-13-1 | Acrylonitrile | ND | ND | nc | 20 | |
| 71-43-2 | Benzene | ND | ND | nc | 20 | |
| 74-97-5 | Bromochloromethane | ND | ND | nc | 20 | |
| 75-27-4 | Bromodichloromethane | ND | ND | nc | 20 | |
| 75-25-2 | Bromoform | ND | ND | nc | 20 | |
| 74-83-9 | Bromomethane | ND | ND | nc | 20 | |
| 78-93-3 | 2-Butanone (MEK) | ND | ND | nc | 20 | |
| 75-15-0 | Carbon disulfide | ND | ND | nc | 20 | |
| 56-23-5 | Carbon tetrachloride | ND | ND | nc | 20 | |
| 108-90-7 | Chlorobenzene | ND | ND | nc | 20 | |
| 75-00-3 | Chloroethane | ND | ND | nc | 20 | |
| 67-66-3 | Chloroform | ND | ND | nc | 20 | |
| 74-87-3 | Chloromethane | ND | ND | nc | 20 | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | ND | nc | 20 | |
| 124-48-1 | Dibromochloromethane | ND | ND | nc | 20 | |
| 106-93-4 | 1,2-Dibromoethane | ND | ND | nc | 20 | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | ND | nc | 20 | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | ND | nc | 20 | |
| 110-57-6 | trans-1,4-Dichloro-2-Butene | ND | ND | nc | 20 | |
| 75-34-3 | 1,1-Dichloroethane | ND | ND | nc | 20 | |
| 107-06-2 | 1,2-Dichloroethane | ND | ND | nc | 20 | |
| 75-35-4 | 1,1-Dichloroethene | ND | ND | nc | 20 | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | ND | nc | 20 | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | ND | nc | 20 | |
| 78-87-5 | 1,2-Dichloropropane | ND | ND | nc | 20 | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | ND | nc | 20 | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | ND | nc | 20 | |
| 100-41-4 | Ethylbenzene | ND | ND | nc | 20 | |
| 591-78-6 | 2-Hexanone | ND | ND | nc | 20 | |
| 74-88-4 | Iodomethane | ND | ND | nc | 20 | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | ND | nc | 20 | |
| 74-95-3 | Methylene bromide | ND | ND | nc | 20 | |
| 75-09-2 | Methylene chloride | ND | ND | nc | 20 | |
| 100-42-5 | Styrene | ND | ND | nc | 20 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | ND | nc | 20 | |

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------------|------------|----|----------|----|-----------|------------|------------------|
| JC64700-3DUP | 2A186781.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |
| JC64700-3 | 2A186775.D | 1 | 04/25/18 | VP | n/a | n/a | V2A7920 |

The QC reported here applies to the following samples:

Method: SW846 8260C

JC64700-2, JC64700-3, JC64700-4, JC64700-6, JC64700-7, JC64700-8

| CAS No. | Compound | JC64700-3 | | Q | RPD | Limits |
|-----------|---------------------------|-----------|----------|---|-----|--------|
| | | ug/l | DUP ug/l | | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | ND | | nc | 20 |
| 127-18-4 | Tetrachloroethene | ND | ND | | nc | 20 |
| 108-88-3 | Toluene | ND | ND | | nc | 20 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | ND | | nc | 20 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | ND | | nc | 20 |
| 79-01-6 | Trichloroethene | ND | ND | | nc | 20 |
| 75-69-4 | Trichlorofluoromethane | ND | ND | | nc | 20 |
| 96-18-4 | 1,2,3-Trichloropropane | ND | ND | | nc | 20 |
| 108-05-4 | Vinyl Acetate | ND | ND | | nc | 20 |
| 75-01-4 | Vinyl chloride | ND | ND | | nc | 20 |
| | m,p-Xylene | ND | ND | | nc | 20 |
| 95-47-6 | o-Xylene | ND | ND | | nc | 20 |
| 1330-20-7 | Xylene (total) | ND | ND | | nc | 20 |

| CAS No. | Surrogate Recoveries | DUP | JC64700-3 | Limits |
|------------|-----------------------|------|-----------|---------|
| 1868-53-7 | Dibromofluoromethane | 100% | 99% | 80-120% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 114% | 111% | 81-124% |
| 2037-26-5 | Toluene-D8 | 97% | 98% | 80-120% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | 100% | 80-120% |

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|--------------------------------|---------------------------------|
| Sample: V2A7918-BFB | Injection Date: 04/20/18 |
| Lab File ID: 2A186732.D | Injection Time: 16:06 |
| Instrument ID: GCMS2A | |

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | Pass/Fail |
|-----|------------------------------------|---------------|--------------------------|-----------|
| 50 | 15.0 - 40.0% of mass 95 | 13654 | 16.3 | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 37989 | 45.4 | Pass |
| 95 | Base peak, 100% relative abundance | 83669 | 100.0 | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 6088 | 7.28 | Pass |
| 173 | Less than 2.0% of mass 174 | 0 | 0.00 (0.00) ^a | Pass |
| 174 | 50.0 - 120.0% of mass 95 | 73152 | 87.4 | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 5556 | 6.64 (7.60) ^a | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 70922 | 84.8 (97.0) ^a | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 4574 | 5.47 (6.45) ^b | Pass |

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|-----------------|-------------|---------------|---------------|--------------|-----------------------------|
| V2A7918-IC7918 | 2A186733.D | 04/20/18 | 16:57 | 00:51 | Initial cal 0.5 |
| V2A7918-IC7918 | 2A186734.D | 04/20/18 | 17:26 | 01:20 | Initial cal 1 |
| V2A7918-IC7918 | 2A186735.D | 04/20/18 | 17:54 | 01:48 | Initial cal 2 |
| V2A7918-IC7918 | 2A186736.D | 04/20/18 | 18:23 | 02:17 | Initial cal 5 |
| V2A7918-IC7918 | 2A186737.D | 04/20/18 | 18:52 | 02:46 | Initial cal 10 |
| V2A7918-IC7918 | 2A186738.D | 04/20/18 | 19:21 | 03:15 | Initial cal 20 |
| V2A7918-ICC7918 | 2A186739.D | 04/20/18 | 19:49 | 03:43 | Initial cal 50 |
| V2A7918-IC7918 | 2A186740.D | 04/20/18 | 20:18 | 04:12 | Initial cal 100 |
| V2A7918-IC7918 | 2A186741.D | 04/20/18 | 20:47 | 04:41 | Initial cal 200 |
| V2A7918-ICV7918 | 2A186744.D | 04/20/18 | 22:12 | 06:06 | Initial cal verification 50 |
| V2A7918-ICV7918 | 2A186745.D | 04/20/18 | 22:41 | 06:35 | Initial cal verification 50 |

Instrument Performance Check (BFB)

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|--------------------------------|---------------------------------|
| Sample: V2A7920-BFB | Injection Date: 04/25/18 |
| Lab File ID: 2A186767.D | Injection Time: 06:27 |
| Instrument ID: GCMS2A | |

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | Pass/Fail |
|-----|------------------------------------|---------------|--------------------------|-----------|
| 50 | 15.0 - 40.0% of mass 95 | 16060 | 16.5 | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 44776 | 46.0 | Pass |
| 95 | Base peak, 100% relative abundance | 97384 | 100.0 | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 6685 | 6.86 | Pass |
| 173 | Less than 2.0% of mass 174 | 0 | 0.00 (0.00) ^a | Pass |
| 174 | 50.0 - 120.0% of mass 95 | 85712 | 88.0 | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 6785 | 6.97 (7.92) ^a | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 83840 | 86.1 (97.8) ^a | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 5773 | 5.93 (6.89) ^b | Pass |

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|----------------|-------------|---------------|---------------|--------------|--------------------|
| V2A7920-CC7918 | 2A186767.D | 04/25/18 | 06:27 | 00:00 | Continuing cal 20 |
| V2A7920-BS | 2A186769.D | 04/25/18 | 08:00 | 01:33 | Blank Spike |
| V2A7920-MB | 2A186771.D | 04/25/18 | 08:57 | 02:30 | Method Blank |
| ZZZZZZ | 2A186772.D | 04/25/18 | 09:54 | 03:27 | (unrelated sample) |
| ZZZZZZ | 2A186773.D | 04/25/18 | 10:23 | 03:56 | (unrelated sample) |
| JC64700-2 | 2A186774.D | 04/25/18 | 10:52 | 04:25 | 3-WES-002-001-02 |
| JC64700-3 | 2A186775.D | 04/25/18 | 11:21 | 04:54 | 3-WES-002-001-03 |
| JC64700-4 | 2A186776.D | 04/25/18 | 11:50 | 05:23 | 3-WES-002-001-04 |
| JC64700-7 | 2A186777.D | 04/25/18 | 12:19 | 05:52 | 3-WES-002-001-07 |
| JC64700-8 | 2A186778.D | 04/25/18 | 12:47 | 06:20 | 3-WES-002-001-08 |
| JC64700-4MS | 2A186779.D | 04/25/18 | 13:16 | 06:49 | Matrix Spike |
| JC64700-3DUP | 2A186781.D | 04/25/18 | 14:14 | 07:47 | Duplicate |
| ZZZZZZ | 2A186782.D | 04/25/18 | 14:43 | 08:16 | (unrelated sample) |
| ZZZZZZ | 2A186783.D | 04/25/18 | 15:11 | 08:44 | (unrelated sample) |
| JC64700-6 | 2A186784.D | 04/25/18 | 15:40 | 09:13 | 3-WES-002-001-06 |
| ZZZZZZ | 2A186788.D | 04/25/18 | 17:36 | 11:09 | (unrelated sample) |
| ZZZZZZ | 2A186789.D | 04/25/18 | 18:04 | 11:37 | (unrelated sample) |

6.5.2
6

Internal Standard Area Summary

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|----------------------------------|---------------------------------|
| Check Std: V2A7920-CC7918 | Injection Date: 04/25/18 |
| Lab File ID: 2A186767.D | Injection Time: 06:27 |
| Instrument ID: GCMS2A | Method: SW846 8260C |

| | IS 1 | RT | IS 2 | RT | IS 3 | RT | IS 4 | RT | IS 5 | RT |
|--------------------------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|
| | AREA | | AREA | | AREA | | AREA | | AREA | |
| Check Std | 61203 | 7.22 | 303110 | 9.46 | 429006 | 10.38 | 350293 | 13.53 | 190480 | 15.83 |
| Upper Limit ^a | 122406 | 7.72 | 606220 | 9.96 | 858012 | 10.88 | 700586 | 14.03 | 380960 | 16.33 |
| Lower Limit ^b | 30602 | 6.72 | 151555 | 8.96 | 214503 | 9.88 | 175147 | 13.03 | 95240 | 15.33 |

| Lab Sample ID | IS 1 | RT | IS 2 | RT | IS 3 | RT | IS 4 | RT | IS 5 | RT |
|---------------|-------|------|--------|------|--------|-------|--------|-------|--------|-------|
| | AREA | | AREA | | AREA | | AREA | | AREA | |
| V2A7920-BS | 58024 | 7.22 | 290955 | 9.46 | 414677 | 10.38 | 340707 | 13.53 | 185974 | 15.83 |
| V2A7920-MB | 54308 | 7.23 | 298587 | 9.46 | 408043 | 10.38 | 341556 | 13.53 | 188615 | 15.83 |
| ZZZZZZ | 44423 | 7.22 | 285705 | 9.47 | 389732 | 10.38 | 324655 | 13.53 | 181339 | 15.84 |
| ZZZZZZ | 45836 | 7.22 | 285885 | 9.47 | 391102 | 10.38 | 327562 | 13.53 | 179322 | 15.83 |
| JC64700-2 | 45359 | 7.22 | 278658 | 9.46 | 383980 | 10.38 | 314550 | 13.53 | 174315 | 15.83 |
| JC64700-3 | 46980 | 7.22 | 274037 | 9.46 | 367855 | 10.38 | 308155 | 13.53 | 169793 | 15.83 |
| JC64700-4 | 45538 | 7.22 | 269274 | 9.47 | 364967 | 10.38 | 306157 | 13.53 | 167413 | 15.83 |
| JC64700-7 | 43077 | 7.23 | 259027 | 9.46 | 352672 | 10.38 | 294081 | 13.53 | 162620 | 15.84 |
| JC64700-8 | 45422 | 7.22 | 256069 | 9.46 | 349368 | 10.38 | 290266 | 13.53 | 160173 | 15.83 |
| JC64700-4MS | 39137 | 7.22 | 241551 | 9.46 | 334367 | 10.38 | 279581 | 13.53 | 155752 | 15.83 |
| JC64700-3DUP | 44297 | 7.23 | 253834 | 9.46 | 344118 | 10.38 | 286611 | 13.53 | 159866 | 15.83 |
| ZZZZZZ | 38368 | 7.22 | 241480 | 9.46 | 332087 | 10.38 | 275782 | 13.53 | 151399 | 15.83 |
| ZZZZZZ | 35963 | 7.22 | 243754 | 9.46 | 331791 | 10.38 | 279660 | 13.53 | 155746 | 15.83 |
| JC64700-6 | 35351 | 7.22 | 238709 | 9.46 | 325145 | 10.38 | 273616 | 13.53 | 152000 | 15.84 |
| ZZZZZZ | 34150 | 7.23 | 226883 | 9.46 | 302145 | 10.38 | 256831 | 13.53 | 144494 | 15.83 |
| ZZZZZZ | 31874 | 7.22 | 217407 | 9.47 | 293768 | 10.38 | 249587 | 13.53 | 141114 | 15.83 |

- IS 1** = Tert Butyl Alcohol-D9
- IS 2** = Pentafluorobenzene
- IS 3** = 1,4-Difluorobenzene
- IS 4** = Chlorobenzene-D5
- IS 5** = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|----------------------------|-------------------|
| Method: SW846 8260C | Matrix: AQ |
|----------------------------|-------------------|

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 | S2 | S3 | S4 |
|---------------|-------------|-----|-----|----|-----|
| JC64700-2 | 2A186774.D | 101 | 110 | 98 | 100 |
| JC64700-3 | 2A186775.D | 99 | 111 | 98 | 100 |
| JC64700-4 | 2A186776.D | 99 | 111 | 98 | 101 |
| JC64700-6 | 2A186784.D | 103 | 117 | 97 | 100 |
| JC64700-7 | 2A186777.D | 101 | 114 | 97 | 100 |
| JC64700-8 | 2A186778.D | 100 | 113 | 97 | 100 |
| JC64700-3DUP | 2A186781.D | 100 | 114 | 97 | 98 |
| JC64700-4MS | 2A186779.D | 102 | 114 | 97 | 99 |
| V2A7920-BS | 2A186769.D | 102 | 105 | 99 | 99 |
| V2A7920-MB | 2A186771.D | 100 | 108 | 98 | 100 |

Surrogate Compounds

Recovery Limits

| | |
|-----------------------------------|---------|
| S1 = Dibromofluoromethane | 80-120% |
| S2 = 1,2-Dichloroethane-D4 | 81-124% |
| S3 = Toluene-D8 | 80-120% |
| S4 = 4-Bromofluorobenzene | 80-120% |

Initial Calibration Summary

Job Number: JC64700

Sample: V2A7918-ICC7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186739.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Response Factor Report Instrumen

Method : C:\MSDCHEM\1\METHODS\M2A7918.M (RTE Integrator)
 Title : Method SW846 8260C, ZB624 60m x 0.25mm x 1.4um
 Last Update : Tue Apr 24 14:56:35 2018
 Response via : Initial Calibration

Calibration Files

5 =2A186736.D 10 =2A186737.D 0.5 =2A186733.D 50 =2A186739.D
 100 =2A186740.D 1 =2A186734.D 200 =2A186741.D 20 =2A186738.D
 2 =2A186735.D =

| Compound | 5 | 10 | 0.5 | 50 | 100 | 1 | 200 | 20 | 2 | Avg | %RSD |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I Tert Butyl Alcohol-d9 -----ISTD----- | | | | | | | | | | | |
| 2) ethanol | | | | | | | | | | | |
| | 0.100 | 0.092 | | 0.086 | 0.085 | 0.082 | 0.087 | 0.086 | 0.094 | 0.089 | 6.52 |
| 3) tertiary butyl alcohol | | | | | | | | | | | |
| | 1.248 | 1.391 | | 1.363 | 1.434 | | 1.403 | 1.377 | 1.278 | 1.356 | 5.01 |
| 4) 1,4-dioxane | | | | | | | | | | | |
| | 0.060 | 0.081 | | 0.081 | 0.085 | | 0.088 | 0.082 | | 0.080 | 12.73 |
| 5) I pentafluorobenzene -----ISTD----- | | | | | | | | | | | |
| 6) chlorodifluoromethane | | | | | | | | | | | |
| | 0.593 | 0.597 | | 0.560 | 0.550 | 0.700 | 0.506 | 0.599 | 0.659 | 0.596 | 10.31 |
| 7) dichlorodifluoromethane | | | | | | | | | | | |
| | 0.700 | 0.685 | | 0.677 | 0.698 | 0.810 | 0.643 | 0.732 | 0.774 | 0.715 | 7.62 |
| 8) freon 142b | | | | | | | | | | 0.000 | -1.00 |
| 9) freon 114 | | | | | | | | | | 0.000 | -1.00 |
| 10) chloromethane | | | | | | | | | | | |
| | 0.822 | 0.831 | | 0.780 | 0.793 | 0.944 | 0.699 | 0.816 | 0.916 | 0.825 | 9.36 |
| 11) vinyl chloride | | | | | | | | | | | |
| | 0.778 | 0.784 | 0.771 | 0.762 | 0.766 | 0.793 | 0.714 | 0.778 | 0.858 | 0.778 | 4.83 |
| 12) 1,3-butadiene | | | | | | | | | | 0.000 | -1.00 |
| 13) bromomethane | | | | | | | | | | | |
| | 0.510 | 0.489 | | 0.471 | 0.466 | 0.564 | 0.439 | 0.482 | 0.566 | 0.499 | 9.18 |
| 14) chloroethane | | | | | | | | | | | |
| | 0.383 | 0.390 | | 0.392 | 0.389 | 0.478 | 0.363 | 0.398 | 0.439 | 0.404 | 9.07 |
| 15) vinyl Bromide | | | | | | | | | | | |
| | 0.442 | 0.452 | 0.453 | 0.460 | 0.456 | 0.456 | 0.443 | 0.470 | 0.505 | 0.460 | 4.15 |
| 16) trichlorofluoromethane | | | | | | | | | | | |
| | 0.781 | 0.794 | 0.802 | 0.779 | 0.793 | 0.836 | 0.769 | 0.830 | 0.855 | 0.804 | 3.67 |
| 17) ethyl ether | | | | | | | | | | | |
| | 0.251 | 0.258 | | 0.261 | 0.254 | 0.219 | 0.246 | 0.263 | 0.270 | 0.253 | 6.18 |
| 18) 2-chloropropane | | | | | | | | | | | |
| | 0.182 | 0.177 | | 0.177 | 0.174 | 0.143 | 0.168 | 0.184 | 0.161 | 0.171 | 7.83 |
| 19) acrolein | | | | | | | | | | | |
| | 0.081 | 0.075 | | 0.087 | 0.084 | | 0.083 | 0.082 | | 0.082 | 4.99 |
| 20) freon 113 | | | | | | | | | | | |
| | 0.348 | 0.334 | 0.231 | 0.323 | 0.334 | 0.345 | 0.325 | 0.351 | 0.344 | 0.326 | 11.34 |
| 21) 1,1-dichloroethene | | | | | | | | | | | |
| | 0.425 | 0.416 | 0.409 | 0.410 | 0.407 | 0.482 | 0.400 | 0.436 | 0.460 | 0.427 | 6.42 |
| 22) acetone | | | | | | | | | | | |
| | 0.102 | 0.093 | | 0.090 | 0.089 | 0.113 | 0.084 | 0.089 | 0.116 | 0.097 | 12.30 |
| 23) acetonitrile | | | | | | | | | | | |

6.8.1
6

Initial Calibration Summary**Job Number:** JC64700**Sample:** V2A7918-ICC7918**Account:** ILINY Parsons Engineering Science for ILI**Lab FileID:** 2A186739.D**Project:** PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | | | | | |
|-----|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 24) | iodomethane | 0.047 | 0.047 | 0.045 | 0.044 | 0.042 | 0.045 | 0.054 | 0.046 | 8.19 | | |
| 25) | carbon disulfide | 0.643 | 0.651 | 0.711 | 0.644 | 0.651 | 0.702 | 0.626 | 0.671 | 0.709 | 0.668 | 4.78 |
| 26) | methylene chloride | 1.225 | 1.206 | 1.506 | 1.193 | 1.171 | 1.360 | 1.125 | 1.233 | 1.295 | 1.257 | 9.20 |
| 27) | methyl acetate | 0.503 | 0.507 | 0.650 | 0.480 | 0.482 | 0.518 | 0.467 | 0.494 | 0.528 | 0.514 | 10.56 |
| 28) | methyl tert butyl ether | 0.354 | 0.311 | 0.282 | 0.293 | 0.284 | 0.317 | 0.307 | 0.307 | 8.91 | | |
| 29) | trans-1,2-dichloroethene | 1.237 | 1.236 | 1.347 | 1.236 | 1.278 | 1.260 | 1.221 | 1.251 | 1.222 | 1.254 | 3.13 |
| 30) | hexane | 0.470 | 0.459 | 0.495 | 0.450 | 0.449 | 0.477 | 0.441 | 0.466 | 0.522 | 0.470 | 5.42 |
| 31) | di-isopropyl ether | 0.638 | 0.632 | 0.734 | 0.586 | 0.597 | 0.744 | 0.578 | 0.663 | 0.716 | 0.654 | 9.77 |
| 32) | ethyl tert-butyl ether | 1.640 | 1.635 | 1.718 | 1.623 | 1.582 | 1.596 | 1.501 | 1.633 | 1.686 | 1.624 | 3.81 |
| 33) | 2-butanone | 1.506 | 1.513 | 1.467 | 1.513 | 1.480 | 1.535 | 1.395 | 1.511 | 1.534 | 1.495 | 2.90 |
| 34) | 1,1-dichloroethane | 0.035 | 0.037 | 0.039 | 0.040 | 0.039 | 0.039 | 0.031 | 0.037 | 9.16 | | |
| 35) | chloroprene | 0.893 | 0.875 | 0.875 | 0.849 | 0.840 | 0.869 | 0.814 | 0.877 | 0.942 | 0.870 | 4.12 |
| 36) | acrylonitrile | 0.685 | 0.706 | 0.697 | 0.691 | 0.691 | 0.699 | 0.687 | 0.724 | 0.728 | 0.701 | 2.21 |
| 37) | vinyl acetate | 0.124 | 0.127 | 0.140 | 0.146 | 0.142 | 0.145 | 0.137 | 6.98 | | | |
| 38) | ethyl acetate | 0.065 | 0.076 | 0.079 | 0.078 | 0.068 | 0.073 | 8.24 | | | | |
| 39) | 2,2-dichloropropane | 0.042 | 0.056 | 0.056 | 0.055 | 0.058 | 0.054 | 10.80 | | | | |
| 40) | cis-1,2-dichloroethene | 0.520 | 0.503 | 0.470 | 0.436 | 0.604 | 0.428 | 0.504 | 0.533 | 0.500 | 11.35 | |
| 41) | propionitrile | 0.558 | 0.532 | 0.603 | 0.524 | 0.518 | 0.579 | 0.500 | 0.541 | 0.532 | 0.543 | 5.90 |
| 42) | bromochloromethane | 0.058 | 0.056 | 0.058 | 0.057 | 0.044 | 0.055 | 0.058 | 0.056 | 0.055 | 8.69 | |
| 43) | tetrahydrofuran | 0.327 | 0.336 | 0.271 | 0.333 | 0.333 | 0.333 | 0.326 | 0.341 | 0.338 | 0.327 | 6.52 |
| 44) | chloroform | 0.038 | 0.044 | 0.049 | 0.048 | 0.048 | 0.047 | 0.046 | 9.03 | | | |
| 45) | tert-Butyl Formate | 0.892 | 0.872 | 1.040 | 0.855 | 0.849 | 0.955 | 0.824 | 0.876 | 0.899 | 0.896 | 7.29 |
| 46) | isobutyl alcohol | 0.319 | 0.294 | 0.336 | 0.330 | 0.332 | 0.313 | 0.257 | 0.312 | 8.94 | | |
| 47) | dibromofluoromethane (s) | 0.015 | 0.013 | 0.011 | 0.011 | 0.011 | 0.013 | 0.012 | 13.80 | | | |
| 48) | methacrylonitrile | 0.451 | 0.449 | 0.448 | 0.444 | 0.452 | 0.441 | 0.440 | 0.443 | 0.440 | 0.445 | 1.07 |
| 49) | 1,1,1-trichloroethane | 0.169 | 0.166 | 0.167 | 0.168 | 0.135 | 0.168 | 0.169 | 0.161 | 0.163 | 7.12 | |
| 50) | cyclohexane | 0.753 | 0.745 | 0.812 | 0.733 | 0.727 | 0.768 | 0.722 | 0.748 | 0.774 | 0.753 | 3.72 |
| 51) | 1,1-dichloropropene | 0.682 | 0.685 | 0.793 | 0.660 | 0.677 | 0.611 | 0.675 | 0.718 | 0.733 | 0.693 | 7.36 |
| 52) | tert-amyl alcohol | 0.650 | 0.676 | 0.701 | 0.658 | 0.656 | 0.679 | 0.645 | 0.680 | 0.686 | 0.670 | 2.77 |
| 53) | carbon tetrachloride | 0.013 | 0.013 | 0.015 | 0.015 | 0.015 | 0.015 | 0.014 | 6.02 | | | |

Initial Calibration Summary

Job Number: JC64700 **Sample:** V2A7918-ICC7918
Account: ILINY Parsons Engineering Science for ILI **Lab FileID:** 2A186739.D
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | 0.647 | 0.656 | 0.620 | 0.661 | 0.668 | 0.687 | 0.665 | 0.681 | 0.680 | 0.663 | 3.11 |
|-------------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 54) I 1,4-difluorobenzene | -----ISTD----- | | | | | | | | | | |
| 55) 1,2-dichloroethane-d4 (s) | 0.343 | 0.344 | 0.339 | 0.337 | 0.338 | 0.337 | 0.335 | 0.339 | 0.336 | 0.339 | 0.89 |
| 56) 2,2,4-trimethylpentane | 1.358 | 1.284 | 1.383 | 1.181 | 1.205 | 1.314 | 1.139 | 1.317 | 1.442 | 1.291 | 7.72 |
| 57) tert-amyl methyl ether | 1.067 | 1.032 | 1.059 | 0.982 | 0.951 | 1.134 | 0.889 | 1.015 | 1.045 | 1.019 | 7.02 |
| 58) n-butyl alcohol | 0.004 | 0.004 | | 0.005 | 0.004 | | 0.004 | 0.005 | 0.004 | 0.004 | 9.19 |
| 59) benzene | 1.390 | 1.363 | 1.559 | 1.301 | 1.254 | 1.450 | 1.192 | 1.353 | 1.437 | 1.367 | 8.06 |
| 60) heptane | 0.273 | 0.246 | | 0.235 | 0.235 | 0.305 | 0.231 | 0.258 | 0.306 | 0.261 | 11.75 |
| 61) isopropyl acetate | 0.257 | 0.235 | | 0.220 | 0.224 | | 0.215 | 0.234 | 0.264 | 0.235 | 7.89 |
| 62) 1,2-dichloroethane | 0.452 | 0.450 | 0.534 | 0.438 | 0.438 | 0.551 | 0.423 | 0.441 | 0.483 | 0.468 | 9.71 |
| 63) trichloroethene | 0.353 | 0.343 | 0.358 | 0.338 | 0.334 | 0.362 | 0.333 | 0.351 | 0.365 | 0.349 | 3.49 |
| 64) ethyl acrylate | 0.354 | 0.355 | | 0.341 | 0.342 | 0.315 | 0.336 | 0.342 | 0.351 | 0.342 | 3.74 |
| 65) 2-nitropropane | 0.102 | 0.096 | | 0.092 | 0.093 | | 0.091 | 0.093 | 0.110 | 0.097 | 7.15 |
| 66) 2-chloroethyl vinyl ether | 0.184 | 0.180 | 0.158 | 0.184 | 0.181 | 0.170 | 0.170 | 0.183 | 0.183 | 0.177 | 5.15 |
| 67) methyl methacrylate | 0.061 | 0.068 | | 0.072 | 0.070 | | 0.071 | 0.067 | 0.056 | 0.066 | 8.91 |
| 68) 1,2-dichloropropane | 0.373 | 0.353 | 0.303 | 0.352 | 0.345 | 0.407 | 0.338 | 0.352 | 0.363 | 0.354 | 7.82 |
| 69) methylcyclohexane | 0.587 | 0.580 | 0.591 | 0.554 | 0.557 | 0.563 | 0.551 | 0.604 | 0.647 | 0.582 | 5.29 |
| 70) dibromomethane | 0.203 | 0.205 | 0.202 | 0.205 | 0.201 | 0.213 | 0.201 | 0.207 | 0.200 | 0.204 | 2.00 |
| 71) bromodichloromethane | 0.454 | 0.467 | 0.511 | 0.472 | 0.464 | 0.510 | 0.461 | 0.467 | 0.482 | 0.477 | 4.37 |
| 72) epichlorohydrin | 0.025 | 0.025 | | 0.025 | 0.023 | | 0.024 | 0.024 | 0.023 | 0.024 | 4.29 |
| 73) cis-1,3-dichloropropene | 0.584 | 0.568 | 0.551 | 0.573 | 0.569 | 0.555 | 0.556 | 0.581 | 0.606 | 0.571 | 3.04 |
| 74) 4-methyl-2-pentanone | 0.101 | 0.099 | | 0.100 | 0.099 | 0.103 | 0.098 | 0.101 | 0.101 | 0.100 | 1.60 |
| 75) 3-methyl-1-butanol | 0.005 | 0.005 | | 0.005 | 0.005 | | 0.005 | 0.005 | 0.004 | 0.005 | 3.86 |
| 76) I chlorobenzene-d5 | -----ISTD----- | | | | | | | | | | |
| 77) toluene-d8 (s) | 1.320 | 1.304 | 1.325 | 1.343 | 1.323 | 1.306 | 1.321 | 1.303 | 1.305 | 1.317 | 1.02 |
| 78) toluene | 0.980 | 0.950 | 1.034 | 0.954 | 0.937 | 1.004 | 0.914 | 0.944 | 1.025 | 0.971 | 4.29 |
| 79) trans-1,3-dichloropropene | 0.591 | 0.598 | 0.641 | 0.608 | 0.595 | 0.594 | 0.582 | 0.595 | 0.600 | 0.601 | 2.78 |
| 80) ethyl methacrylate | 0.465 | 0.443 | 0.441 | 0.449 | 0.448 | 0.446 | 0.443 | 0.446 | 0.442 | 0.447 | 1.62 |
| 81) 1,1,2-trichloroethane | 0.298 | 0.280 | 0.275 | 0.284 | 0.280 | 0.280 | 0.275 | 0.288 | 0.291 | 0.283 | 2.70 |
| 82) 2-hexanone | 0.103 | 0.106 | | 0.105 | 0.104 | 0.080 | 0.102 | 0.104 | 0.098 | 0.100 | 8.48 |
| 83) tetrachloroethene | | | | | | | | | | | |

6.8.1
6

Initial Calibration Summary

Job Number: JC64700 **Sample:** V2A7918-ICC7918
Account: ILINY Parsons Engineering Science for ILI **Lab FileID:** 2A186739.D
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | | | | | |
|------|-----------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 84) | 1,3-dichloropropane | 0.424 | 0.428 | 0.442 | 0.428 | 0.418 | 0.470 | 0.413 | 0.439 | 0.455 | 0.435 | 4.19 |
| 85) | butyl acetate | 0.573 | 0.533 | 0.536 | 0.544 | 0.537 | 0.556 | 0.526 | 0.548 | 0.546 | 0.544 | 2.56 |
| 86) | dibromochloromethane | 0.207 | 0.204 | | 0.202 | 0.200 | 0.225 | 0.207 | 0.202 | 0.198 | 0.206 | 4.09 |
| 87) | 1,2-dibromoethane | 0.387 | 0.397 | 0.370 | 0.417 | 0.417 | 0.371 | 0.418 | 0.406 | 0.400 | 0.398 | 4.75 |
| 88) | n-butyl ether | 0.361 | 0.362 | 0.370 | 0.366 | 0.357 | 0.358 | 0.354 | 0.365 | 0.383 | 0.364 | 2.34 |
| 89) | chlorobenzene | 1.758 | 1.685 | 1.834 | 1.627 | 1.580 | 1.867 | 1.478 | 1.664 | 1.780 | 1.697 | 7.39 |
| 90) | 1,1,1,2-tetrachloroethane | 1.058 | 1.063 | 1.220 | 1.042 | 1.019 | 1.109 | 0.995 | 1.048 | 1.123 | 1.075 | 6.25 |
| 91) | ethylbenzene | 0.390 | 0.407 | 0.369 | 0.407 | 0.398 | 0.394 | 0.398 | 0.397 | 0.413 | 0.397 | 3.19 |
| 92) | m,p-xylene | 1.765 | 1.776 | 1.888 | 1.716 | 1.659 | 1.899 | 1.587 | 1.746 | 1.840 | 1.764 | 5.83 |
| 93) | o-xylene | 0.686 | 0.670 | 0.690 | 0.659 | 0.646 | 0.717 | 0.625 | 0.680 | 0.709 | 0.676 | 4.35 |
| 94) | styrene | 1.483 | 1.450 | 1.508 | 1.411 | 1.367 | 1.494 | 1.318 | 1.439 | 1.569 | 1.449 | 5.26 |
| 95) | bromoforn | 1.169 | 1.122 | 1.186 | 1.131 | 1.107 | 1.178 | 1.072 | 1.133 | 1.163 | 1.140 | 3.25 |
| 96) | butyl acrylate | 0.228 | 0.245 | 0.197 | 0.258 | 0.261 | 0.248 | 0.264 | 0.241 | 0.236 | 0.242 | 8.49 |
| 97) | isopropylbenzene | 0.716 | 0.708 | 0.699 | 0.708 | 0.689 | 0.682 | 0.692 | 0.686 | 0.747 | 0.703 | 2.85 |
| 98) | cis-1,4-dichloro-2-butene | 1.736 | 1.750 | 1.852 | 1.687 | 1.648 | 1.841 | 1.562 | 1.737 | 1.786 | 1.733 | 5.32 |
| | | 0.137 | 0.142 | | 0.143 | 0.150 | 0.131 | 0.153 | 0.136 | 0.117 | 0.139 | 8.10 |
| 99) | I 1,4-dichlorobenzene-d | -----ISTD----- | | | | | | | | | | |
| 100) | 4-bromofluorobenzene (s) | 0.899 | 0.886 | 0.874 | 0.925 | 0.872 | 0.881 | 0.906 | 0.898 | 0.921 | 0.896 | 2.14 |
| 101) | bromobenzene | 0.872 | 0.869 | 0.974 | 0.872 | 0.841 | 0.923 | 0.838 | 0.874 | 0.920 | 0.887 | 4.95 |
| 102) | 1,1,1,2-tetrachloroethane | 0.774 | 0.771 | 0.742 | 0.762 | 0.728 | 0.782 | 0.729 | 0.744 | 0.831 | 0.763 | 4.23 |
| 103) | trans-1,4-dichloro-2-butene | 0.180 | 0.175 | | 0.177 | 0.186 | | 0.191 | 0.180 | 0.146 | 0.176 | 8.26 |
| 104) | 1,2,3-trichloropropane | 0.204 | 0.197 | | 0.196 | 0.184 | | 0.188 | 0.192 | 0.200 | 0.194 | 3.60 |
| 105) | n-propylbenzene | 3.851 | 3.783 | 3.972 | 3.716 | 3.469 | 4.013 | 3.289 | 3.822 | 4.105 | 3.780 | 6.91 |
| 106) | 2-chlorotoluene | 0.787 | 0.806 | 0.834 | 0.790 | 0.765 | 0.800 | 0.761 | 0.792 | 0.842 | 0.797 | 3.41 |
| 107) | 4-chlorotoluene | 2.322 | 2.321 | 2.510 | 2.308 | 2.190 | 2.411 | 2.137 | 2.305 | 2.529 | 2.337 | 5.59 |
| 108) | 1,3,5-trimethylbenzene | 2.696 | 2.703 | 3.005 | 2.697 | 2.574 | 2.875 | 2.476 | 2.739 | 2.908 | 2.742 | 6.03 |
| 109) | tert-butylbenzene | 2.262 | 2.263 | 2.357 | 2.260 | 2.185 | 2.355 | 2.146 | 2.314 | 2.441 | 2.287 | 3.98 |
| 110) | 1,2,4-trimethylbenzene | 2.739 | 2.761 | 2.983 | 2.694 | 2.591 | 2.795 | 2.509 | 2.762 | 2.940 | 2.753 | 5.44 |
| 111) | sec-butylbenzene | 3.370 | 3.370 | 3.393 | 3.272 | 3.150 | 3.540 | 2.993 | 3.367 | 3.757 | 3.357 | 6.47 |
| 112) | 1,3-dichlorobenzene | 1.611 | 1.580 | 1.748 | 1.599 | 1.555 | 1.714 | 1.514 | 1.606 | 1.735 | 1.629 | 5.11 |
| 113) | p-isopropyltoluene | | | | | | | | | | | |

Initial Calibration Summary

Job Number: JC64700 **Sample:** V2A7918-ICC7918
Account: ILINY Parsons Engineering Science for ILI **Lab FileID:** 2A186739.D
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | | | | | |
|------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 114) | benzyl chloride | 2.823 | 2.815 | 2.943 | 2.798 | 2.713 | 2.924 | 2.618 | 2.879 | 3.137 | 2.850 | 5.18 |
| 115) | 1,4-dichlorobenzene | 1.550 | 1.530 | 1.482 | 1.558 | 1.505 | 1.573 | 1.463 | 1.524 | 1.628 | 1.535 | 3.24 |
| 116) | 1,2-dichlorobenzene | 1.608 | 1.617 | 1.835 | 1.608 | 1.578 | 1.699 | 1.534 | 1.605 | 1.774 | 1.651 | 5.95 |
| 117) | n-butylbenzene | 1.561 | 1.534 | 1.467 | 1.534 | 1.503 | 1.578 | 1.454 | 1.563 | 1.630 | 1.536 | 3.61 |
| 118) | 1,2-dibromo-3-chloropropane | 1.448 | 1.426 | 1.561 | 1.454 | 1.443 | 1.444 | 1.411 | 1.449 | 1.503 | 1.460 | 3.10 |
| 119) | 1,3,5-Trichlorobenzene | 0.147 | 0.139 | | 0.158 | 0.160 | 0.128 | 0.164 | 0.149 | 0.123 | 0.146 | 10.38 |
| 120) | 1,2,4-trichlorobenzene | 1.343 | 1.318 | 1.409 | 1.343 | 1.312 | 1.360 | 1.272 | 1.345 | 1.338 | 1.338 | 2.77 |
| 121) | hexachlorobutadiene | 1.139 | 1.149 | 1.101 | 1.152 | 1.136 | 1.072 | 1.097 | 1.163 | 1.141 | 1.128 | 2.70 |
| 122) | naphthalene | 0.570 | 0.570 | 0.564 | 0.583 | 0.562 | 0.562 | 0.555 | 0.569 | 0.616 | 0.572 | 3.19 |
| 123) | 1,2,3-trichlorobenzene | 2.272 | 2.260 | 2.457 | 2.373 | 2.271 | 2.184 | 2.171 | 2.323 | 2.195 | 2.278 | 4.12 |
| 124) | hexachloroethane | 1.008 | 1.008 | 0.968 | 1.051 | 1.033 | 0.987 | 1.011 | 1.034 | 1.041 | 1.016 | 2.64 |
| 125) | 2-ethylhexyl acrylate | 0.447 | 0.456 | | 0.495 | 0.499 | 0.393 | 0.503 | 0.475 | 0.498 | 0.471 | 8.05 |
| 126) | 2-methylnaphthalene | 0.588 | 0.660 | | 0.765 | 0.823 | | 0.851 | 0.679 | | 0.728 | 14.02 |
| | | 1.116 | 1.198 | | 1.390 | 1.399 | | 1.426 | 1.289 | 1.071 | 1.270 | 11.34 |

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2A7918.M

Tue Apr 24 14:59:57 2018

MS2A

6.8.1
6

Initial Calibration Verification

Job Number: JC64700

Sample: V2A7918-ICV7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186744.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V2A7918\2A186744.D Vial: 13
 Acq On : 20 Apr 2018 10:12 pm Operator: vidishp
 Sample : icv7918-50 Inst : Instrumen
 Misc : MS25631,V2A7918,w,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2A7918.M (RTE Integrator)
 Title : Method SW846 8260C, ZB624 60m x 0.25mm x 1.4um
 Last Update : Tue Apr 24 11:42:14 2018
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|-----|--------------------------|-------|-------|--------------|-------|----------|-------|
| 1 I | Tert Butyl Alcohol-d9 | 1.000 | 1.000 | 0.0 | 85 | 0.00 | 7.22 |
| 2 | ethanol | 0.089 | 0.069 | 22.5 | 68 | 0.00 | 5.97 |
| 3 | tertiary butyl alcohol | 1.356 | 1.373 | -1.3 | 86 | 0.00 | 7.34 |
| 4 | 1,4-dioxane | 0.080 | 0.064 | 20.0 | 67 | 0.00 | 11.11 |
| 5 I | pentafluorobenzene | 1.000 | 1.000 | 0.0 | 97 | 0.00 | 9.46 |
| 6 | chlorodifluoromethane | 0.596 | 0.558 | 6.4 | 97 | 0.00 | 3.85 |
| 7 | dichlorodifluoromethane | 0.715 | 0.910 | -27.3 | 131 | 0.00 | 3.82 |
| 8 | freon 142b | | | -----NA----- | | | |
| 9 | freon 114 | | | -----NA----- | | | |
| 10 | chloromethane | 0.825 | 0.986 | -19.5 | 123 | 0.00 | 4.23 |
| 11 | vinyl chloride | 0.778 | 0.882 | -13.4 | 113 | 0.00 | 4.45 |
| 12 | 1,3-butadiene | | | -----NA----- | | | |
| 13 | bromomethane | 0.499 | 0.543 | -8.8 | 112 | 0.00 | 5.10 |
| 14 | chloroethane | 0.404 | 0.512 | -26.7 | 127 | 0.00 | 5.27 |
| 15 | vinyl Bromide | 0.460 | 0.509 | -10.7 | 108 | 0.00 | 5.61 |
| 16 | trichlorofluoromethane | 0.804 | 0.891 | -10.8 | 111 | 0.00 | 5.70 |
| 17 | ethyl ether | 0.253 | 0.252 | 0.4 | 94 | 0.00 | 6.12 |
| 18 | 2-chloropropane | 0.171 | 0.193 | -12.9 | 106 | 0.00 | 6.32 |
| 19 | acrolein | 0.082 | 0.089 | -8.5 | 100 | 0.00 | 6.39 |
| 20 | freon 113 | 0.326 | 0.369 | -13.2 | 111 | 0.00 | 6.50 |
| 21 | 1,1-dichloroethene | 0.427 | 0.405 | 5.2 | 96 | 0.00 | 6.54 |
| 22 | acetone | 0.097 | 0.086 | 11.3 | 92 | 0.00 | 6.61 |
| 23 | acetonitrile | | | -----NA----- | | | |
| 24 | iodomethane | 0.668 | 0.787 | -17.8 | 119 | 0.00 | 6.83 |
| 25 | carbon disulfide | 1.257 | 1.354 | -7.7 | 110 | 0.00 | 6.95 |
| 26 | methylene chloride | 0.514 | 0.477 | 7.2 | 97 | 0.00 | 7.27 |
| 27 | methyl acetate | 0.313 | 0.264 | 15.7 | 91 | 0.00 | 7.07 |
| 28 | methyl tert butyl ether | 1.254 | 1.242 | 1.2 | 98 | 0.00 | 7.57 |
| 29 | trans-1,2-dichloroethene | 0.470 | 0.450 | 4.3 | 97 | 0.00 | 7.64 |
| 30 | hexane | 0.654 | 0.653 | 0.2 | 108 | 0.00 | 7.92 |
| 31 | di-isopropyl ether | 1.624 | 1.606 | 1.1 | 96 | 0.00 | 8.17 |
| 32 | ethyl tert-butyl ether | 1.495 | 1.484 | 0.7 | 95 | 0.00 | 8.63 |
| 33 | 2-butanone | 0.037 | 0.039 | -5.4 | 97 | 0.00 | 8.92 |
| 34 | 1,1-dichloroethane | 0.870 | 0.872 | -0.2 | 100 | 0.00 | 8.21 |
| 35 | chloroprene | 0.701 | 0.749 | -6.8 | 105 | 0.00 | 8.32 |
| 36 | acrylonitrile | 0.137 | 0.157 | -14.6 | 109 | 0.00 | 7.62 |
| 37 | vinyl acetate | 0.073 | 0.080 | -9.6 | 103 | 0.00 | 8.20 |
| 38 | ethyl acetate | 0.054 | 0.056 | -3.7 | 97 | 0.00 | 8.93 |
| 39 | 2,2-dichloropropane | 0.500 | 0.473 | 5.4 | 98 | 0.00 | 8.94 |
| 40 | cis-1,2-dichloroethene | 0.543 | 0.545 | -0.4 | 101 | 0.00 | 8.95 |
| 41 | propionitrile | 0.055 | 0.055 | 0.0 | 93 | 0.00 | 9.03 |

Initial Calibration Verification

Job Number: JC64700

Sample: V2A7918-ICV7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186744.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | |
|------|---------------------------|-------|-------|--------------|-----|------|-------|
| 42 | bromochloromethane | 0.327 | 0.341 | -4.3 | 100 | 0.00 | 9.27 |
| 43 | tetrahydrofuran | 0.046 | 0.047 | -2.2 | 94 | 0.00 | 9.30 |
| 44 | chloroform | 0.896 | 0.887 | 1.0 | 101 | 0.00 | 9.32 |
| 45 | tert-Butyl Formate | 0.312 | 0.230 | 26.3 | 67 | 0.00 | 9.34 |
| 46 | isobutyl alcohol | 0.012 | 0.010 | 16.7 | 91 | 0.00 | 9.76 |
| 47 S | dibromofluoromethane (s) | 0.445 | 0.452 | -1.6 | 99 | 0.00 | 9.52 |
| 48 | methacrylonitrile | 0.163 | 0.168 | -3.1 | 97 | 0.00 | 9.21 |
| 49 | 1,1,1-trichloroethane | 0.753 | 0.765 | -1.6 | 101 | 0.00 | 9.56 |
| 50 | cyclohexane | 0.693 | 0.774 | -11.7 | 114 | 0.00 | 9.62 |
| 51 | 1,1-dichloropropene | 0.670 | 0.689 | -2.8 | 102 | 0.00 | 9.74 |
| 52 | tert-amyl alcohol | 0.014 | 0.014 | 0.0 | 91 | 0.00 | 9.87 |
| 53 | carbon tetrachloride | 0.663 | 0.701 | -5.7 | 103 | 0.00 | 9.76 |
| 54 I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 98 | 0.00 | 10.38 |
| 55 S | 1,2-dichloroethane-d4 (s) | 0.339 | 0.338 | 0.3 | 98 | 0.00 | 9.94 |
| 56 | 2,2,4-trimethylpentane | 1.291 | 1.295 | -0.3 | 107 | 0.00 | 9.98 |
| 57 | tert-amyl methyl ether | 1.019 | 0.968 | 5.0 | 96 | 0.00 | 10.02 |
| 58 | n-butyl alcohol | 0.004 | 0.004 | 0.0 | 79 | 0.00 | 10.51 |
| 59 | benzene | 1.367 | 1.331 | 2.6 | 100 | 0.00 | 10.01 |
| 60 | heptane | 0.261 | 0.276 | -5.7 | 115 | 0.00 | 10.16 |
| 61 | isopropyl acetate | 0.235 | 0.225 | 4.3 | 100 | 0.00 | 10.02 |
| 62 | 1,2-dichloroethane | 0.468 | 0.447 | 4.5 | 99 | 0.00 | 10.03 |
| 63 | trichloroethene | 0.349 | 0.357 | -2.3 | 103 | 0.00 | 10.72 |
| 64 | ethyl acrylate | 0.342 | 0.339 | 0.9 | 97 | 0.00 | 10.73 |
| 65 | 2-nitropropane | 0.097 | 0.097 | 0.0 | 103 | 0.00 | 11.51 |
| 66 | 2-chloroethyl vinyl ether | 0.177 | 0.188 | -6.2 | 100 | 0.00 | 11.52 |
| 67 | methyl methacrylate | 0.066 | 0.073 | -10.6 | 99 | 0.00 | 10.99 |
| 68 | 1,2-dichloropropane | 0.354 | 0.346 | 2.3 | 96 | 0.00 | 10.99 |
| 69 | methylcyclohexane | 0.582 | 0.582 | 0.0 | 103 | 0.00 | 10.93 |
| 70 | dibromomethane | 0.204 | 0.210 | -2.9 | 100 | 0.00 | 11.16 |
| 71 | bromodichloromethane | 0.477 | 0.472 | 1.0 | 98 | 0.00 | 11.29 |
| 72 | epichlorohydrin | 0.024 | 0.023 | 4.2 | 90 | 0.00 | 11.65 |
| 73 | cis-1,3-dichloropropene | 0.571 | 0.580 | -1.6 | 99 | 0.00 | 11.74 |
| 74 | 4-methyl-2-pentanone | 0.100 | 0.099 | 1.0 | 96 | 0.00 | 11.83 |
| 75 | 3-methyl-1-butanol | 0.005 | 0.004 | 20.0 | 88 | 0.00 | 11.86 |
| 76 I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 99 | 0.00 | 13.53 |
| 77 S | toluene-d8 (s) | 1.317 | 1.299 | 1.4 | 96 | 0.00 | 12.02 |
| 78 | toluene | 0.971 | 0.986 | -1.5 | 103 | 0.00 | 12.09 |
| 79 | trans-1,3-dichloropropene | 0.601 | 0.574 | 4.5 | 94 | 0.00 | 12.30 |
| 80 | ethyl methacrylate | 0.447 | 0.424 | 5.1 | 94 | 0.00 | 12.28 |
| 81 | 1,1,2-trichloroethane | 0.283 | 0.280 | 1.1 | 98 | 0.00 | 12.52 |
| 82 | 2-hexanone | 0.100 | 0.100 | 0.0 | 95 | 0.00 | 12.68 |
| 83 | tetrachloroethene | | | -----NA----- | | | |
| 84 | 1,3-dichloropropane | 0.544 | 0.550 | -1.1 | 101 | 0.00 | 12.70 |
| 85 | butyl acetate | 0.205 | 0.207 | -1.0 | 102 | 0.00 | 12.75 |
| 86 | dibromochloromethane | 0.398 | 0.434 | -9.0 | 104 | 0.00 | 12.96 |
| 87 | 1,2-dibromoethane | 0.364 | 0.366 | -0.5 | 99 | 0.00 | 13.11 |
| 88 | n-butyl ether | 1.697 | 1.621 | 4.5 | 99 | 0.00 | 13.46 |
| 89 | chlorobenzene | 1.075 | 1.075 | 0.0 | 103 | 0.00 | 13.56 |
| 90 | 1,1,1,2-tetrachloroethane | 0.397 | 0.421 | -6.0 | 103 | 0.00 | 13.62 |
| 91 | ethylbenzene | 1.764 | 1.816 | -2.9 | 105 | 0.00 | 13.61 |
| 92 | m,p-xylene | 0.676 | 0.696 | -3.0 | 105 | 0.00 | 13.71 |
| 93 | o-xylene | 1.449 | 1.486 | -2.6 | 105 | 0.00 | 14.13 |
| 94 | styrene | 1.140 | 1.188 | -4.2 | 104 | 0.00 | 14.14 |
| 95 | bromoform | 0.242 | 0.273 | -12.8 | 105 | 0.00 | 14.41 |
| 96 | butyl acrylate | 0.703 | 0.708 | -0.7 | 99 | 0.00 | 13.95 |
| 97 | isopropylbenzene | 1.733 | 1.805 | -4.2 | 106 | 0.00 | 14.47 |
| 98 | cis-1,4-dichloro-2-butene | 0.139 | 0.145 | -4.3 | 101 | 0.00 | 14.55 |

Initial Calibration Verification

Job Number: JC64700

Sample: V2A7918-ICV7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186744.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | |
|-----|---|---------------------------|-------|-------|-------|-----|------|-------|
| 99 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 104 | 0.00 | 15.83 |
| 100 | S | 4-bromofluorobenzene (s) | 0.896 | 0.880 | 1.8 | 99 | 0.00 | 14.68 |
| 101 | | bromobenzene | 0.887 | 0.884 | 0.3 | 105 | 0.00 | 14.87 |
| 102 | | 1,1,2,2-tetrachloroethane | 0.763 | 0.732 | 4.1 | 100 | 0.00 | 14.79 |
| 103 | | trans-1,4-dichloro-2-bute | 0.176 | 0.195 | -10.8 | 114 | 0.00 | 14.83 |
| 104 | | 1,2,3-trichloropropane | 0.194 | 0.190 | 2.1 | 100 | 0.00 | 14.86 |
| 105 | | n-propylbenzene | 3.780 | 3.841 | -1.6 | 107 | 0.00 | 14.87 |
| 106 | | 2-chlorotoluene | 0.797 | 0.797 | 0.0 | 105 | 0.00 | 15.02 |
| 107 | | 4-chlorotoluene | 2.337 | 2.404 | -2.9 | 108 | 0.00 | 15.12 |
| 108 | | 1,3,5-trimethylbenzene | 2.742 | 2.772 | -1.1 | 107 | 0.00 | 15.02 |
| 109 | | tert-butylbenzene | 2.287 | 2.353 | -2.9 | 108 | 0.00 | 15.37 |
| 110 | | 1,2,4-trimethylbenzene | 2.753 | 2.841 | -3.2 | 109 | 0.00 | 15.41 |
| 111 | | sec-butylbenzene | 3.357 | 3.420 | -1.9 | 108 | 0.00 | 15.58 |
| 112 | | 1,3-dichlorobenzene | 1.629 | 1.644 | -0.9 | 107 | 0.00 | 15.77 |
| 113 | | p-isopropyltoluene | 2.850 | 2.994 | -5.1 | 111 | 0.00 | 15.70 |
| 114 | | benzyl chloride | 1.535 | 1.232 | 19.7 | 82 | 0.00 | 15.98 |
| 115 | | 1,4-dichlorobenzene | 1.651 | 1.648 | 0.2 | 106 | 0.00 | 15.86 |
| 116 | | 1,2-dichlorobenzene | 1.536 | 1.582 | -3.0 | 107 | 0.00 | 16.25 |
| 117 | | n-butylbenzene | 1.460 | 1.541 | -5.5 | 110 | 0.00 | 16.11 |
| 118 | | 1,2-dibromo-3-chloropropa | 0.146 | 0.153 | -4.8 | 100 | 0.00 | 17.03 |
| 119 | | 1,3,5-Trichlorobenzene | 1.338 | 1.346 | -0.6 | 104 | 0.00 | 17.20 |
| 120 | | 1,2,4-trichlorobenzene | 1.128 | 1.175 | -4.2 | 106 | 0.00 | 17.84 |
| 121 | | hexachlorobutadiene | 0.572 | 0.588 | -2.8 | 105 | 0.00 | 17.95 |
| 122 | | naphthalene | 2.278 | 2.372 | -4.1 | 104 | 0.00 | 18.12 |
| 123 | | 1,2,3-trichlorobenzene | 1.016 | 1.050 | -3.3 | 104 | 0.00 | 18.36 |
| 124 | | hexachloroethane | 0.471 | 0.531 | -12.7 | 111 | 0.00 | 16.50 |
| 125 | | 2-ethylhexyl acrylate | 0.728 | 0.812 | -11.5 | 110 | 0.00 | 17.81 |
| 126 | | 2-methylnaphthalene | 1.270 | 1.273 | -0.2 | 95 | 0.00 | 19.33 |

(#) = Out of Range
2A186739.D M2A7918.M

SPCC's out = 0 CCC's out = 0
Tue Apr 24 12:19:04 2018 MS2A

Initial Calibration Verification

Job Number: JC64700

Sample: V2A7918-ICV7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186745.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V2A7918\2A186745.D Vial: 14
 Acq On : 20 Apr 2018 10:41 pm Operator: vidishp
 Sample : icv7918-50 Inst : Instrumen
 Misc : MS25631,V2A7918,w,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2A7918.M (RTE Integrator)
 Title : Method SW846 8260C, ZB624 60m x 0.25mm x 1.4um
 Last Update : Tue Apr 24 11:42:14 2018
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|-----|--------------------------|-------|-------|--------------|-------|----------|------|
| 1 I | Tert Butyl Alcohol-d9 | 1.000 | 1.000 | 0.0 | 87 | 0.00 | 7.22 |
| 2 | ethanol | | | -----NA----- | | | |
| 3 | tertiary butyl alcohol | | | -----NA----- | | | |
| 4 | 1,4-dioxane | | | -----NA----- | | | |
| 5 I | pentafluorobenzene | 1.000 | 1.000 | 0.0 | 102 | 0.00 | 9.46 |
| 6 | chlorodifluoromethane | | | -----NA----- | | | |
| 7 | dichlorodifluoromethane | | | -----NA----- | | | |
| 8 | freon 142b | | | -----NA----- | | | |
| 9 | freon 114 | | | -----NA----- | | | |
| 10 | chloromethane | | | -----NA----- | | | |
| 11 | vinyl chloride | | | -----NA----- | | | |
| 12 | 1,3-butadiene | | | -----NA----- | | | |
| 13 | bromomethane | | | -----NA----- | | | |
| 14 | chloroethane | | | -----NA----- | | | |
| 15 | vinyl Bromide | | | -----NA----- | | | |
| 16 | trichlorofluoromethane | | | -----NA----- | | | |
| 17 | ethyl ether | | | -----NA----- | | | |
| 18 | 2-chloropropane | | | -----NA----- | | | |
| 19 | acrolein | | | -----NA----- | | | |
| 20 | freon 113 | | | -----NA----- | | | |
| 21 | 1,1-dichloroethene | | | -----NA----- | | | |
| 22 | acetone | | | -----NA----- | | | |
| 23 | acetonitrile | 0.046 | 0.042 | 8.7 | 95 | 0.00 | 7.05 |
| 24 | iodomethane | | | -----NA----- | | | |
| 25 | carbon disulfide | | | -----NA----- | | | |
| 26 | methylene chloride | | | -----NA----- | | | |
| 27 | methyl acetate | | | -----NA----- | | | |
| 28 | methyl tert butyl ether | | | -----NA----- | | | |
| 29 | trans-1,2-dichloroethene | | | -----NA----- | | | |
| 30 | hexane | | | -----NA----- | | | |
| 31 | di-isopropyl ether | | | -----NA----- | | | |
| 32 | ethyl tert-butyl ether | | | -----NA----- | | | |
| 33 | 2-butanone | | | -----NA----- | | | |
| 34 | 1,1-dichloroethane | | | -----NA----- | | | |
| 35 | chloroprene | | | -----NA----- | | | |
| 36 | acrylonitrile | | | -----NA----- | | | |
| 37 | vinyl acetate | | | -----NA----- | | | |
| 38 | ethyl acetate | | | -----NA----- | | | |
| 39 | 2,2-dichloropropane | | | -----NA----- | | | |
| 40 | cis-1,2-dichloroethene | | | -----NA----- | | | |
| 41 | propionitrile | | | -----NA----- | | | |

Initial Calibration Verification

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Sample: V2A7918-ICV7918
Lab FileID: 2A186745.D

| | | | | | | | | |
|------|---------------------------|-------|-------|------|-----|------|-------|--|
| 42 | bromochloromethane | | | | | | | |
| 43 | tetrahydrofuran | | | | | | | |
| 44 | chloroform | | | | | | | |
| 45 | tert-Butyl Formate | | | | | | | |
| 46 | isobutyl alcohol | | | | | | | |
| 47 S | dibromofluoromethane (s) | 0.445 | 0.438 | 1.6 | 100 | 0.00 | 9.52 | |
| 48 | methacrylonitrile | | | | | | | |
| 49 | 1,1,1-trichloroethane | | | | | | | |
| 50 | cyclohexane | | | | | | | |
| 51 | 1,1-dichloropropene | | | | | | | |
| 52 | tert-amyl alcohol | | | | | | | |
| 53 | carbon tetrachloride | | | | | | | |
| 54 I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 98 | 0.00 | 10.38 | |
| 55 S | 1,2-dichloroethane-d4 (s) | 0.339 | 0.350 | -3.2 | 102 | 0.00 | 9.94 | |
| 56 | 2,2,4-trimethylpentane | | | | | | | |
| 57 | tert-amyl methyl ether | | | | | | | |
| 58 | n-butyl alcohol | | | | | | | |
| 59 | benzene | | | | | | | |
| 60 | heptane | | | | | | | |
| 61 | isopropyl acetate | | | | | | | |
| 62 | 1,2-dichloroethane | | | | | | | |
| 63 | trichloroethene | | | | | | | |
| 64 | ethyl acrylate | | | | | | | |
| 65 | 2-nitropropane | | | | | | | |
| 66 | 2-chloroethyl vinyl ether | | | | | | | |
| 67 | methyl methacrylate | | | | | | | |
| 68 | 1,2-dichloropropane | | | | | | | |
| 69 | methylcyclohexane | | | | | | | |
| 70 | dibromomethane | | | | | | | |
| 71 | bromodichloromethane | | | | | | | |
| 72 | epichlorohydrin | | | | | | | |
| 73 | cis-1,3-dichloropropene | | | | | | | |
| 74 | 4-methyl-2-pentanone | | | | | | | |
| 75 | 3-methyl-1-butanol | | | | | | | |
| 76 I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 102 | 0.00 | 13.53 | |
| 77 S | toluene-d8 (s) | 1.317 | 1.290 | 2.1 | 98 | 0.00 | 12.02 | |
| 78 | toluene | | | | | | | |
| 79 | trans-1,3-dichloropropene | | | | | | | |
| 80 | ethyl methacrylate | | | | | | | |
| 81 | 1,1,2-trichloroethane | | | | | | | |
| 82 | 2-hexanone | | | | | | | |
| 83 | tetrachloroethene | 0.435 | 0.416 | 4.4 | 100 | 0.00 | 12.67 | |
| 84 | 1,3-dichloropropane | | | | | | | |
| 85 | butyl acetate | | | | | | | |
| 86 | dibromochloromethane | | | | | | | |
| 87 | 1,2-dibromoethane | | | | | | | |
| 88 | n-butyl ether | | | | | | | |
| 89 | chlorobenzene | | | | | | | |
| 90 | 1,1,1,2-tetrachloroethane | | | | | | | |
| 91 | ethylbenzene | | | | | | | |
| 92 | m,p-xylene | | | | | | | |
| 93 | o-xylene | | | | | | | |
| 94 | styrene | | | | | | | |
| 95 | bromoform | | | | | | | |
| 96 | butyl acrylate | | | | | | | |
| 97 | isopropylbenzene | | | | | | | |
| 98 | cis-1,4-dichloro-2-butene | | | | | | | |

6.8.3
6

Initial Calibration Verification

Job Number: JC64700

Sample: V2A7918-ICV7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186745.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | |
|-----|---|---------------------------|-------|-------|-----|-----|--------------|-------|
| 99 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 105 | 0.00 | 15.83 |
| 100 | S | 4-bromofluorobenzene (s) | 0.896 | 0.883 | 1.5 | 100 | 0.00 | 14.68 |
| 101 | | bromobenzene | | | | | -----NA----- | |
| 102 | | 1,1,2,2-tetrachloroethane | | | | | -----NA----- | |
| 103 | | trans-1,4-dichloro-2-bute | | | | | -----NA----- | |
| 104 | | 1,2,3-trichloropropane | | | | | -----NA----- | |
| 105 | | n-propylbenzene | | | | | -----NA----- | |
| 106 | | 2-chlorotoluene | | | | | -----NA----- | |
| 107 | | 4-chlorotoluene | | | | | -----NA----- | |
| 108 | | 1,3,5-trimethylbenzene | | | | | -----NA----- | |
| 109 | | tert-butylbenzene | | | | | -----NA----- | |
| 110 | | 1,2,4-trimethylbenzene | | | | | -----NA----- | |
| 111 | | sec-butylbenzene | | | | | -----NA----- | |
| 112 | | 1,3-dichlorobenzene | | | | | -----NA----- | |
| 113 | | p-isopropyltoluene | | | | | -----NA----- | |
| 114 | | benzyl chloride | | | | | -----NA----- | |
| 115 | | 1,4-dichlorobenzene | | | | | -----NA----- | |
| 116 | | 1,2-dichlorobenzene | | | | | -----NA----- | |
| 117 | | n-butylbenzene | | | | | -----NA----- | |
| 118 | | 1,2-dibromo-3-chloropropa | | | | | -----NA----- | |
| 119 | | 1,3,5-Trichlorobenzene | | | | | -----NA----- | |
| 120 | | 1,2,4-trichlorobenzene | | | | | -----NA----- | |
| 121 | | hexachlorobutadiene | | | | | -----NA----- | |
| 122 | | naphthalene | | | | | -----NA----- | |
| 123 | | 1,2,3-trichlorobenzene | | | | | -----NA----- | |
| 124 | | hexachloroethane | | | | | -----NA----- | |
| 125 | | 2-ethylhexyl acrylate | | | | | -----NA----- | |
| 126 | | 2-methylnaphthalene | | | | | -----NA----- | |

(#) = Out of Range
2A186739.D M2A7918.M

SPCC's out = 0 CCC's out = 0
Tue Apr 24 12:19:04 2018 MS2A

Continuing Calibration Summary

Job Number: JC64700

Sample: V2A7920-CC7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186767.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...20-revised\2a186767.d Vial: 2
 Acq On : 25 Apr 2018 6:27 am Operator: vidishp
 Sample : CC7918-20 Inst : Instrument #1
 Misc : MS25808,V2A7920,w,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2A7918.M (RTE Integrator)
 Title : Method SW846 8260C, ZB624 60m x 0.25mm x 1.4um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

| Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|-----------------------------|-------|-------|--------------|-------|----------|-------|
| 1 I Tert Butyl Alcohol-d9 | 1.000 | 1.000 | 0.0 | 101 | 0.00 | 7.22 |
| 2 ethanol | 0.089 | 0.070 | 21.3# | 83 | 0.00 | 5.98 |
| 3 tertiary butyl alcohol | 1.356 | 1.375 | -1.4 | 101 | 0.00 | 7.34 |
| 4 1,4-dioxane | 0.080 | 0.062 | 22.5# | 77 | 0.00 | 11.11 |
| 5 I pentafluorobenzene | 1.000 | 1.000 | 0.0 | 117 | 0.00 | 9.46 |
| 6 chlorodifluoromethane | 0.596 | 0.625 | -4.9 | 122 | 0.00 | 3.85 |
| 7 dichlorodifluoromethane | 0.715 | 0.735 | -2.8 | 117 | 0.00 | 3.81 |
| 8 freon 142b | | | -----NA----- | | | |
| 9 freon 114 | | | -----NA----- | | | |
| 10 chloromethane | 0.825 | 0.768 | 6.9 | 110 | 0.00 | 4.23 |
| 11 vinyl chloride | 0.778 | 0.757 | 2.7 | 114 | 0.00 | 4.46 |
| 12 1,3-butadiene | | | -----NA----- | | | |
| 13 bromomethane | 0.499 | 0.493 | 1.2 | 119 | 0.00 | 5.10 |
| 14 chloroethane | 0.404 | 0.384 | 5.0 | 113 | 0.00 | 5.27 |
| 15 vinyl Bromide | 0.460 | 0.479 | -4.1 | 119 | 0.00 | 5.61 |
| 16 trichlorofluoromethane | 0.804 | 0.884 | -10.0 | 124 | 0.00 | 5.70 |
| 17 ethyl ether | 0.253 | 0.255 | -0.8 | 113 | 0.00 | 6.12 |
| 18 2-chloropropane | 0.171 | 0.182 | -6.4 | 116 | 0.00 | 6.32 |
| 19 acrolein | 0.082 | 0.079 | 3.7 | 113 | 0.00 | 6.41 |
| 20 freon 113 | 0.326 | 0.366 | -12.3 | 122 | 0.00 | 6.50 |
| 21 1,1-dichloroethene | 0.427 | 0.440 | -3.0 | 118 | 0.00 | 6.54 |
| 22 acetone | 0.097 | 0.085 | 12.4 | 112 | 0.00 | 6.61 |
| 23 acetonitrile | 0.046 | 0.039 | 15.2 | 101 | 0.01 | 7.06 |
| 24 iodomethane | 0.668 | 0.733 | -9.7 | 128 | 0.00 | 6.83 |
| 25 carbon disulfide | 1.257 | 1.210 | 3.7 | 115 | 0.00 | 6.95 |
| 26 methylene chloride | 0.514 | 0.512 | 0.4 | 121 | 0.00 | 7.28 |
| 27 methyl acetate | 0.307 | 0.309 | -0.7 | 114 | 0.00 | 7.07 |
| 28 methyl tert butyl ether | 1.254 | 1.267 | -1.0 | 118 | 0.00 | 7.57 |
| 29 trans-1,2-dichloroethene | 0.470 | 0.476 | -1.3 | 119 | 0.00 | 7.64 |
| 30 hexane | 0.654 | 0.644 | 1.5 | 114 | 0.00 | 7.93 |
| 31 di-isopropyl ether | 1.624 | 1.518 | 6.5 | 109 | 0.00 | 8.17 |
| 32 ethyl tert-butyl ether | 1.495 | 1.478 | 1.1 | 114 | 0.00 | 8.64 |
| 33 2-butanone | 0.037 | 0.037 | 0.0 | 110 | 0.00 | 8.92 |
| 34 1,1-dichloroethane | 0.870 | 0.876 | -0.7 | 117 | 0.00 | 8.21 |
| 35 chloroprene | 0.701 | 0.728 | -3.9 | 117 | 0.00 | 8.32 |
| 36 acrylonitrile | 0.137 | 0.137 | 0.0 | 110 | 0.01 | 7.63 |
| 37 vinyl acetate | 0.073 | 0.064 | 12.3 | 111 | 0.00 | 8.20 |
| 38 ethyl acetate | 0.054 | 0.050 | 7.4 | 101 | 0.01 | 8.94 |
| 39 2,2-dichloropropane | 0.500 | 0.534 | -6.8 | 124 | 0.00 | 8.94 |
| 40 cis-1,2-dichloroethene | 0.543 | 0.550 | -1.3 | 119 | 0.00 | 8.95 |
| 41 propionitrile | 0.055 | 0.053 | 3.6 | 105 | 0.00 | 9.03 |

Continuing Calibration Summary

Job Number: JC64700

Sample: V2A7920-CC7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186767.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | |
|------|---------------------------|-------|-------|-------|-----|-------|-------|
| 42 | bromochloromethane | 0.327 | 0.350 | -7.0 | 120 | 0.00 | 9.26 |
| 43 | tetrahydrofuran | 0.046 | 0.047 | -2.2 | 117 | 0.01 | 9.31 |
| 44 | chloroform | 0.896 | 0.902 | -0.7 | 120 | 0.00 | 9.32 |
| 45 | tert-Butyl Formate | 0.312 | 0.311 | 0.3 | 116 | 0.00 | 9.34 |
| 46 | isobutyl alcohol | 0.012 | 0.010 | 16.7 | 89 | 0.00 | 9.76 |
| 47 S | dibromofluoromethane (s) | 0.445 | 0.449 | -0.9 | 118 | 0.00 | 9.52 |
| 48 | methacrylonitrile | 0.163 | 0.159 | 2.5 | 110 | 0.00 | 9.21 |
| 49 | 1,1,1-trichloroethane | 0.753 | 0.796 | -5.7 | 124 | 0.00 | 9.56 |
| 50 | cyclohexane | 0.693 | 0.681 | 1.7 | 111 | 0.00 | 9.62 |
| 51 | 1,1-dichloropropene | 0.670 | 0.674 | -0.6 | 116 | 0.00 | 9.74 |
| 52 | tert-amyl alcohol | 0.014 | 0.014 | 0.0 | 107 | -0.01 | 9.87 |
| 53 | carbon tetrachloride | 0.663 | 0.741 | -11.8 | 127 | 0.00 | 9.76 |
| 54 I | 1,4-difluorobenzene | 1.000 | 1.000 | 0.0 | 116 | 0.00 | 10.38 |
| 55 S | 1,2-dichloroethane-d4 (s) | 0.339 | 0.353 | -4.1 | 120 | 0.00 | 9.94 |
| 56 | 2,2,4-trimethylpentane | 1.291 | 1.290 | 0.1 | 113 | 0.00 | 9.98 |
| 57 | tert-amyl methyl ether | 1.019 | 1.021 | -0.2 | 116 | 0.00 | 10.02 |
| 58 | n-butyl alcohol | 0.004 | 0.003 | 25.0# | 88 | 0.00 | 10.52 |
| 59 | benzene | 1.367 | 1.329 | 2.8 | 113 | 0.00 | 10.01 |
| 60 | heptane | 0.261 | 0.246 | 5.7 | 110 | 0.00 | 10.16 |
| 61 | isopropyl acetate | 0.235 | 0.238 | -1.3 | 117 | 0.00 | 10.03 |
| 62 | 1,2-dichloroethane | 0.468 | 0.473 | -1.1 | 124 | 0.00 | 10.03 |
| 63 | trichloroethene | 0.349 | 0.352 | -0.9 | 116 | 0.00 | 10.73 |
| 64 | ethyl acrylate | 0.342 | 0.322 | 5.8 | 109 | 0.00 | 10.73 |
| 65 | 2-nitropropane | 0.097 | 0.091 | 6.2 | 113 | 0.00 | 11.51 |
| 66 | 2-chloroethyl vinyl ether | 0.177 | 0.175 | 1.1 | 110 | 0.00 | 11.52 |
| 67 | methyl methacrylate | 0.066 | 0.067 | -1.5 | 116 | 0.00 | 10.99 |
| 68 | 1,2-dichloropropane | 0.354 | 0.344 | 2.8 | 113 | 0.00 | 10.99 |
| 69 | methylcyclohexane | 0.582 | 0.602 | -3.4 | 115 | 0.00 | 10.93 |
| 70 | dibromomethane | 0.204 | 0.210 | -2.9 | 118 | 0.00 | 11.16 |
| 71 | bromodichloromethane | 0.477 | 0.501 | -5.0 | 124 | 0.00 | 11.29 |
| 72 | epichlorohydrin | 0.024 | 0.023 | 4.2 | 115 | 0.00 | 11.65 |
| 73 | cis-1,3-dichloropropene | 0.571 | 0.579 | -1.4 | 115 | 0.00 | 11.74 |
| 74 | 4-methyl-2-pentanone | 0.100 | 0.094 | 6.0 | 108 | 0.00 | 11.83 |
| 75 | 3-methyl-1-butanol | 0.005 | 0.004 | 20.0 | 100 | 0.00 | 11.86 |
| 76 I | chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 114 | 0.00 | 13.53 |
| 77 S | toluene-d8 (s) | 1.317 | 1.295 | 1.7 | 113 | 0.00 | 12.02 |
| 78 | toluene | 0.971 | 0.953 | 1.9 | 115 | 0.00 | 12.09 |
| 79 | trans-1,3-dichloropropene | 0.601 | 0.618 | -2.8 | 118 | 0.00 | 12.30 |
| 80 | ethyl methacrylate | 0.447 | 0.433 | 3.1 | 111 | 0.00 | 12.28 |
| 81 | 1,1,2-trichloroethane | 0.283 | 0.281 | 0.7 | 111 | 0.00 | 12.52 |
| 82 | 2-hexanone | 0.100 | 0.097 | 3.0 | 106 | 0.00 | 12.68 |
| 83 | tetrachloroethene | 0.435 | 0.471 | -8.3 | 122 | 0.00 | 12.67 |
| 84 | 1,3-dichloropropane | 0.544 | 0.547 | -0.6 | 114 | 0.00 | 12.70 |
| 85 | butyl acetate | 0.206 | 0.190 | 7.8 | 107 | 0.00 | 12.75 |
| 86 | dibromochloromethane | 0.398 | 0.444 | -11.6 | 124 | 0.00 | 12.96 |
| 87 | 1,2-dibromoethane | 0.364 | 0.370 | -1.6 | 116 | 0.00 | 13.11 |
| 88 | n-butyl ether | 1.697 | 1.586 | 6.5 | 109 | 0.00 | 13.46 |
| 89 | chlorobenzene | 1.075 | 1.071 | 0.4 | 116 | 0.00 | 13.56 |
| 90 | 1,1,1,2-tetrachloroethane | 0.397 | 0.432 | -8.8 | 124 | 0.00 | 13.62 |
| 91 | ethylbenzene | 1.764 | 1.801 | -2.1 | 118 | 0.00 | 13.61 |
| 92 | m,p-xylene | 0.676 | 0.692 | -2.4 | 116 | 0.00 | 13.71 |
| 93 | o-xylene | 1.449 | 1.480 | -2.1 | 117 | 0.00 | 14.13 |
| 94 | styrene | 1.140 | 1.149 | -0.8 | 116 | 0.00 | 14.14 |
| 95 | bromoform | 0.242 | 0.274 | -13.2 | 129 | 0.00 | 14.41 |
| 96 | butyl acrylate | 0.703 | 0.676 | 3.8 | 112 | 0.00 | 13.95 |
| 97 | isopropylbenzene | 1.733 | 1.772 | -2.3 | 116 | 0.00 | 14.47 |
| 98 | cis-1,4-dichloro-2-butene | 0.139 | 0.143 | -2.9 | 120 | 0.00 | 14.55 |

Continuing Calibration Summary

Job Number: JC64700

Sample: V2A7920-CC7918

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 2A186767.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | |
|-----|---|---------------------------|-------|-------|-------|-----|------|-------|
| 99 | I | 1,4-dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 116 | 0.00 | 15.83 |
| 100 | S | 4-bromofluorobenzene (s) | 0.896 | 0.896 | 0.0 | 116 | 0.00 | 14.68 |
| 101 | | bromobenzene | 0.887 | 0.909 | -2.5 | 120 | 0.00 | 14.87 |
| 102 | | 1,1,2,2-tetrachloroethane | 0.763 | 0.737 | 3.4 | 115 | 0.00 | 14.79 |
| 103 | | trans-1,4-dichloro-2-bute | 0.176 | 0.165 | 6.2 | 106 | 0.00 | 14.83 |
| 104 | | 1,2,3-trichloropropane | 0.194 | 0.192 | 1.0 | 116 | 0.00 | 14.86 |
| 105 | | n-propylbenzene | 3.780 | 3.807 | -0.7 | 115 | 0.00 | 14.87 |
| 106 | | 2-chlorotoluene | 0.797 | 0.819 | -2.8 | 120 | 0.00 | 15.02 |
| 107 | | 4-chlorotoluene | 2.337 | 2.373 | -1.5 | 119 | 0.00 | 15.12 |
| 108 | | 1,3,5-trimethylbenzene | 2.742 | 2.779 | -1.3 | 117 | 0.00 | 15.02 |
| 109 | | tert-butylbenzene | 2.287 | 2.344 | -2.5 | 117 | 0.00 | 15.37 |
| 110 | | 1,2,4-trimethylbenzene | 2.753 | 2.813 | -2.2 | 118 | 0.00 | 15.41 |
| 111 | | sec-butylbenzene | 3.357 | 3.406 | -1.5 | 117 | 0.00 | 15.58 |
| 112 | | 1,3-dichlorobenzene | 1.629 | 1.661 | -2.0 | 120 | 0.00 | 15.77 |
| 113 | | p-isopropyltoluene | 2.850 | 2.945 | -3.3 | 118 | 0.00 | 15.70 |
| 114 | | benzyl chloride | 1.535 | 1.714 | -11.7 | 130 | 0.00 | 15.98 |
| 115 | | 1,4-dichlorobenzene | 1.651 | 1.665 | -0.8 | 120 | 0.00 | 15.86 |
| 116 | | 1,2-dichlorobenzene | 1.536 | 1.621 | -5.5 | 120 | 0.00 | 16.25 |
| 117 | | n-butylbenzene | 1.460 | 1.489 | -2.0 | 119 | 0.00 | 16.11 |
| 118 | | 1,2-dibromo-3-chloropropa | 0.146 | 0.162 | -11.0 | 126 | 0.00 | 17.03 |
| 119 | | 1,3,5-Trichlorobenzene | 1.338 | 1.410 | -5.4 | 121 | 0.00 | 17.20 |
| 120 | | 1,2,4-trichlorobenzene | 1.128 | 1.196 | -6.0 | 119 | 0.00 | 17.84 |
| 121 | | hexachlorobutadiene | 0.572 | 0.598 | -4.5 | 122 | 0.00 | 17.94 |
| 122 | | naphthalene | 2.278 | 2.339 | -2.7 | 117 | 0.00 | 18.12 |
| 123 | | 1,2,3-trichlorobenzene | 1.016 | 1.060 | -4.3 | 119 | 0.00 | 18.36 |
| 124 | | hexachloroethane | 0.471 | 0.516 | -9.6 | 126 | 0.00 | 16.50 |
| 125 | | 2-ethylhexyl acrylate | 0.728 | 0.632 | 13.2 | 108 | 0.00 | 17.81 |
| 126 | | 2-methylnaphthalene | 1.270 | 1.321 | -4.0 | 119 | 0.00 | 19.33 |

(#) = Out of Range
2A186738.D M2A7918.M

SPCC's out = 0 CCC's out = 0
Thu Apr 26 23:56:46 2018

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------------|-----------|----|----------|----|-----------|------------|------------------|
| OP11510A-MB1 | 4P26775.D | 1 | 05/02/18 | JB | 04/24/18 | OP11510A | E4P1509 |

The QC reported here applies to the following samples:

Method: SW846 8270D BY SIM

JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|----------|------------------------|--------|-------|-------|-------|---|
| 83-32-9 | Acenaphthene | ND | 0.10 | 0.025 | ug/l | |
| 208-96-8 | Acenaphthylene | ND | 0.10 | 0.021 | ug/l | |
| 120-12-7 | Anthracene | ND | 0.10 | 0.020 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 0.050 | 0.023 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 0.050 | 0.033 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.10 | 0.043 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 0.10 | 0.036 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.10 | 0.033 | ug/l | |
| 218-01-9 | Chrysene | ND | 0.10 | 0.026 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.10 | 0.036 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 0.10 | 0.022 | ug/l | |
| 86-73-7 | Fluorene | ND | 0.10 | 0.025 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.10 | 0.038 | ug/l | |
| 91-20-3 | Naphthalene | ND | 0.10 | 0.029 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 0.10 | 0.023 | ug/l | |
| 129-00-0 | Pyrene | ND | 0.10 | 0.019 | ug/l | |
| 123-91-1 | 1,4-Dioxane | ND | 0.10 | 0.049 | ug/l | |

| CAS No. | Surrogate Recoveries | Limits | |
|-----------|----------------------|--------|---------|
| 367-12-4 | 2-Fluorophenol | 53% | 15-110% |
| 4165-62-2 | Phenol-d5 | 30% | 12-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 86% | 32-143% |
| 4165-60-0 | Nitrobenzene-d5 | 89% | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 73% | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 78% | 22-130% |

7.1.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|----------------|-----------|----|----------|----|-----------|------------|------------------|
| OP11510A-BS12 | 4P26776.D | 1 | 05/02/18 | JB | 04/24/18 | OP11510A | E4P1509 |
| OP11510A-BSD12 | 4P26777.D | 1 | 05/02/18 | JB | 04/24/18 | OP11510A | E4P1509 |

The QC reported here applies to the following samples:

Method: SW846 8270D BY SIM

JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | BSD ug/l | BSD % | RPD | Limits Rec/RPD |
|----------|------------------------|------------|----------|-------|----------|-------|-----|----------------|
| 83-32-9 | Acenaphthene | 1 | 0.890 | 89 | 0.894 | 89 | 0 | 31-135/38 |
| 208-96-8 | Acenaphthylene | 1 | 0.965 | 97 | 0.967 | 97 | 0 | 28-130/42 |
| 120-12-7 | Anthracene | 1 | 1.02 | 102 | 0.985 | 99 | 3 | 40-125/32 |
| 56-55-3 | Benzo(a)anthracene | 1 | 0.882 | 88 | 0.860 | 86 | 3 | 38-132/31 |
| 50-32-8 | Benzo(a)pyrene | 1 | 0.771 | 77 | 0.721 | 72 | 7 | 31-110/37 |
| 205-99-2 | Benzo(b)fluoranthene | 1 | 0.935 | 94 | 0.891 | 89 | 5 | 31-113/37 |
| 191-24-2 | Benzo(g,h,i)perylene | 1 | 0.835 | 84 | 0.726 | 73 | 14 | 18-110/54 |
| 207-08-9 | Benzo(k)fluoranthene | 1 | 0.854 | 85 | 0.824 | 82 | 4 | 31-119/43 |
| 218-01-9 | Chrysene | 1 | 0.856 | 86 | 0.838 | 84 | 2 | 43-119/33 |
| 53-70-3 | Dibenzo(a,h)anthracene | 1 | 0.861 | 86 | 0.793 | 79 | 8 | 20-112/50 |
| 206-44-0 | Fluoranthene | 1 | 0.791 | 79 | 0.774 | 77 | 2 | 48-118/27 |
| 86-73-7 | Fluorene | 1 | 0.865 | 87 | 0.884 | 88 | 2 | 42-123/34 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 1 | 0.898 | 90 | 0.799 | 80 | 12 | 18-113/49 |
| 91-20-3 | Naphthalene | 1 | 0.903 | 90 | 0.842 | 84 | 7 | 30-114/40 |
| 85-01-8 | Phenanthrene | 1 | 0.915 | 92 | 0.882 | 88 | 4 | 45-125/31 |
| 129-00-0 | Pyrene | 1 | 0.885 | 89 | 0.866 | 87 | 2 | 48-125/29 |
| 123-91-1 | 1,4-Dioxane | 1 | 0.475 | 48 | 0.475 | 48 | 0 | 10-110/40 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|-----------|----------------------|-----|-----|---------|
| 367-12-4 | 2-Fluorophenol | 58% | 60% | 15-110% |
| 4165-62-2 | Phenol-d5 | 39% | 40% | 12-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 91% | 93% | 32-143% |
| 4165-60-0 | Nitrobenzene-d5 | 92% | 94% | 29-124% |
| 321-60-8 | 2-Fluorobiphenyl | 77% | 78% | 23-122% |
| 1718-51-0 | Terphenyl-d14 | 82% | 83% | 22-130% |

* = Outside of Control Limits.

7.2.1
7

Instrument Performance Check (DFTPP)

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|-------------------------------|---------------------------------|
| Sample: E4P1492-DFTPP | Injection Date: 04/25/18 |
| Lab File ID: 4P26470.D | Injection Time: 10:58 |
| Instrument ID: GCMS4P | |

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | Pass/Fail |
|-----|------------------------------------|---------------|--------------------------|-----------|
| 51 | 30.0 - 60.0% of mass 198 | 51011 | 43.3 | Pass |
| 68 | Less than 2.0% of mass 69 | 603 | 0.51 (1.00) ^a | Pass |
| 69 | Mass 69 relative abundance | 60402 | 51.3 | Pass |
| 70 | Less than 2.0% of mass 69 | 246 | 0.21 (0.41) ^a | Pass |
| 127 | 40.0 - 60.0% of mass 198 | 61440 | 52.2 | Pass |
| 197 | Less than 1.0% of mass 198 | 0 | 0.00 | Pass |
| 198 | Base peak, 100% relative abundance | 117786 | 100.0 | Pass |
| 199 | 5.0 - 9.0% of mass 198 | 7398 | 6.28 | Pass |
| 275 | 10.0 - 30.0% of mass 198 | 29890 | 25.4 | Pass |
| 365 | 1.0 - 100.0% of mass 198 | 2482 | 2.11 | Pass |
| 441 | Present, but less than mass 443 | 9405 | 7.98 (69.2) ^b | Pass |
| 442 | 40.0 - 100.0% of mass 198 | 63992 | 54.3 | Pass |
| 443 | 17.0 - 23.0% of mass 442 | 13588 | 11.5 (21.2) ^c | Pass |

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|-----------------|-------------|---------------|---------------|--------------|------------------------------|
| E4P1492-IC1492 | 4P26471.D | 04/25/18 | 11:11 | 00:13 | Initial cal 5.0 |
| E4P1492-IC1492 | 4P26472.D | 04/25/18 | 11:36 | 00:38 | Initial cal 2.5 |
| E4P1492-ICC1492 | 4P26473.D | 04/25/18 | 12:02 | 01:04 | Initial cal 1.0 |
| E4P1492-IC1492 | 4P26474.D | 04/25/18 | 12:28 | 01:30 | Initial cal 0.5 |
| E4P1492-IC1492 | 4P26475.D | 04/25/18 | 12:53 | 01:55 | Initial cal 0.2 |
| E4P1492-IC1492 | 4P26476.D | 04/25/18 | 13:19 | 02:21 | Initial cal 0.1 |
| E4P1492-IC1492 | 4P26477.D | 04/25/18 | 13:44 | 02:46 | Initial cal 0.05 |
| E4P1492-IC1492 | 4P26478.D | 04/25/18 | 14:09 | 03:11 | Initial cal 0.02 |
| E4P1492-IC1492 | 4P26479.D | 04/25/18 | 14:35 | 03:37 | Initial cal 0.01 |
| E4P1492-ICV1492 | 4P26480.D | 04/25/18 | 15:01 | 04:03 | Initial cal verification 5.0 |
| E4P1492-ICV1492 | 4P26481.D | 04/25/18 | 15:26 | 04:28 | Initial cal verification 1.0 |

7.3.1
7

Instrument Performance Check (DFTPP)

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|-------------------------------|---------------------------------|
| Sample: E4P1509-DFTPP | Injection Date: 05/02/18 |
| Lab File ID: 4P26768.D | Injection Time: 13:46 |
| Instrument ID: GCMS4P | |

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | Pass/Fail |
|-----|------------------------------------|---------------|--------------------------|-----------|
| 51 | 30.0 - 60.0% of mass 198 | 54693 | 45.0 | Pass |
| 68 | Less than 2.0% of mass 69 | 156 | 0.13 (0.24) ^a | Pass |
| 69 | Mass 69 relative abundance | 64836 | 53.4 | Pass |
| 70 | Less than 2.0% of mass 69 | 313 | 0.26 (0.48) ^a | Pass |
| 127 | 40.0 - 60.0% of mass 198 | 64283 | 52.9 | Pass |
| 197 | Less than 1.0% of mass 198 | 0 | 0.00 | Pass |
| 198 | Base peak, 100% relative abundance | 121448 | 100.0 | Pass |
| 199 | 5.0 - 9.0% of mass 198 | 7981 | 6.57 | Pass |
| 275 | 10.0 - 30.0% of mass 198 | 28544 | 23.5 | Pass |
| 365 | 1.0 - 100.0% of mass 198 | 1890 | 1.56 | Pass |
| 441 | Present, but less than mass 443 | 9139 | 7.53 (70.1) ^b | Pass |
| 442 | 40.0 - 100.0% of mass 198 | 64564 | 53.2 | Pass |
| 443 | 17.0 - 23.0% of mass 442 | 13044 | 10.7 (20.2) ^c | Pass |

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|----------------|-------------|---------------|---------------|--------------|-----------------------|
| E4P1509-CC1492 | 4P26770.D | 05/02/18 | 14:20 | 00:34 | Continuing cal 1.0 |
| OP11681A-MB1 | 4P26771.D | 05/02/18 | 14:45 | 00:59 | Method Blank |
| OP11681A-BS12 | 4P26772.D | 05/02/18 | 15:08 | 01:22 | Blank Spike |
| OP11681A-BSD12 | 4P26773.D | 05/02/18 | 15:31 | 01:45 | Blank Spike Duplicate |
| ZZZZZZ | 4P26774.D | 05/02/18 | 15:55 | 02:09 | (unrelated sample) |
| OP11510A-MB1 | 4P26775.D | 05/02/18 | 16:18 | 02:32 | Method Blank |
| OP11510A-BS12 | 4P26776.D | 05/02/18 | 16:41 | 02:55 | Blank Spike |
| OP11510A-BSD12 | 4P26777.D | 05/02/18 | 17:05 | 03:19 | Blank Spike Duplicate |
| ZZZZZZ | 4P26778.D | 05/02/18 | 17:28 | 03:42 | (unrelated sample) |
| ZZZZZZ | 4P26779.D | 05/02/18 | 17:52 | 04:06 | (unrelated sample) |
| ZZZZZZ | 4P26780.D | 05/02/18 | 18:15 | 04:29 | (unrelated sample) |
| ZZZZZZ | 4P26781.D | 05/02/18 | 18:38 | 04:52 | (unrelated sample) |
| ZZZZZZ | 4P26782.D | 05/02/18 | 19:02 | 05:16 | (unrelated sample) |
| ZZZZZZ | 4P26783.D | 05/02/18 | 19:25 | 05:39 | (unrelated sample) |
| ZZZZZZ | 4P26784.D | 05/02/18 | 19:48 | 06:02 | (unrelated sample) |
| ZZZZZZ | 4P26785.D | 05/02/18 | 20:12 | 06:26 | (unrelated sample) |
| ZZZZZZ | 4P26786.D | 05/02/18 | 20:35 | 06:49 | (unrelated sample) |
| ZZZZZZ | 4P26787.D | 05/02/18 | 20:58 | 07:12 | (unrelated sample) |
| ZZZZZZ | 4P26788.D | 05/02/18 | 21:21 | 07:35 | (unrelated sample) |

7.3.2
7

Instrument Performance Check (DFTPP)

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|-------------------------------|---------------------------------|
| Sample: E4P1509-DFTPP | Injection Date: 05/02/18 |
| Lab File ID: 4P26768.D | Injection Time: 13:46 |
| Instrument ID: GCMS4P | |

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|-----------------|-------------|---------------|---------------|--------------|--------------------|
| ZZZZZZ | 4P26789.D | 05/02/18 | 21:45 | 07:59 | (unrelated sample) |
| ZZZZZZ | 4P26790.D | 05/02/18 | 22:08 | 08:22 | (unrelated sample) |
| JC64700-2 | 4P26791.D | 05/02/18 | 22:31 | 08:45 | 3-WES-002-001-02 |
| JC64700-3 | 4P26792.D | 05/02/18 | 22:55 | 09:09 | 3-WES-002-001-03 |
| JC64700-4 | 4P26793.D | 05/02/18 | 23:18 | 09:32 | 3-WES-002-001-04 |
| JC64700-7 | 4P26794.D | 05/02/18 | 23:42 | 09:56 | 3-WES-002-001-07 |
| JC64700-8 | 4P26795.D | 05/03/18 | 00:05 | 10:19 | 3-WES-002-001-08 |
| E4P1509-ECC1492 | 4P26797.D | 05/03/18 | 00:51 | 11:05 | Ending cal 1.0 |

7.3.2
7

Internal Standard Area Summary

Job Number: JC64700
Account: ILINY Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|----------------------------------|-----------------------------------|
| Check Std: E4P1509-CC1492 | Injection Date: 05/02/18 |
| Lab File ID: 4P26770.D | Injection Time: 14:20 |
| Instrument ID: GCMS4P | Method: SW846 8270D BY SIM |

| | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|--------------------------|--------------|------|--------------|------|--------------|-------|--------------|-------|
| Check Std | 60921 | 6.17 | 78657 | 7.63 | 122231 | 9.77 | 83391 | 13.20 |
| Upper Limit ^a | 121842 | 6.67 | 157314 | 8.13 | 244462 | 10.27 | 166782 | 13.70 |
| Lower Limit ^b | 30461 | 5.67 | 39329 | 7.13 | 61116 | 9.27 | 41696 | 12.70 |

| Lab Sample ID | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|----------------------|--------------|-------|--------------|--------|--------------|-------|--------------|-------|
| OP11681A-MB1 | 50695 | 6.17 | 61806 | 7.64 | 101844 | 9.77 | 69121 | 13.20 |
| OP11681A-BS12 | 54534 | 6.17 | 67926 | 7.63 | 107666 | 9.77 | 69559 | 13.20 |
| OP11681A-BSD1253310 | 6.17 | 71185 | 7.64 | 106817 | 9.78 | 68849 | 13.20 | |
| ZZZZZZ | 55723 | 6.17 | 73745 | 7.64 | 106116 | 9.77 | 73627 | 13.21 |
| OP11510A-MB1 | 59491 | 6.17 | 73221 | 7.65 | 118701 | 9.77 | 81269 | 13.21 |
| OP11510A-BS12 | 56040 | 6.17 | 69208 | 7.65 | 108374 | 9.77 | 71668 | 13.21 |
| OP11510A-BSD1258752 | 6.17 | 72040 | 7.64 | 114558 | 9.77 | 75494 | 13.21 | |
| ZZZZZZ | 56242 | 6.17 | 69007 | 7.65 | 112168 | 9.77 | 75563 | 13.21 |
| ZZZZZZ | 58287 | 6.17 | 72368 | 7.65 | 117401 | 9.77 | 79847 | 13.21 |
| ZZZZZZ | 58422 | 6.17 | 70801 | 7.65 | 114688 | 9.77 | 82031 | 13.21 |
| ZZZZZZ | 56211 | 6.17 | 68614 | 7.64 | 108657 | 9.77 | 78480 | 13.21 |
| ZZZZZZ | 56565 | 6.17 | 76074 | 7.64 | 114448 | 9.77 | 78429 | 13.21 |
| ZZZZZZ | 59810 | 6.18 | 64779 | 7.64 | 99019 | 9.77 | 71190 | 13.21 |
| ZZZZZZ | 53772 | 6.17 | 66241 | 7.64 | 89443 | 9.77 | 63932 | 13.21 |
| ZZZZZZ | 53496 | 6.17 | 65330 | 7.64 | 95066 | 9.77 | 68107 | 13.21 |
| ZZZZZZ | 46560 | 6.17 | 57890 | 7.64 | 95228 | 9.77 | 65516 | 13.21 |
| ZZZZZZ | 48948 | 6.17 | 68211 | 7.64 | 96907 | 9.78 | 70454 | 13.21 |
| ZZZZZZ | 46599 | 6.17 | 58710 | 7.64 | 96081 | 9.77 | 67307 | 13.21 |
| ZZZZZZ | 50718 | 6.17 | 69205 | 7.64 | 101598 | 9.77 | 73640 | 13.21 |
| ZZZZZZ | 45368 | 6.17 | 55448 | 7.64 | 91798 | 9.77 | 65528 | 13.21 |
| JC64700-2 | 46644 | 6.17 | 60803 | 7.64 | 91501 | 9.77 | 63658 | 13.21 |
| JC64700-3 | 44861 | 6.17 | 54822 | 7.65 | 92232 | 9.77 | 63877 | 13.21 |
| JC64700-4 | 47898 | 6.17 | 63929 | 7.64 | 97225 | 9.77 | 68455 | 13.21 |
| JC64700-7 | 47493 | 6.17 | 57693 | 7.65 | 98012 | 9.77 | 67716 | 13.21 |
| JC64700-8 | 46485 | 6.17 | 54939 | 7.65 | 94457 | 9.77 | 65155 | 13.21 |
| E4P1509-ECC149256736 | 6.17 | 71825 | 7.65 | 113621 | 9.77 | 82019 | 13.21 | |

- IS 1 = 1-Methylnaphthalene-d10
- IS 2 = Fluorene-d10
- IS 3 = Fluoranthene-d10
- IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

7.4.1
7

Surrogate Recovery Summary

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|-----------------------------------|-------------------|
| Method: SW846 8270D BY SIM | Matrix: AQ |
|-----------------------------------|-------------------|

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 | S2 | S3 |
|-----------------|-------------|----|----|----|
| JC64700-2 | 4P26791.D | 88 | 72 | 80 |
| JC64700-3 | 4P26792.D | 92 | 77 | 83 |
| JC64700-4 | 4P26793.D | 81 | 66 | 77 |
| JC64700-7 | 4P26794.D | 85 | 71 | 71 |
| JC64700-8 | 4P26795.D | 98 | 84 | 62 |
| OP11510A-BS12 | 4P26776.D | 92 | 77 | 82 |
| OP11510A-BSD124 | 4P26777.D | 94 | 78 | 83 |
| OP11510A-MB1 | 4P26775.D | 89 | 73 | 78 |

| Surrogate Compounds | Recovery Limits |
|-----------------------|-----------------|
| S1 = Nitrobenzene-d5 | 29-124% |
| S2 = 2-Fluorobiphenyl | 23-122% |
| S3 = Terphenyl-d14 | 22-130% |

7.5.1
7

Initial Calibration Summary

Job Number: JC64700

Sample: E4P1492-ICC1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26473.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Response Factor Report MS4P

Method : C:\MSDCHEM\1\METHODS\M4P1492SIM.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Wed Apr 25 17:07:37 2018
 Response via : Initial Calibration

Calibration Files

2.5 =4p26472.D 1.0 =4p26473.D 0.5 =4p26474.D 0.2 =4p26475.D
 0.1 =4p26476.D 0.05=4p26477.D 0.02=4p26478.D 0.01=4p26479.D
 5 =4p26471.D = = =

| Compound | 2.5 | 1.0 | 0.5 | 0.2 | 0.1 | 0.05 | 0.02 | 0.01 | 5 | Avg | %RSD |
|--------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I 1-Methylnaphthalene-d | -----ISTD----- | | | | | | | | | | |
| 2) 1,4-Dioxane | 0.321 | 0.314 | 0.359 | 0.280 | 0.292 | 0.299 | 0.315 | | 0.308 | 0.311 | 7.58 |
| 3) 2-Fluorophenol | 0.553 | 0.526 | 0.603 | 0.490 | 0.422 | 0.371 | | | 0.543 | 0.501 | 16.02 |
| 4) Phenol-d5 | 0.882 | 0.870 | 0.967 | 0.781 | 0.714 | 0.597 | | | 0.827 | 0.805 | 15.13 |
| 5) Phenol | 1.074 | 1.088 | 1.094 | 0.953 | 0.806 | 0.679 | | | 1.052 | 0.964 | 16.88 |
| 6) bis(2-Chloroethyl)ether | | | | | | | | | | | |
| 7) Nitrobenzene-d5 | 0.933 | 0.909 | 1.038 | 0.850 | 0.784 | 0.678 | 0.684 | | 0.899 | 0.847 | 14.75 |
| 8) Naphthalene | 2.400 | 2.419 | 2.789 | 2.396 | 2.386 | 2.184 | 2.430 | | 2.269 | 2.409 | 7.29 |
| 9) Hexachlorobutadiene | 0.608 | 0.608 | 0.688 | 0.573 | 0.631 | 0.623 | 0.645 | 0.771 | 0.577 | 0.636 | 9.66 |
| 10) 2-Methylnaphthalene | 1.275 | 1.268 | 1.438 | 1.160 | 1.181 | 1.082 | 0.932 | 1.196 | 1.236 | 1.196 | 11.67 |
| 11) 1-Methylnaphthalene | 1.329 | 1.375 | 1.585 | 1.391 | 1.489 | 1.468 | 1.563 | 1.585 | 1.272 | 1.451 | 7.95 |
| 12) Hexachlorocyclopentadiene | 0.471 | 0.384 | 0.362 | 0.184 | 0.099 | 0.053 | | | 0.496 | 0.293 | 61.21 |
| 13) I Fluorene-d10 | -----ISTD----- | | | | | | | | | | |
| 14) 2-Fluorobiphenyl | 1.221 | 1.172 | 1.412 | 1.241 | 1.366 | 1.494 | 1.496 | 1.246 | 1.008 | 1.295 | 12.42 |
| 15) Acenaphthylene | 1.946 | 1.747 | 1.989 | 1.621 | 1.582 | 1.600 | 1.472 | 1.551 | 1.773 | 1.698 | 10.54 |
| 16) Acenaphthene | 1.278 | 1.155 | 1.376 | 1.173 | 1.168 | 1.239 | 1.314 | 1.449 | 1.153 | 1.256 | 8.51 |
| 17) Fluorene | 1.519 | 1.315 | 1.641 | 1.301 | 1.364 | 1.447 | 1.555 | 1.449 | 1.267 | 1.429 | 8.92 |
| 18) 4,6-dinitro-2-methylphenol | 0.287 | 0.169 | 0.169 | 0.080 | 0.045 | 0.034 | | | | 0.131 | 73.73 |
| | ---- Quadratic regression ---- Coefficient = 0.9991 | | | | | | | | | | |
| | Response Ratio = -0.00505 + 0.11051 *A + 0.05705 *A^2 | | | | | | | | | | |
| 19) 2,4,6-Tribromophenol | 0.231 | 0.173 | 0.226 | 0.149 | 0.150 | | | | 0.203 | 0.188 | 19.42 |
| 20) Fluoranthene-d10 | -----ISTD----- | | | | | | | | | | |
| 21) Hexachlorobenzene | -----ISTD----- | | | | | | | | | | |

7.6.1
7

Initial Calibration Summary

Job Number: JC64700

Sample: E4P1492-ICC1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26473.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | | | | |
|----------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 0.337 | 0.375 | 0.377 | 0.357 | 0.326 | 0.346 | 0.345 | 0.425 | 0.349 | 0.360 | 8.21 |
| 22) Pentachlorophenol | 0.192 | 0.155 | 0.154 | 0.093 | 0.068 | 0.063 | 0.041 | | 0.197 | 0.120 | 51.10 |
| | ---- Quadratic regression ---- Coefficient = 0.9991 | | | | | | | | | | |
| | Response Ratio = -0.01565 + 0.18373 *A + 0.00260 *A^2 | | | | | | | | | | |
| 23) Phenanthrene | 1.319 | 1.337 | 1.536 | 1.209 | 1.164 | 1.170 | 1.186 | 1.205 | 1.247 | 1.264 | 9.45 |
| 24) Anthracene | 1.283 | 1.290 | 1.316 | 1.127 | 1.055 | 1.049 | 1.012 | 0.959 | 1.267 | 1.151 | 12.05 |
| 25) Fluoranthene | 1.531 | 1.561 | 1.772 | 1.492 | 1.590 | 1.644 | 1.774 | 2.152 | 1.466 | 1.665 | 12.84 |
| 26) Pyrene | 1.549 | 1.564 | 1.744 | 1.410 | 1.398 | 1.328 | 1.450 | 1.549 | 1.486 | 1.498 | 8.15 |
| 27) Terphenyl-d14 | 0.642 | 0.667 | 0.745 | 0.646 | 0.661 | 0.667 | 0.660 | 0.646 | 0.586 | 0.658 | 6.26 |
| 28) Benzo[a]anthracene | 1.137 | 1.003 | 1.035 | 0.753 | 0.665 | 0.649 | 0.670 | 0.673 | 1.145 | 0.859 | 25.17 |
| | ---- Quadratic regression ---- Coefficient = 0.9996 | | | | | | | | | | |
| | Response Ratio = -0.00923 + 1.10587 *A + 0.03883 *A^2 | | | | | | | | | | |
| 29) Chrysene | 1.408 | 1.338 | 1.504 | 1.266 | 1.114 | 1.057 | 0.977 | 0.982 | 1.340 | 1.221 | 15.85 |
| 30) I Benzo(a)pyrene-d12 | -----ISTD----- | | | | | | | | | | |
| 31) Benzo[b]fluoranthene | 1.792 | 1.659 | 1.692 | 1.314 | 1.290 | 1.235 | 1.154 | 1.101 | 1.765 | 1.445 | 19.23 |
| 32) Benzo[k]fluoranthene | 1.914 | 1.902 | 2.033 | 1.597 | 1.538 | 1.458 | 1.491 | 1.581 | 1.927 | 1.716 | 13.04 |
| 33) Benzo[a]pyrene | 1.726 | 1.686 | 1.871 | 1.581 | 1.521 | 1.660 | 1.669 | 1.835 | 1.686 | 1.693 | 6.49 |
| 34) Indeno[1,2,3-cd]pyrene | 1.928 | 1.761 | 1.780 | 1.347 | 1.244 | 1.293 | | | 1.953 | 1.615 | 19.16 |
| 35) Dibenz[a,h]anthracene | 1.563 | 1.444 | 1.492 | 1.129 | 1.033 | 1.064 | | | 1.598 | 1.332 | 18.51 |
| 36) Benzo[g,h,i]perylene | 1.722 | 1.648 | 1.751 | 1.407 | 1.312 | 1.348 | 1.376 | 1.263 | 1.709 | 1.504 | 13.22 |

(#) = Out of Range ### Number of calibration levels exceeded format ###

M4P1492SIM.M

Wed Apr 25 18:12:25 2018

Initial Calibration Verification

Job Number: JC64700

Sample: E4P1492-ICV1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26480.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P1492\4p26480.D Vial: 11
Acq On : 25 Apr 2018 3:01 pm Operator: seanbl
Sample : icv1492-5.0 Inst : MS4P
Misc : op11029a,e4p1492,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4P1492SIM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 25 17:07:37 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

| Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|------------------------------|-------|-------|------|-------|----------|------|
| 1 I 1-Methylnaphthalene-d10 | 1.000 | 1.000 | 0.0 | 70 | 0.00 | 6.21 |
| 5 Phenol | 0.964 | 0.747 | 22.5 | 48# | 0.00 | 3.96 |
| 13 I Fluorene-d10 | 1.000 | 1.000 | 0.0 | 68 | 0.00 | 7.67 |
| 18 4,6-dinitro-2-methylpheno | 5.000 | 3.750 | 25.0 | 48 | -0.04 | 7.76 |
| 20 Fluoranthene-d10 | 1.000 | 1.000 | 0.0 | 74 | 0.00 | 9.81 |
| 22 t Pentachlorophenol | 5.000 | 3.870 | 22.6 | 63 | 0.00 | 8.45 |

(#) = Out of Range

4p26473.D M4P1492SIM.M

SPCC's out = 0 CCC's out = 0

Wed Apr 25 18:12:12 2018

Initial Calibration Verification

Job Number: JC64700

Sample: E4P1492-ICV1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26481.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P1492\4p26481.D Vial: 12
 Acq On : 25 Apr 2018 3:26 pm Operator: seanbl
 Sample : icv1492-1.0 Inst : MS4P
 Misc : op11029a,e4p1492,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4P1492SIM.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Wed Apr 25 17:07:37 2018
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|--------------------------------|-------------------------|-------|-------|------|-------|----------|-------|
| 1 I | 1-Methylnaphthalene-d10 | 1.000 | 1.000 | 0.0 | 81 | 0.00 | 6.21 |
| 2 t | 1,4-Dioxane | 0.311 | 0.290 | 6.8 | 75 | 0.00 | 1.98 |
| 8 t | Naphthalene | 2.409 | 2.316 | 3.9 | 78 | 0.00 | 5.47 |
| 9 t | Hexachlorobutadiene | 0.636 | 0.567 | 10.8 | 76 | 0.00 | 5.61 |
| 10 t | 2-Methylnaphthalene | 1.196 | 1.106 | 7.5 | 71 | 0.00 | 6.15 |
| 13 I | Fluorene-d10 | 1.000 | 1.000 | 0.0 | 73 | 0.00 | 7.67 |
| 15 t | Acenaphthylene | 1.698 | 1.620 | 4.6 | 68 | 0.00 | 7.03 |
| 16 t | Acenaphthene | 1.256 | 1.205 | 4.1 | 76 | 0.00 | 7.20 |
| 17 t | Fluorene | 1.429 | 1.282 | 10.3 | 71 | 0.00 | 7.71 |
| 20 | Fluoranthene-d10 | 1.000 | 1.000 | 0.0 | 74 | 0.00 | 9.81 |
| 21 t | Hexachlorobenzene | 0.360 | 0.349 | 3.1 | 69 | 0.00 | 8.26 |
| 23 t | Phenanthrene | 1.264 | 1.218 | 3.6 | 68 | 0.00 | 8.65 |
| 24 t | Anthracene | 1.151 | 1.023 | 11.1 | 59 | 0.00 | 8.71 |
| 25 t | Fluoranthene | 1.665 | 1.357 | 18.5 | 65 | 0.00 | 9.83 |
| 26 t | Pyrene | 1.498 | 1.307 | 12.8 | 62 | 0.00 | 10.05 |
| ----- True Calc. % Drift ----- | | | | | | | |
| 28 t | Benzo[a]anthracene | 1.000 | 0.753 | 24.7 | 59 | 0.00 | 11.39 |
| ----- AvgRF CCRF % Dev ----- | | | | | | | |
| 29 t | Chrysene | 1.221 | 1.119 | 8.4 | 62 | 0.00 | 11.44 |
| 30 I | Benzo(a)pyrene-d12 | 1.000 | 1.000 | 0.0 | 60 | 0.00 | 13.26 |
| 31 t | Benzo[b]fluoranthene | 1.445 | 1.300 | 10.0 | 47# | 0.00 | 12.83 |
| 32 t | Benzo[k]fluoranthene | 1.716 | 1.729 | -0.8 | 55 | 0.00 | 12.87 |
| 33 t | Benzo[a]pyrene | 1.693 | 1.529 | 9.7 | 55 | 0.00 | 13.29 |
| 34 t | Indeno[1,2,3-cd]pyrene | 1.615 | 1.434 | 11.2 | 49# | 0.00 | 14.89 |
| 35 t | Dibenz[a,h]anthracene | 1.332 | 1.214 | 8.9 | 51 | 0.00 | 14.92 |
| 36 t | Benzo[g,h,i]perylene | 1.504 | 1.435 | 4.6 | 52 | 0.00 | 15.26 |

(#) = Out of Range
 4p26473.D M4P1492SIM.M

SPCC's out = 0 CCC's out = 0
 Wed Apr 25 18:12:14 2018

Continuing Calibration Summary

Job Number: JC64700

Sample: E4P1509-CC1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26770.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\e4p1509\4p26770.d Vial: 2
 Acq On : 2 May 2018 2:20 pm Operator: johnb1
 Sample : ccl492-1.0 Inst : MS4P
 Misc : op11029a,e4p1509,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4P1492SIM.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Thu Apr 26 23:31:32 2018
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|------|---------------------------|-------|-------|--------|-------|----------|-------|
| 1 I | 1-Methylnaphthalene-d10 | 1.000 | 1.000 | 0.0 | 88 | -0.04 | 6.17 |
| 2 t | 1,4-Dioxane | 0.311 | 0.353 | -13.5 | 99 | -0.04 | 1.94 |
| 3 S | 2-Fluorophenol | 0.501 | 0.598 | -19.4 | 100 | -0.06 | 3.14 |
| 4 S | Phenol-d5 | 0.805 | 0.955 | -18.6 | 96 | -0.03 | 3.92 |
| 5 | Phenol | 0.964 | 1.177 | -22.1# | 95 | -0.03 | 3.93 |
| 7 S | Nitrobenzene-d5 | 0.847 | 0.987 | -16.5 | 95 | -0.04 | 4.73 |
| 8 t | Naphthalene | 2.409 | 2.697 | -12.0 | 98 | -0.04 | 5.44 |
| 9 t | Hexachlorobutadiene | 0.636 | 0.609 | 4.2 | 88 | -0.04 | 5.56 |
| 10 t | 2-Methylnaphthalene | 1.196 | 1.388 | -16.1 | 96 | -0.04 | 6.11 |
| 11 t | 1-Methylnaphthalene | 1.451 | 1.516 | -4.5 | 97 | -0.04 | 6.20 |
| 12 | Hexachlorocyclopentadiene | 0.293 | 0.398 | -35.8# | 91 | -0.04 | 6.27 |
| 13 I | Fluorene-d10 | 1.000 | 1.000 | 0.0 | 84 | -0.04 | 7.63 |
| 14 S | 2-Fluorobiphenyl | 1.295 | 1.310 | -1.2 | 94 | -0.04 | 6.47 |
| 15 t | Acenaphthylene | 1.698 | 2.053 | -20.9# | 99 | -0.04 | 6.99 |
| 16 t | Acenaphthene | 1.256 | 1.347 | -7.2 | 98 | -0.04 | 7.16 |
| 17 t | Fluorene | 1.429 | 1.481 | -3.6 | 95 | -0.04 | 7.67 |
| 18 | 4,6-dinitro-2-methylpheno | 5.000 | 4.069 | 18.6 | 98 | -0.08 | 7.72 |
| 19 S | 2,4,6-Tribromophenol | 0.188 | 0.196 | -4.3 | 95 | -0.04 | 7.91 |
| 20 | Fluoranthene-d10 | 1.000 | 1.000 | 0.0 | 88 | -0.03 | 9.77 |
| 21 t | Hexachlorobenzene | 0.360 | 0.371 | -3.1 | 87 | -0.03 | 8.22 |
| 22 t | Pentachlorophenol | 5.000 | 4.310 | 13.8 | 84 | -0.04 | 8.42 |
| 23 t | Phenanthrene | 1.264 | 1.361 | -7.7 | 90 | -0.04 | 8.62 |
| 24 t | Anthracene | 1.151 | 1.402 | -21.8# | 96 | -0.04 | 8.67 |
| 25 t | Fluoranthene | 1.665 | 1.575 | 5.4 | 89 | -0.03 | 9.79 |
| 26 t | Pyrene | 1.498 | 1.617 | -7.9 | 91 | -0.03 | 10.01 |
| 27 S | Terphenyl-d14 | 0.658 | 0.651 | 1.1 | 86 | -0.03 | 10.18 |
| 28 t | Benzo[a]anthracene | 1.000 | 1.072 | -7.2 | 102 | -0.04 | 11.35 |
| 29 t | Chrysene | 1.221 | 1.371 | -12.3 | 90 | -0.04 | 11.39 |

7.6.4

7

Continuing Calibration Summary

Job Number: JC64700

Sample: E4P1509-CC1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26770.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | |
|----|---|------------------------|-------|-------|--------|-----|-------|-------|
| 30 | I | Benzo(a)pyrene-d12 | 1.000 | 1.000 | 0.0 | 90 | -0.05 | 13.20 |
| 31 | t | Benzo[b]fluoranthene | 1.445 | 1.795 | -24.2# | 97 | -0.05 | 12.78 |
| 32 | t | Benzo[k]fluoranthene | 1.716 | 1.949 | -13.6 | 92 | -0.05 | 12.81 |
| 33 | t | Benzo[a]pyrene | 1.693 | 1.703 | -0.6 | 91 | -0.05 | 13.24 |
| 34 | t | Indeno[1,2,3-cd]pyrene | 1.615 | 1.992 | -23.3# | 102 | -0.06 | 14.83 |
| 35 | t | Dibenz[a,h]anthracene | 1.332 | 1.613 | -21.1# | 100 | -0.06 | 14.87 |
| 36 | t | Benzo[g,h,i]perylene | 1.504 | 1.745 | -16.0 | 95 | -0.06 | 15.19 |

(#) = Out of Range
4p26473.D M4P1492SIM.M

SPCC's out = 0 CCC's out = 0
Wed May 02 22:16:17 2018

Continuing Calibration Summary

Job Number: JC64700

Sample: E4P1509-ECC1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26797.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\e4p1509\4p26797.d Vial: 2
 Acq On : 3 May 2018 12:51 am Operator: johnb1
 Sample : ecc1492-1.0 Inst : MS4P
 Misc : op11510a,e4p1509,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4P1492SIM.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Thu May 03 03:06:13 2018
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 50% Max. Rel. Area : 200%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|--------------------------------|---------------------------|-------|-------|-------|-------|----------|-------|
| 1 I | 1-Methylnaphthalene-d10 | 1.000 | 1.000 | 0.0 | 82 | 0.00 | 6.17 |
| 2 t | 1,4-Dioxane | 0.311 | 0.275 | 11.6 | 72 | -0.03 | 1.94 |
| 3 S | 2-Fluorophenol | 0.501 | 0.560 | -11.8 | 87 | -0.04 | 3.14 |
| 4 S | Phenol-d5 | 0.805 | 0.923 | -14.7 | 87 | -0.01 | 3.92 |
| 5 | Phenol | 0.964 | 1.138 | -18.0 | 86 | 0.00 | 3.93 |
| 7 S | Nitrobenzene-d5 | 0.847 | 0.981 | -15.8 | 88 | -0.02 | 4.73 |
| 8 t | Naphthalene | 2.409 | 2.705 | -12.3 | 92 | 0.00 | 5.44 |
| 9 t | Hexachlorobutadiene | 0.636 | 0.622 | 2.2 | 84 | 0.00 | 5.57 |
| 10 t | 2-Methylnaphthalene | 1.196 | 1.436 | -20.1 | 93 | 0.00 | 6.11 |
| 11 t | 1-Methylnaphthalene | 1.451 | 1.525 | -5.1 | 91 | 0.00 | 6.21 |
| 12 | Hexachlorocyclopentadiene | 0.293 | 0.193 | 34.1 | 41# | 0.00 | 6.27 |
| 13 I | Fluorene-d10 | 1.000 | 1.000 | 0.0 | 77 | 0.00 | 7.65 |
| 14 S | 2-Fluorobiphenyl | 1.295 | 1.333 | -2.9 | 87 | -0.02 | 6.47 |
| 15 t | Acenaphthylene | 1.698 | 2.246 | -32.3 | 99 | -0.02 | 6.99 |
| 16 t | Acenaphthene | 1.256 | 1.416 | -12.7 | 94 | -0.01 | 7.17 |
| 17 t | Fluorene | 1.429 | 1.619 | -13.3 | 95 | -0.01 | 7.67 |
| ----- True Calc. % Drift ----- | | | | | | | |
| 18 | 4,6-dinitro-2-methylpheno | 5.000 | 4.027 | 19.5 | 88 | -0.05 | 7.72 |
| ----- AvgRF CCRF % Dev ----- | | | | | | | |
| 19 S | 2,4,6-Tribromophenol | 0.188 | 0.234 | -24.5 | 104 | -0.01 | 7.91 |
| 20 | Fluoranthene-d10 | 1.000 | 1.000 | 0.0 | 82 | 0.00 | 9.77 |
| 21 t | Hexachlorobenzene | 0.360 | 0.365 | -1.4 | 80 | 0.00 | 8.22 |
| ----- True Calc. % Drift ----- | | | | | | | |
| 22 t | Pentachlorophenol | 5.000 | 5.561 | -11.2 | 104 | 0.00 | 8.42 |
| ----- AvgRF CCRF % Dev ----- | | | | | | | |
| 23 t | Phenanthrene | 1.264 | 1.433 | -13.4 | 88 | 0.00 | 8.62 |
| 24 t | Anthracene | 1.151 | 1.468 | -27.5 | 93 | -0.01 | 8.67 |
| 25 t | Fluoranthene | 1.665 | 1.598 | 4.0 | 84 | 0.00 | 9.79 |
| 26 t | Pyrene | 1.498 | 1.679 | -12.1 | 88 | 0.00 | 10.02 |
| 27 S | Terphenyl-d14 | 0.658 | 0.648 | 1.5 | 80 | 0.00 | 10.18 |
| ----- True Calc. % Drift ----- | | | | | | | |
| 28 t | Benzo[a]anthracene | 1.000 | 1.255 | -25.5 | 112 | 0.00 | 11.35 |
| ----- AvgRF CCRF % Dev ----- | | | | | | | |
| 29 t | Chrysene | 1.221 | 1.361 | -11.5 | 83 | 0.00 | 11.39 |

7.6.5
7

Continuing Calibration Summary

Job Number: JC64700

Sample: E4P1509-ECC1492

Account: ILINY Parsons Engineering Science for ILI

Lab FileID: 4P26797.D

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | |
|----|---|------------------------|-------|-------|-------|-----|------|-------|
| 30 | I | Benzo(a)pyrene-d12 | 1.000 | 1.000 | 0.0 | 88 | 0.00 | 13.21 |
| 31 | t | Benzo[b]fluoranthene | 1.445 | 1.876 | -29.8 | 100 | 0.00 | 12.79 |
| 32 | t | Benzo[k]fluoranthene | 1.716 | 1.894 | -10.4 | 88 | 0.00 | 12.82 |
| 33 | t | Benzo[a]pyrene | 1.693 | 1.751 | -3.4 | 92 | 0.00 | 13.24 |
| 34 | t | Indeno[1,2,3-cd]pyrene | 1.615 | 2.069 | -28.1 | 104 | 0.00 | 14.84 |
| 35 | t | Dibenz[a,h]anthracene | 1.332 | 1.684 | -26.4 | 103 | 0.00 | 14.87 |
| 36 | t | Benzo[g,h,i]perylene | 1.504 | 1.777 | -18.2 | 95 | 0.00 | 15.20 |

(#) = Out of Range
4p26473.D M4P1492SIM.M

SPCC's out = 0 CCC's out = 0
Thu May 03 03:10:10 2018

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
Analyst: JA Run ID: MA44266
Parameters: Hg

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 10:48 | MA44266-STD1 | 1 | | B=1.8582E-004, C=3.7584E-002, R=0.9997333 |
| 10:49 | MA44266-STD2 | 1 | | STDB |
| 10:50 | MA44266-STD3 | 1 | | STDC |
| 10:52 | MA44266-STD4 | 1 | | STDD |
| 10:53 | MA44266-STD5 | 1 | | STDE |
| 10:55 | MA44266-STD6 | 1 | | STDF |
| 11:00 | MA44266-STD7 | 1 | | STDC |
| 11:03 | MA44266-STD8 | 1 | | STDD |
| 11:05 | MA44266-ICV1 | 1 | | |
| 11:07 | MA44266-ICB1 | 1 | | |
| 11:09 | MA44266-CCV1 | 1 | | |
| 11:10 | MA44266-CCB1 | 1 | | |
| 11:12 | MA44266-CRI1 | 1 | | |
| 11:18 | MP6788-MB1 | 1 | | |
| 11:19 | MP6788-B1 | 1 | | |
| 11:20 | MP6788-S1 | 1 | | |
| 11:22 | MP6788-S2 | 1 | | |
| 11:24 | JC64572-1 | 1 | | (sample used for QC only; not part of login JC64700) |
| 11:25 | ZZZZZZ | 1 | | |
| 11:26 | ZZZZZZ | 1 | | |
| 11:28 | ZZZZZZ | 1 | | |
| 11:29 | MA44266-CCV2 | 1 | | |
| 11:30 | MA44266-CCB2 | 1 | | |
| 11:32 | ZZZZZZ | 1 | | |
| 11:33 | ZZZZZZ | 1 | | |
| 11:35 | ZZZZZZ | 1 | | |
| 11:36 | ZZZZZZ | 1 | | |
| 11:37 | ZZZZZZ | 1 | | |
| 11:38 | ZZZZZZ | 1 | | |
| 11:40 | ZZZZZZ | 1 | | |
| 11:41 | ZZZZZZ | 1 | | |
| 11:42 | ZZZZZZ | 1 | | |
| 11:44 | MA44266-CCV3 | 1 | | |

8.1
8

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV

Date Analyzed: 04/24/18

Methods: SW846 7470A

Analyst: JA

Run ID: MA44266

Parameters: Hg

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|--------|---|-----------------|----------|----------|
| 11:45 | MA44266-CCB3 | 1 | | |
| 11:46 | ZZZZZZ | 1 | | |
| 11:48 | ZZZZZZ | 1 | | |
| 11:49 | ZZZZZZ | 1 | | |
| 11:50 | ZZZZZZ | 1 | | |
| 11:52 | ZZZZZZ | 1 | | |
| 11:53 | ZZZZZZ | 1 | | |
| 11:54 | ZZZZZZ | 1 | | |
| 11:56 | MP6789-MB1 | 1 | | |
| 11:57 | MA44266-CCV4 | 1 | | |
| 11:58 | MA44266-CCB4 | 1 | | |
| 12:00 | MP6789-B1 | 1 | | |
| 12:01 | ZZZZZZ | 1 | | |
| 12:03 | MP6790-MB1 | 1 | | |
| 12:04 | MP6790-B1 | 1 | | |
| 12:05 | MP6790-S1 | 1 | | |
| 12:07 | MP6790-S2 | 1 | | |
| 12:08 | JC64700-2 | 1 | | |
| 12:10 | JC64700-3 | 1 | | |
| 12:11 | JC64700-4 | 1 | | |
| 12:13 | MA44266-CCV5 | 1 | | |
| 12:14 | MA44266-CCB5 | 1 | | |
| 12:16 | JC64700-7 | 1 | | |
| 12:17 | JC64700-8 | 1 | | |
| -----> | Last reportable sample/prep for job JC64700 | | | |
| 12:18 | ZZZZZZ | 1 | | |
| 12:19 | ZZZZZZ | 1 | | |
| 12:21 | ZZZZZZ | 1 | | |
| 12:22 | ZZZZZZ | 1 | | |
| 12:23 | ZZZZZZ | 1 | | |
| 12:25 | ZZZZZZ | 1 | | |
| 12:26 | ZZZZZZ | 1 | | |
| 12:28 | MA44266-CCV6 | 1 | | |
| 12:29 | MA44266-CCB6 | 1 | | |
| -----> | Last reportable CCB for job JC64700 | | | |

8.1
8

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV

Date Analyzed: 04/24/18

Methods: SW846 7470A

Analyst: JA

Run ID: MA44266

Parameters: Hg

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 12:31 | ZZZZZZ | 1 | | |
| 12:32 | ZZZZZZ | 1 | | |
| 12:33 | ZZZZZZ | 1 | | |
| 12:34 | ZZZZZZ | 1 | | |
| 12:36 | ZZZZZZ | 1 | | |
| 12:37 | ZZZZZZ | 1 | | |
| 12:40 | MA44266-CCV7 | 1 | | |
| 12:42 | MA44266-CCB7 | 1 | | |
| 14:01 | MA44266-CCV8 | 1 | | |
| 14:02 | MA44266-CCB8 | 1 | | |
| 14:04 | ZZZZZZ | 1 | | |
| 14:05 | ZZZZZZ | 1 | | |
| 14:06 | ZZZZZZ | 1 | | |
| 14:08 | ZZZZZZ | 1 | | |
| 14:09 | ZZZZZZ | 1 | | |
| 14:10 | ZZZZZZ | 1 | | |
| 14:24 | MA44266-CCV9 | 1 | | |
| 14:25 | MA44266-CCB9 | 1 | | |
| 14:27 | MP6798-MB1 | 1 | | |
| 14:28 | MP6798-B1 | 1 | | |
| 14:30 | MP6798-S1 | 1 | | |
| 14:31 | MP6798-S2 | 1 | | |
| 14:33 | JC64582-2A | 1 | | (sample used for QC only; not part of login JC64700) |
| 14:34 | ZZZZZZ | 1 | | |
| 14:48 | MP6799-MB1 | 1 | | |
| 14:50 | MA44266-CCV10 | 1 | | |
| 14:51 | MA44266-CCB10 | 1 | | |
| 14:53 | MP6799-B1 | 1 | | |
| 14:54 | MP6799-S1 | 1 | | |
| 14:55 | MP6799-S2 | 1 | | |
| 14:57 | JC64625-2A | 1 | | (sample used for QC only; not part of login JC64700) |
| 14:59 | ZZZZZZ | 1 | | |
| 15:00 | ZZZZZZ | 1 | | |

8.1
8

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
Analyst: JA Run ID: MA44266
Parameters: Hg

| Time | Sample Description | Dilution PS | | Comments |
|------|--------------------|-------------|-------|----------|
| | | Factor | Recov | |

15:02 MA44266-CCV11 1

15:03 MA44266-CCB11 1

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
 Analyst: JA Run ID: MA44266
 Parameters: Hg

| Time | Sample Description | Element: | H Dilution | g |
|-------|--------------------|----------|------------|---|
| 11:05 | MA44266-ICV1 | 1 | X | |
| 11:07 | MA44266-ICB1 | 1 | X | |
| 11:09 | MA44266-CCV1 | 1 | X | |
| 11:10 | MA44266-CCB1 | 1 | X | |
| 11:12 | MA44266-CRI1 | 1 | X | |
| 11:18 | MP6788-MB1 | 1 | X | |
| 11:19 | MP6788-B1 | 1 | X | |
| 11:20 | MP6788-S1 | 1 | X | |
| 11:22 | MP6788-S2 | 1 | X | |
| 11:24 | JC64572-1 | 1 | X (a) | |
| 11:25 | ZZZZZZ | 1 | | |
| 11:26 | ZZZZZZ | 1 | | |
| 11:28 | ZZZZZZ | 1 | | |
| 11:29 | MA44266-CCV2 | 1 | X | |
| 11:30 | MA44266-CCB2 | 1 | X | |
| 11:32 | ZZZZZZ | 1 | | |
| 11:33 | ZZZZZZ | 1 | | |
| 11:35 | ZZZZZZ | 1 | | |
| 11:36 | ZZZZZZ | 1 | | |
| 11:37 | ZZZZZZ | 1 | | |
| 11:38 | ZZZZZZ | 1 | | |
| 11:40 | ZZZZZZ | 1 | | |
| 11:41 | ZZZZZZ | 1 | | |
| 11:42 | ZZZZZZ | 1 | | |
| 11:44 | MA44266-CCV3 | 1 | X | |
| 11:45 | MA44266-CCB3 | 1 | X | |
| 11:46 | ZZZZZZ | 1 | | |
| 11:48 | ZZZZZZ | 1 | | |
| 11:49 | ZZZZZZ | 1 | | |
| 11:50 | ZZZZZZ | 1 | | |
| 11:52 | ZZZZZZ | 1 | | |
| 11:53 | ZZZZZZ | 1 | | |
| 11:54 | ZZZZZZ | 1 | | |
| | | Element: | H | g |

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REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
 Analyst: JA Run ID: MA44266
 Parameters: Hg

| Time | Sample Description | Element: | H Dilution | g |
|-------|--------------------|----------|------------|---|
| 11:56 | MP6789-MB1 | 1 | X | |
| 11:57 | MA44266-CCV4 | 1 | X | |
| 11:58 | MA44266-CCB4 | 1 | X | |
| 12:00 | MP6789-B1 | 1 | X | |
| 12:01 | ZZZZZZ | 1 | | |
| 12:03 | MP6790-MB1 | 1 | X | |
| 12:04 | MP6790-B1 | 1 | X | |
| 12:05 | MP6790-S1 | 1 | X | |
| 12:07 | MP6790-S2 | 1 | X | |
| 12:08 | JC64700-2 | 1 | X | |
| 12:10 | JC64700-3 | 1 | X | |
| 12:11 | JC64700-4 | 1 | X | |
| 12:13 | MA44266-CCV5 | 1 | X | |
| 12:14 | MA44266-CCB5 | 1 | X | |
| 12:16 | JC64700-7 | 1 | X | |
| 12:17 | JC64700-8 | 1 | X | |
| 12:18 | ZZZZZZ | 1 | | |
| 12:19 | ZZZZZZ | 1 | | |
| 12:21 | ZZZZZZ | 1 | | |
| 12:22 | ZZZZZZ | 1 | | |
| 12:23 | ZZZZZZ | 1 | | |
| 12:25 | ZZZZZZ | 1 | | |
| 12:26 | ZZZZZZ | 1 | | |
| 12:28 | MA44266-CCV6 | 1 | X | |
| 12:29 | MA44266-CCB6 | 1 | X | |
| 12:31 | ZZZZZZ | 1 | | |
| 12:32 | ZZZZZZ | 1 | | |
| 12:33 | ZZZZZZ | 1 | | |
| 12:34 | ZZZZZZ | 1 | | |
| 12:36 | ZZZZZZ | 1 | | |
| 12:37 | ZZZZZZ | 1 | | |
| 12:40 | MA44266-CCV7 | 1 | X | |
| 12:42 | MA44266-CCB7 | 1 | X | |
| | | Element: | H | |
| | | | g | |

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REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
 Analyst: JA Run ID: MA44266
 Parameters: Hg

| Time | Sample Description | Element: | H Dilution g |
|-------|--------------------|----------|--------------|
| 14:01 | MA44266-CCV8 | 1 | X |
| 14:02 | MA44266-CCB8 | 1 | X |
| 14:04 | ZZZZZZ | 1 | |
| 14:05 | ZZZZZZ | 1 | |
| 14:06 | ZZZZZZ | 1 | |
| 14:08 | ZZZZZZ | 1 | |
| 14:09 | ZZZZZZ | 1 | |
| 14:10 | ZZZZZZ | 1 | |
| 14:24 | MA44266-CCV9 | 1 | X |
| 14:25 | MA44266-CCB9 | 1 | X |
| 14:27 | MP6798-MB1 | 1 | X |
| 14:28 | MP6798-B1 | 1 | X |
| 14:30 | MP6798-S1 | 1 | X |
| 14:31 | MP6798-S2 | 1 | X |
| 14:33 | JC64582-2A | 1 | X (a) |
| 14:34 | ZZZZZZ | 1 | |
| 14:48 | MP6799-MB1 | 1 | X |
| 14:50 | MA44266-CCV10 | 1 | X |
| 14:51 | MA44266-CCB10 | 1 | X |
| 14:53 | MP6799-B1 | 1 | X |
| 14:54 | MP6799-S1 | 1 | X |
| 14:55 | MP6799-S2 | 1 | X |
| 14:57 | JC64625-2A | 1 | X (a) |
| 14:59 | ZZZZZZ | 1 | |
| 15:00 | ZZZZZZ | 1 | |
| 15:02 | MA44266-CCV11 | 1 | X |
| 15:03 | MA44266-CCB11 | 1 | X |

(a) Sample used for QC only; not part of login JC64700.

Element: H
g

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BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
 QC Limits: result < RL Run ID: MA44266 Units: ug/l

| Time: | | | 11:07 | | 11:10 | | 11:30 | | 11:45 | |
|------------|------|------|--------|-------|--------|-------|--------|-------|--------|-------|
| Sample ID: | | | ICB1 | | CCB1 | | CCB2 | | CCB3 | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |
| Mercury | 0.20 | .016 | -0.038 | <0.20 | -0.038 | <0.20 | -0.023 | <0.20 | -0.016 | <0.20 |

(*) Outside of QC limits
 (anr) Analyte not requested

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BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
 QC Limits: result < RL Run ID: MA44266 Units: ug/l

| | Time: | | 11:58 | | 12:14 | | 12:29 | |
|---------|------------|------|--------|-------|--------|-------|--------|-------|
| | Sample ID: | | CCB4 | | CCB5 | | CCB6 | |
| Metal | RL | IDL | raw | final | raw | final | raw | final |
| Mercury | 0.20 | .016 | -0.014 | <0.20 | -0.025 | <0.20 | -0.021 | <0.20 |

(*) Outside of QC limits
 (anr) Analyte not requested

8.1.2
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CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA44266 Units: ug/l

| | Time: | | 11:05 | | 11:09 | | 11:29 | | |
|------------|-------|---------|-------|------|---------|-------|-------|---------|-------|
| Sample ID: | ICV | ICV1 | CCV | CCV1 | CCV | CCV2 | | | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |
| Mercury | 3 | 3.2 | 106.7 | 2.5 | 2.6 | 104.0 | 2.5 | 2.5 | 100.0 |

(*) Outside of QC limits
(anr) Analyte not requested

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CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA44266 Units: ug/l

| | Time: | 11:44 | | 11:57 | | 12:13 | | | |
|------------|-------|---------|-------|-------|---------|-------|------|---------|-------|
| Sample ID: | CCV | CCV3 | | CCV4 | | CCV5 | | | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |
| Mercury | 2.5 | 2.5 | 100.0 | 2.5 | 2.5 | 100.0 | 2.5 | 2.5 | 100.0 |

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA44266 Units: ug/l

| | | | |
|----------------|-------|---------|-------|
| Time: | 12:28 | | |
| Sample ID: CCV | CCV6 | | |
| Metal | True | Results | % Rec |

Mercury 2.5 2.5 100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: H9042418W1.CSV Date Analyzed: 04/24/18 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA44266 Units: ug/l

| | | | | |
|------------|------|------|---------|-------|
| Time: | | | 11:12 | |
| Sample ID: | CRI | CRIA | CRI1 | |
| Metal | True | True | Results | % Rec |

Mercury 0.20 0.16 80.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
Analyst: GT Run ID: MA44281
Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 17:52 | MA44281-STD1 | 1 | | STDA |
| 17:57 | MA44281-STD2 | 1 | | STDB |
| 18:01 | ZZZZZZ | 1 | | |
| 18:05 | ZZZZZZ | 1 | | |
| 18:11 | MA44281-ICV1 | 1 | | |
| 18:20 | MA44281-ICB1 | 1 | | |
| 18:25 | MA44281-ICCV1 | 1 | | |
| 18:34 | MA44281-CCB1 | 1 | | |
| 18:41 | MA44281-CRI1 | 1 | | |
| 18:45 | MA44281-CRID1 | 1 | | |
| 18:49 | MA44281-ICSA1 | 1 | | |
| 18:54 | MA44281-ICSAB1 | 1 | | |
| 18:58 | MA44281-HSTD1 | 1 | | |
| 19:02 | MA44281-HSTD2 | 1 | | |
| 19:07 | ZZZZZZ | 1 | | |
| 19:11 | ZZZZZZ | 1 | | |
| 19:15 | ZZZZZZ | 1 | | |
| 19:20 | MA44281-CCV1 | 1 | | |
| 19:24 | MA44281-CCB2 | 1 | | |
| 19:28 | ZZZZZZ | 1 | | |
| 19:32 | ZZZZZZ | 2 | | |
| 19:37 | ZZZZZZ | 2 | | |
| 19:41 | MP6800-B1 | 1 | | |
| 19:45 | MP6800-MB1 | 1 | | |
| 19:49 | MP6800-B2 | 1 | | |
| 19:53 | MP6800-S1 | 1 | | |
| 19:57 | MP6800-S2 | 1 | | |
| 20:01 | JC64680-2F | 1 | | (sample used for QC only; not part of login JC64700) |
| 20:05 | MP6800-SD1 | 5 | | |
| 20:10 | MA44281-CCV2 | 1 | | |
| 20:14 | MA44281-CCB3 | 1 | | |
| 20:18 | ZZZZZZ | 1 | | |
| 20:23 | ZZZZZZ | 1 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
Analyst: GT Run ID: MA44281
Parameters: As, Ba, Be, B, Cr, Cu, Fe, Pb, Mn, Ni, Se, Tl, Zn

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 20:27 | ZZZZZZ | 1 | | |
| 20:31 | ZZZZZZ | 1 | | |
| 20:35 | ZZZZZZ | 1 | | |
| 20:40 | ZZZZZZ | 1 | | |
| 20:44 | ZZZZZZ | 1 | | |
| 20:48 | ZZZZZZ | 1 | | |
| 20:53 | ZZZZZZ | 1 | | |
| 20:57 | MA44281-CCV3 | 1 | | |
| 21:01 | MA44281-CCB4 | 1 | | |
| 21:05 | ZZZZZZ | 1 | | |
| 21:10 | ZZZZZZ | 1 | | |
| 21:14 | ZZZZZZ | 1 | | |
| 21:18 | ZZZZZZ | 1 | | |
| 21:23 | ZZZZZZ | 1 | | |
| 21:27 | ZZZZZZ | 1 | | |
| 21:31 | ZZZZZZ | 1 | | |
| 21:35 | ZZZZZZ | 1 | | |
| 21:40 | ZZZZZZ | 1 | | |
| 21:44 | MA44281-CCV4 | 1 | | |
| 21:48 | MA44281-CCB5 | 1 | | |
| 21:52 | MP6801-MB1 | 1 | | |
| 21:57 | MP6801-B1 | 1 | | |
| 22:01 | MP6801-S1 | 1 | | |
| 22:05 | MP6801-S2 | 1 | | |
| 22:09 | JC64507-12A | 1 | | (sample used for QC only; not part of login JC64700) |
| 22:13 | MP6801-SD1 | 5 | | |
| 22:17 | ZZZZZZ | 1 | | |
| 22:22 | ZZZZZZ | 1 | | |
| 22:26 | ZZZZZZ | 1 | | |
| 22:30 | MA44281-CCV5 | 1 | | |
| 22:34 | MA44281-CCB6 | 1 | | |
| 22:39 | ZZZZZZ | 1 | | |
| 22:43 | ZZZZZZ | 1 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
Analyst: GT Run ID: MA44281
Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 22:47 | ZZZZZZ | 1 | | |
| 22:52 | ZZZZZZ | 1 | | |
| 22:56 | ZZZZZZ | 1 | | |
| 23:00 | ZZZZZZ | 1 | | |
| 23:04 | ZZZZZZ | 1 | | |
| 23:09 | ZZZZZZ | 1 | | |
| 23:13 | ZZZZZZ | 1 | | |
| 23:17 | MA44281-CCV6 | 1 | | |
| 23:21 | MA44281-CCB7 | 1 | | |
| 23:26 | MP6815-MB1 | 5 | | |
| 23:30 | MP6815-B1 | 5 | | |
| 23:34 | MP6815-S1 | 5 | | |
| 23:39 | MP6815-S2 | 5 | | |
| 23:43 | JC64567-1 | 5 | | (sample used for QC only; not part of login JC64700) |
| 23:47 | MP6815-SD1 | 25 | | |
| 23:51 | ZZZZZZ | 5 | | |
| 23:56 | MA44281-CCV7 | 1 | | |
| 00:00 | MA44281-CCB8 | 1 | | |
| 00:05 | MA44281-CRI2 | 1 | | |
| 00:09 | MA44281-CRID2 | 1 | | |
| 00:13 | MA44281-ICSA2 | 1 | | |
| 00:18 | MA44281-ICSAB2 | 1 | | |
| 00:22 | MA44281-CCV8 | 1 | | |
| 00:26 | MA44281-CCB9 | 1 | | |
| 00:30 | ZZZZZZ | 1 | | |
| 00:35 | ZZZZZZ | 1 | | |
| 00:39 | ZZZZZZ | 1 | | |
| 00:43 | ZZZZZZ | 1 | | |
| 00:48 | ZZZZZZ | 1 | | |
| 00:52 | ZZZZZZ | 1 | | |
| 00:57 | ZZZZZZ | 1 | | |
| 01:01 | ZZZZZZ | 1 | | |
| 01:05 | ZZZZZZ | 1 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
Analyst: GT Run ID: MA44281
Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|--------|---|-----------------|----------|--|
| 01:10 | ZZZZZ | 1 | | |
| 01:14 | ZZZZZ | 1 | | |
| 01:19 | ZZZZZ | 1 | | |
| 01:23 | MA44281-CCV9 | 1 | | |
| 01:27 | MA44281-CCB10 | 1 | | |
| 01:31 | ZZZZZ | 5 | | |
| 01:36 | ZZZZZ | 5 | | |
| 01:40 | ZZZZZ | 5 | | |
| 01:44 | ZZZZZ | 5 | | |
| 01:49 | ZZZZZ | 5 | | |
| 01:53 | ZZZZZ | 5 | | |
| 01:58 | MP6809-B1 | 1 | | |
| 02:02 | MP6809-MB1 | 1 | | |
| 02:06 | MP6809-S1 | 1 | | Na, Ca high |
| 02:10 | MP6809-S2 | 1 | | Na, Ca high |
| 02:16 | MA44281-CCV10 | 1 | | |
| 02:21 | MA44281-CCB11 | 1 | | |
| 02:26 | JC64764-5 | 1 | | (sample used for QC only; not part of login JC64700) |
| 02:30 | MP6809-SD1 | 5 | | Na, Ca high |
| 02:34 | ZZZZZ | 1 | | |
| 02:38 | JC64700-2 | 1 | | Mn high |
| 02:43 | JC64700-3 | 1 | | |
| 02:47 | JC64700-4 | 1 | | |
| 02:51 | JC64700-7 | 1 | | |
| 02:56 | JC64700-8 | 1 | | |
| -----> | Last reportable sample/prep for job JC64700 | | | |
| 03:00 | ZZZZZ | 1 | | |
| 03:05 | ZZZZZ | 1 | | |
| 03:10 | MA44281-CCV11 | 1 | | |
| 03:15 | MA44281-CCB12 | 1 | | |
| 03:20 | ZZZZZ | 1 | | |
| 03:24 | ZZZZZ | 1 | | |
| 03:28 | ZZZZZ | 1 | | |
| 03:33 | ZZZZZ | 1 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
Analyst: GT Run ID: MA44281
Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 03:37 | ZZZZZZ | 1 | | |
| 03:42 | ZZZZZZ | 1 | | |
| 03:46 | ZZZZZZ | 1 | | |
| 03:50 | ZZZZZZ | 1 | | |
| 03:55 | ZZZZZZ | 1 | | |
| 04:00 | MA44281-CCV12 | 1 | | |
| 04:05 | MA44281-CCB13 | 1 | | |
| 04:10 | MP6810-MB1 | 1 | | |
| 04:14 | MP6810-B1 | 1 | | |
| 04:18 | MP6810-S1 | 1 | | |
| 04:22 | MP6810-S2 | 1 | | |
| 04:26 | JC64777-2 | 1 | | (sample used for QC only; not part of login JC64700) |
| 04:31 | MP6810-SD1 | 5 | | |
| 04:35 | ZZZZZZ | 1 | | |
| 04:39 | ZZZZZZ | 1 | | |
| 04:44 | ZZZZZZ | 1 | | |
| 04:48 | MA44281-CCV13 | 1 | | |
| 04:52 | MA44281-CCB14 | 1 | | |
| 04:56 | ZZZZZZ | 1 | | |
| 05:00 | ZZZZZZ | 1 | | |
| 05:05 | ZZZZZZ | 1 | | |
| 05:09 | ZZZZZZ | 1 | | |
| 05:13 | ZZZZZZ | 1 | | |
| 05:17 | ZZZZZZ | 1 | | |
| 05:22 | ZZZZZZ | 1 | | |
| 05:26 | ZZZZZZ | 1 | | |
| 05:30 | ZZZZZZ | 1 | | |
| 05:34 | MA44281-CCV14 | 1 | | |
| 05:38 | MA44281-CCB15 | 1 | | |
| 05:43 | ZZZZZZ | 1 | | |
| 05:47 | ZZZZZZ | 1 | | |
| 05:51 | ZZZZZZ | 1 | | |
| 05:55 | ZZZZZZ | 1 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
Analyst: GT Run ID: MA44281
Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|------|--------------------|-----------------|----------|----------|
|------|--------------------|-----------------|----------|----------|

06:00 ZZZZZZ 1

06:04 ZZZZZZ 1

06:08 ZZZZZZ 1

06:12 MA44281-CCV15 1

06:16 MA44281-CCB16 1

06:21 MA44281-CRI3 1

06:25 MA44281-CRID3 1

06:30 MA44281-CCV16 1

06:34 MA44281-CCB17 1

-----> Last reportable CCB for job JC64700
Refer to raw data for calibration curve and standards.

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REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Element: Dilution | A | B | B | B | C | C | F | P | M | N | S | T | Z |
|-------|--------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| | | | s | a | e | r | u | e | b | n | i | e | l | n | |
| 18:01 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 18:05 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 18:11 | MA44281-ICV1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:20 | MA44281-ICB1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:25 | MA44281-ICCV1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:34 | MA44281-CCB1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:41 | MA44281-CRI1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:45 | MA44281-CRID1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:49 | MA44281-ICSA1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:54 | MA44281-ICSAB1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 18:58 | MA44281-HSTD1 | 1 | X | X | X | X | X | | X | X | X | X | X | X | X |
| 19:02 | MA44281-HSTD2 | 1 | | | | | | | X | | | | | | |
| 19:07 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 19:11 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 19:15 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 19:20 | MA44281-CCV1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 19:24 | MA44281-CCB2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 19:28 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 19:32 | ZZZZZZ | 2 | | | | | | | | | | | | | |
| 19:37 | ZZZZZZ | 2 | | | | | | | | | | | | | |
| 19:41 | MP6800-B1 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 19:45 | MP6800-MB1 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 19:49 | MP6800-B2 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 19:53 | MP6800-S1 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 19:57 | MP6800-S2 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 20:01 | JC64680-2F | 1 | X | | | | | | | | | | | | (a) |
| 20:05 | MP6800-SD1 | 5 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 20:10 | MA44281-CCV2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 20:14 | MA44281-CCB3 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 20:18 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 20:23 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 20:27 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 20:31 | ZZZZZZ | 1 | | | | | | | | | | | | | |

Element: A B B B C C F P M N S T Z
 s a e r u e b n i e l n

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Dilution | Element: s a e r u e b n i e l n | A | B | B | B | C | C | F | P | M | N | S | T | Z |
|-------|--------------------|----------|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| 20:35 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 20:40 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 20:44 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 20:48 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 20:53 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 20:57 | MA44281-CCV3 | 1 | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 21:01 | MA44281-CCB4 | 1 | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 21:05 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:10 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:14 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:18 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:23 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:27 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:31 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:35 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:40 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 21:44 | MA44281-CCV4 | 1 | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 21:48 | MA44281-CCB5 | 1 | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 21:52 | MP6801-MB1 | 1 | | X | | | | X | X | X | | | X | X | | |
| 21:57 | MP6801-B1 | 1 | | X | | | | X | X | X | | | X | X | | |
| 22:01 | MP6801-S1 | 1 | | X | | | | X | X | X | | | X | X | | |
| 22:05 | MP6801-S2 | 1 | | X | | | | X | X | X | | | X | X | | |
| 22:09 | JC64507-12A | 1 | | X | | | | X | X | X | | | X | X | | (a) |
| 22:13 | MP6801-SD1 | 5 | | X | | | | X | X | X | | | X | X | | |
| 22:17 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 22:22 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 22:26 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 22:30 | MA44281-CCV5 | 1 | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 22:34 | MA44281-CCB6 | 1 | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 22:39 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 22:43 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 22:47 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 22:52 | ZZZZZZ | 1 | | | | | | | | | | | | | | |

Element: A B B B C C F P M N S T Z
 s a e r u e b n i e l n

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As, Ba, Be, B, Cr, Cu, Fe, Pb, Mn, Ni, Se, Tl, Zn

| Time | Sample Description | Element: Dilution | A s | B a | B e | B | C r | C u | F e | P b | M n | N i | S e | T l | Z n |
|-------|--------------------|-------------------|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 22:56 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 23:00 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 23:04 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 23:09 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 23:13 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 23:17 | MA44281-CCV6 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 23:21 | MA44281-CCB7 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 23:26 | MP6815-MB1 | 5 | X | X | | | X | X | | X | | X | X | | X |
| 23:30 | MP6815-B1 | 5 | X | X | | | X | X | | X | | X | X | | X |
| 23:34 | MP6815-S1 | 5 | X | X | | | X | X | | X | | X | X | | X |
| 23:39 | MP6815-S2 | 5 | X | X | | | X | X | | X | | X | X | | X |
| 23:43 | JC64567-1 | 5 | X | X | | | X | | | X | | | X | | (a) |
| 23:47 | MP6815-SD1 | 25 | X | X | | | X | X | | X | | X | X | | X |
| 23:51 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 23:56 | MA44281-CCV7 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:00 | MA44281-CCB8 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:05 | MA44281-CRI2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:09 | MA44281-CRID2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:13 | MA44281-ICSA2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:18 | MA44281-ICSAB2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:22 | MA44281-CCV8 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:26 | MA44281-CCB9 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 00:30 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 00:35 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 00:39 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 00:43 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 00:48 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 00:52 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 00:57 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 01:01 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 01:05 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 01:10 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 01:14 | ZZZZZZ | 1 | | | | | | | | | | | | | |

Element: A B B B C C F P M N S T Z
 s a e r u e b n i e l n

8.2.1
 8

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Element: Dilution | A | B | B | B | C | C | F | P | M | N | S | T | Z |
|-------|--------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| | | | s | a | e | r | u | e | b | n | i | e | l | n | |
| 01:19 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 01:23 | MA44281-CCV9 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 01:27 | MA44281-CCB10 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 01:31 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 01:36 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 01:40 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 01:44 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 01:49 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 01:53 | ZZZZZZ | 5 | | | | | | | | | | | | | |
| 01:58 | MP6809-B1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:02 | MP6809-MB1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:06 | MP6809-S1 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:10 | MP6809-S2 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:16 | MA44281-CCV10 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:21 | MA44281-CCB11 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:26 | JC64764-5 | 1 | X | X | X | | X | X | X | X | X | X | X | X | (a) |
| 02:30 | MP6809-SD1 | 5 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:34 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 02:38 | JC64700-2 | 1 | X | X | X | X | X | X | | | | X | | | X |
| 02:43 | JC64700-3 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:47 | JC64700-4 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:51 | JC64700-7 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 02:56 | JC64700-8 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 03:00 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:05 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:10 | MA44281-CCV11 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 03:15 | MA44281-CCB12 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 03:20 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:24 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:28 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:33 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:37 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:42 | ZZZZZZ | 1 | | | | | | | | | | | | | |

Element: A B B B C C F P M N S T Z
 s a e r u e b n i e l n

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Element: Dilution | A | B | B | B | C | C | F | P | M | N | S | T | Z |
|-------|--------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| | | | s | a | e | r | u | e | b | n | i | e | l | n | |
| 03:46 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:50 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 03:55 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 04:00 | MA44281-CCV12 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 04:05 | MA44281-CCB13 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 04:10 | MP6810-MB1 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 04:14 | MP6810-B1 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 04:18 | MP6810-S1 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 04:22 | MP6810-S2 | 1 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 04:26 | JC64777-2 | 1 | X | X | X | | X | X | X | X | X | X | X | X | (a) |
| 04:31 | MP6810-SD1 | 5 | X | X | X | | X | X | X | X | X | X | X | X | X |
| 04:35 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 04:39 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 04:44 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 04:48 | MA44281-CCV13 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 04:52 | MA44281-CCB14 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 04:56 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:00 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:05 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:09 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:13 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:17 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:22 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:26 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:30 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:34 | MA44281-CCV14 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 05:38 | MA44281-CCB15 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 05:43 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:47 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:51 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 05:55 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 06:00 | ZZZZZZ | 1 | | | | | | | | | | | | | |
| 06:04 | ZZZZZZ | 1 | | | | | | | | | | | | | |

Element: A B B B C C F P M N S T Z
 s a e r u e b n i e l n

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Element: Dilution | A | B | B | B | C | C | F | P | M | N | S | T | Z | |
|-------|--------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | s | a | e | r | u | e | b | n | i | e | l | n | | |
| 06:08 | ZZZZZZ | 1 | | | | | | | | | | | | | | |
| 06:12 | MA44281-CCV15 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 06:16 | MA44281-CCB16 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 06:21 | MA44281-CRI3 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 06:25 | MA44281-CRID3 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 06:30 | MA44281-CCV16 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 06:34 | MA44281-CCB17 | 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

(a) Sample used for QC only; not part of login JC64700.

Element: A B B B C C F P M N S T Z
 s a e r u e b n i e l n

8.2.1
 8

INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|----------|---------|--------|
| 17:52 | MA44281-STD1 | 3833 R | 113790 R | 17822 R | 9042 R |
| 17:57 | MA44281-STD2 | 3559 | 105850 | 17314 | 7608 |
| 18:01 | ZZZZZ | 3677 | 108900 | 17634 | 7976 |
| 18:05 | ZZZZZ | 3829 | 113890 | 17721 | 9020 |
| 18:11 | MA44281-ICV1 | 3699 | 108620 | 17560 | 8016 |
| 18:20 | MA44281-ICB1 | 3855 | 114540 | 17799 | 9068 |
| 18:25 | MA44281-ICCV1 | 3690 | 109050 | 17635 | 7993 |
| 18:34 | MA44281-CCB1 | 3839 | 114260 | 17744 | 9046 |
| 18:41 | MA44281-CRI1 | 3800 | 113170 | 17692 | 8806 |
| 18:45 | MA44281-CRID1 | 3842 | 114790 | 17793 | 9000 |
| 18:49 | MA44281-ICSA1 | 3356 | 99536 | 17067 | 6882 |
| 18:54 | MA44281-ICSAB1 | 3358 | 99455 | 16957 | 6885 |
| 18:58 | MA44281-HSTD1 | 3775 | 113210 | 17860 | 8700 |
| 19:02 | MA44281-HSTD2 | 3459 | 102060 | 17132 | 7059 |
| 19:07 | ZZZZZ | 3790 | 112210 | 17692 | 8823 |
| 19:11 | ZZZZZ | 3788 | 114510 | 17590 | 9044 |
| 19:15 | ZZZZZ | 3873 | 115250 | 17783 | 9111 |
| 19:20 | MA44281-CCV1 | 3715 | 109450 | 17603 | 8022 |
| 19:24 | MA44281-CCB2 | 3877 | 114620 | 17635 | 9087 |
| 19:28 | ZZZZZ | 3883 | 115330 | 17845 | 9125 |
| 19:32 | ZZZZZ | 3730 | 110820 | 17771 | 7958 |
| 19:37 | ZZZZZ | 3719 | 110890 | 17846 | 8285 |
| 19:41 | MP6800-B1 | 3732 | 111200 | 17723 | 8213 |
| 19:45 | MP6800-MB1 | 3872 | 115750 | 18010 | 9111 |
| 19:49 | MP6800-B2 | 3758 | 111830 | 17863 | 8277 |
| 19:53 | MP6800-S1 | 3655 | 108950 | 17608 | 7933 |
| 19:57 | MP6800-S2 | 3654 | 109330 | 17610 | 7926 |
| 20:01 | JC64680-2F | 3729 | 110880 | 17693 | 8351 |
| 20:05 | MP6800-SD1 | 3842 | 113660 | 17705 | 8892 |
| 20:10 | MA44281-CCV2 | 3713 | 110020 | 17532 | 8018 |
| 20:14 | MA44281-CCB3 | 3892 | 115250 | 17738 | 9132 |
| 20:18 | ZZZZZ | 3881 | 115560 | 17972 | 9122 |
| 20:23 | ZZZZZ | 3732 | 110990 | 17638 | 8282 |

8.2.2
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INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As, Ba, Be, B, Cr, Cu, Fe, Pb, Mn, Ni, Se, Tl, Zn

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|--------|--------|--------|
| 20:27 | ZZZZZZ | 3720 | 110980 | 17704 | 8328 |
| 20:31 | ZZZZZZ | 3738 | 111090 | 17723 | 8315 |
| 20:35 | ZZZZZZ | 3878 | 115450 | 17838 | 9120 |
| 20:40 | ZZZZZZ | 3720 | 110380 | 17654 | 8320 |
| 20:44 | ZZZZZZ | 3727 | 110440 | 17683 | 8325 |
| 20:48 | ZZZZZZ | 3884 | 114880 | 17857 | 9139 |
| 20:53 | ZZZZZZ | 3885 | 116070 | 17887 | 9135 |
| 20:57 | MA44281-CCV3 | 3732 | 110480 | 17527 | 8053 |
| 21:01 | MA44281-CCB4 | 3900 | 115050 | 17743 | 9150 |
| 21:05 | ZZZZZZ | 3780 | 112540 | 17613 | 8656 |
| 21:10 | ZZZZZZ | 3871 | 115370 | 17848 | 9048 |
| 21:14 | ZZZZZZ | 3896 | 116010 | 17980 | 9141 |
| 21:18 | ZZZZZZ | 3896 | 115950 | 17898 | 9175 |
| 21:23 | ZZZZZZ | 3702 | 108590 | 17571 | 8120 |
| 21:27 | ZZZZZZ | 3854 | 115390 | 17698 | 8865 |
| 21:31 | ZZZZZZ | 3731 | 109180 | 17459 | 8222 |
| 21:35 | ZZZZZZ | 3790 | 112030 | 17736 | 8430 |
| 21:40 | ZZZZZZ | 3745 | 109970 | 17593 | 8310 |
| 21:44 | MA44281-CCV4 | 3770 | 111500 | 17588 | 8130 |
| 21:48 | MA44281-CCB5 | 3919 | 116020 | 17648 | 9189 |
| 21:52 | MP6801-MB1 | 3898 | 116260 | 17934 | 9159 |
| 21:57 | MP6801-B1 | 3814 | 112910 | 17714 | 8379 |
| 22:01 | MP6801-S1 | 3746 | 111100 | 17695 | 8159 |
| 22:05 | MP6801-S2 | 3733 | 111240 | 17757 | 8133 |
| 22:09 | JC64507-12A | 3796 | 113830 | 17741 | 8625 |
| 22:13 | MP6801-SD1 | 3908 | 115810 | 17738 | 9105 |
| 22:17 | ZZZZZZ | 3725 | 111030 | 17554 | 8400 |
| 22:22 | ZZZZZZ | 3708 | 110020 | 17476 | 8240 |
| 22:26 | ZZZZZZ | 3845 | 113920 | 17732 | 8720 |
| 22:30 | MA44281-CCV5 | 3779 | 110810 | 17475 | 8122 |
| 22:34 | MA44281-CCB6 | 3940 | 116070 | 17639 | 9204 |
| 22:39 | ZZZZZZ | 3917 | 116480 | 17788 | 9178 |
| 22:43 | ZZZZZZ | 3924 | 117080 | 17901 | 9189 |

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INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|--------|--------|--------|
| 22:47 | ZZZZZZ | 3930 | 116490 | 17765 | 9213 |
| 22:52 | ZZZZZZ | 3745 | 111000 | 17684 | 8299 |
| 22:56 | ZZZZZZ | 3735 | 110970 | 17542 | 8428 |
| 23:00 | ZZZZZZ | 3825 | 113550 | 17822 | 8709 |
| 23:04 | ZZZZZZ | 3699 | 109930 | 17613 | 8231 |
| 23:09 | ZZZZZZ | 3814 | 113070 | 17684 | 8673 |
| 23:13 | ZZZZZZ | 3744 | 111230 | 17562 | 8285 |
| 23:17 | MA44281-CCV6 | 3769 | 110500 | 17564 | 8106 |
| 23:21 | MA44281-CCB7 | 3915 | 115480 | 17580 | 9149 |
| 23:26 | MP6815-MB1 | 3663 | 106140 | 17299 | 7830 |
| 23:30 | MP6815-B1 | 3694 | 106840 | 17462 | 7802 |
| 23:34 | MP6815-S1 | 3630 | 105440 | 17296 | 7647 |
| 23:39 | MP6815-S2 | 3618 | 105380 | 17192 | 7607 |
| 23:43 | JC64567-1 | 3617 | 105210 | 17217 | 7649 |
| 23:47 | MP6815-SD1 | 3795 | 111460 | 17430 | 8452 |
| 23:51 | ZZZZZZ | 3657 | 105920 | 17153 | 7792 |
| 23:56 | MA44281-CCV7 | 3744 | 110360 | 17424 | 8057 |
| 00:00 | MA44281-CCB8 | 3923 | 116020 | 17726 | 9165 |
| 00:05 | MA44281-CRI2 | 3864 | 113790 | 17620 | 8901 |
| 00:09 | MA44281-CRID2 | 3893 | 114830 | 17562 | 9064 |
| 00:13 | MA44281-ICSA2 | 3393 | 100620 | 16772 | 6923 |
| 00:18 | MA44281-ICSAB2 | 3415 | 100400 | 16811 | 6967 |
| 00:22 | MA44281-CCV8 | 3735 | 109610 | 17510 | 8029 |
| 00:26 | MA44281-CCB9 | 3895 | 115710 | 17516 | 9109 |
| 00:30 | ZZZZZZ | 3905 | 115790 | 17726 | 9114 |
| 00:35 | ZZZZZZ | 3902 | 115500 | 17653 | 9135 |
| 00:39 | ZZZZZZ | 3897 | 115460 | 17614 | 9089 |
| 00:43 | ZZZZZZ | 3996 | 117000 | 18185 | 9403 |
| 00:48 | ZZZZZZ | 3900 | 115630 | 17712 | 9060 |
| 00:52 | ZZZZZZ | 3904 | 115330 | 17654 | 9137 |
| 00:57 | ZZZZZZ | 3889 | 115460 | 17696 | 9048 |
| 01:01 | ZZZZZZ | 3925 | 116480 | 17810 | 9149 |
| 01:05 | ZZZZZZ | 3945 | 116340 | 17733 | 9240 |

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INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As, Ba, Be, B, Cr, Cu, Fe, Pb, Mn, Ni, Se, Tl, Zn

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|--------|--------|--------|
| 01:10 | ZZZZZZ | 3563 | 105600 | 16976 | 7755 |
| 01:14 | ZZZZZZ | 3913 | 110740 | 18008 | 8040 |
| 01:19 | ZZZZZZ | 3576 | 105280 | 17104 | 7654 |
| 01:23 | MA44281-CCV9 | 3777 | 110410 | 17425 | 8106 |
| 01:27 | MA44281-CCB10 | 3916 | 115930 | 17460 | 9123 |
| 01:31 | ZZZZZZ | 3652 | 106950 | 17318 | 7805 |
| 01:36 | ZZZZZZ | 3707 | 106750 | 17134 | 7897 |
| 01:40 | ZZZZZZ | 3672 | 106500 | 17280 | 7809 |
| 01:44 | ZZZZZZ | 3680 | 106610 | 17198 | 7792 |
| 01:49 | ZZZZZZ | 3642 | 106270 | 17215 | 7716 |
| 01:53 | ZZZZZZ | 3702 | 106540 | 17247 | 7872 |
| 01:58 | MP6809-B1 | 3799 | 112240 | 17572 | 8312 |
| 02:02 | MP6809-MB1 | 3925 | 116440 | 17696 | 9155 |
| 02:06 | MP6809-S1 | 3478 | 103320 | 16881 | 7150 |
| 02:10 | MP6809-S2 | 3480 | 102930 | 16859 | 7148 |
| 02:16 | MA44281-CCV10 | 3769 | 110540 | 17444 | 8076 |
| 02:21 | MA44281-CCB11 | 3929 | 115620 | 17473 | 9143 |
| 02:26 | JC64764-5 | 3441 | 101840 | 16938 | 7230 |
| 02:30 | MP6809-SD1 | 3751 | 110160 | 17443 | 8268 |
| 02:34 | ZZZZZZ | 3292 | 93787 | 16619 | 6730 |
| 02:38 | JC64700-2 | 3808 | 112870 | 17554 | 8476 |
| 02:43 | JC64700-3 | 3854 | 114350 | 17475 | 8773 |
| 02:47 | JC64700-4 | 3849 | 114020 | 17641 | 8689 |
| 02:51 | JC64700-7 | 3850 | 114400 | 17732 | 8813 |
| 02:56 | JC64700-8 | 3821 | 113990 | 17559 | 8591 |
| 03:00 | ZZZZZZ | 3441 | 100880 | 16936 | 7113 |
| 03:05 | ZZZZZZ | 3510 | 102840 | 16958 | 7332 |
| 03:10 | MA44281-CCV11 | 3766 | 110510 | 17337 | 8069 |
| 03:15 | MA44281-CCB12 | 3934 | 115900 | 17521 | 9140 |
| 03:20 | ZZZZZZ | 3449 | 101520 | 16715 | 7255 |
| 03:24 | ZZZZZZ | 3662 | 108400 | 17288 | 7950 |
| 03:28 | ZZZZZZ | 3343 | 99223 | 16730 | 7015 |
| 03:33 | ZZZZZZ | 3727 | 110780 | 17344 | 8202 |

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INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As, Ba, Be, B, Cr, Cu, Fe, Pb, Mn, Ni, Se, Tl, Zn

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|--------|--------|---------|
| 03:37 | ZZZZZZ | 3069 | 86321 | 16026 | 5909 !a |
| 03:42 | ZZZZZZ | 3447 | 98525 | 16922 | 6886 |
| 03:46 | ZZZZZZ | 3665 | 108260 | 17313 | 7961 |
| 03:50 | ZZZZZZ | 3903 | 115960 | 17726 | 9112 |
| 03:55 | ZZZZZZ | 3914 | 116680 | 17590 | 9128 |
| 04:00 | MA44281-CCV12 | 3780 | 110900 | 17455 | 8095 |
| 04:05 | MA44281-CCB13 | 3936 | 116080 | 17592 | 9158 |
| 04:10 | MP6810-MB1 | 3917 | 115950 | 17711 | 9145 |
| 04:14 | MP6810-B1 | 3795 | 111880 | 17370 | 8292 |
| 04:18 | MP6810-S1 | 3584 | 105500 | 17229 | 7245 |
| 04:22 | MP6810-S2 | 3556 | 104930 | 17192 | 7183 |
| 04:26 | JC64777-2 | 3624 | 107090 | 17316 | 7374 |
| 04:31 | MP6810-SD1 | 3826 | 113070 | 17365 | 8308 |
| 04:35 | ZZZZZZ | 3651 | 107560 | 17461 | 7486 |
| 04:39 | ZZZZZZ | 3712 | 109960 | 17709 | 7542 |
| 04:44 | ZZZZZZ | 3758 | 111820 | 17827 | 8127 |
| 04:48 | MA44281-CCV13 | 3815 | 111920 | 17434 | 8174 |
| 04:52 | MA44281-CCB14 | 3977 | 117330 | 17836 | 9269 |
| 04:56 | ZZZZZZ | 3989 | 117420 | 18583 | 8362 |
| 05:00 | ZZZZZZ | 3921 | 115830 | 18047 | 8581 |
| 05:05 | ZZZZZZ | 3911 | 115860 | 18125 | 8441 |
| 05:09 | ZZZZZZ | 3979 | 116780 | 18284 | 8469 |
| 05:13 | ZZZZZZ | 3986 | 118110 | 18322 | 8540 |
| 05:17 | ZZZZZZ | 3972 | 116930 | 18185 | 8559 |
| 05:22 | ZZZZZZ | 3973 | 117670 | 18470 | 8380 |
| 05:26 | ZZZZZZ | 3909 | 115480 | 18112 | 8116 |
| 05:30 | ZZZZZZ | 3960 | 117170 | 18135 | 8495 |
| 05:34 | MA44281-CCV14 | 3787 | 112840 | 17594 | 8122 |
| 05:38 | MA44281-CCB15 | 3999 | 117880 | 17737 | 9302 |
| 05:43 | ZZZZZZ | 4028 | 119280 | 18438 | 8589 |
| 05:47 | ZZZZZZ | 4078 | 120470 | 18770 | 8493 |
| 05:51 | ZZZZZZ | 4131 | 121790 | 18902 | 8459 |
| 05:55 | ZZZZZZ | 4038 | 118720 | 18212 | 8653 |

8.2.2
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INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 Analyst: GT Run ID: MA44281
 Parameters: As,Ba,Be,B,Cr,Cu,Fe,Pb,Mn,Ni,Se,Tl,Zn

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|--------|--------|--------|
| 06:00 | ZZZZZZ | 4097 | 120430 | 18744 | 8481 |
| 06:04 | ZZZZZZ | 3978 | 117090 | 17898 | 8704 |
| 06:08 | ZZZZZZ | 4102 | 121570 | 18908 | 8427 |
| 06:12 | MA44281-CCV15 | 3856 | 112860 | 17497 | 8243 |
| 06:16 | MA44281-CCB16 | 4000 | 117900 | 17591 | 9298 |
| 06:21 | MA44281-CRI3 | 3944 | 116570 | 17607 | 9023 |
| 06:25 | MA44281-CRID3 | 3974 | 117530 | 17594 | 9203 |
| 06:30 | MA44281-CCV16 | 3825 | 112540 | 17492 | 8191 |
| 06:34 | MA44281-CCB17 | 3994 | 118250 | 17829 | 9309 |

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

| Istd# | Parameter | Limits |
|--------|----------------|----------|
| Istd#1 | Yttrium (2243) | 70-130 % |
| Istd#2 | Yttrium (3600) | 70-130 % |
| Istd#3 | Yttrium (3710) | 70-130 % |
| Istd#4 | Indium | 70-130 % |

(a) No samples reported for the elements associated with this internal standard.

8.2.2
8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Metal | Time: | | 18:20 | | 18:34 | | 19:24 | | 20:14 | | |
|------------|------------|----|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| | Sample ID: | RL | IDL | ICB1 | final | CCB1 | final | CCB2 | final | CCB3 | final |
| Aluminum | 200 | | 34 | anr | | | | | | | |
| Antimony | 6.0 | | 1.4 | anr | | | | | | | |
| Arsenic | 3.0 | | 1.4 | 0.200 | <3.0 | -0.700 | <3.0 | -1.10 | <3.0 | -0.300 | <3.0 |
| Barium | 200 | | .5 | -0.100 | <200 | 0.00 | <200 | 0.00 | <200 | 0.200 | <200 |
| Beryllium | 1.0 | | .2 | -0.100 | <1.0 | 0.00 | <1.0 | 0.100 | <1.0 | 0.100 | <1.0 |
| Bismuth | 20 | | 2.5 | | | | | | | | |
| Boron | 100 | | 1.9 | 0.900 | <100 | 1.90 | <100 | 1.90 | <100 | 2.70 | <100 |
| Cadmium | 3.0 | | .3 | anr | | | | | | | |
| Calcium | 5000 | | 8.7 | anr | | | | | | | |
| Chromium | 10 | | .6 | 0.500 | <10 | 0.00 | <10 | 0.700 | <10 | 0.100 | <10 |
| Cobalt | 50 | | .5 | anr | | | | | | | |
| Copper | 10 | | 1.2 | 0.600 | <10 | 0.700 | <10 | 0.600 | <10 | 0.800 | <10 |
| Iron | 100 | | 4.6 | 1.70 | <100 | 3.90 | <100 | 3.10 | <100 | 5.70 | <100 |
| Lead | 3.0 | | 1.4 | 0.100 | <3.0 | 0.00 | <3.0 | -0.400 | <3.0 | 0.600 | <3.0 |
| Lithium | 50 | | 2.8 | | | | | | | | |
| Magnesium | 5000 | | 33 | anr | | | | | | | |
| Manganese | 15 | | .1 | 0.00 | <15 | 0.100 | <15 | 0.200 | <15 | 0.400 | <15 |
| Molybdenum | 20 | | .4 | | | | | | | | |
| Nickel | 10 | | .5 | 0.00 | <10 | 0.100 | <10 | 0.200 | <10 | 0.300 | <10 |
| Phosphorus | 50 | | 1.7 | | | | | | | | |
| Potassium | 10000 | | 68 | anr | | | | | | | |
| Selenium | 10 | | 3.8 | 0.700 | <10 | -1.20 | <10 | 0.200 | <10 | 2.00 | <10 |
| Silicon | 200 | | 2.1 | | | | | | | | |
| Silver | 10 | | .5 | anr | | | | | | | |
| Sodium | 10000 | | 15 | anr | | | | | | | |
| Strontium | 10 | | .2 | | | | | | | | |
| Sulfur | 50 | | 20 | | | | | | | | |
| Thallium | 2.0 | | 1.6 | -0.400 | <2.0 | 0.700 | <2.0 | 0.200 | <2.0 | 0.100 | <2.0 |
| Tin | 10 | | 1 | anr | | | | | | | |
| Titanium | 10 | | .7 | | | | | | | | |
| Tungsten | 50 | | 1.8 | | | | | | | | |
| Vanadium | 50 | | .4 | anr | | | | | | | |
| Zinc | 20 | | .3 | 0.00 | <20 | 0.300 | <20 | 0.300 | <20 | 0.600 | <20 |

8.2.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

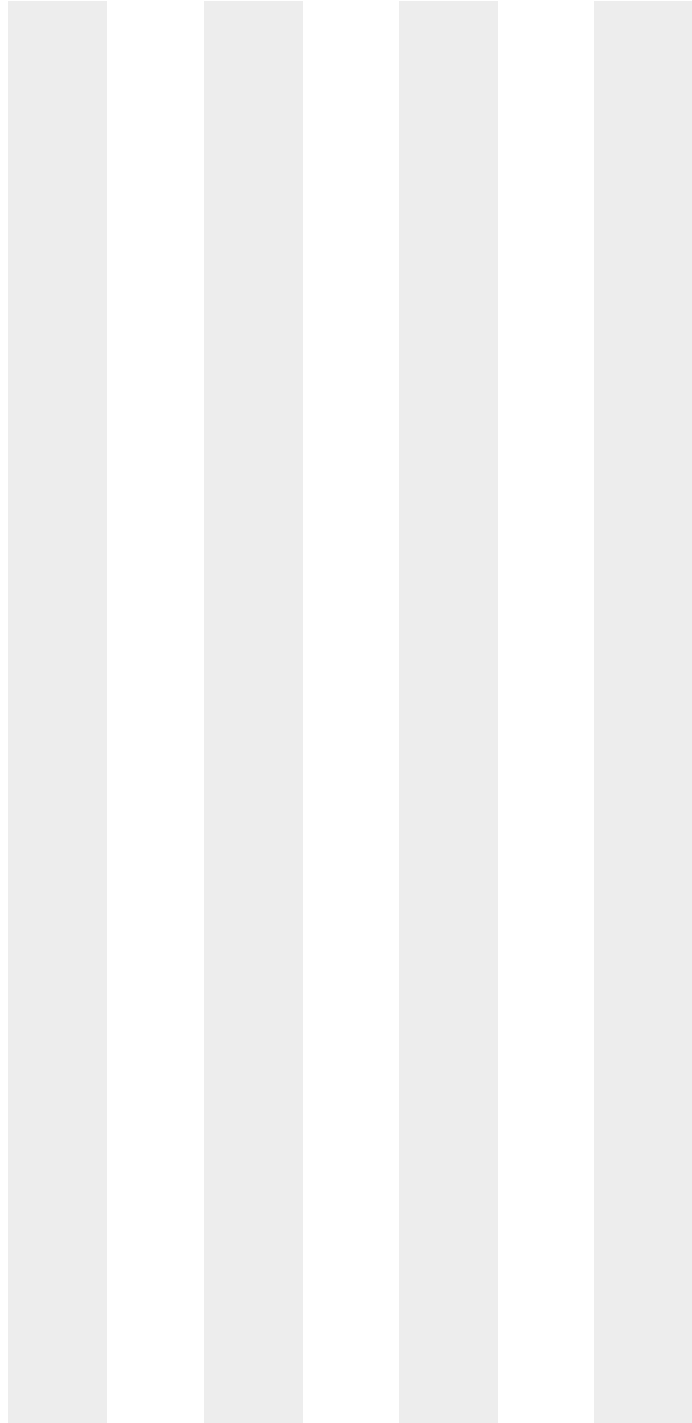
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Time: | | | 18:20 | | 18:34 | | 19:24 | | 20:14 | |
|------------|----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| Sample ID: | | | ICB1 | | CCB1 | | CCB2 | | CCB3 | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested



8.2.3
 8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Metal | RL | IDL | 21:01 CCB4 | | 21:48 CCB5 | | 22:34 CCB6 | | 23:21 CCB7 | |
|------------|-------|-----|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| | | | raw | final | raw | final | raw | final | raw | final |
| Aluminum | 200 | 34 | anr | | | | | | | |
| Antimony | 6.0 | 1.4 | anr | | | | | | | |
| Arsenic | 3.0 | 1.4 | 0.100 | <3.0 | -0.700 | <3.0 | 0.700 | <3.0 | 0.300 | <3.0 |
| Barium | 200 | .5 | 0.300 | <200 | 0.200 | <200 | 0.600 | <200 | 0.200 | <200 |
| Beryllium | 1.0 | .2 | 0.100 | <1.0 | 0.200 | <1.0 | 0.200 | <1.0 | 0.200 | <1.0 |
| Bismuth | 20 | 2.5 | | | | | | | | |
| Boron | 100 | 1.9 | 1.50 | <100 | 1.10 | <100 | 1.90 | <100 | 1.10 | <100 |
| Cadmium | 3.0 | .3 | anr | | | | | | | |
| Calcium | 5000 | 8.7 | anr | | | | | | | |
| Chromium | 10 | .6 | 0.500 | <10 | 0.900 | <10 | 0.700 | <10 | 0.300 | <10 |
| Cobalt | 50 | .5 | anr | | | | | | | |
| Copper | 10 | 1.2 | 0.900 | <10 | 1.00 | <10 | 0.600 | <10 | 0.400 | <10 |
| Iron | 100 | 4.6 | 6.90 | <100 | 7.30 | <100 | 7.20 | <100 | 8.30 | <100 |
| Lead | 3.0 | 1.4 | 0.700 | <3.0 | 0.200 | <3.0 | 0.900 | <3.0 | 1.30 | <3.0 |
| Lithium | 50 | 2.8 | | | | | | | | |
| Magnesium | 5000 | 33 | anr | | | | | | | |
| Manganese | 15 | .1 | 0.400 | <15 | 0.600 | <15 | 0.500 | <15 | 0.500 | <15 |
| Molybdenum | 20 | .4 | | | | | | | | |
| Nickel | 10 | .5 | 0.200 | <10 | 0.100 | <10 | 0.100 | <10 | 0.200 | <10 |
| Phosphorus | 50 | 1.7 | | | | | | | | |
| Potassium | 10000 | 68 | anr | | | | | | | |
| Selenium | 10 | 3.8 | 0.800 | <10 | 1.10 | <10 | -0.200 | <10 | 0.500 | <10 |
| Silicon | 200 | 2.1 | | | | | | | | |
| Silver | 10 | .5 | anr | | | | | | | |
| Sodium | 10000 | 15 | anr | | | | | | | |
| Strontium | 10 | .2 | | | | | | | | |
| Sulfur | 50 | 20 | | | | | | | | |
| Thallium | 2.0 | 1.6 | 1.00 | <2.0 | -0.800 | <2.0 | -0.100 | <2.0 | 1.00 | <2.0 |
| Tin | 10 | 1 | anr | | | | | | | |
| Titanium | 10 | .7 | | | | | | | | |
| Tungsten | 50 | 1.8 | | | | | | | | |
| Vanadium | 50 | .4 | anr | | | | | | | |
| Zinc | 20 | .3 | 0.500 | <20 | 0.600 | <20 | 0.600 | <20 | 0.400 | <20 |

8.2.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

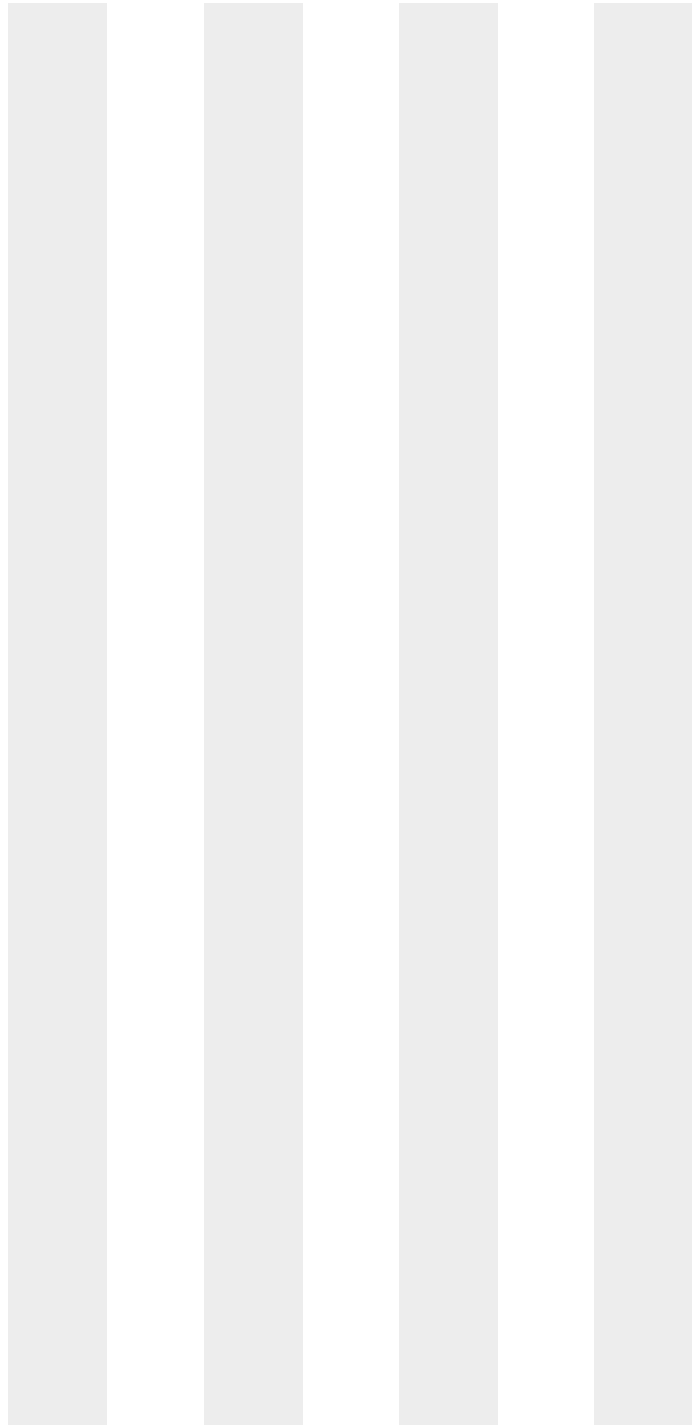
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Time: | | | 21:01 | | 21:48 | | 22:34 | | 23:21 | |
|------------|----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| Sample ID: | | | CCB4 | | CCB5 | | CCB6 | | CCB7 | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested



8.2.3
 8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Metal | Time: | | 00:00 | | 00:26 | | 01:27 | | 02:21 | | |
|------------|------------|-----|--------|------|-------|------|--------|-------|--------|-------|-------|
| | Sample ID: | RL | IDL | CCB8 | final | CCB9 | final | CCB10 | final | CCB11 | final |
| Aluminum | 200 | 34 | anr | | | | | | | | |
| Antimony | 6.0 | 1.4 | anr | | | | | | | | |
| Arsenic | 3.0 | 1.4 | -0.700 | <3.0 | 0.700 | <3.0 | -0.100 | <3.0 | -1.00 | <3.0 | |
| Barium | 200 | .5 | 0.100 | <200 | 0.300 | <200 | 0.200 | <200 | 0.300 | <200 | |
| Beryllium | 1.0 | .2 | -0.200 | <1.0 | 0.100 | <1.0 | 0.200 | <1.0 | -0.100 | <1.0 | |
| Bismuth | 20 | 2.5 | | | | | | | | | |
| Boron | 100 | 1.9 | 0.300 | <100 | 0.900 | <100 | 0.500 | <100 | 2.40 | <100 | |
| Cadmium | 3.0 | .3 | anr | | | | | | | | |
| Calcium | 5000 | 8.7 | anr | | | | | | | | |
| Chromium | 10 | .6 | 0.300 | <10 | 0.100 | <10 | 0.300 | <10 | 0.100 | <10 | |
| Cobalt | 50 | .5 | anr | | | | | | | | |
| Copper | 10 | 1.2 | 0.500 | <10 | 0.700 | <10 | 0.500 | <10 | 0.900 | <10 | |
| Iron | 100 | 4.6 | -1.50 | <100 | 10.1 | <100 | 6.80 | <100 | -1.40 | <100 | |
| Lead | 3.0 | 1.4 | -0.300 | <3.0 | 0.00 | <3.0 | 0.500 | <3.0 | -0.300 | <3.0 | |
| Lithium | 50 | 2.8 | | | | | | | | | |
| Magnesium | 5000 | 33 | anr | | | | | | | | |
| Manganese | 15 | .1 | 0.200 | <15 | 0.400 | <15 | 0.500 | <15 | 0.200 | <15 | |
| Molybdenum | 20 | .4 | | | | | | | | | |
| Nickel | 10 | .5 | 0.00 | <10 | 0.100 | <10 | 0.300 | <10 | 0.100 | <10 | |
| Phosphorus | 50 | 1.7 | | | | | | | | | |
| Potassium | 10000 | 68 | anr | | | | | | | | |
| Selenium | 10 | 3.8 | 0.200 | <10 | 1.40 | <10 | 0.800 | <10 | 1.20 | <10 | |
| Silicon | 200 | 2.1 | | | | | | | | | |
| Silver | 10 | .5 | anr | | | | | | | | |
| Sodium | 10000 | 15 | anr | | | | | | | | |
| Strontium | 10 | .2 | | | | | | | | | |
| Sulfur | 50 | 20 | | | | | | | | | |
| Thallium | 2.0 | 1.6 | 0.400 | <2.0 | 0.400 | <2.0 | 0.200 | <2.0 | 0.200 | <2.0 | |
| Tin | 10 | 1 | anr | | | | | | | | |
| Titanium | 10 | .7 | | | | | | | | | |
| Tungsten | 50 | 1.8 | | | | | | | | | |
| Vanadium | 50 | .4 | anr | | | | | | | | |
| Zinc | 20 | .3 | 0.100 | <20 | 0.500 | <20 | 0.600 | <20 | 0.00 | <20 | |

8.2.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

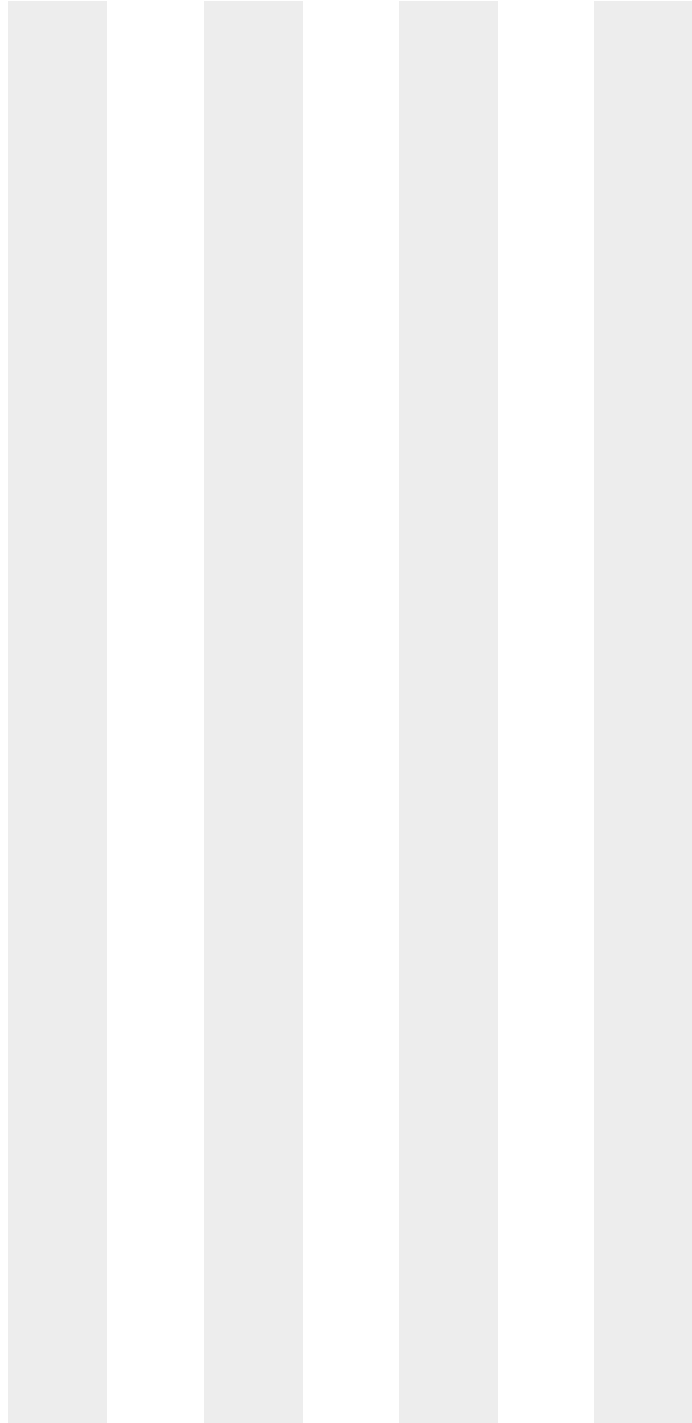
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Time: | | | 00:00 | | 00:26 | | 01:27 | | 02:21 | |
|------------|----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| Sample ID: | | | CCB8 | | CCB9 | | CCB10 | | CCB11 | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested



8.2.3
 8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Metal | RL | IDL | 03:15 CCB12 | | 04:05 CCB13 | | 04:52 CCB14 | | 05:38 CCB15 | |
|------------|-------|-----|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| | | | raw | final | raw | final | raw | final | raw | final |
| Aluminum | 200 | 34 | anr | | | | | | | |
| Antimony | 6.0 | 1.4 | anr | | | | | | | |
| Arsenic | 3.0 | 1.4 | 0.400 | <3.0 | -0.700 | <3.0 | -0.700 | <3.0 | -0.300 | <3.0 |
| Barium | 200 | .5 | 0.100 | <200 | 0.400 | <200 | 0.400 | <200 | 0.300 | <200 |
| Beryllium | 1.0 | .2 | -0.100 | <1.0 | -0.100 | <1.0 | 0.00 | <1.0 | 0.00 | <1.0 |
| Bismuth | 20 | 2.5 | | | | | | | | |
| Boron | 100 | 1.9 | 0.00 | <100 | 0.600 | <100 | 1.10 | <100 | 0.300 | <100 |
| Cadmium | 3.0 | .3 | anr | | | | | | | |
| Calcium | 5000 | 8.7 | anr | | | | | | | |
| Chromium | 10 | .6 | -0.200 | <10 | 0.500 | <10 | 0.200 | <10 | 0.00 | <10 |
| Cobalt | 50 | .5 | anr | | | | | | | |
| Copper | 10 | 1.2 | 0.100 | <10 | 0.300 | <10 | 0.200 | <10 | 0.500 | <10 |
| Iron | 100 | 4.6 | 2.10 | <100 | 3.00 | <100 | 6.70 | <100 | 5.20 | <100 |
| Lead | 3.0 | 1.4 | 0.700 | <3.0 | -0.100 | <3.0 | 0.200 | <3.0 | 0.500 | <3.0 |
| Lithium | 50 | 2.8 | | | | | | | | |
| Magnesium | 5000 | 33 | anr | | | | | | | |
| Manganese | 15 | .1 | 0.600 | <15 | 0.300 | <15 | 0.500 | <15 | 0.700 | <15 |
| Molybdenum | 20 | .4 | | | | | | | | |
| Nickel | 10 | .5 | -0.100 | <10 | -0.200 | <10 | 0.100 | <10 | 0.100 | <10 |
| Phosphorus | 50 | 1.7 | | | | | | | | |
| Potassium | 10000 | 68 | anr | | | | | | | |
| Selenium | 10 | 3.8 | 1.20 | <10 | 0.800 | <10 | -0.300 | <10 | 0.100 | <10 |
| Silicon | 200 | 2.1 | | | | | | | | |
| Silver | 10 | .5 | anr | | | | | | | |
| Sodium | 10000 | 15 | anr | | | | | | | |
| Strontium | 10 | .2 | | | | | | | | |
| Sulfur | 50 | 20 | | | | | | | | |
| Thallium | 2.0 | 1.6 | 0.00 | <2.0 | -1.20 | <2.0 | -0.100 | <2.0 | -1.00 | <2.0 |
| Tin | 10 | 1 | anr | | | | | | | |
| Titanium | 10 | .7 | | | | | | | | |
| Tungsten | 50 | 1.8 | | | | | | | | |
| Vanadium | 50 | .4 | anr | | | | | | | |
| Zinc | 20 | .3 | 0.200 | <20 | 0.100 | <20 | 0.100 | <20 | 0.400 | <20 |

8.2.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

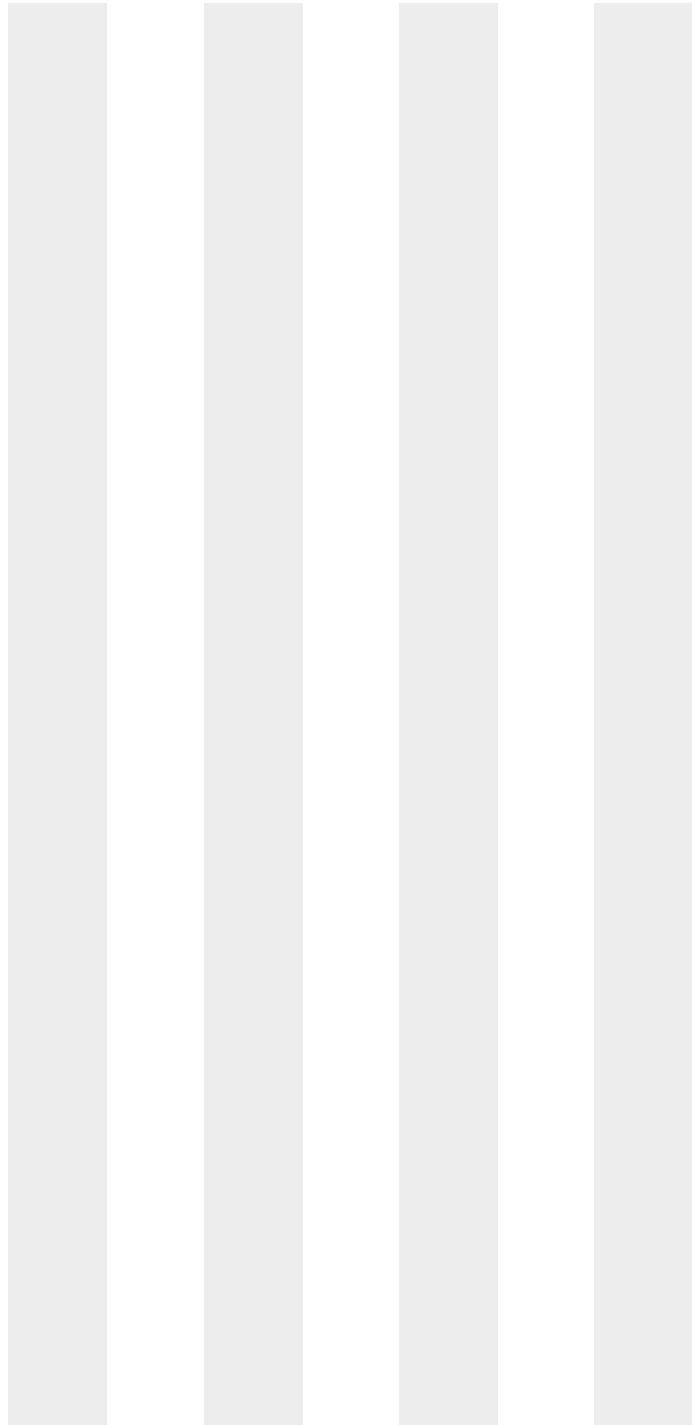
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Time: | 03:15 | 04:05 | 04:52 | 05:38 | | | | | | |
|------------|-------|-------|-------|-------|-----|-------|-----|-------|-----|-------|
| Sample ID: | CCB12 | CCB13 | CCB14 | CCB15 | | | | | | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested



8.2.3
 8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Metal | RL | IDL | 06:16 CCB16 | | 06:34 CCB17 | |
|------------|-------|-----|-------------|-------|-------------|-------|
| | | | raw | final | raw | final |
| Aluminum | 200 | 34 | anr | | | |
| Antimony | 6.0 | 1.4 | anr | | | |
| Arsenic | 3.0 | 1.4 | 0.200 | <3.0 | -0.400 | <3.0 |
| Barium | 200 | .5 | 0.300 | <200 | 0.400 | <200 |
| Beryllium | 1.0 | .2 | -0.100 | <1.0 | 0.00 | <1.0 |
| Bismuth | 20 | 2.5 | | | | |
| Boron | 100 | 1.9 | 0.200 | <100 | 1.20 | <100 |
| Cadmium | 3.0 | .3 | anr | | | |
| Calcium | 5000 | 8.7 | anr | | | |
| Chromium | 10 | .6 | 0.300 | <10 | 0.300 | <10 |
| Cobalt | 50 | .5 | anr | | | |
| Copper | 10 | 1.2 | 0.100 | <10 | 0.400 | <10 |
| Iron | 100 | 4.6 | 1.20 | <100 | 5.00 | <100 |
| Lead | 3.0 | 1.4 | 0.100 | <3.0 | 1.20 | <3.0 |
| Lithium | 50 | 2.8 | | | | |
| Magnesium | 5000 | 33 | anr | | | |
| Manganese | 15 | .1 | 0.500 | <15 | 0.500 | <15 |
| Molybdenum | 20 | .4 | | | | |
| Nickel | 10 | .5 | 0.100 | <10 | 0.100 | <10 |
| Phosphorus | 50 | 1.7 | | | | |
| Potassium | 10000 | 68 | anr | | | |
| Selenium | 10 | 3.8 | 1.90 | <10 | 0.300 | <10 |
| Silicon | 200 | 2.1 | | | | |
| Silver | 10 | .5 | anr | | | |
| Sodium | 10000 | 15 | anr | | | |
| Strontium | 10 | .2 | | | | |
| Sulfur | 50 | 20 | | | | |
| Thallium | 2.0 | 1.6 | -0.300 | <2.0 | 0.100 | <2.0 |
| Tin | 10 | 1 | anr | | | |
| Titanium | 10 | .7 | | | | |
| Tungsten | 50 | 1.8 | | | | |
| Vanadium | 50 | .4 | anr | | | |
| Zinc | 20 | .3 | 0.100 | <20 | 0.00 | <20 |

8.2.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44281 Units: ug/l

| Time: | 06:16 | 06:34 | | | | |
|------------|-------|-------|-----|-------|-----|-------|
| Sample ID: | CCB16 | CCB17 | | | | |
| Metal | RL | IDL | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 18:25 | | |
|------------|-------|---------|-------|
| Sample ID: | ICCV | ICCV1 | |
| Metal | True | Results | % Rec |
| Aluminum | anr | | |
| Antimony | anr | | |
| Arsenic | 2000 | 2000 | 100.0 |
| Barium | 2000 | 2040 | 102.0 |
| Beryllium | 2000 | 2050 | 102.5 |
| Bismuth | | | |
| Boron | 2000 | 2050 | 102.5 |
| Cadmium | anr | | |
| Calcium | anr | | |
| Chromium | 2000 | 2050 | 102.5 |
| Cobalt | anr | | |
| Copper | 2000 | 1990 | 99.5 |
| Iron | 40000 | 40800 | 102.0 |
| Lead | 2000 | 2050 | 102.5 |
| Lithium | | | |
| Magnesium | anr | | |
| Manganese | 2000 | 2060 | 103.0 |
| Molybdenum | | | |
| Nickel | 2000 | 2030 | 101.5 |
| Phosphorus | | | |
| Potassium | anr | | |
| Selenium | 2000 | 2020 | 101.0 |
| Silicon | | | |
| Silver | anr | | |
| Sodium | anr | | |
| Strontium | | | |
| Sulfur | | | |
| Thallium | 2000 | 2100 | 105.0 |
| Tin | anr | | |
| Titanium | | | |
| Tungsten | | | |
| Vanadium | anr | | |
| Zinc | 2000 | 2050 | 102.5 |

8.2.4
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | |
|------------|------------------------------|
| Time: | 18:25 |
| Sample ID: | ICCV ICCV1 |
| Metal | True Results % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested

8.2.4

8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Metal | Time: | 18:11 | | | 19:20 | | | 20:10 | | |
|------------|------------|-------|-------|-------|-------|-------|-------|---------|-------|--|
| | Sample ID: | ICV | ICV1 | CCV | CCV1 | CCV | CCV2 | Results | % Rec | |
| Aluminum | anr | | | | | | | | | |
| Antimony | anr | | | | | | | | | |
| Arsenic | 2000 | 1990 | 99.5 | 2000 | 1990 | 99.5 | 2000 | 1990 | 99.5 | |
| Barium | 2000 | 2040 | 102.0 | 2000 | 2040 | 102.0 | 2000 | 2030 | 101.5 | |
| Beryllium | 2000 | 2040 | 102.0 | 2000 | 2030 | 101.5 | 2000 | 2050 | 102.5 | |
| Bismuth | | | | | | | | | | |
| Boron | 2000 | 2040 | 102.0 | 2000 | 2020 | 101.0 | 2000 | 2030 | 101.5 | |
| Cadmium | anr | | | | | | | | | |
| Calcium | anr | | | | | | | | | |
| Chromium | 2000 | 2060 | 103.0 | 2000 | 2040 | 102.0 | 2000 | 2030 | 101.5 | |
| Cobalt | anr | | | | | | | | | |
| Copper | 2000 | 1990 | 99.5 | 2000 | 1980 | 99.0 | 2000 | 1990 | 99.5 | |
| Iron | 40000 | 40400 | 101.0 | 40000 | 40700 | 101.8 | 40000 | 40700 | 101.8 | |
| Lead | 2000 | 2050 | 102.5 | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | |
| Lithium | | | | | | | | | | |
| Magnesium | anr | | | | | | | | | |
| Manganese | 2000 | 2070 | 103.5 | 2000 | 2060 | 103.0 | 2000 | 2060 | 103.0 | |
| Molybdenum | | | | | | | | | | |
| Nickel | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | |
| Phosphorus | | | | | | | | | | |
| Potassium | anr | | | | | | | | | |
| Selenium | 2000 | 2020 | 101.0 | 2000 | 2000 | 100.0 | 2000 | 2000 | 100.0 | |
| Silicon | | | | | | | | | | |
| Silver | anr | | | | | | | | | |
| Sodium | anr | | | | | | | | | |
| Strontium | | | | | | | | | | |
| Sulfur | | | | | | | | | | |
| Thallium | 2000 | 2100 | 105.0 | 2000 | 2080 | 104.0 | 2000 | 2080 | 104.0 | |
| Tin | anr | | | | | | | | | |
| Titanium | | | | | | | | | | |
| Tungsten | | | | | | | | | | |
| Vanadium | anr | | | | | | | | | |
| Zinc | 2000 | 2050 | 102.5 | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | |

8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | Time: | | | | | | | | |
|------------|-------|---------|-------|------|---------|-------|------|---------|-------|
| Sample ID: | ICV | 18:11 | ICV1 | CCV | 19:20 | CCV1 | CCV | 20:10 | CCV2 |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Metal | Time: | 20:57 | | | 21:44 | | | 22:30 | | |
|------------|------------|---------|-------|-------|---------|-------|-------|---------|-------|------|
| | Sample ID: | CCV | CCV3 | CCV | CCV4 | CCV | CCV5 | CCV | CCV5 | CCV |
| | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec | True |
| Aluminum | anr | | | | | | | | | |
| Antimony | anr | | | | | | | | | |
| Arsenic | 2000 | 1980 | 99.0 | 2000 | 1960 | 98.0 | 2000 | 1940 | 97.0 | |
| Barium | 2000 | 2030 | 101.5 | 2000 | 2020 | 101.0 | 2000 | 2020 | 101.0 | |
| Beryllium | 2000 | 2040 | 102.0 | 2000 | 2030 | 101.5 | 2000 | 2020 | 101.0 | |
| Bismuth | | | | | | | | | | |
| Boron | 2000 | 2010 | 100.5 | 2000 | 1990 | 99.5 | 2000 | 1980 | 99.0 | |
| Cadmium | anr | | | | | | | | | |
| Calcium | anr | | | | | | | | | |
| Chromium | 2000 | 2020 | 101.0 | 2000 | 2000 | 100.0 | 2000 | 2020 | 101.0 | |
| Cobalt | anr | | | | | | | | | |
| Copper | 2000 | 1970 | 98.5 | 2000 | 1960 | 98.0 | 2000 | 1960 | 98.0 | |
| Iron | 40000 | 40700 | 101.8 | 40000 | 40500 | 101.3 | 40000 | 40400 | 101.0 | |
| Lead | 2000 | 2030 | 101.5 | 2000 | 2010 | 100.5 | 2000 | 2000 | 100.0 | |
| Lithium | | | | | | | | | | |
| Magnesium | anr | | | | | | | | | |
| Manganese | 2000 | 2050 | 102.5 | 2000 | 2040 | 102.0 | 2000 | 2050 | 102.5 | |
| Molybdenum | | | | | | | | | | |
| Nickel | 2000 | 2030 | 101.5 | 2000 | 2010 | 100.5 | 2000 | 2010 | 100.5 | |
| Phosphorus | | | | | | | | | | |
| Potassium | anr | | | | | | | | | |
| Selenium | 2000 | 1990 | 99.5 | 2000 | 1960 | 98.0 | 2000 | 1940 | 97.0 | |
| Silicon | | | | | | | | | | |
| Silver | anr | | | | | | | | | |
| Sodium | anr | | | | | | | | | |
| Strontium | | | | | | | | | | |
| Sulfur | | | | | | | | | | |
| Thallium | 2000 | 2080 | 104.0 | 2000 | 2050 | 102.5 | 2000 | 2040 | 102.0 | |
| Tin | anr | | | | | | | | | |
| Titanium | | | | | | | | | | |
| Tungsten | | | | | | | | | | |
| Vanadium | anr | | | | | | | | | |
| Zinc | 2000 | 2030 | 101.5 | 2000 | 2010 | 100.5 | 2000 | 2000 | 100.0 | |

8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | Time: | | | | 20:57 | | | 21:44 | | | 22:30 |
|------------|-------|---------|-------|------|---------|-------|------|---------|-------|--|-------|
| Sample ID: | CCV | CCV3 | CCV | CCV4 | CCV | CCV5 | | | | | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec | | |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 23:17 | | | 23:56 | | | 00:22 | | |
|------------|-------|---------|-------|-------|---------|-------|-------|---------|-------|
| Sample ID: | CCV | CCV6 | CCV | CCV7 | CCV | CCV8 | CCV | CCV8 | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |
| Aluminum | anr | | | | | | | | |
| Antimony | anr | | | | | | | | |
| Arsenic | 2000 | 1960 | 98.0 | 2000 | 1960 | 98.0 | 2000 | 1970 | 98.5 |
| Barium | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | 2000 | 2040 | 102.0 |
| Beryllium | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | 2000 | 2040 | 102.0 |
| Bismuth | | | | | | | | | |
| Boron | 2000 | 1990 | 99.5 | 2000 | 1990 | 99.5 | 2000 | 2000 | 100.0 |
| Cadmium | anr | | | | | | | | |
| Calcium | anr | | | | | | | | |
| Chromium | 2000 | 2020 | 101.0 | 2000 | 2010 | 100.5 | 2000 | 2030 | 101.5 |
| Cobalt | anr | | | | | | | | |
| Copper | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 |
| Iron | 40000 | 40600 | 101.5 | 40000 | 40400 | 101.0 | 40000 | 40500 | 101.3 |
| Lead | 2000 | 2010 | 100.5 | 2000 | 2010 | 100.5 | 2000 | 2020 | 101.0 |
| Lithium | | | | | | | | | |
| Magnesium | anr | | | | | | | | |
| Manganese | 2000 | 2060 | 103.0 | 2000 | 2050 | 102.5 | 2000 | 2060 | 103.0 |
| Molybdenum | | | | | | | | | |
| Nickel | 2000 | 2010 | 100.5 | 2000 | 2020 | 101.0 | 2000 | 2030 | 101.5 |
| Phosphorus | | | | | | | | | |
| Potassium | anr | | | | | | | | |
| Selenium | 2000 | 1960 | 98.0 | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 |
| Silicon | | | | | | | | | |
| Silver | anr | | | | | | | | |
| Sodium | anr | | | | | | | | |
| Strontium | | | | | | | | | |
| Sulfur | | | | | | | | | |
| Thallium | 2000 | 2050 | 102.5 | 2000 | 2050 | 102.5 | 2000 | 2050 | 102.5 |
| Tin | anr | | | | | | | | |
| Titanium | | | | | | | | | |
| Tungsten | | | | | | | | | |
| Vanadium | anr | | | | | | | | |
| Zinc | 2000 | 2000 | 100.0 | 2000 | 2010 | 100.5 | 2000 | 2010 | 100.5 |

8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | Time: | | | | 23:56 | | | 00:22 | | |
|-------|------------|------|---------|-------|-------|---------|-------|-------|---------|-------|
| | Sample ID: | CCV | 23:17 | CCV6 | CCV | 23:56 | CCV7 | CCV | 00:22 | CCV8 |
| Metal | | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Metal | Time: Sample ID: CCV | 01:23 | | | 02:16 | | | 03:10 | | |
|------------|-------------------------|-------|-----------------|-------|-------|------------------|-------|-------|------------------|-------|
| | | True | CCV9 Results | % Rec | True | CCV10 Results | % Rec | True | CCV11 Results | % Rec |
| Aluminum | anr | | | | | | | | | |
| Antimony | anr | | | | | | | | | |
| Arsenic | 2000 | 1940 | 97.0 | 2000 | 1940 | 97.0 | 2000 | 1950 | 97.5 | |
| Barium | 2000 | 2030 | 101.5 | 2000 | 2040 | 102.0 | 2000 | 2040 | 102.0 | |
| Beryllium | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | 2000 | 2030 | 101.5 | |
| Bismuth | | | | | | | | | | |
| Boron | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 | |
| Cadmium | anr | | | | | | | | | |
| Calcium | anr | | | | | | | | | |
| Chromium | 2000 | 2020 | 101.0 | 2000 | 2010 | 100.5 | 2000 | 2010 | 100.5 | |
| Cobalt | anr | | | | | | | | | |
| Copper | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 | |
| Iron | 40000 | 40300 | 100.8 | 40000 | 40300 | 100.8 | 40000 | 40300 | 100.8 | |
| Lead | 2000 | 1990 | 99.5 | 2000 | 1990 | 99.5 | 2000 | 2000 | 100.0 | |
| Lithium | | | | | | | | | | |
| Magnesium | anr | | | | | | | | | |
| Manganese | 2000 | 2060 | 103.0 | 2000 | 2060 | 103.0 | 2000 | 2060 | 103.0 | |
| Molybdenum | | | | | | | | | | |
| Nickel | 2000 | 2010 | 100.5 | 2000 | 2020 | 101.0 | 2000 | 2020 | 101.0 | |
| Phosphorus | | | | | | | | | | |
| Potassium | anr | | | | | | | | | |
| Selenium | 2000 | 1930 | 96.5 | 2000 | 1930 | 96.5 | 2000 | 1940 | 97.0 | |
| Silicon | | | | | | | | | | |
| Silver | anr | | | | | | | | | |
| Sodium | anr | | | | | | | | | |
| Strontium | | | | | | | | | | |
| Sulfur | | | | | | | | | | |
| Thallium | 2000 | 2020 | 101.0 | 2000 | 2020 | 101.0 | 2000 | 2020 | 101.0 | |
| Tin | anr | | | | | | | | | |
| Titanium | | | | | | | | | | |
| Tungsten | | | | | | | | | | |
| Vanadium | anr | | | | | | | | | |
| Zinc | 2000 | 1980 | 99.0 | 2000 | 1990 | 99.5 | 2000 | 1990 | 99.5 | |

8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | Time: | | | | | | | | |
|-------|------------|---------|---------------|------|----------------|-------|----------------|---------|-------|
| | Sample ID: | CCV | 01:23 CCV9 | CCV | 02:16 CCV10 | CCV | 03:10 CCV11 | | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Metal | Time: | 04:00 | | | 04:48 | | | 05:34 | | |
|------------|------------|---------|-------|-------|---------|-------|-------|---------|-------|------|
| | Sample ID: | CCV | CCV12 | CCV | CCV13 | CCV | CCV14 | CCV | CCV14 | CCV |
| | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec | True |
| Aluminum | anr | | | | | | | | | |
| Antimony | anr | | | | | | | | | |
| Arsenic | 2000 | 1930 | 96.5 | 2000 | 1930 | 96.5 | 2000 | 1950 | 97.5 | |
| Barium | 2000 | 2020 | 101.0 | 2000 | 2030 | 101.5 | 2000 | 2010 | 100.5 | |
| Beryllium | 2000 | 2010 | 100.5 | 2000 | 2030 | 101.5 | 2000 | 2010 | 100.5 | |
| Bismuth | | | | | | | | | | |
| Boron | 2000 | 1960 | 98.0 | 2000 | 1950 | 97.5 | 2000 | 1980 | 99.0 | |
| Cadmium | anr | | | | | | | | | |
| Calcium | anr | | | | | | | | | |
| Chromium | 2000 | 2000 | 100.0 | 2000 | 1990 | 99.5 | 2000 | 1970 | 98.5 | |
| Cobalt | anr | | | | | | | | | |
| Copper | 2000 | 1960 | 98.0 | 2000 | 1950 | 97.5 | 2000 | 1950 | 97.5 | |
| Iron | 40000 | 40000 | 100.0 | 40000 | 40300 | 100.8 | 40000 | 39900 | 99.8 | |
| Lead | 2000 | 1990 | 99.5 | 2000 | 1980 | 99.0 | 2000 | 2000 | 100.0 | |
| Lithium | | | | | | | | | | |
| Magnesium | anr | | | | | | | | | |
| Manganese | 2000 | 2050 | 102.5 | 2000 | 2040 | 102.0 | 2000 | 2030 | 101.5 | |
| Molybdenum | | | | | | | | | | |
| Nickel | 2000 | 2010 | 100.5 | 2000 | 2000 | 100.0 | 2000 | 2020 | 101.0 | |
| Phosphorus | | | | | | | | | | |
| Potassium | anr | | | | | | | | | |
| Selenium | 2000 | 1920 | 96.0 | 2000 | 1920 | 96.0 | 2000 | 1940 | 97.0 | |
| Silicon | | | | | | | | | | |
| Silver | anr | | | | | | | | | |
| Sodium | anr | | | | | | | | | |
| Strontium | | | | | | | | | | |
| Sulfur | | | | | | | | | | |
| Thallium | 2000 | 2010 | 100.5 | 2000 | 2000 | 100.0 | 2000 | 2030 | 101.5 | |
| Tin | anr | | | | | | | | | |
| Titanium | | | | | | | | | | |
| Tungsten | | | | | | | | | | |
| Vanadium | anr | | | | | | | | | |
| Zinc | 2000 | 1980 | 99.0 | 2000 | 1970 | 98.5 | 2000 | 1990 | 99.5 | |

8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

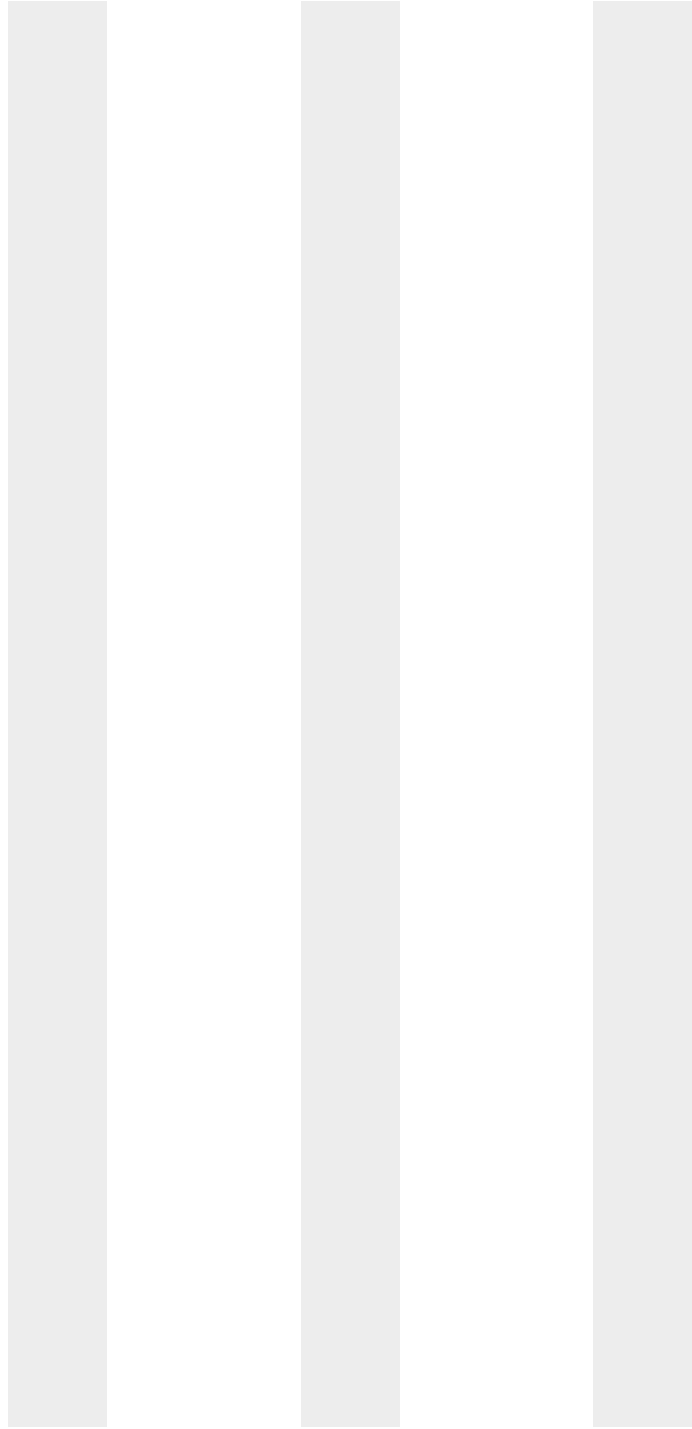
Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | Time: | 04:00 | | 04:48 | | 05:34 | |
|------------|-------|---------------|------|---------------|------|---------------|--|
| Sample ID: | CCV | CCV12 | CCV | CCV13 | CCV | CCV14 | |
| Metal | True | Results % Rec | True | Results % Rec | True | Results % Rec | |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| Metal | Sample ID: | Time: 06:12 | | Time: 06:30 | | |
|------------|------------|-------------|-------|-------------|---------|-------|
| | | CCV | CCV15 | CCV | CCV16 | |
| | True | Results | % Rec | True | Results | % Rec |
| Aluminum | anr | | | | | |
| Antimony | anr | | | | | |
| Arsenic | 2000 | 1910 | 95.5 | 2000 | 1930 | 96.5 |
| Barium | 2000 | 2020 | 101.0 | 2000 | 2010 | 100.5 |
| Beryllium | 2000 | 2020 | 101.0 | 2000 | 2010 | 100.5 |
| Bismuth | | | | | | |
| Boron | 2000 | 1940 | 97.0 | 2000 | 1960 | 98.0 |
| Cadmium | anr | | | | | |
| Calcium | anr | | | | | |
| Chromium | 2000 | 1980 | 99.0 | 2000 | 1990 | 99.5 |
| Cobalt | anr | | | | | |
| Copper | 2000 | 1950 | 97.5 | 2000 | 1940 | 97.0 |
| Iron | 40000 | 40300 | 100.8 | 40000 | 40100 | 100.3 |
| Lead | 2000 | 1970 | 98.5 | 2000 | 1990 | 99.5 |
| Lithium | | | | | | |
| Magnesium | anr | | | | | |
| Manganese | 2000 | 2040 | 102.0 | 2000 | 2040 | 102.0 |
| Molybdenum | | | | | | |
| Nickel | 2000 | 2000 | 100.0 | 2000 | 2010 | 100.5 |
| Phosphorus | | | | | | |
| Potassium | anr | | | | | |
| Selenium | 2000 | 1900 | 95.0 | 2000 | 1920 | 96.0 |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | anr | | | | | |
| Strontium | | | | | | |
| Sulfur | | | | | | |
| Thallium | 2000 | 2000 | 100.0 | 2000 | 2020 | 101.0 |
| Tin | anr | | | | | |
| Titanium | | | | | | |
| Tungsten | | | | | | |
| Vanadium | anr | | | | | |
| Zinc | 2000 | 1960 | 98.0 | 2000 | 1980 | 99.0 |

8.2.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44281 Units: ug/l

| | Time: | 06:12 | | 06:30 | |
|------------|-------|---------|-------|-------|---------------|
| Sample ID: | CCV | CCV15 | CCV | CCV16 | |
| Metal | True | Results | % Rec | True | Results % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.2.5
8

HIGH STANDARD CHECK SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 90 to 110 % Recovery Run ID: MA44281 Units: ug/l

| Metal | Time: 18:58 | | % Rec | Time: 19:02 | | % Rec |
|------------|-------------|-------|-------|-------------|--------|-------|
| | HSTD | HSTD1 | | HSTD | HSTD2 | |
| Aluminum | | | | | | |
| Antimony | anr | | | | | |
| Arsenic | 5000 | 4980 | 99.6 | | | |
| Barium | 5000 | 5190 | 103.8 | | | |
| Beryllium | 5000 | 5210 | 104.2 | | | |
| Bismuth | | | | | | |
| Boron | 5000 | 5160 | 103.2 | | | |
| Cadmium | anr | | | | | |
| Calcium | | | | | | |
| Chromium | 5000 | 5260 | 105.2 | | | |
| Cobalt | anr | | | | | |
| Copper | 5000 | 5260 | 105.2 | | | |
| Iron | | | | 150000 | 150000 | 100.0 |
| Lead | 5000 | 5130 | 102.6 | | | |
| Lithium | | | | | | |
| Magnesium | | | | | | |
| Manganese | 5000 | 5270 | 105.4 | | | |
| Molybdenum | | | | | | |
| Nickel | 5000 | 5050 | 101.0 | | | |
| Phosphorus | | | | | | |
| Potassium | | | | | | |
| Selenium | 5000 | 5100 | 102.0 | | | |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | | | | | | |
| Strontium | | | | | | |
| Sulfur | | | | | | |
| Thallium | 5000 | 5420 | 108.4 | | | |
| Tin | anr | | | | | |
| Titanium | | | | | | |
| Tungsten | | | | | | |
| Vanadium | anr | | | | | |
| Zinc | 5000 | 5250 | 105.0 | | | |

8.2.6
8

HIGH STANDARD CHECK SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 90 to 110 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 18:58 | 19:02 |
|------------|--------------------|--------------------|
| Sample ID: | HSTD HSTD1 | HSTD HSTD2 |
| Metal | True Results % Rec | True Results % Rec |

Zirconium
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.6
 8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 18:41 | 18:45 | 00:05 | | | | | | |
|------------|-------|-------|-------|---------|-------|---------|-------|---------|-------|
| Sample ID: | CRI | CRIA | CRID | CR11 | % Rec | CRID1 | % Rec | CR12 | % Rec |
| Metal | True | True | True | Results | % Rec | Results | % Rec | Results | % Rec |
| Aluminum | 200 | 500 | 100 | anr | | | | | |
| Antimony | 6.0 | 20 | 3.0 | anr | | | | | |
| Arsenic | 8.0 | 20 | 3.0 | 7.60 | 95.0 | 2.90 | 96.7 | 7.70 | 96.3 |
| Barium | 200 | | 4.0 | 215 | 107.5 | 4.50 | 112.5 | 215 | 107.5 |
| Beryllium | 2.0 | | 1.0 | 2.10 | 105.0 | 1.10 | 110.0 | 2.10 | 105.0 |
| Bismuth | 20 | | | | | | | | |
| Boron | 100 | | 10 | 108 | 108.0 | | | 105 | 105.0 |
| Cadmium | 3.0 | | 1.0 | anr | | | | | |
| Calcium | 5000 | 2000 | 1000 | anr | | | | | |
| Chromium | 10 | | 2.0 | 11.1 | 111.0 | 2.40 | 120.0 | 11.1 | 111.0 |
| Cobalt | 50 | | 3.0 | anr | | | | | |
| Copper | 10 | | 2.0 | 10.8 | 108.0 | | | 10.8 | 108.0 |
| Iron | 100 | 500 | | 112 | 112.0 | | | 112 | 112.0 |
| Lead | 3.0 | 20 | 2.5 | 2.50 | 83.3 | | | 2.70 | 90.0 |
| Lithium | 50 | | | | | | | | |
| Magnesium | 5000 | 2000 | 100 | anr | | | | | |
| Manganese | 15 | | 3.0 | 17.0 | 113.3 | 3.60 | 120.0 | 17.2 | 114.7 |
| Molybdenum | 20 | | | | | | | | |
| Nickel | 10 | | 4.0 | 10.5 | 105.0 | 4.60 | 115.0 | 10.7 | 107.0 |
| Phosphorus | 50 | | | | | | | | |
| Potassium | 5000 | | 2000 | anr | | | | | |
| Selenium | 10 | 20 | 5.0 | 12.3 | 123.0 | 5.20 | 104.0 | 11.1 | 111.0 |
| Silicon | 200 | | | | | | | | |
| Silver | 5.0 | | 2.0 | anr | | | | | |
| Sodium | 5000 | | 1000 | anr | | | | | |
| Strontium | 10 | | | | | | | | |
| Sulfur | 50 | | | | | | | | |
| Thallium | 10 | | 2.0 | 9.30 | 93.0 | 2.50 | 125.0 | 9.60 | 96.0 |
| Tin | 10 | | | anr | | | | | |
| Titanium | 10 | | | | | | | | |
| Tungsten | 50 | | | | | | | | |
| Vanadium | 50 | | 2.0 | anr | | | | | |
| Zinc | 20 | | 10 | 22.7 | 113.5 | 11.7 | 117.0 | 22.4 | 112.0 |

8.2.7
8

LOW CALIBRATION CHECK STANDARDS SUMMARY

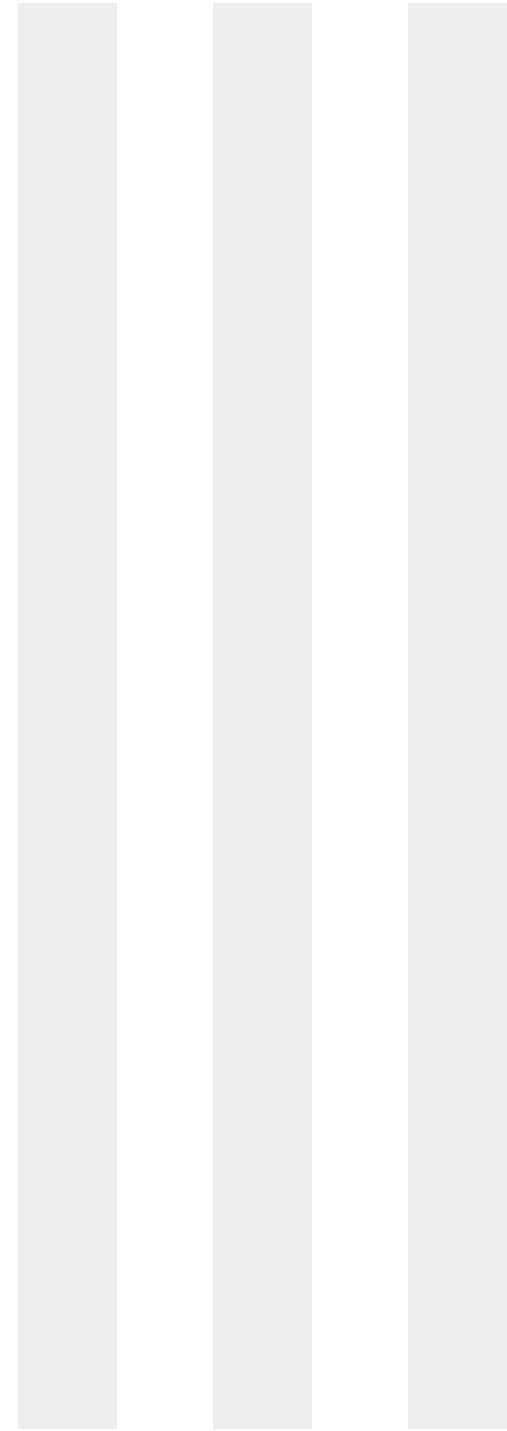
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44281 Units: ug/l

| Time: | | | | 18:41 | | | 18:45 | | | 00:05 |
|------------|------|------|------|---------|-------|---------|-------|---------|-------|-------|
| Sample ID: | CRI | CRIA | CRID | CR11 | | CRID1 | | CR12 | | |
| Metal | True | True | True | Results | % Rec | Results | % Rec | Results | % Rec | |

Zirconium 10

(*) Outside of QC limits
 (anr) Analyte not requested



8.2.7
 8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 00:09 | 06:21 | 06:25 | | | | | | |
|------------|-------|-------|-------|---------|-------|---------|-------|---------|-------|
| Sample ID: | CRID2 | CRI3 | CRID3 | Results | % Rec | Results | % Rec | Results | % Rec |
| Metal | True | True | True | | | | | | |
| Aluminum | 200 | 500 | 100 | anr | | | | | |
| Antimony | 6.0 | 20 | 3.0 | | | | | | |
| Arsenic | 8.0 | 20 | 3.0 | 2.60 | 86.7 | 8.60 | 107.5 | 2.70 | 90.0 |
| Barium | 200 | | 4.0 | 4.50 | 112.5 | 215 | 107.5 | 4.70 | 117.5 |
| Beryllium | 2.0 | | 1.0 | 1.00 | 100.0 | 2.10 | 105.0 | 1.00 | 100.0 |
| Bismuth | 20 | | | | | | | | |
| Boron | 100 | | 10 | | | 103 | 103.0 | | |
| Cadmium | 3.0 | | 1.0 | anr | | | | | |
| Calcium | 5000 | 2000 | 1000 | anr | | | | | |
| Chromium | 10 | | 2.0 | 2.60 | 130.0 | 10.9 | 109.0 | 2.40 | 120.0 |
| Cobalt | 50 | | 3.0 | anr | | | | | |
| Copper | 10 | | 2.0 | | | 10.2 | 102.0 | | |
| Iron | 100 | 500 | | | | 114 | 114.0 | | |
| Lead | 3.0 | 20 | 2.5 | | | 3.40 | 113.3 | | |
| Lithium | 50 | | | | | | | | |
| Magnesium | 5000 | 2000 | 100 | anr | | | | | |
| Manganese | 15 | | 3.0 | 3.60 | 120.0 | 17.5 | 116.7 | 3.90 | 130.0 |
| Molybdenum | 20 | | | | | | | | |
| Nickel | 10 | | 4.0 | 4.30 | 107.5 | 10.8 | 108.0 | 4.30 | 107.5 |
| Phosphorus | 50 | | | | | | | | |
| Potassium | 5000 | | 2000 | anr | | | | | |
| Selenium | 10 | 20 | 5.0 | 6.50 | 130.0 | 10.9 | 109.0 | 5.20 | 104.0 |
| Silicon | 200 | | | | | | | | |
| Silver | 5.0 | | 2.0 | | | | | | |
| Sodium | 5000 | | 1000 | anr | | | | | |
| Strontium | 10 | | | | | | | | |
| Sulfur | 50 | | | | | | | | |
| Thallium | 10 | | 2.0 | 1.80 | 90.0 | 9.50 | 95.0 | 1.40 | 70.0 |
| Tin | 10 | | | | | | | | |
| Titanium | 10 | | | | | | | | |
| Tungsten | 50 | | | | | | | | |
| Vanadium | 50 | | 2.0 | anr | | | | | |
| Zinc | 20 | | 10 | 11.6 | 116.0 | 21.9 | 109.5 | 11.6 | 116.0 |

8.2.7
8

LOW CALIBRATION CHECK STANDARDS SUMMARY

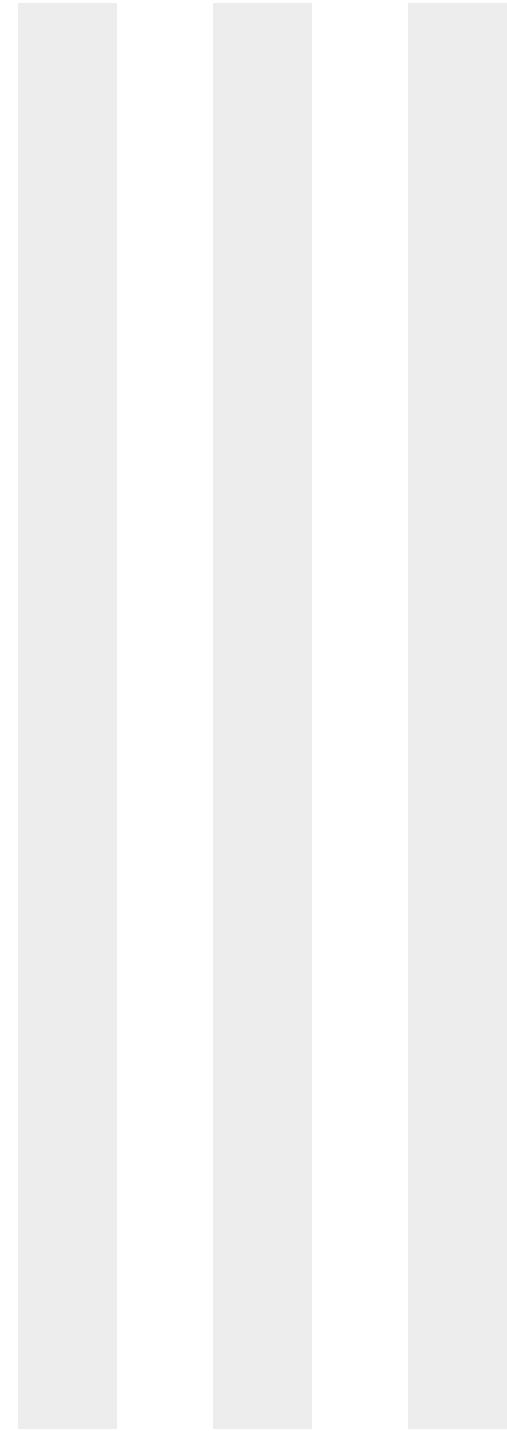
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 00:09 | | 06:21 | | 06:25 | | | | |
|------------|-------|------|-------|---------|-------|---------|-------|---------|-------|
| Sample ID: | CRI | CRIA | CRID | CRID2 | CRI3 | CRID3 | | | |
| Metal | True | True | True | Results | % Rec | Results | % Rec | Results | % Rec |

Zirconium 10

(*) Outside of QC limits
 (anr) Analyte not requested



8.2.7
 8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA44281 Units: ug/l

| Time: | 18:49 | | 18:54 | | 00:13 | | 00:18 | | | |
|------------|--------|--------|---------|-------|---------|-------|---------|-------|---------|-------|
| Sample ID: | ICSA | ICSAB | ICSAL | % Rec | ICSAB1 | % Rec | ICSA2 | % Rec | ICSAB2 | % Rec |
| Metal | True | True | Results | | Results | | Results | | Results | |
| Aluminum | 500000 | 500000 | 533000 | 106.6 | 515000 | 103.0 | 533000 | 106.6 | 517000 | 103.4 |
| Antimony | | 1000 | -3.30 | | 1030 | 103.0 | -3.80 | | 1010 | 101.0 |
| Arsenic | | 1000 | -1.10 | | 1010 | 101.0 | -2.10 | | 990 | 99.0 |
| Barium | | 500 | -0.300 | | 522 | 104.4 | 0.200 | | 516 | 103.2 |
| Beryllium | | 500 | 0.200 | | 505 | 101.0 | 0.200 | | 499 | 99.8 |
| Bismuth | | 500 | -1.90 | | 534 | 106.8 | -4.40 | | 521 | 104.2 |
| Boron | | 500 | -2.00 | | 494 | 98.8 | -2.30 | | 482 | 96.4 |
| Cadmium | | 1000 | 0.700 | | 1030 | 103.0 | 0.200 | | 1010 | 101.0 |
| Calcium | 400000 | 400000 | 399000 | 99.8 | 392000 | 98.0 | 396000 | 99.0 | 387000 | 96.8 |
| Chromium | | 500 | -1.50 | | 491 | 98.2 | -1.70 | | 486 | 97.2 |
| Cobalt | | 500 | 0.600 | | 495 | 99.0 | 0.200 | | 487 | 97.4 |
| Copper | | 500 | 3.10 | | 514 | 102.8 | 3.60 | | 507 | 101.4 |
| Iron | 200000 | 200000 | 190000 | 95.0 | 185000 | 92.5 | 190000 | 95.0 | 183000 | 91.5 |
| Lead | | 1000 | 5.00 | | 984 | 98.4 | 4.20 | | 969 | 96.9 |
| Lithium | | 500 | 2.10 | | 538 | 107.6 | 2.30 | | 528 | 105.6 |
| Magnesium | 500000 | 500000 | 513000 | 102.6 | 510000 | 102.0 | 519000 | 103.8 | 509000 | 101.8 |
| Manganese | | 500 | 0.100 | | 507 | 101.4 | -0.200 | | 504 | 100.8 |
| Molybdenum | | 500 | -1.90 | | 488 | 97.6 | -1.80 | | 482 | 96.4 |
| Nickel | | 1000 | -0.400 | | 991 | 99.1 | -1.00 | | 983 | 98.3 |
| Phosphorus | | 500 | -2.40 | | 504 | 100.8 | -0.600 | | 496 | 99.2 |
| Potassium | | | -463 | | -476 | | -491 | | -491 | |
| Selenium | | 1000 | -3.20 | | 979 | 97.9 | -4.30 | | 947 | 94.7 |
| Silicon | | 500 | -6.60 | | 521 | 104.2 | -8.40 | | 508 | 101.6 |
| Silver | | 1000 | 2.20 | | 1070 | 107.0 | 1.50 | | 1050 | 105.0 |
| Sodium | | | -20.4 | | -11.7 | | 9.50 | | 11.4 | |
| Strontium | | 500 | 5.00 | | 561 | 112.2 | 5.10 | | 555 | 111.0 |
| Sulfur | | 500 | 50.0 | | 543 | 108.6 | 53.6 | | 539 | 107.8 |
| Thallium | | 1000 | 1.70 | | 1090 | 109.0 | 3.00 | | 1060 | 106.0 |
| Tin | | 500 | -2.40 | | 458 | 91.6 | -1.30 | | 450 | 90.0 |
| Titanium | | 500 | -0.400 | | 504 | 100.8 | -0.600 | | 501 | 100.2 |
| Tungsten | | 500 | 9.40 | | 478 | 95.6 | 10.1 | | 472 | 94.4 |
| Vanadium | | 500 | -0.600 | | 497 | 99.4 | -0.300 | | 494 | 98.8 |
| Zinc | | 1000 | 3.10 | | 967 | 96.7 | 2.80 | | 950 | 95.0 |

82.8
8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
 Part 1 - ICSA and ICSAB Standards

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042518M2.ICP Date Analyzed: 04/25/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 80 to 120 % Recovery Run ID: MA44281 Units: ug/l

| Time: | | | 18:49 | | | 18:54 | | | 00:13 | | | 00:18 |
|------------|------|-------|---------|-------|---------|-------|---------|-------|---------|-------|--|-------|
| Sample ID: | ICSA | ICSAB | ICSAB1 | % Rec | ICSAB1 | % Rec | ICSAB2 | % Rec | ICSAB2 | % Rec | | |
| Metal | True | True | Results | % Rec | Results | % Rec | Results | % Rec | Results | % Rec | | |

| | | | | | | | | | | |
|-----------|--|-----|------|--|-----|------|------|--|-----|------|
| Zirconium | | 500 | 2.90 | | 477 | 95.4 | 2.60 | | 473 | 94.6 |
|-----------|--|-----|------|--|-----|------|------|--|-----|------|

(*) Outside of QC limits
 (anr) Analyte not requested

8.2.8

8

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA44289
Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 10:02 | MA44289-STD1 | 1 | | STDA |
| 10:06 | MA44289-STD2 | 1 | | STDB |
| 10:10 | ZZZZZZ | 1 | | |
| 10:14 | ZZZZZZ | 1 | | |
| 10:23 | MA44289-ICV1 | 1 | | |
| 10:30 | MA44289-ICB1 | 1 | | |
| 10:34 | MA44289-ICCV1 | 1 | | |
| 10:47 | MA44289-CCB1 | 1 | | |
| 10:55 | MA44289-CRI1 | 1 | | |
| 10:59 | MA44289-CRID1 | 1 | | |
| 11:03 | MA44289-ICSA1 | 1 | | |
| 11:08 | MA44289-ICSAB1 | 1 | | |
| 11:12 | MA44289-HSTD1 | 1 | | |
| 11:16 | MA44289-HSTD2 | 1 | | |
| 11:21 | ZZZZZZ | 1 | | |
| 11:25 | ZZZZZZ | 1 | | |
| 11:29 | ZZZZZZ | 1 | | |
| 11:34 | MA44289-CCV1 | 1 | | |
| 11:41 | MA44289-CCB2 | 1 | | |
| 11:47 | ZZZZZZ | 1 | | |
| 11:51 | ZZZZZZ | 1 | | |
| 11:55 | MP6784-PS1 | 1 | | |
| 11:59 | ZZZZZZ | 1 | | |
| 12:04 | ZZZZZZ | 25 | | |
| 12:08 | MP6797-MB1 | 1 | | |
| 12:12 | MP6797-B1 | 1 | | |
| 12:16 | MP6797-S1 | 1 | | |
| 12:20 | MP6797-S2 | 1 | | |
| 12:24 | MA44289-CCV2 | 1 | | |
| 12:28 | MA44289-CCB3 | 1 | | |
| 12:33 | JC64728-2F | 1 | | (sample used for QC only; not part of login JC64700) |
| 12:37 | MP6797-SD1 | 5 | | |
| 12:41 | ZZZZZZ | 1 | | |



SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA44289
Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|--------|---|-----------------|----------|--|
| 12:46 | ZZZZZZ | 1 | | |
| 12:50 | ZZZZZZ | 1 | | |
| 12:54 | ZZZZZZ | 1 | | |
| 12:58 | MP6809-S1 | 2 | | |
| 13:02 | MP6809-S2 | 2 | | |
| 13:06 | JC64764-5 | 2 | | (sample used for QC only; not part of login JC64700) |
| 13:10 | MA44289-CCV3 | 1 | | |
| 13:16 | MA44289-CCB4 | 1 | | |
| 13:20 | MP6809-SD1 | 10 | | |
| 13:24 | JC64700-2 | 3 | | |
| -----> | Last reportable sample/prep for job JC64700 | | | |
| 13:29 | ZZZZZZ | 3 | | |
| 13:33 | ZZZZZZ | 1 | | |
| 13:37 | ZZZZZZ | 2 | | |
| 13:42 | ZZZZZZ | 2 | | |
| 13:46 | ZZZZZZ | 5 | | |
| 13:50 | ZZZZZZ | 1 | | |
| 13:55 | ZZZZZZ | 5 | | |
| 13:59 | MA44289-CCV4 | 1 | | |
| 14:03 | MA44289-CCB5 | 1 | | |
| 14:07 | ZZZZZZ | 25 | | |
| 14:13 | MA44289-CCV5 | 1 | | |
| 14:17 | MA44289-CCB6 | 1 | | |
| 14:21 | ZZZZZZ | 5 | | |
| 14:26 | ZZZZZZ | 10 | | |
| 14:30 | ZZZZZZ | 2 | | |
| 14:34 | ZZZZZZ | 5 | | |
| 14:38 | ZZZZZZ | 1 | | |
| 14:43 | ZZZZZZ | 1 | | |
| 14:47 | ZZZZZZ | 2 | | |
| 14:51 | ZZZZZZ | 3 | | |
| 14:58 | MA44289-CCV6 | 1 | | |
| 15:03 | MA44289-CCB7 | 1 | | |
| 15:10 | MA44289-CRI2 | 1 | | |



SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
Analyst: EAL Run ID: MA44289
Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|--------|-------------------------------------|-----------------|----------|----------|
| 15:14 | MA44289-CRID2 | 1 | | |
| 15:19 | MA44289-ICSA2 | 1 | | |
| 15:23 | MA44289-ICSAB2 | 1 | | |
| 15:27 | MA44289-CCV7 | 1 | | |
| 15:31 | MA44289-CCB8 | 1 | | |
| -----> | Last reportable CCB for job JC64700 | | | |
| 15:36 | ZZZZZ | 1 | | |
| 15:40 | ZZZZZ | 1 | | |
| 15:44 | ZZZZZ | 1 | | |
| 15:49 | ZZZZZ | 1 | | |
| 15:53 | ZZZZZ | 1 | | |
| 15:57 | ZZZZZ | 1 | | |
| 16:02 | MA44289-CCV8 | 1 | | |
| 16:06 | MA44289-CCB9 | 1 | | |

Refer to raw data for calibration curve and standards.



REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 Analyst: EAL Run ID: MA44289
 Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Element: Dilution | P b | M n | S e | T l |
|-------|--------------------|-------------------|--------|--------|--------|--------|
| 10:10 | ZZZZZZ | 1 | | | | |
| 10:14 | ZZZZZZ | 1 | | | | |
| 10:23 | MA44289-ICV1 | 1 | X | X | X | X |
| 10:30 | MA44289-ICB1 | 1 | X | X | X | X |
| 10:34 | MA44289-ICCV1 | 1 | X | X | X | X |
| 10:47 | MA44289-CCB1 | 1 | X | X | X | X |
| 10:55 | MA44289-CRI1 | 1 | X | X | X | X |
| 10:59 | MA44289-CRID1 | 1 | X | X | X | X |
| 11:03 | MA44289-ICSA1 | 1 | X | X | X | X |
| 11:08 | MA44289-ICSAB1 | 1 | X | X | X | X |
| 11:12 | MA44289-HSTD1 | 1 | X | X | X | X |
| 11:16 | MA44289-HSTD2 | 1 | | | | |
| 11:21 | ZZZZZZ | 1 | | | | |
| 11:25 | ZZZZZZ | 1 | | | | |
| 11:29 | ZZZZZZ | 1 | | | | |
| 11:34 | MA44289-CCV1 | 1 | X | X | X | X |
| 11:41 | MA44289-CCB2 | 1 | X | X | X | X |
| 11:47 | ZZZZZZ | 1 | | | | |
| 11:51 | ZZZZZZ | 1 | | | | |
| 11:55 | MP6784-PS1 | 1 | | | | |
| 11:59 | ZZZZZZ | 1 | | | | |
| 12:04 | ZZZZZZ | 25 | | | | |
| 12:08 | MP6797-MB1 | 1 | | | | |
| 12:12 | MP6797-B1 | 1 | | | | |
| 12:16 | MP6797-S1 | 1 | | | | |
| 12:20 | MP6797-S2 | 1 | | | | |
| 12:24 | MA44289-CCV2 | 1 | X | X | X | X |
| 12:28 | MA44289-CCB3 | 1 | X | X | X | X |
| 12:33 | JC64728-2F | 1 | | | | (a) |
| 12:37 | MP6797-SD1 | 5 | | | | |
| 12:41 | ZZZZZZ | 1 | | | | |
| 12:46 | ZZZZZZ | 1 | | | | |
| 12:50 | ZZZZZZ | 1 | | | | |

8.3.1
8

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 Analyst: EAL Run ID: MA44289
 Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Element: Dilution | P b | M n | S e | T l |
|-------|--------------------|-------------------|--------|--------|--------|--------|
| 12:54 | ZZZZZZ | 1 | | | | |
| 12:58 | MP6809-S1 | 2 | | | | |
| 13:02 | MP6809-S2 | 2 | | | | |
| 13:06 | JC64764-5 | 2 | | | | (a) |
| 13:10 | MA44289-CCV3 | 1 | X | X | X | X |
| 13:16 | MA44289-CCB4 | 1 | X | X | X | X |
| 13:20 | MP6809-SD1 | 10 | | | | |
| 13:24 | JC64700-2 | 3 | X | X | X | X |
| 13:29 | ZZZZZZ | 3 | | | | |
| 13:33 | ZZZZZZ | 1 | | | | |
| 13:37 | ZZZZZZ | 2 | | | | |
| 13:42 | ZZZZZZ | 2 | | | | |
| 13:46 | ZZZZZZ | 5 | | | | |
| 13:50 | ZZZZZZ | 1 | | | | |
| 13:55 | ZZZZZZ | 5 | | | | |
| 13:59 | MA44289-CCV4 | 1 | X | X | X | X |
| 14:03 | MA44289-CCB5 | 1 | X | X | X | X |
| 14:07 | ZZZZZZ | 25 | | | | |
| 14:13 | MA44289-CCV5 | 1 | X | X | X | X |
| 14:17 | MA44289-CCB6 | 1 | X | X | X | X |
| 14:21 | ZZZZZZ | 5 | | | | |
| 14:26 | ZZZZZZ | 10 | | | | |
| 14:30 | ZZZZZZ | 2 | | | | |
| 14:34 | ZZZZZZ | 5 | | | | |
| 14:38 | ZZZZZZ | 1 | | | | |
| 14:43 | ZZZZZZ | 1 | | | | |
| 14:47 | ZZZZZZ | 2 | | | | |
| 14:51 | ZZZZZZ | 3 | | | | |
| 14:58 | MA44289-CCV6 | 1 | X | X | X | X |
| 15:03 | MA44289-CCB7 | 1 | X | X | X | X |
| 15:10 | MA44289-CRI2 | 1 | X | X | X | X |
| 15:14 | MA44289-CRID2 | 1 | X | X | X | X |
| 15:19 | MA44289-ICSA2 | 1 | X | X | X | X |

Element: P M S T
 b n e l

REPORTED ELEMENTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 Analyst: EAL Run ID: MA44289
 Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Element: Dilution | P b | M n | S e | T l |
|-------|--------------------|-------------------|--------|--------|--------|--------|
| 15:23 | MA44289-ICSAB2 | 1 | X | X | X | X |
| 15:27 | MA44289-CCV7 | 1 | X | X | X | X |
| 15:31 | MA44289-CCB8 | 1 | X | X | X | X |
| 15:36 | ZZZZZZ | 1 | | | | |
| 15:40 | ZZZZZZ | 1 | | | | |
| 15:44 | ZZZZZZ | 1 | | | | |
| 15:49 | ZZZZZZ | 1 | | | | |
| 15:53 | ZZZZZZ | 1 | | | | |
| 15:57 | ZZZZZZ | 1 | | | | |
| 16:02 | MA44289-CCV8 | 1 | X | X | X | X |
| 16:06 | MA44289-CCB9 | 1 | X | X | X | X |

(a) Sample used for QC only; not part of login JC64700.

Element: P M S T
 b n e l

8.3.1
 8

INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 Analyst: EAL Run ID: MA44289
 Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|---------|---------|--------|
| 10:02 | MA44289-STD1 | 3155 R | 91835 R | 12173 R | 7418 R |
| 10:06 | MA44289-STD2 | 2980 | 86395 | 12159 | 6442 |
| 10:10 | ZZZZZZ | 3081 | 88930 | 12270 | 6742 |
| 10:14 | ZZZZZZ | 3219 | 94130 | 12457 | 7561 |
| 10:23 | MA44289-ICV1 | 3113 | 90206 | 12441 | 6812 |
| 10:30 | MA44289-ICB1 | 3267 | 96139 | 12659 | 7671 |
| 10:34 | MA44289-ICCV1 | 3144 | 91039 | 12488 | 6875 |
| 10:47 | MA44289-CCB1 | 3307 | 96902 | 12658 | 7749 |
| 10:55 | MA44289-CRI1 | 3275 | 96058 | 12721 | 7591 |
| 10:59 | MA44289-CRID1 | 3299 | 96809 | 12762 | 7723 |
| 11:03 | MA44289-ICSA1 | 2908 | 84463 | 12181 | 6074 |
| 11:08 | MA44289-ICSAB1 | 2920 | 84664 | 12290 | 6099 |
| 11:12 | MA44289-HSTD1 | 3270 | 96550 | 12888 | 7561 |
| 11:16 | MA44289-HSTD2 | 2989 | 86680 | 12456 | 6206 |
| 11:21 | ZZZZZZ | 3270 | 95812 | 12707 | 7649 |
| 11:25 | ZZZZZZ | 3268 | 98319 | 12933 | 7815 |
| 11:29 | ZZZZZZ | 3342 | 98179 | 12949 | 7839 |
| 11:34 | MA44289-CCV1 | 3211 | 93708 | 12787 | 7019 |
| 11:41 | MA44289-CCB2 | 3340 | 97856 | 12813 | 7842 |
| 11:47 | ZZZZZZ | 3339 | 98990 | 12916 | 7856 |
| 11:51 | ZZZZZZ | 3254 | 95441 | 12729 | 7213 |
| 11:55 | MP6784-PS1 | 2700 | 80401 | 12032 | 5501 |
| 11:59 | ZZZZZZ | 3281 | 96931 | 13075 | 7209 |
| 12:04 | ZZZZZZ | 3348 | 98257 | 13065 | 7678 |
| 12:08 | MP6797-MB1 | 3377 | 100260 | 13229 | 7910 |
| 12:12 | MP6797-B1 | 3278 | 95991 | 13016 | 7260 |
| 12:16 | MP6797-S1 | 3175 | 92651 | 12924 | 6826 |
| 12:20 | MP6797-S2 | 3162 | 92942 | 12756 | 6805 |
| 12:24 | MA44289-CCV2 | 3245 | 94546 | 12740 | 7064 |
| 12:28 | MA44289-CCB3 | 3388 | 99694 | 12934 | 7897 |
| 12:33 | JC64728-2F | 3194 | 94075 | 12828 | 7066 |
| 12:37 | MP6797-SD1 | 3342 | 97775 | 12985 | 7642 |
| 12:41 | ZZZZZZ | 3228 | 93870 | 12868 | 6988 |

8.3.2
8

INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 Analyst: EAL Run ID: MA44289
 Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--|--------|--------|--------|
| 12:46 | ZZZZZZ | 3265 | 94958 | 12985 | 7204 |
| 12:50 | ZZZZZZ | 3307 | 96435 | 12959 | 7283 |
| 12:54 | ZZZZZZ | 3424 | 100720 | 13084 | 7940 |
| 12:58 | MP6809-S1 | 3172 | 91870 | 12777 | 6718 |
| 13:02 | MP6809-S2 | 3170 | 92263 | 12858 | 6700 |
| 13:06 | JC64764-5 | 3164 | 91162 | 12666 | 6810 |
| 13:10 | MA44289-CCV3 | 3304 | 95661 | 12845 | 7130 |
| 13:16 | MA44289-CCB4 | 3436 | 99809 | 12908 | 7949 |
| 13:20 | MP6809-SD1 | 3351 | 96991 | 12957 | 7491 |
| 13:24 | JC64700-2 | 3413 | 99682 | 13007 | 7744 |
| 13:29 | ZZZZZZ | 3231 | 92458 | 12711 | 6927 |
| 13:33 | ZZZZZZ | 3138 | 90012 | 12736 | 6536 |
| 13:37 | ZZZZZZ | 3237 | 92960 | 12833 | 6892 |
| 13:42 | ZZZZZZ | 3225 | 92332 | 12800 | 6897 |
| 13:46 | ZZZZZZ | 3277 | 94654 | 12786 | 7145 |
| 13:50 | ZZZZZZ | 3326 | 96765 | 13065 | 7259 |
| 13:55 | ZZZZZZ | 3124 | 86660 | 12574 | 6422 |
| 13:59 | MA44289-CCV4 | 3350 | 95986 | 12951 | 7179 |
| 14:03 | MA44289-CCB5 | 3503 | 100840 | 13037 | 8047 |
| 14:07 | ZZZZZZ | 3331 | 94577 | 12843 | 7212 |
| 14:13 | MA44289-CCV5 | 3342 | 95551 | 12807 | 7159 |
| 14:17 | MA44289-CCB6 | 3498 | 100200 | 12974 | 8039 |
| 14:21 | ZZZZZZ | 3298 | 93299 | 12766 | 7009 |
| 14:26 | ZZZZZZ | 3366 | 95362 | 12847 | 7317 |
| 14:30 | ZZZZZZ | No results reported for the elements associated with this internal standard. | | | |
| 14:34 | ZZZZZZ | No results reported for the elements associated with this internal standard. | | | |
| 14:38 | ZZZZZZ | 3516 | 101300 | 13113 | 8045 |
| 14:43 | ZZZZZZ | 3444 | 98812 | 13165 | 7454 |
| 14:47 | ZZZZZZ | 3530 | 100570 | 13464 | 7579 |
| 14:51 | ZZZZZZ | 3479 | 99196 | 13217 | 7416 |
| 14:58 | MA44289-CCV6 | 3387 | 96464 | 12937 | 7217 |
| 15:03 | MA44289-CCB7 | 3532 | 101250 | 13061 | 8077 |
| 15:10 | MA44289-CRI2 | 3492 | 99932 | 13008 | 7882 |

INTERNAL STANDARD SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 Analyst: EAL Run ID: MA44289
 Parameters: Pb,Mn,Se,Tl

| Time | Sample Description | Istd#1 | Istd#2 | Istd#3 | Istd#4 |
|-------|--------------------|--------|--------|--------|--------|
| 15:14 | MA44289-CRID2 | 3520 | 101260 | 13093 | 8043 |
| 15:19 | MA44289-ICSA2 | 3110 | 88260 | 12623 | 6342 |
| 15:23 | MA44289-ICSAB2 | 3119 | 88665 | 12565 | 6367 |
| 15:27 | MA44289-CCV7 | 3390 | 96538 | 12935 | 7225 |
| 15:31 | MA44289-CCB8 | 3542 | 101560 | 13196 | 8089 |
| 15:36 | ZZZZZZ | 3538 | 102070 | 13130 | 8081 |
| 15:40 | ZZZZZZ | 3541 | 101730 | 13102 | 8085 |
| 15:44 | ZZZZZZ | 3533 | 101920 | 13197 | 8073 |
| 15:49 | ZZZZZZ | 3554 | 102080 | 13225 | 8152 |
| 15:53 | ZZZZZZ | 3546 | 101830 | 13277 | 8123 |
| 15:57 | ZZZZZZ | 3561 | 101830 | 13281 | 8163 |
| 16:02 | MA44289-CCV8 | 3398 | 96613 | 12990 | 7242 |
| 16:06 | MA44289-CCB9 | 3552 | 101850 | 13159 | 8137 |

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

| Istd# | Parameter | Limits |
|--------|----------------|----------|
| Istd#1 | Yttrium (2243) | 70-130 % |
| Istd#2 | Yttrium (3600) | 70-130 % |
| Istd#3 | Yttrium (3710) | 70-130 % |
| Istd#4 | Indium | 70-130 % |

8.3.2
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44289 Units: ug/l

| Metal | Time: | | 10:30 | | 10:47 | | 11:41 | | 12:28 | | |
|------------|------------|----|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| | Sample ID: | RL | IDL | ICB1 | final | CCB1 | final | CCB2 | final | CCB3 | final |
| Aluminum | 200 | | 34 | anr | | | | | | | |
| Antimony | 6.0 | | 1.4 | anr | | | | | | | |
| Arsenic | 3.0 | | 1.4 | anr | | | | | | | |
| Barium | 200 | | .5 | | | | | | | | |
| Beryllium | 1.0 | | .2 | anr | | | | | | | |
| Bismuth | 20 | | 2.5 | | | | | | | | |
| Boron | 100 | | 1.9 | | | | | | | | |
| Cadmium | 3.0 | | .3 | | | | | | | | |
| Calcium | 5000 | | 8.7 | anr | | | | | | | |
| Chromium | 10 | | .6 | anr | | | | | | | |
| Cobalt | 50 | | .5 | anr | | | | | | | |
| Copper | 10 | | 1.2 | anr | | | | | | | |
| Iron | 100 | | 4.6 | anr | | | | | | | |
| Lead | 3.0 | | 1.4 | -0.900 | <3.0 | 0.00 | <3.0 | -0.400 | <3.0 | -0.500 | <3.0 |
| Lithium | 50 | | 2.8 | | | | | | | | |
| Magnesium | 5000 | | 33 | | | | | | | | |
| Manganese | 15 | | .1 | 0.00 | <15 | 0.100 | <15 | 0.200 | <15 | 0.300 | <15 |
| Molybdenum | 20 | | .4 | | | | | | | | |
| Nickel | 10 | | .5 | anr | | | | | | | |
| Phosphorus | 50 | | 1.7 | | | | | | | | |
| Potassium | 10000 | | 68 | anr | | | | | | | |
| Selenium | 10 | | 3.8 | 1.40 | <10 | 2.90 | <10 | 0.500 | <10 | 0.600 | <10 |
| Silicon | 200 | | 2.1 | | | | | | | | |
| Silver | 10 | | .5 | anr | | | | | | | |
| Sodium | 10000 | | 15 | anr | | | | | | | |
| Strontium | 10 | | .2 | | | | | | | | |
| Sulfur | 50 | | 20 | | | | | | | | |
| Thallium | 2.0 | | 1.6 | 0.600 | <2.0 | -0.500 | <2.0 | -0.600 | <2.0 | 0.00 | <2.0 |
| Tin | 10 | | 1 | | | | | | | | |
| Titanium | 10 | | .7 | | | | | | | | |
| Tungsten | 50 | | 1.8 | | | | | | | | |
| Vanadium | 50 | | .4 | | | | | | | | |
| Zinc | 20 | | .3 | | | | | | | | |

8.3.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

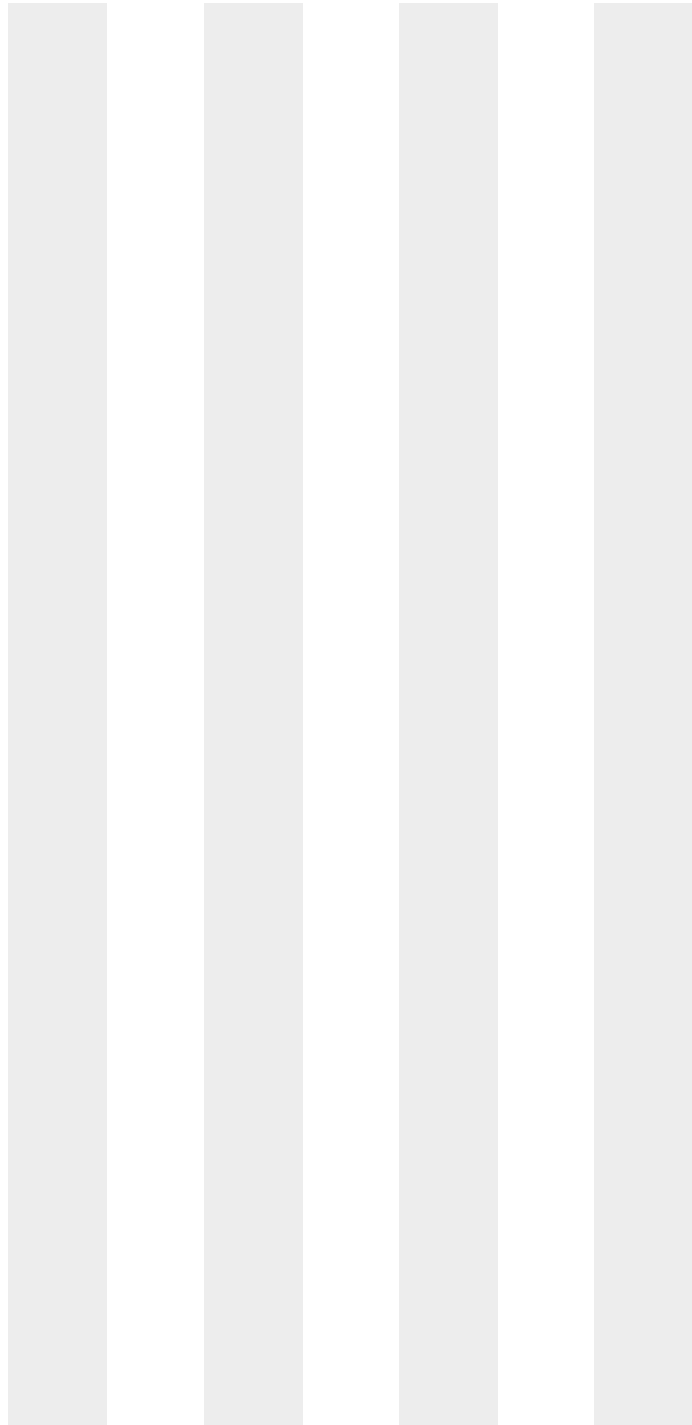
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44289 Units: ug/l

| Time: | | | 10:30 | | 10:47 | | 11:41 | | 12:28 | |
|------------|----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| Sample ID: | | | ICB1 | | CCB1 | | CCB2 | | CCB3 | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested



8.3.3
 8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44289 Units: ug/l

| Metal | Time: | | 13:16 | | 14:03 | | 14:17 | | 15:03 | | |
|------------|------------|-----|-------|------|-------|------|-------|------|--------|------|-------|
| | Sample ID: | RL | IDL | CCB4 | final | CCB5 | final | CCB6 | final | CCB7 | final |
| Aluminum | 200 | 34 | anr | | | | | | | | |
| Antimony | 6.0 | 1.4 | anr | | | | | | | | |
| Arsenic | 3.0 | 1.4 | anr | | | | | | | | |
| Barium | 200 | .5 | | | | | | | | | |
| Beryllium | 1.0 | .2 | anr | | | | | | | | |
| Bismuth | 20 | 2.5 | | | | | | | | | |
| Boron | 100 | 1.9 | | | | | | | | | |
| Cadmium | 3.0 | .3 | | | | | | | | | |
| Calcium | 5000 | 8.7 | anr | | | | | | | | |
| Chromium | 10 | .6 | anr | | | | | | | | |
| Cobalt | 50 | .5 | anr | | | | | | | | |
| Copper | 10 | 1.2 | anr | | | | | | | | |
| Iron | 100 | 4.6 | anr | | | | | | | | |
| Lead | 3.0 | 1.4 | 0.200 | <3.0 | 0.300 | <3.0 | 0.100 | <3.0 | -0.300 | <3.0 | |
| Lithium | 50 | 2.8 | | | | | | | | | |
| Magnesium | 5000 | 33 | | | | | | | | | |
| Manganese | 15 | .1 | 0.300 | <15 | 0.300 | <15 | 0.300 | <15 | 0.200 | <15 | |
| Molybdenum | 20 | .4 | | | | | | | | | |
| Nickel | 10 | .5 | anr | | | | | | | | |
| Phosphorus | 50 | 1.7 | | | | | | | | | |
| Potassium | 10000 | 68 | anr | | | | | | | | |
| Selenium | 10 | 3.8 | 0.600 | <10 | 1.20 | <10 | 0.900 | <10 | 1.10 | <10 | |
| Silicon | 200 | 2.1 | | | | | | | | | |
| Silver | 10 | .5 | anr | | | | | | | | |
| Sodium | 10000 | 15 | anr | | | | | | | | |
| Strontium | 10 | .2 | | | | | | | | | |
| Sulfur | 50 | 20 | | | | | | | | | |
| Thallium | 2.0 | 1.6 | 0.200 | <2.0 | 0.900 | <2.0 | 1.20 | <2.0 | 0.500 | <2.0 | |
| Tin | 10 | 1 | | | | | | | | | |
| Titanium | 10 | .7 | | | | | | | | | |
| Tungsten | 50 | 1.8 | | | | | | | | | |
| Vanadium | 50 | .4 | | | | | | | | | |
| Zinc | 20 | .3 | | | | | | | | | |

8.3.3
8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

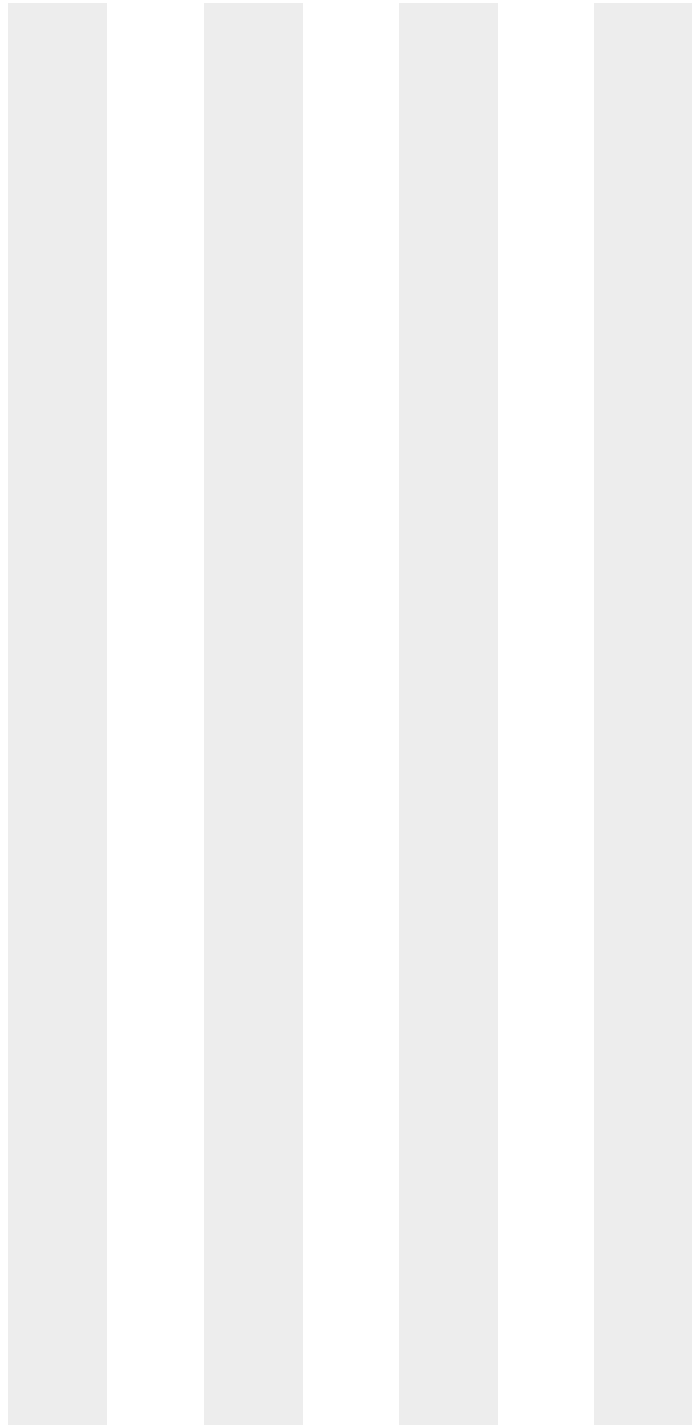
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44289 Units: ug/l

| Time: | 13:16 | 14:03 | 14:17 | 15:03 | | | | | | |
|------------|-------|-------|-------|-------|-----|-------|-----|-------|-----|-------|
| Sample ID: | CCB4 | CCB5 | CCB6 | CCB7 | | | | | | |
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
 (anr) Analyte not requested



8.3.3
 8

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: result < RL Run ID: MA44289 Units: ug/l

| Metal | RL | IDL | 15:31 CCB8 raw | final |
|------------|-------|-----|----------------------|-------|
| Aluminum | 200 | 34 | anr | |
| Antimony | 6.0 | 1.4 | anr | |
| Arsenic | 3.0 | 1.4 | anr | |
| Barium | 200 | .5 | | |
| Beryllium | 1.0 | .2 | anr | |
| Bismuth | 20 | 2.5 | | |
| Boron | 100 | 1.9 | | |
| Cadmium | 3.0 | .3 | | |
| Calcium | 5000 | 8.7 | anr | |
| Chromium | 10 | .6 | anr | |
| Cobalt | 50 | .5 | anr | |
| Copper | 10 | 1.2 | anr | |
| Iron | 100 | 4.6 | anr | |
| Lead | 3.0 | 1.4 | 0.900 | <3.0 |
| Lithium | 50 | 2.8 | | |
| Magnesium | 5000 | 33 | | |
| Manganese | 15 | .1 | 0.400 | <15 |
| Molybdenum | 20 | .4 | | |
| Nickel | 10 | .5 | anr | |
| Phosphorus | 50 | 1.7 | | |
| Potassium | 10000 | 68 | anr | |
| Selenium | 10 | 3.8 | -1.00 | <10 |
| Silicon | 200 | 2.1 | | |
| Silver | 10 | .5 | anr | |
| Sodium | 10000 | 15 | anr | |
| Strontium | 10 | .2 | | |
| Sulfur | 50 | 20 | | |
| Thallium | 2.0 | 1.6 | 0.100 | <2.0 |
| Tin | 10 | 1 | | |
| Titanium | 10 | .7 | | |
| Tungsten | 50 | 1.8 | | |
| Vanadium | 50 | .4 | | |
| Zinc | 20 | .3 | | |

8.3.3
8

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA44289 Units: ug/l

| | | | | |
|------------|----|-----|-------|-------|
| Time: | | | 15:31 | |
| Sample ID: | | | CCB8 | |
| Metal | RL | IDL | raw | final |

Zirconium 10 .3

(*) Outside of QC limits
(anr) Analyte not requested

8.3.3
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| Metal | Sample ID | ICCV | 10:34 ICCV1 | Results | % Rec |
|------------|-----------|------|----------------|---------|-------|
| Aluminum | | anr | | | |
| Antimony | | anr | | | |
| Arsenic | | anr | | | |
| Barium | | | | | |
| Beryllium | | anr | | | |
| Bismuth | | | | | |
| Boron | | | | | |
| Cadmium | | | | | |
| Calcium | | anr | | | |
| Chromium | | anr | | | |
| Cobalt | | anr | | | |
| Copper | | anr | | | |
| Iron | | anr | | | |
| Lead | 2000 | | 1990 | | 99.5 |
| Lithium | | | | | |
| Magnesium | | | | | |
| Manganese | 2000 | | 1980 | | 99.0 |
| Molybdenum | | | | | |
| Nickel | | anr | | | |
| Phosphorus | | | | | |
| Potassium | | anr | | | |
| Selenium | 2000 | | 1940 | | 97.0 |
| Silicon | | | | | |
| Silver | | anr | | | |
| Sodium | | anr | | | |
| Strontium | | | | | |
| Sulfur | | | | | |
| Thallium | 2000 | | 2020 | | 101.0 |
| Tin | | | | | |
| Titanium | | | | | |
| Tungsten | | | | | |
| Vanadium | | | | | |
| Zinc | | | | | |

8.3.4
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JC64700

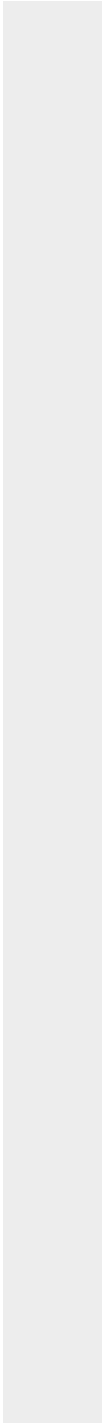
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| | | | |
|-----------------|-------|---------|-------|
| Time: | 10:34 | | |
| Sample ID: ICCV | ICCV1 | | |
| Metal | True | Results | % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.3.4
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| Metal | Sample ID: | 10:23 | | CCV | 11:34 | | CCV | 12:24 | |
|------------|------------|---------|-------|------|---------|-------|------|---------|-------|
| | | ICV | ICV1 | | CCV1 | CCV2 | | | |
| | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |
| Aluminum | anr | | | | | | | | |
| Antimony | anr | | | | | | | | |
| Arsenic | anr | | | | | | | | |
| Barium | | | | | | | | | |
| Beryllium | anr | | | | | | | | |
| Bismuth | | | | | | | | | |
| Boron | | | | | | | | | |
| Cadmium | | | | | | | | | |
| Calcium | anr | | | | | | | | |
| Chromium | anr | | | | | | | | |
| Cobalt | anr | | | | | | | | |
| Copper | anr | | | | | | | | |
| Iron | anr | | | | | | | | |
| Lead | 2000 | 2010 | 100.5 | 2000 | 1960 | 98.0 | 2000 | 1920 | 96.0 |
| Lithium | | | | | | | | | |
| Magnesium | | | | | | | | | |
| Manganese | 2000 | 2010 | 100.5 | 2000 | 1940 | 97.0 | 2000 | 1930 | 96.5 |
| Molybdenum | | | | | | | | | |
| Nickel | anr | | | | | | | | |
| Phosphorus | | | | | | | | | |
| Potassium | anr | | | | | | | | |
| Selenium | 2000 | 1970 | 98.5 | 2000 | 1910 | 95.5 | 2000 | 1880 | 94.0 |
| Silicon | | | | | | | | | |
| Silver | anr | | | | | | | | |
| Sodium | anr | | | | | | | | |
| Strontium | | | | | | | | | |
| Sulfur | | | | | | | | | |
| Thallium | 2000 | 2040 | 102.0 | 2000 | 1980 | 99.0 | 2000 | 1960 | 98.0 |
| Tin | | | | | | | | | |
| Titanium | | | | | | | | | |
| Tungsten | | | | | | | | | |
| Vanadium | | | | | | | | | |
| Zinc | | | | | | | | | |

8.3.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| | Time: | | | | 11:34 | | | 12:24 | |
|------------|-------|---------|-------|------|---------|-------|---------|---------|-------|
| Sample ID: | ICV | ICV1 | CCV | CCV1 | CCV | CCV2 | Results | % Rec | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.3.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| Metal | Sample ID: CCV | 13:10 CCV3 | | CCV | 13:59 CCV4 | | CCV | 14:13 CCV5 | |
|------------|----------------|---------------|---------------|------|---------------|---------------|------|---------------|---------------|
| | | True | Results % Rec | | True | Results % Rec | | True | Results % Rec |
| Aluminum | anr | | | | | | | | |
| Antimony | anr | | | | | | | | |
| Arsenic | anr | | | | | | | | |
| Barium | | | | | | | | | |
| Beryllium | anr | | | | | | | | |
| Bismuth | | | | | | | | | |
| Boron | | | | | | | | | |
| Cadmium | | | | | | | | | |
| Calcium | anr | | | | | | | | |
| Chromium | anr | | | | | | | | |
| Cobalt | anr | | | | | | | | |
| Copper | anr | | | | | | | | |
| Iron | anr | | | | | | | | |
| Lead | 2000 | 1880 | 94.0 | 2000 | 1860 | 93.0 | 2000 | 1860 | 93.0 |
| Lithium | | | | | | | | | |
| Magnesium | | | | | | | | | |
| Manganese | 2000 | 1930 | 96.5 | 2000 | 1940 | 97.0 | 2000 | 1950 | 97.5 |
| Molybdenum | | | | | | | | | |
| Nickel | anr | | | | | | | | |
| Phosphorus | | | | | | | | | |
| Potassium | anr | | | | | | | | |
| Selenium | 2000 | 1870 | 93.5 | 2000 | 1860 | 93.0 | 2000 | 1860 | 93.0 |
| Silicon | | | | | | | | | |
| Silver | anr | | | | | | | | |
| Sodium | anr | | | | | | | | |
| Strontium | | | | | | | | | |
| Sulfur | | | | | | | | | |
| Thallium | 2000 | 1970 | 98.5 | 2000 | 1970 | 98.5 | 2000 | 1980 | 99.0 |
| Tin | | | | | | | | | |
| Titanium | | | | | | | | | |
| Tungsten | | | | | | | | | |
| Vanadium | | | | | | | | | |
| Zinc | | | | | | | | | |

8.3.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| | Time: | | | | 13:59 | | | 14:13 | |
|------------|-------|---------|-------|------|---------|-------|------|---------|-------|
| Sample ID: | CCV | 13:10 | | CCV | CCV4 | | CCV | CCV5 | |
| Metal | True | Results | % Rec | True | Results | % Rec | True | Results | % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.3.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| | Time: | 14:58 | | 15:27 | | |
|------------|-------|---------|-------|-------|---------|-------|
| Sample ID: | CCV | CCV6 | | CCV | CCV7 | |
| Metal | True | Results | % Rec | True | Results | % Rec |
| Aluminum | anr | | | | | |
| Antimony | anr | | | | | |
| Arsenic | anr | | | | | |
| Barium | | | | | | |
| Beryllium | anr | | | | | |
| Bismuth | | | | | | |
| Boron | | | | | | |
| Cadmium | | | | | | |
| Calcium | anr | | | | | |
| Chromium | anr | | | | | |
| Cobalt | anr | | | | | |
| Copper | anr | | | | | |
| Iron | anr | | | | | |
| Lead | 2000 | 1850 | 92.5 | 2000 | 1840 | 92.0 |
| Lithium | | | | | | |
| Magnesium | | | | | | |
| Manganese | 2000 | 1950 | 97.5 | 2000 | 1940 | 97.0 |
| Molybdenum | | | | | | |
| Nickel | anr | | | | | |
| Phosphorus | | | | | | |
| Potassium | anr | | | | | |
| Selenium | 2000 | 1850 | 92.5 | 2000 | 1850 | 92.5 |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | anr | | | | | |
| Strontium | | | | | | |
| Sulfur | | | | | | |
| Thallium | 2000 | 1960 | 98.0 | 2000 | 1960 | 98.0 |
| Tin | | | | | | |
| Titanium | | | | | | |
| Tungsten | | | | | | |
| Vanadium | | | | | | |
| Zinc | | | | | | |

8.3.5
8

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA44289 Units: ug/l

| | Time: | 14:58 | | 15:27 | |
|------------|-------|---------|-------|-------|---------------|
| Sample ID: | CCV | CCV6 | CCV | CCV7 | |
| Metal | True | Results | % Rec | True | Results % Rec |

Zirconium

(*) Outside of QC limits
(anr) Analyte not requested



8.3.5
8

HIGH STANDARD CHECK SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 90 to 110 % Recovery Run ID: MA44289 Units: ug/l

| | Time: | 11:12 | | 11:16 | |
|------------|-------|---------|-------|-------|---------|
| Sample ID: | HSTD | HSTD1 | HSTD | HSTD2 | HSTD |
| Metal | True | Results | % Rec | True | Results |
| Aluminum | | | | | |
| Antimony | anr | | | | |
| Arsenic | anr | | | | |
| Barium | | | | | |
| Beryllium | anr | | | | |
| Bismuth | | | | | |
| Boron | | | | | |
| Cadmium | | | | | |
| Calcium | | | | | |
| Chromium | anr | | | | |
| Cobalt | anr | | | | |
| Copper | anr | | | | |
| Iron | | | | | |
| Lead | 5000 | 4950 | 99.0 | | |
| Lithium | | | | | |
| Magnesium | | | | | |
| Manganese | 5000 | 5000 | 100.0 | | |
| Molybdenum | | | | | |
| Nickel | anr | | | | |
| Phosphorus | | | | | |
| Potassium | | | | | |
| Selenium | 5000 | 4870 | 97.4 | | |
| Silicon | | | | | |
| Silver | anr | | | | |
| Sodium | | | | | |
| Strontium | | | | | |
| Sulfur | | | | | |
| Thallium | 5000 | 5180 | 103.6 | | |
| Tin | | | | | |
| Titanium | | | | | |
| Tungsten | | | | | |
| Vanadium | | | | | |
| Zinc | | | | | |

8.3.6
8

HIGH STANDARD CHECK SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 90 to 110 % Recovery Run ID: MA44289 Units: ug/l

| Time: | 11:12 | 11:16 |
|------------|---------------|---------------|
| Sample ID: | HSTD1 | HSTD2 |
| Metal | True | True |
| | Results % Rec | Results % Rec |

Zirconium

(*) Outside of QC limits
 (anr) Analyte not requested

8.3.6
 8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44289 Units: ug/l

| Time: | 10:55 | 10:59 | 15:10 | | |
|------------|-------|-------|-------|---------|-------|
| Sample ID: | CRI1 | CRID1 | CRID2 | Results | % Rec |
| Metal | True | True | True | Results | % Rec |
| Aluminum | 200 | 500 | 100 | anr | |
| Antimony | 6.0 | 20 | 3.0 | anr | |
| Arsenic | 8.0 | 20 | 3.0 | anr | |
| Barium | 200 | | 4.0 | | |
| Beryllium | 2.0 | | 1.0 | anr | |
| Bismuth | 20 | | | | |
| Boron | 100 | | 10 | | |
| Cadmium | 3.0 | | 1.0 | | |
| Calcium | 5000 | 2000 | 1000 | anr | |
| Chromium | 10 | | 2.0 | anr | |
| Cobalt | 50 | | 3.0 | anr | |
| Copper | 10 | | 2.0 | anr | |
| Iron | 100 | 500 | | anr | |
| Lead | 3.0 | 20 | 2.5 | 3.60 | 120.0 |
| Lithium | 50 | | | | |
| Magnesium | 5000 | 2000 | 100 | | |
| Manganese | 15 | | 3.0 | 15.6 | 104.0 |
| Molybdenum | 20 | | | | |
| Nickel | 10 | | 4.0 | anr | |
| Phosphorus | 50 | | | | |
| Potassium | 5000 | | 2000 | anr | |
| Selenium | 10 | 20 | 5.0 | 9.50 | 95.0 |
| Silicon | 200 | | | | |
| Silver | 5.0 | | 2.0 | anr | |
| Sodium | 5000 | | 1000 | anr | |
| Strontium | 10 | | | | |
| Sulfur | 50 | | | | |
| Thallium | 10 | | 2.0 | 9.50 | 95.0 |
| Tin | 10 | | | | |
| Titanium | 10 | | | | |
| Tungsten | 50 | | | | |
| Vanadium | 50 | | 2.0 | | |
| Zinc | 20 | | 10 | | |

8.3.7
8

LOW CALIBRATION CHECK STANDARDS SUMMARY

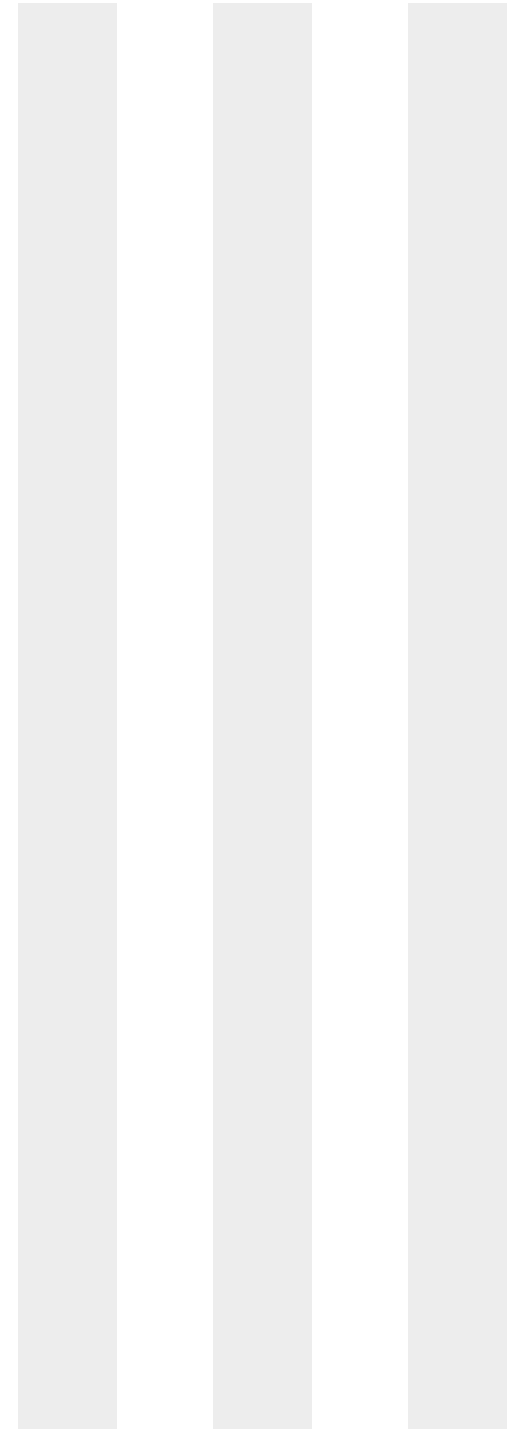
Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44289 Units: ug/l

| Time: | | | | 10:55 | | | 10:59 | | | 15:10 |
|------------|------|------|------|---------|-------|---------|-------|---------|-------|-------|
| Sample ID: | CRI | CRIA | CRID | CR11 | | CRID1 | | CR12 | | |
| Metal | True | True | True | Results | % Rec | Results | % Rec | Results | % Rec | |

Zirconium 10

(*) Outside of QC limits
 (anr) Analyte not requested



8.3.7
 8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44289 Units: ug/l

| Time: | Sample ID: | CRI | CRIA | CRID | 15:14 CRID2 | Results | % Rec |
|------------|------------|------|------|------|----------------|---------|-------|
| Metal | True | True | True | True | Results | % Rec | |
| Aluminum | 200 | 500 | 100 | anr | | | |
| Antimony | 6.0 | 20 | 3.0 | | | | |
| Arsenic | 8.0 | 20 | 3.0 | anr | | | |
| Barium | 200 | | 4.0 | | | | |
| Beryllium | 2.0 | | 1.0 | anr | | | |
| Bismuth | 20 | | | | | | |
| Boron | 100 | | 10 | | | | |
| Cadmium | 3.0 | | 1.0 | | | | |
| Calcium | 5000 | 2000 | 1000 | anr | | | |
| Chromium | 10 | | 2.0 | anr | | | |
| Cobalt | 50 | | 3.0 | anr | | | |
| Copper | 10 | | 2.0 | | | | |
| Iron | 100 | 500 | | | | | |
| Lead | 3.0 | 20 | 2.5 | | | | |
| Lithium | 50 | | | | | | |
| Magnesium | 5000 | 2000 | 100 | | | | |
| Manganese | 15 | | 3.0 | 3.20 | 106.7 | | |
| Molybdenum | 20 | | | | | | |
| Nickel | 10 | | 4.0 | anr | | | |
| Phosphorus | 50 | | | | | | |
| Potassium | 5000 | | 2000 | anr | | | |
| Selenium | 10 | 20 | 5.0 | 4.60 | 92.0 | | |
| Silicon | 200 | | | | | | |
| Silver | 5.0 | | 2.0 | | | | |
| Sodium | 5000 | | 1000 | anr | | | |
| Strontium | 10 | | | | | | |
| Sulfur | 50 | | | | | | |
| Thallium | 10 | | 2.0 | 2.10 | 105.0 | | |
| Tin | 10 | | | | | | |
| Titanium | 10 | | | | | | |
| Tungsten | 50 | | | | | | |
| Vanadium | 50 | | 2.0 | | | | |
| Zinc | 20 | | 10 | | | | |

8.3.7
8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 70 to 130 % Recovery Run ID: MA44289 Units: ug/l

| Time: | | | | 15:14 | | |
|------------|------|------|------|---------|---|-----|
| Sample ID: | CRI | CRIA | CRID | CRID2 | | |
| Metal | True | True | True | Results | % | Rec |

Zirconium 10

(*) Outside of QC limits
 (anr) Analyte not requested

8.3.7

8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA44289 Units: ug/l

| Time: | | | 11:03 | | | 11:08 | | | 15:19 | | | 15:23 |
|------------|--------|--------|---------|-------|---------|-------|---------|-------|---------|-------|--|-------|
| Sample ID: | ICSA | ICSAB | ICSAL | % Rec | ICSAB1 | % Rec | ICSAB2 | % Rec | ICSAB2 | % Rec | | |
| Metal | True | True | Results | | Results | | Results | | Results | | | |
| Aluminum | 500000 | 500000 | 504000 | 100.8 | 482000 | 96.4 | 471000 | 94.2 | 460000 | 92.0 | | |
| Antimony | | 1000 | -4.50 | | 972 | 97.2 | -5.40 | | 901 | 90.1 | | |
| Arsenic | | 1000 | -3.80 | | 944 | 94.4 | -2.00 | | 924 | 92.4 | | |
| Barium | | 500 | 0.100 | | 480 | 96.0 | 0.300 | | 451 | 90.2 | | |
| Beryllium | | 500 | 0.300 | | 472 | 94.4 | 0.00 | | 442 | 88.4 | | |
| Bismuth | | 500 | -3.00 | | 506 | 101.2 | -5.10 | | 465 | 93.0 | | |
| Boron | | 500 | -2.60 | | 461 | 92.2 | -3.10 | | 451 | 90.2 | | |
| Cadmium | | 1000 | 0.200 | | 965 | 96.5 | -0.100 | | 906 | 90.6 | | |
| Calcium | 400000 | 400000 | 377000 | 94.3 | 367000 | 91.8 | 359000 | 89.8 | 355000 | 88.8 | | |
| Chromium | | 500 | -1.20 | | 458 | 91.6 | -1.20 | | 435 | 87.0 | | |
| Cobalt | | 500 | 0.800 | | 463 | 92.6 | 0.900 | | 441 | 88.2 | | |
| Copper | | 500 | 1.30 | | 474 | 94.8 | 0.00 | | 458 | 91.6 | | |
| Iron | 200000 | 200000 | 184000 | 92.0 | 177000 | 88.5 | 169000 | 84.5 | 164000 | 82.0 | | |
| Lead | | 1000 | -0.600 | | 921 | 92.1 | -2.50 | | 864 | 86.4 | | |
| Lithium | | 500 | 4.00 | | 496 | 99.2 | 1.50 | | 457 | 91.4 | | |
| Magnesium | 500000 | 500000 | 497000 | 99.4 | 484000 | 96.8 | 469000 | 93.8 | 464000 | 92.8 | | |
| Manganese | | 500 | 0.500 | | 471 | 94.2 | -2.00 | | 462 | 92.4 | | |
| Molybdenum | | 500 | -1.50 | | 458 | 91.6 | -1.70 | | 442 | 88.4 | | |
| Nickel | | 1000 | 0.200 | | 926 | 92.6 | -0.100 | | 900 | 90.0 | | |
| Phosphorus | | 500 | -4.40 | | 463 | 92.6 | 5.60 | | 451 | 90.2 | | |
| Potassium | | | -442 | | -438 | | -498 | | -429 | | | |
| Selenium | | 1000 | -8.10 | | 908 | 90.8 | -6.70 | | 871 | 87.1 | | |
| Silicon | | 500 | -7.50 | | 487 | 97.4 | -7.60 | | 443 | 88.6 | | |
| Silver | | 1000 | 4.10 | | 983 | 98.3 | -4.60 | | 941 | 94.1 | | |
| Sodium | | | -11.8 | | 9.40 | | -1.40 | | 17.6 | | | |
| Strontium | | 500 | 4.50 | | 519 | 103.8 | 4.10 | | 484 | 96.8 | | |
| Sulfur | | 500 | 48.6 | | 507 | 101.4 | 47.9 | | 493 | 98.6 | | |
| Thallium | | 1000 | -3.00 | | 1020 | 102.0 | -1.90 | | 995 | 99.5 | | |
| Tin | | 500 | -2.70 | | 436 | 87.2 | -2.50 | | 423 | 84.6 | | |
| Titanium | | 500 | -0.600 | | 470 | 94.0 | -0.700 | | 457 | 91.4 | | |
| Tungsten | | 500 | 6.50 | | 450 | 90.0 | 7.40 | | 434 | 86.8 | | |
| Vanadium | | 500 | -1.10 | | 460 | 92.0 | -0.300 | | 448 | 89.6 | | |
| Zinc | | 1000 | 2.50 | | 910 | 91.0 | 2.50 | | 844 | 84.4 | | |

8.3.8
8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
 Part 1 - ICSA and ICSAB Standards

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: SE042618M1.ICP Date Analyzed: 04/26/18 Methods: EPA 200.7, SW846 6010C
 QC Limits: 80 to 120 % Recovery Run ID: MA44289 Units: ug/l

| Time: | | | 11:03 | | | 11:08 | | | 15:19 | | | 15:23 |
|------------|------|-------|---------|-------|---------|-------|---------|-------|---------|-------|--|-------|
| Sample ID: | ICSA | ICSAB | ICSAB1 | % Rec | ICSAB1 | % Rec | ICSAB2 | % Rec | ICSAB2 | % Rec | | |
| Metal | True | True | Results | % Rec | Results | % Rec | Results | % Rec | Results | % Rec | | |

Zirconium 500 3.00 446 89.2 0.800 435 87.0

(*) Outside of QC limits
 (anr) Analyte not requested

8.3.8
 8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6790
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/24/18

| Metal | RL | IDL | MDL | MB raw | final |
|---------|------|------|-----|-----------|-------|
| Mercury | 0.20 | .016 | .13 | 0.060 | <0.20 |

Associated samples MP6790: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6790
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/24/18

| Metal | JC64700-2 Original MS | Spike lot | HGPW3 % Rec | QC Limits |
|---------|--------------------------|--------------|----------------|--------------|
| Mercury | 0.0 | 1.8 | 2 90.0 | 75-125 |

Associated samples MP6790: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.4.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6790
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 04/24/18

| Metal | JC64700-2 Original MSD | | Spike lot HGPW3 | % Rec | MSD RPD | QC Limit |
|---------|---------------------------|-----|--------------------|-------|------------|-------------|
| Mercury | 0.0 | 1.9 | 2 | 95.0 | 5.4 | 20 |

Associated samples MP6790: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.4.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6790
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/24/18

| Metal | BSP Result | Spikelot HGPW3 | % Rec | QC Limits |
|---------|---------------|-------------------|-------|--------------|
| Mercury | 2.1 | 2 | 105.0 | 80-120 |

Associated samples MP6790: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.4.3

8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/25/18

| Metal | RL | IDL | MDL | MB raw | final |
|------------|-------|-----|-----|-----------|-------|
| Aluminum | 200 | 34 | 33 | | |
| Antimony | 6.0 | 1.4 | 4.3 | | |
| Arsenic | 3.0 | 1.4 | 2.7 | -0.70 | <3.0 |
| Barium | 200 | .5 | 1.3 | 0.10 | <200 |
| Beryllium | 1.0 | .2 | .4 | -0.10 | <1.0 |
| Bismuth | 20 | 2.5 | 5 | | |
| Boron | 100 | 1.9 | 13 | 1.0 | <100 |
| Cadmium | 3.0 | .3 | .7 | | |
| Calcium | 5000 | 8.7 | 29 | | |
| Chromium | 10 | .6 | .85 | 0.10 | <10 |
| Cobalt | 50 | .5 | .72 | | |
| Copper | 10 | 1.2 | 3.2 | 0.40 | <10 |
| Iron | 100 | 4.6 | 32 | 4.0 | <100 |
| Lead | 3.0 | 1.4 | 2.6 | 1.1 | <3.0 |
| Lithium | 50 | 2.8 | 15 | | |
| Magnesium | 5000 | 33 | 64 | | |
| Manganese | 15 | .1 | .42 | 0.20 | <15 |
| Molybdenum | 20 | .4 | 1.4 | | |
| Nickel | 10 | .5 | 1.3 | -0.30 | <10 |
| Phosphorus | 50 | 1.7 | 13 | | |
| Potassium | 10000 | 68 | 230 | | |
| Selenium | 10 | 3.8 | 6.6 | 0.60 | <10 |
| Silicon | 200 | 2.1 | 45 | | |
| Silver | 10 | .5 | 3.1 | | |
| Sodium | 10000 | 15 | 130 | | |
| Strontium | 10 | .2 | .3 | | |
| Sulfur | 50 | 20 | 15 | | |
| Thallium | 2.0 | 1.6 | 1.6 | -0.60 | <2.0 |
| Tin | 10 | 1 | 2.4 | | |
| Titanium | 10 | .7 | 1.8 | | |
| Tungsten | 50 | 1.8 | 14 | | |
| Vanadium | 50 | .4 | 1.3 | | |
| Zinc | 20 | .3 | 4 | 0.40 | <20 |

8.5.1
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/25/18

| Metal | RL | IDL | MDL | MB raw | final |
|-------|----|-----|-----|-----------|-------|
|-------|----|-----|-----|-----------|-------|

Zirconium 10 .3 2

Associated samples MP6809: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.5.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/25/18

| Metal | JC64764-5 Original MS | | SpikeLot MPSPK2 | % Rec | QC Limits |
|------------|--------------------------|-------|--------------------|-------|--------------|
| Aluminum | anr | | | | |
| Antimony | anr | | | | |
| Arsenic | 1.4 | 2030 | 2000 | 101.4 | 75-125 |
| Barium | 66.1 | 2140 | 2000 | 103.7 | 75-125 |
| Beryllium | 0.0 | 2090 | 2000 | 104.5 | 75-125 |
| Bismuth | | | | | |
| Boron | 912 | 2870 | 2000 | 97.9 | 75-125 |
| Cadmium | anr | | | | |
| Calcium | anr | | | | |
| Chromium | 14.7 | 2000 | 2000 | 99.3 | 75-125 |
| Cobalt | anr | | | | |
| Copper | 18.5 | 2070 | 2000 | 102.6 | 75-125 |
| Iron | 1040 | 26500 | 25000 | 101.8 | 75-125 |
| Lead | 3.4 | 2010 | 2000 | 100.3 | 75-125 |
| Lithium | | | | | |
| Magnesium | anr | | | | |
| Manganese | 47.2 | 2090 | 2000 | 102.1 | 75-125 |
| Molybdenum | | | | | |
| Nickel | 9.7 | 2080 | 2000 | 103.5 | 75-125 |
| Phosphorus | | | | | |
| Potassium | anr | | | | |
| Selenium | 0.0 | 2010 | 2000 | 100.5 | 75-125 |
| Silicon | | | | | |
| Silver | anr | | | | |
| Sodium | anr | | | | |
| Strontium | | | | | |
| Sulfur | | | | | |
| Thallium | 0.0 | 1920 | 2000 | 96.0 | 75-125 |
| Tin | | | | | |
| Titanium | | | | | |
| Tungsten | | | | | |
| Vanadium | anr | | | | |
| Zinc | 115 | 2070 | 2000 | 97.8 | 75-125 |

8.5.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/25/18

| Metal | JC64764-5 Original MS | Spikelet MPSPK2 | % Rec | QC Limits |
|-------|--------------------------|--------------------|-------|--------------|
|-------|--------------------------|--------------------|-------|--------------|

Zirconium

Associated samples MP6809: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.5.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/25/18

| Metal | JC64764-5 Original MSD | | SpikeLot MPSPK2 | % Rec | MSD RPD | QC Limit |
|------------|---------------------------|-------|--------------------|-------|------------|-------------|
| Aluminum | anr | | | | | |
| Antimony | anr | | | | | |
| Arsenic | 1.4 | 2010 | 2000 | 100.4 | 1.0 | 20 |
| Barium | 66.1 | 2160 | 2000 | 104.7 | 0.9 | 20 |
| Beryllium | 0.0 | 2100 | 2000 | 105.0 | 0.5 | 20 |
| Bismuth | | | | | | |
| Boron | 912 | 2870 | 2000 | 97.9 | 0.0 | 20 |
| Cadmium | anr | | | | | |
| Calcium | anr | | | | | |
| Chromium | 14.7 | 1990 | 2000 | 98.8 | 0.5 | 20 |
| Cobalt | anr | | | | | |
| Copper | 18.5 | 2050 | 2000 | 101.6 | 1.0 | 20 |
| Iron | 1040 | 26500 | 25000 | 101.8 | 0.0 | 20 |
| Lead | 3.4 | 2000 | 2000 | 99.8 | 0.5 | 20 |
| Lithium | | | | | | |
| Magnesium | anr | | | | | |
| Manganese | 47.2 | 2080 | 2000 | 101.6 | 0.5 | 20 |
| Molybdenum | | | | | | |
| Nickel | 9.7 | 2070 | 2000 | 103.0 | 0.5 | 20 |
| Phosphorus | | | | | | |
| Potassium | anr | | | | | |
| Selenium | 0.0 | 2010 | 2000 | 100.5 | 0.0 | 20 |
| Silicon | | | | | | |
| Silver | anr | | | | | |
| Sodium | anr | | | | | |
| Strontium | | | | | | |
| Sulfur | | | | | | |
| Thallium | 0.0 | 1920 | 2000 | 96.0 | 0.0 | 20 |
| Tin | | | | | | |
| Titanium | | | | | | |
| Tungsten | | | | | | |
| Vanadium | anr | | | | | |
| Zinc | 115 | 2060 | 2000 | 97.3 | 0.5 | 20 |

8.5.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/25/18

| Metal | JC64764-5 Original MSD | Spike/lot MPSPK2 % Rec | MSD RPD | QC Limit |
|-------|---------------------------|---------------------------|------------|-------------|
|-------|---------------------------|---------------------------|------------|-------------|

Zirconium

Associated samples MP6809: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.5.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/25/18

| Metal | BSP Result | SpikeLot MPSPK2 | % Rec | QC Limits |
|------------|------------|-----------------|-------|-----------|
| Aluminum | anr | | | |
| Antimony | anr | | | |
| Arsenic | 1930 | 2000 | 96.5 | 80-120 |
| Barium | 2080 | 2000 | 104.0 | 80-120 |
| Beryllium | 2090 | 2000 | 104.5 | 80-120 |
| Bismuth | | | | |
| Boron | 2010 | 2000 | 100.5 | 80-120 |
| Cadmium | anr | | | |
| Calcium | anr | | | |
| Chromium | 2050 | 2000 | 102.5 | 80-120 |
| Cobalt | anr | | | |
| Copper | 2030 | 2000 | 101.5 | 80-120 |
| Iron | 25800 | 25000 | 103.2 | 80-120 |
| Lead | 2030 | 2000 | 101.5 | 80-120 |
| Lithium | | | | |
| Magnesium | anr | | | |
| Manganese | 2110 | 2000 | 105.5 | 80-120 |
| Molybdenum | | | | |
| Nickel | 2040 | 2000 | 102.0 | 80-120 |
| Phosphorus | | | | |
| Potassium | anr | | | |
| Selenium | 1970 | 2000 | 98.5 | 80-120 |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | anr | | | |
| Strontium | | | | |
| Sulfur | | | | |
| Thallium | 2090 | 2000 | 104.5 | 80-120 |
| Tin | | | | |
| Titanium | | | | |
| Tungsten | | | | |
| Vanadium | anr | | | |
| Zinc | 2010 | 2000 | 100.5 | 80-120 |

8.5.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/25/18

| Metal | BSP Result | Spikelot MPSPK2 | % Rec | QC Limits |
|-------|---------------|--------------------|-------|--------------|
|-------|---------------|--------------------|-------|--------------|

Zirconium

Associated samples MP6809: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.5.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC64700
 Account: ILINY - Parsons Engineering Science for ILI
 Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/25/18

| Metal | JC64764-5 Original | SDL 1:5 | %DIF | QC Limits |
|------------|-----------------------|---------|-----------|--------------|
| Aluminum | anr | | | |
| Antimony | anr | | | |
| Arsenic | 1.40 | 8.30 | 492.9 (a) | 0-10 |
| Barium | 66.1 | 66.8 | 1.1 | 0-10 |
| Beryllium | 0.00 | 0.00 | NC | 0-10 |
| Bismuth | | | | |
| Boron | 912 | 914 | 0.3 | 0-10 |
| Cadmium | anr | | | |
| Calcium | anr | | | |
| Chromium | 14.7 | 18.7 | 27.2 (a) | 0-10 |
| Cobalt | anr | | | |
| Copper | 18.5 | 20.7 | 11.9 (a) | 0-10 |
| Iron | 1040 | 1090 | 5.1 | 0-10 |
| Lead | 3.40 | 0.00 | 100.0(a) | 0-10 |
| Lithium | | | | |
| Magnesium | anr | | | |
| Manganese | 47.2 | 48.7 | 3.2 | 0-10 |
| Molybdenum | | | | |
| Nickel | 9.70 | 10.0 | 3.1 | 0-10 |
| Phosphorus | | | | |
| Potassium | anr | | | |
| Selenium | 0.00 | 0.00 | NC | 0-10 |
| Silicon | | | | |
| Silver | anr | | | |
| Sodium | anr | | | |
| Strontium | | | | |
| Sulfur | | | | |
| Thallium | 0.00 | 0.00 | NC | 0-10 |
| Tin | | | | |
| Titanium | | | | |
| Tungsten | | | | |
| Vanadium | anr | | | |
| Zinc | 115 | 118 | 3.0 | 0-10 |

8.5.4
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

QC Batch ID: MP6809
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/25/18

| | | |
|-------|-----------------------|--------|
| Metal | JC64764-5 | QC |
| | Original SDL 1:5 %DIF | Limits |

Zirconium

Associated samples MP6809: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Instrument Detection Limits

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|---------------------------------|---------------------------------|
| Instrument ID: LEEMANHG9 | Effective Date: 03/09/18 |
|---------------------------------|---------------------------------|

| Analyte | IDL ug/l |
|---------|-------------|
| Mercury | .01642 |

The above applies to the following instrument runs:
MA44266

Instrument Detection Limits

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|--------------------------------|---------------------------------|
| Instrument ID: SSTRACE5 | Effective Date: 03/05/18 |
|--------------------------------|---------------------------------|

| Analyte | IDL ug/l |
|------------|-------------|
| Aluminum | 34.2 |
| Antimony | 1.4 |
| Arsenic | 1.4 |
| Barium | .5 |
| Beryllium | .2 |
| Bismuth | 2.5 |
| Boron | 1.9 |
| Cadmium | .3 |
| Calcium | 8.7 |
| Chromium | .6 |
| Cobalt | .5 |
| Copper | 1.2 |
| Iron | 4.6 |
| Lead | 1.4 |
| Lithium | 2.8 |
| Magnesium | 32.6 |
| Manganese | .1 |
| Molybdenum | .4 |
| Nickel | .5 |
| Phosphorus | 1.7 |
| Potassium | 68.4 |
| Selenium | 3.8 |
| Silicon | 2.1 |
| Silver | .5 |
| Sodium | 15.3 |
| Sulfur | 19.9 |
| Strontium | .2 |
| Thallium | 1.6 |
| Tin | 1 |
| Titanium | .7 |
| Tungsten | 1.8 |
| Vanadium | .4 |
| Zinc | .3 |
| Zirconium | .3 |

The above applies to the following instrument runs:
MA44281,MA44289

8.8
8

Instrument Linear Ranges

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|---------------------------------|---------------------------------|
| Instrument ID: LEEMANHG9 | Effective Date: 02/26/18 |
|---------------------------------|---------------------------------|

| Analyte | Linear Range ug/l |
|---------|----------------------|
| Mercury | 5 |

The above applies to the following instrument runs:
MA44266

Instrument Linear Ranges

Job Number: JC64700

Account: ILINY Parsons Engineering Science for ILI

Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Instrument ID: SSTRACE5

Effective Date: 11/30/17

| Analyte | Linear Range ug/l |
|------------|----------------------|
| Aluminum | 600000 |
| Antimony | 10000 |
| Arsenic | 10000 |
| Barium | 10000 |
| Beryllium | 10000 |
| Bismuth | 10000 |
| Boron | 10000 |
| Cadmium | 10000 |
| Calcium | 300000 |
| Chromium | 10000 |
| Cobalt | 10000 |
| Copper | 10000 |
| Iron | 300000 |
| Lead | 10000 |
| Lithium | 10000 |
| Magnesium | 600000 |
| Manganese | 10000 |
| Molybdenum | 10000 |
| Nickel | 10000 |
| Palladium | 10000 |
| Phosphorus | 50000 |
| Potassium | 300000 |
| Selenium | 10000 |
| Silicon | 50000 |
| Silver | 1250 |
| Sodium | 300000 |
| Sulfur | 100000 |
| Strontium | 10000 |
| Thallium | 10000 |
| Tin | 10000 |
| Titanium | 10000 |
| Tungsten | 10000 |
| Vanadium | 10000 |
| Zinc | 10000 |
| Zirconium | 10000 |

The above applies to the following instrument runs:
MA44281, MA44289

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Analyte | Batch ID | RL | MB Result | Units | Spike Amount | BSP Result | BSP %Recov | QC Limits |
|----------------------------|-----------------|------|-----------|-------|--------------|------------|------------|-----------|
| Alkalinity, Total as CaCO3 | GN79191 | | | mg/l | 250 | 246 | 98.4 | 90-110% |
| Alkalinity, Total as CaCO3 | GN79191 | 5.0 | 0.0 | mg/l | 50 | 48.5 | 97.0 | 90-110% |
| Bromide | GP12901/GN79756 | 0.50 | 0.0 | mg/l | 1 | 1.08 | 108.0 | 90-110% |
| Chemical Oxygen Demand | GP12636/GN79195 | 20 | 0.0 | mg/l | | | | |
| Chemical Oxygen Demand | GP12636/GN79195 | 20 | 0.0 | mg/l | 50 | 50.8 | 101.6 | 90-110% |
| Chloride | GP12901/GN79756 | 2.0 | 0.0 | mg/l | 10 | 10.1 | 101.0 | 90-110% |
| Hardness, Total as CaCO3 | GN79057 | 4.0 | 0.0 | mg/l | 160 | 161 | 100.6 | 80-120% |
| Hardness, Total as CaCO3 | GN79057 | | | mg/l | 80 | 82.3 | 102.9 | 80-120% |
| Hardness, Total as CaCO3 | GN79057 | | | mg/l | 80 | 80.4 | 100.5 | 80-120% |
| Hardness, Total as CaCO3 | GN79057 | | | mg/l | 160 | 161 | 100.6 | 80-120% |
| Nitrogen, Ammonia | GP12689/GN79290 | 0.20 | 0.0 | mg/l | 1 | 0.978 | 97.8 | 80-120% |
| Solids, Total Dissolved | GN79083 | 10 | 0.0 | mg/l | | | | |
| Sulfate | GP12901/GN79756 | 2.0 | 0.0 | mg/l | 10 | 10.5 | 105.0 | 90-110% |
| Total Organic Carbon | GP12570/GN79045 | 1.0 | 0.0 | mg/l | 10 | 10.6 | 106.0 | 90-110% |

Associated Samples:

Batch GN79057: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GN79083: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GN79191: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12570: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12636: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12689: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12901: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 (*) Outside of QC limits

9.1
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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Analyte | Batch ID | QC Sample | Units | Original Result | DUP Result | RPD | QC Limits |
|----------------------------|-----------------|-----------|-------|-----------------|------------|------|-----------|
| Alkalinity, Total as CaCO3 | GN79191 | JC64728-2 | mg/l | 270 | 275 | 1.8 | 0-10% |
| Bromide | GP12901/GN79756 | JC64700-2 | mg/l | 0.067 | 0.074 | 9.9 | 0-20% |
| Chemical Oxygen Demand | GP12636/GN79195 | FA53554-4 | mg/l | 27.9 | 25.4 | 9.4 | 0-25% |
| Chloride | GP12901/GN79756 | JC64700-2 | mg/l | 2.7 | 2.4 | 11.8 | 0-20% |
| Hardness, Total as CaCO3 | GN79057 | JC64494-1 | mg/l | 104 | 102 | 1.9 | 0-10% |
| Nitrogen, Ammonia | GP12689/GN79290 | JC64630-1 | mg/l | 1.0 | 1.0 | 0.0 | 0-33% |
| Solids, Total Dissolved | GN79083 | JC64546-1 | mg/l | 1090 | 1040 | 4.7 | 0-16% |
| Sulfate | GP12901/GN79756 | JC64700-2 | mg/l | 0.081 | 0.0 | 0.0 | 0-20% |

Associated Samples:

Batch GN79057: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GN79083: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GN79191: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12636: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12689: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 Batch GP12901: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8
 (*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Analyte | Batch ID | QC Sample | Units | Original Result | Spike Amount | MS Result | %Rec | QC Limits |
|--------------------------|-----------------|-----------|-------|-----------------|--------------|-----------|-----------|-----------|
| Bromide | GP12901/GN79756 | JC64700-2 | mg/l | 0.067 | 1 | 1.1 | 103.3 | 80-120% |
| Chemical Oxygen Demand | GP12636/GN79195 | FA53554-4 | mg/l | 27.9 | 50 | 76.2 | 96.6 | 55-133% |
| Chloride | GP12901/GN79756 | JC64700-2 | mg/l | 2.7 | 10 | 12.2 | 95.0 | 80-120% |
| Hardness, Total as CaCO3 | GN79057 | JC64494-1 | mg/l | 104 | 160 | 263 | 99.4 | 67-130% |
| Nitrogen, Ammonia | GP12689/GN79290 | JC64630-1 | mg/l | 1.0 | 1 | 2.0 | 100.0 | 75-131% |
| Sulfate | GP12901/GN79938 | JC64700-2 | mg/l | 0.081 | 20 | 36.7 | 183.5N(a) | 80-120% |
| Total Organic Carbon | GP12570/GN79045 | JC64700-2 | mg/l | 6.5 | 10 | 18.2 | 117.0 | 50-150% |

Associated Samples:

Batch GN79057: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Batch GP12570: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Batch GP12636: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Batch GP12689: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Batch GP12901: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Analyte | Batch ID | QC Sample | Units | Original Result | Spike Amount | MSD Result | RPD | QC Limit |
|----------------------|-----------------|-----------|-------|-----------------|--------------|------------|-----|----------|
| Nitrogen, Ammonia | GP12689/GN79290 | JC64630-1 | mg/l | 1.0 | 1 | 2.0 | 0.0 | 14% |
| Total Organic Carbon | GP12570/GN79045 | JC64700-2 | mg/l | 6.5 | 10 | 18.2 | 0.0 | 11% |

Associated Samples:

Batch GP12570: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

Batch GP12689: JC64700-2, JC64700-3, JC64700-4, JC64700-7, JC64700-8

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: E80423W1.TXT Date Analyzed: 04/23/18 Methods: SW846 9060A
Analyst: CD Run ID: GN79045
Parameters: Total Organic Carbon

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|-------------------------|
| 09:21 | GN79045-STD1 | 1 | | STDA |
| 09:43 | GN79045-STD2 | 1 | | STDB |
| 09:56 | GN79045-STD3 | 1 | | STDC |
| 10:09 | GN79045-STD4 | 1 | | STDD |
| 10:23 | GN79045-STD5 | 1 | | STDE |
| 10:39 | GN79045-STD6 | 1 | | STDF |
| 10:57 | GN79045-STD7 | 1 | | STDG |
| 11:13 | GN79045-STD8 | 1 | | STDH |
| 12:15 | ZZZZZZ | 1 | | |
| 12:34 | GN79045-CRI1 | 1 | | average of 5 injections |
| 12:49 | GN79045-HSTD1 | 1 | | |
| 13:05 | GN79045-ICV1 | 1 | | |
| 13:20 | GN79045-ICB1 | 1 | | |
| 13:39 | GN79045-CCV1 | 1 | | |
| 13:53 | GN79045-CCB1 | 1 | | |
| 14:21 | ZZZZZZ | 1 | | |
| 14:34 | GP12570-MB1 | 1 | | |
| 15:19 | GP12570-B1 | 1 | | |
| 15:34 | JC64700-2 | 1 | | |
| 15:48 | GP12570-S1 | 1 | | |
| 16:04 | GP12570-MSD1 | 1 | | |
| 16:19 | JC64700-3 | 1 | | |
| 16:31 | JC64700-4 | 1 | | |
| 16:44 | JC64700-7 | 1 | | average of 5 injections |
| 17:01 | JC64700-8 | 1 | | |
| 17:15 | GN79045-CCVA1 | 1 | | |
| 17:30 | GN79045-CCB2 | 1 | | |
| 17:44 | ZZZZZZ | 1 | | |

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: E80423W1.TXT

Date Analyzed: 04/23/18
Run ID: GN79045

Methods: SW846 9060A
Units: mg/l

| Sample Number | Parameter | Result | RL | IDL/MDL | True Value | % Recov. | QC Limits |
|---------------|----------------------|--------|-----|---------|------------|----------|-----------|
| GN79045-CRI1 | Total Organic Carbon | 1.3 | 1.0 | 0.60 | 1 | 130.0 | 70-130 |
| GN79045-HSTD1 | Total Organic Carbon | 52.1 | 1.0 | 0.60 | 50 | 104.2 | 90-110 |
| GN79045-ICV1 | Total Organic Carbon | 20.7 | 1.0 | 0.60 | 20 | 103.5 | 90-110 |
| GN79045-ICB1 | Total Organic Carbon | 0.60 U | 1.0 | 0.60 | | | |
| GN79045-CCV1 | Total Organic Carbon | 26.2 | 1.0 | 0.60 | 25 | 104.8 | 90-110 |
| GN79045-CCB1 | Total Organic Carbon | 0.67 | 1.0 | 0.60 | | | |
| GN79045-CCVA1 | Total Organic Carbon | 52.3 | 1.0 | 0.60 | 50 | 104.6 | |
| GN79045-CCB2 | Total Organic Carbon | 0.60 U | 1.0 | 0.60 | | | |

(!) Outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: D042718W1.AMN Date Analyzed: 04/27/18 Methods: SM4500NH3 H-11LACHAT
Analyst: TG Run ID: GN79290
Parameters: Nitrogen, Ammonia

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 14:10 | GN79290-STD1 | 1 | | STDA |
| 14:12 | GN79290-STD2 | 1 | | STDB |
| 14:13 | GN79290-STD3 | 1 | | STDC |
| 14:14 | GN79290-STD4 | 1 | | STDD |
| 14:16 | GN79290-STD5 | 1 | | STDE |
| 14:17 | GN79290-STD6 | 1 | | STDF |
| 14:19 | GN79290-STD7 | 1 | | STDG |
| 14:20 | GN79290-ICV1 | 1 | | |
| 14:22 | GN79290-ICB1 | 1 | | |
| 14:23 | GN79290-CCV2 | 1 | | |
| 14:24 | GN79290-CCB4 | 1 | | |
| 14:26 | GP12689-MB1 | 1 | | |
| 14:27 | GP12689-B1 | 1 | | |
| 14:29 | GP12689-S1 | 1 | | |
| 14:30 | GP12689-MSD1 | 1 | | |
| 14:32 | GP12689-D1 | 1 | | |
| 14:33 | JC64630-1 | 1 | | (sample used for QC only; not part of login JC64700) |
| 14:34 | ZZZZZZ | 1 | | |
| 14:36 | ZZZZZZ | 1 | | |
| 14:37 | ZZZZZZ | 1 | | |
| 14:39 | ZZZZZZ | 1 | | |
| 14:40 | GN79290-CCVA3 | 1 | | |
| 14:42 | GN79290-CCB5 | 1 | | |
| 14:43 | ZZZZZZ | 1 | | |
| 14:44 | ZZZZZZ | 1 | | |
| 14:46 | ZZZZZZ | 1 | | |
| 14:47 | ZZZZZZ | 1 | | |
| 14:49 | JC64700-2 | 1 | | |
| 14:50 | JC64700-3 | 1 | | |
| 14:52 | ZZZZZZ | 5 | | |
| 14:53 | JC64700-4 | 1 | | |
| 14:54 | JC64700-7 | 1 | | |
| 14:56 | JC64700-8 | 1 | | |

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: D042718W1.AMN Date Analyzed: 04/27/18 Methods: SM4500NH3 H-11LACHAT
Analyst: TG Run ID: GN79290
Parameters: Nitrogen, Ammonia

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 14:57 | GN79290-CCV3 | 1 | | |
| 14:59 | GN79290-CCB6 | 1 | | |
| 15:00 | ZZZZZZ | 1 | | |
| 15:02 | ZZZZZZ | 1 | | |
| 15:03 | ZZZZZZ | 1 | | |
| 15:04 | ZZZZZZ | 1 | | |
| 15:06 | ZZZZZZ | 1 | | |
| 15:07 | ZZZZZZ | 1 | | |
| 15:09 | GP12691-MB1 | 1 | | |
| 15:10 | GP12691-B1 | 1 | | |
| 15:12 | GP12691-S1 | 1 | | overrange see 1:4 |
| 15:13 | GN79290-CCVA4 | 1 | | |
| 15:15 | GN79290-CCB7 | 1 | | |
| 15:16 | GP12691-MSD1 | 1 | | overrange see 1:4 |
| 15:17 | GP12691-D1 | 1 | | overrange see 1:4 |
| 15:19 | JC64832-1 | 1 | | (sample used for QC only; not part of login JC64700) |
| 15:20 | ZZZZZZ | 1 | | |
| 15:22 | ZZZZZZ | 1 | | |
| 15:23 | ZZZZZZ | 1 | | |
| 15:25 | ZZZZZZ | 1 | | |
| 15:26 | ZZZZZZ | 1 | | |
| 15:28 | ZZZZZZ | 1 | | |
| 15:29 | ZZZZZZ | 1 | | |
| 15:30 | ZZZZZZ | 1 | | |
| 15:32 | GN79290-CCV4 | 1 | | |
| 15:41 | GN79290-CCVA1 | 1 | | |
| 15:43 | GN79290-CCB1 | 1 | | |
| 15:44 | ZZZZZZ | 1 | | |
| 15:46 | ZZZZZZ | 1 | | |
| 15:47 | ZZZZZZ | 1 | | |
| 15:49 | ZZZZZZ | 1 | | |
| 15:50 | ZZZZZZ | 1 | | |
| 15:52 | ZZZZZZ | 1 | | |

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: D042718W1.AMN Date Analyzed: 04/27/18 Methods: SM4500NH3 H-11LACHAT
Analyst: TG Run ID: GN79290
Parameters: Nitrogen, Ammonia

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 15:53 | ZZZZZZ | 1 | | |
| 15:54 | ZZZZZZ | 1 | | |
| 15:56 | GN79290-CCV1 | 1 | | |
| 15:57 | GN79290-CCB2 | 1 | | |
| 15:59 | ZZZZZZ | 10 | | |
| 16:00 | ZZZZZZ | 1 | | |
| 16:02 | ZZZZZZ | 1 | | |
| 16:03 | GP12691-S1 | 4 | | |
| 16:05 | GP12691-MSD1 | 4 | | |
| 16:06 | GP12691-D1 | 4 | | |
| 16:07 | JC64832-1 | 4 | | (sample used for QC only; not part of login JC64700) |
| 16:09 | ZZZZZZ | 4 | | |
| 16:10 | ZZZZZZ | 4 | | |
| 16:12 | ZZZZZZ | 100 | | |
| 16:13 | GN79290-CCVA2 | 1 | | |
| 16:15 | GN79290-CCB3 | 1 | | |

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: D042718W1.AMN

Date Analyzed: 04/27/18
Run ID: GN79290

Methods: SM4500NH3 H-11LACHAT
Units: mg/l

| Sample Number | Parameter | Result | RL | IDL/MDL | True Value | % Recov. | QC Limits |
|---------------|-------------------|--------|------|---------|------------|----------|-----------|
| GN79290-ICV1 | Nitrogen, Ammonia | 1.46 | 0.20 | 0.14 | 1.5 | 97.3 | 90-110 |
| GN79290-ICB1 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCV2 | Nitrogen, Ammonia | 1.48 | 0.20 | 0.14 | 1.5 | 98.7 | 90-110 |
| GN79290-CCB4 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCVA3 | Nitrogen, Ammonia | 2.89 | 0.20 | 0.14 | 3 | 96.3 | |
| GN79290-CCB5 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCV3 | Nitrogen, Ammonia | 1.38 | 0.20 | 0.14 | 1.5 | 92.0 | 90-110 |
| GN79290-CCB6 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCVA4 | Nitrogen, Ammonia | 2.71 | 0.20 | 0.14 | 3 | 90.3 | |
| GN79290-CCB7 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCV4 | Nitrogen, Ammonia | 1.31 | 0.20 | 0.14 | 1.5 | 87.3!(a) | 90-110 |
| GN79290-CCVA1 | Nitrogen, Ammonia | 2.74 | 0.20 | 0.14 | 3 | 91.3 | |
| GN79290-CCB1 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCV1 | Nitrogen, Ammonia | 1.47 | 0.20 | 0.14 | 1.5 | 98.0 | 90-110 |
| GN79290-CCB2 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |
| GN79290-CCVA2 | Nitrogen, Ammonia | 2.77 | 0.20 | 0.14 | 3 | 92.3 | |
| GN79290-CCB3 | Nitrogen, Ammonia | 0.14 U | 0.20 | 0.14 | | | |

(!) Outside of QC limits

(a) No samples reported for this test in the area associated with this QC.

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051001.TXT Date Analyzed: 05/10/18 Methods: EPA 300/SW846 9056A
Analyst: NV Run ID: GN79756
Parameters: Bromide,Chloride,Sulfate

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 08:57 | GN79756-STD1 | 1 | | Manually integrated chrom. peaks reviewed and verified to comply with criteria of Accutest SOP EQA044. |
| 09:25 | GN79756-STD2 | 1 | | STDB |
| 09:53 | GN79756-STD3 | 1 | | STDC |
| 10:20 | GN79756-STD4 | 1 | | STDD |
| 11:16 | GN79756-STD6 | 1 | | STDF |
| 13:19 | GN79756-STD5 | 1 | | STDE |
| 08:16 | GN79756-ICV1 | 1 | | |
| 08:43 | GN79756-CCV1 | 1 | | |
| 09:11 | GN79756-CCB1 | 1 | | |
| 09:39 | GP12885-MB1 | 1 | | |
| 10:07 | GP12885-B1 | 1 | | |
| 10:35 | ZZZZZZ | 1 | | |
| 11:03 | ZZZZZZ | 1 | | |
| 11:31 | ZZZZZZ | 1 | | |
| 11:59 | ZZZZZZ | 1 | | |
| 12:27 | ZZZZZZ | 1 | | |
| 12:55 | ZZZZZZ | 1 | | |
| 13:23 | ZZZZZZ | 1 | | |
| 13:51 | ZZZZZZ | 1 | | |
| 14:18 | GN79756-CCV2 | 1 | | |
| 14:46 | GN79756-CCB2 | 1 | | |
| 15:14 | ZZZZZZ | 2 | | |
| 15:42 | GN79756-CCV3 | 1 | | |
| 16:10 | GN79756-CCB3 | 1 | | |
| 16:45 | GP12767-MB7 | 1 | | |
| 16:45 | GP12883-MB2 | 1 | | |
| 17:47 | GP12767-B7 | 1 | | |
| 17:47 | GP12883-B2 | 1 | | |
| 18:14 | GP12767-S1 | 1 | | |
| 18:42 | GP12767-D1 | 1 | | |
| 19:10 | JC64927-2 | 1 | | (sample used for QC only; not part of login JC64700) |
| 19:38 | GP12767-S2 | 1 | | |
| 20:06 | ZZZZZZ | 1 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051001.TXT Date Analyzed: 05/10/18 Methods: EPA 300/SW846 9056A
Analyst: NV Run ID: GN79756
Parameters: Bromide, Chloride, Sulfate

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 20:34 | JC64927-4 | 1 | | (sample used for QC only; not part of login JC64700) |
| 21:02 | ZZZZZZ | 1 | | |
| 21:30 | ZZZZZZ | 1 | | |
| 21:58 | GN79756-CCV4 | 1 | | |
| 22:26 | GN79756-CCB4 | 1 | | |
| 22:54 | ZZZZZZ | 1 | | |
| 23:22 | ZZZZZZ | 1 | | |
| 23:50 | ZZZZZZ | 1 | | |
| 00:17 | ZZZZZZ | 1 | | |
| 00:45 | ZZZZZZ | 1 | | |
| 01:13 | ZZZZZZ | 1 | | |
| 01:41 | ZZZZZZ | 1 | | |
| 02:09 | ZZZZZZ | 1 | | |
| 03:05 | ZZZZZZ | 1 | | |
| 03:33 | ZZZZZZ | 1 | | |
| 04:01 | GN79756-CCV5 | 1 | | |
| 04:29 | GN79756-CCB5 | 1 | | |
| 04:57 | ZZZZZZ | 1 | | |
| 05:25 | ZZZZZZ | 1 | | |
| 05:53 | ZZZZZZ | 1 | | |
| 06:21 | ZZZZZZ | 1 | | |
| 06:49 | GN79756-CCV6 | 1 | | |
| 07:17 | GN79756-CCB6 | 1 | | |
| 07:44 | GP12883-MB2 | 1 | | |
| 07:44 | GP12885-MB2 | 1 | | |
| 07:44 | GP12901-MB2 | 1 | | |
| 07:44 | GP12859-MB4 | 1 | | |
| 08:12 | GP12883-B2 | 1 | | |
| 08:12 | GP12885-B2 | 1 | | |
| 08:12 | GP12901-B2 | 1 | | |
| 08:12 | GP12859-B4 | 1 | | |
| 08:43 | GP12883-S1 | 10 | | rerun on higher dilution |
| 09:11 | GP12883-D1 | 5 | | |

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051001.TXT Date Analyzed: 05/10/18 Methods: EPA 300/SW846 9056A
Analyst: NV Run ID: GN79756
Parameters: Bromide,Chloride,Sulfate

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 09:39 | JC64584-3 | 5 | | (sample used for QC only; not part of login JC64700) |
| 10:07 | ZZZZZZ | 100 | | |
| 10:35 | GP12883-S2 | 5 | | |
| 11:03 | JC64584-6 | 4 | | (sample used for QC only; not part of login JC64700) |
| 11:31 | ZZZZZZ | 30 | | |
| 11:59 | ZZZZZZ | 4 | | |
| 12:31 | GN79756-CCV7 | 1 | | |
| 12:58 | GN79756-CCB7 | 1 | | |
| 13:26 | ZZZZZZ | 10 | | |
| 13:54 | ZZZZZZ | 10 | | |
| 14:22 | ZZZZZZ | 30 | | |
| 14:50 | ZZZZZZ | 100 | | |
| 15:18 | ZZZZZZ | 3 | | |
| 15:46 | ZZZZZZ | 10 | | |
| 16:14 | ZZZZZZ | 400 | | |
| 16:41 | ZZZZZZ | 2 | | |
| 17:09 | ZZZZZZ | 10 | | |
| 17:37 | ZZZZZZ | 2 | | |
| 18:05 | GN79756-CCV8 | 1 | | |
| 18:33 | GN79756-CCB8 | 1 | | |
| 19:01 | ZZZZZZ | 3 | | |
| 19:29 | GP12859-S1 | 1 | | |
| 19:57 | GP12859-S1 | 50 | | |
| 20:25 | GP12859-S1 | 5 | | |
| 20:53 | GP12859-D1 | 30 | | |
| 21:21 | GP12859-D1 | 3 | | |
| 21:49 | JC64575-10 | 30 | | (sample used for QC only; not part of login JC64700) |
| 22:16 | JC64575-10 | 3 | | (sample used for QC only; not part of login JC64700) |
| 22:44 | GP12859-S2 | 1 | | |
| 23:12 | GP12859-S2 | 40 | | |
| 23:40 | GN79756-CCV9 | 1 | | |
| 00:08 | GN79756-CCB9 | 1 | | |
| 00:36 | GP12859-S2 | 2 | | |

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051001.TXT Date Analyzed: 05/10/18 Methods: EPA 300/SW846 9056A
Analyst: NV Run ID: GN79756
Parameters: Bromide,Chloride,Sulfate

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 01:04 | JC64575-11 | 20 | | (sample used for QC only; not part of login JC64700) |
| 01:32 | GP12885-S1 | 1 | | |
| 02:00 | GP12885-D1 | 1 | | rerun on dilution due to interference |
| 02:28 | JC64595-1 | 1 | | (sample used for QC only; not part of login JC64700) |
| 02:56 | ZZZZZZ | 1 | | |
| 03:24 | GP12901-S1 | 1 | | |
| 03:52 | GP12901-D1 | 1 | | |
| 04:20 | JC64700-2 | 1 | | |
| 04:47 | JC64700-3 | 1 | | |
| 05:15 | GN79756-CCV10 | 1 | | |
| 05:43 | GN79756-CCB10 | 1 | | |
| 06:11 | JC64700-4 | 1 | | |
| 06:39 | JC64700-7 | 1 | | |
| 07:07 | JC64700-8 | 1 | | |
| 07:35 | GP12883-S2 | 10 | | |
| 08:03 | ZZZZZZ | 500 | | |
| 08:31 | GN79756-CCV11 | 1 | | |
| 08:59 | GN79756-CCB11 | 1 | | |

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051001.TXT

Date Analyzed: 05/10/18
Run ID: GN79756

Methods: EPA 300/SW846 9056A
Units: mg/l

| Sample Number | Parameter | Result | RL | IDL/MDL | True Value | % Recov. | QC Limits |
|---------------|-----------|---------|------|---------|------------|------------|-----------|
| GN79756-ICV1 | Chloride | 10.1 | 2.0 | 0.070 | 10 | 101.0 | 90-110 |
| GN79756-ICV1 | Bromide | 1.06 | 0.50 | 0.060 | 1 | 106.0 | 90-110 |
| GN79756-ICV1 | Sulfate | 10.4 | 2.0 | 0.53 | 10 | 104.0 | 90-110 |
| GN79756-CCV1 | Chloride | 12.0 | 2.0 | 0.070 | 12.5 | 96.0 | 90-110 |
| GN79756-CCV1 | Bromide | 2.52 | 0.50 | 0.060 | 2.5 | 100.8 | 90-110 |
| GN79756-CCV1 | Sulfate | 12.2 | 2.0 | 0.53 | 12.5 | 97.6 | 90-110 |
| GN79756-CCB1 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB1 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB1 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV2 | Chloride | 12.0 | 2.0 | 0.070 | 12.5 | 96.0 | 90-110 |
| GN79756-CCV2 | Bromide | 2.53 | 0.50 | 0.060 | 2.5 | 101.2 | 90-110 |
| GN79756-CCV2 | Sulfate | 12.2 | 2.0 | 0.53 | 12.5 | 97.6 | 90-110 |
| GN79756-CCB2 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB2 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB2 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV3 | Chloride | 12.1 | 2.0 | 0.070 | 12.5 | 96.8 | 90-110 |
| GN79756-CCV3 | Bromide | 2.89 | 0.50 | 0.060 | 2.5 | 115.6! (a) | 90-110 |
| GN79756-CCV3 | Sulfate | 12.3 | 2.0 | 0.53 | 12.5 | 98.4 | 90-110 |
| GN79756-CCB3 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB3 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB3 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV4 | Chloride | 12.6 | 2.0 | 0.070 | 12.5 | 100.8 | 90-110 |
| GN79756-CCV4 | Bromide | 2.57 | 0.50 | 0.060 | 2.5 | 102.8 | 90-110 |
| GN79756-CCV4 | Sulfate | 12.8 | 2.0 | 0.53 | 12.5 | 102.4 | 90-110 |
| GN79756-CCB4 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB4 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB4 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV5 | Chloride | 13.0 | 2.0 | 0.070 | 12.5 | 104.0 | 90-110 |
| GN79756-CCV5 | Bromide | 2.81 | 0.50 | 0.060 | 2.5 | 112.4! (a) | 90-110 |
| GN79756-CCV5 | Sulfate | 13.1 | 2.0 | 0.53 | 12.5 | 104.8 | 90-110 |
| GN79756-CCB5 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB5 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB5 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV6 | Chloride | 12.0 | 2.0 | 0.070 | 12.5 | 96.0 | 90-110 |
| GN79756-CCV6 | Bromide | 2.54 | 0.50 | 0.060 | 2.5 | 101.6 | 90-110 |
| GN79756-CCV6 | Sulfate | 12.1 | 2.0 | 0.53 | 12.5 | 96.8 | 90-110 |
| GN79756-CCB6 | Chloride | 0.195 | 2.0 | 0.070 | | | |
| GN79756-CCB6 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB6 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV7 | Chloride | 12.0 | 2.0 | 0.070 | 12.5 | 96.0 | 90-110 |
| GN79756-CCV7 | Bromide | 2.54 | 0.50 | 0.060 | 2.5 | 101.6 | 90-110 |
| GN79756-CCV7 | Sulfate | 12.3 | 2.0 | 0.53 | 12.5 | 98.4 | 90-110 |
| GN79756-CCB7 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB7 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB7 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV8 | Chloride | 11.8 | 2.0 | 0.070 | 12.5 | 94.4 | 90-110 |
| GN79756-CCV8 | Bromide | 2.52 | 0.50 | 0.060 | 2.5 | 100.8 | 90-110 |
| GN79756-CCV8 | Sulfate | 12.2 | 2.0 | 0.53 | 12.5 | 97.6 | 90-110 |
| GN79756-CCB8 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB8 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB8 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |

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Instrument QC Summary
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051001.TXT

Date Analyzed: 05/10/18
Run ID: GN79756

Methods: EPA 300/SW846 9056A
Units: mg/l

| Sample Number | Parameter | Result | RL | IDL/MDL | True Value | % Recov. | QC Limits |
|---------------|-----------|---------|------|---------|------------|----------|-----------|
| GN79756-CCV9 | Chloride | 11.9 | 2.0 | 0.070 | 12.5 | 95.2 | 90-110 |
| GN79756-CCV9 | Bromide | 2.51 | 0.50 | 0.060 | 2.5 | 100.4 | 90-110 |
| GN79756-CCV9 | Sulfate | 12.3 | 2.0 | 0.53 | 12.5 | 98.4 | 90-110 |
| GN79756-CCB9 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB9 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB9 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV10 | Chloride | 11.9 | 2.0 | 0.070 | 12.5 | 95.2 | 90-110 |
| GN79756-CCV10 | Bromide | 2.53 | 0.50 | 0.060 | 2.5 | 101.2 | 90-110 |
| GN79756-CCV10 | Sulfate | 12.7 | 2.0 | 0.53 | 12.5 | 101.6 | 90-110 |
| GN79756-CCB10 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB10 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB10 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79756-CCV11 | Chloride | 12.0 | 2.0 | 0.070 | 12.5 | 96.0 | 90-110 |
| GN79756-CCV11 | Bromide | 2.55 | 0.50 | 0.060 | 2.5 | 102.0 | 90-110 |
| GN79756-CCV11 | Sulfate | 12.8 | 2.0 | 0.53 | 12.5 | 102.4 | 90-110 |
| GN79756-CCB11 | Chloride | 0.070 U | 2.0 | 0.070 | | | |
| GN79756-CCB11 | Bromide | 0.060 U | 0.50 | 0.060 | | | |
| GN79756-CCB11 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |

(!) Outside of QC limits

(a) No samples reported for this test in the area associated with this QC.

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SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051402.TXT Date Analyzed: 05/14/18 Methods: EPA 300/SW846 9056A
Analyst: NV Run ID: GN79938
Parameters: Sulfate

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 08:57 | GN79938-STD1 | 1 | | Manually integrated chrom. peaks reviewed and verified to comply with criteria of Accutest SOP EQA044. |
| 09:25 | GN79938-STD2 | 1 | | STDB |
| 09:53 | GN79938-STD3 | 1 | | STDC |
| 10:20 | GN79938-STD4 | 1 | | STDD |
| 11:16 | GN79938-STD6 | 1 | | STDF |
| 13:19 | GN79938-STD5 | 1 | | STDE |
| 12:57 | GN79938-ICV1 | 1 | | |
| 13:24 | GN79938-CCV1 | 1 | | |
| 13:52 | GN79938-CCB1 | 1 | | |
| 14:20 | GP12963-MB1 | 1 | | |
| 14:48 | GP12963-B1 | 1 | | |
| 15:16 | GP12963-S1 | 1 | | |
| 15:44 | GP12963-D1 | 1 | | |
| 16:12 | JC64821-1 | 1 | | (sample used for QC only; not part of login JC64700) |
| 16:40 | ZZZZZZ | 1 | | |
| 17:08 | ZZZZZZ | 1 | | |
| 17:37 | ZZZZZZ | 1 | | |
| 18:06 | GN79938-CCV2 | 1 | | |
| 18:34 | GN79938-CCB2 | 1 | | |
| 19:02 | GP12885-MB3 | 1 | | |
| 19:02 | GP13037-MB1 | 1 | | |
| 19:02 | GP12793-MB4 | 1 | | |
| 19:30 | GP12885-B3 | 1 | | |
| 19:30 | GP13037-B1 | 1 | | |
| 19:30 | GP12793-B4 | 1 | | |
| 19:58 | GP12885-S1 | 2000 | | |
| 20:25 | GP12885-S1 | 4 | | |
| 20:53 | GP12885-D1 | 1 | | |
| 21:21 | GP12885-D1 | 1000 | | |
| 21:49 | GP12885-D1 | 2 | | |
| 22:17 | JC64595-1 | 1 | | (sample used for QC only; not part of login JC64700) |
| 22:45 | JC64595-1 | 1000 | | (sample used for QC only; not part of login JC64700) |
| 23:13 | JC64595-1 | 2 | | (sample used for QC only; not part of login JC64700) |

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700
Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051402.TXT Date Analyzed: 05/14/18 Methods: EPA 300/SW846 9056A
Analyst: NV Run ID: GN79938
Parameters: Sulfate

| Time | Sample Description | Dilution Factor | PS Recov | Comments |
|-------|--------------------|-----------------|----------|--|
| 23:41 | ZZZZZZ | 1 | | |
| 00:09 | ZZZZZZ | 3 | | |
| 00:37 | GN79938-CCV3 | 1 | | |
| 01:05 | GN79938-CCB3 | 1 | | |
| 01:33 | GP13037-S1 | 1 | | |
| 02:01 | GP13037-D1 | 1 | | |
| 02:28 | JC65050-2 | 1 | | (sample used for QC only; not part of login JC64700) |
| 02:56 | GP13037-S2 | 1 | | |
| 03:24 | JC65050-3 | 1 | | (sample used for QC only; not part of login JC64700) |
| 03:52 | ZZZZZZ | 1 | | |
| 04:20 | ZZZZZZ | 1 | | |
| 04:48 | ZZZZZZ | 1 | | |
| 05:16 | ZZZZZZ | 1 | | |
| 05:44 | ZZZZZZ | 1 | | |
| 06:12 | GN79938-CCV4 | 1 | | |
| 06:40 | GN79938-CCB4 | 1 | | |
| 07:08 | ZZZZZZ | 1 | | |
| 07:36 | ZZZZZZ | 1 | | |
| 08:04 | ZZZZZZ | 1 | | |
| 08:31 | GP12793-S1 | 20 | | |
| 09:04 | GN79938-CCV5 | 1 | | |
| 09:38 | GN79938-CCB5 | 1 | | |
| 10:06 | GP12901-MB3 | 1 | | |
| 10:06 | GP12883-MB3 | 1 | | |
| 11:22 | GP12901-B3 | 1 | | |
| 11:22 | GP12883-B3 | 1 | | |
| 11:49 | GP12901-S1 | 1 | | Over calibration curve. See rerun at dilution. |
| 12:26 | GP12883-S1 | 20 | | |
| 13:09 | GP12885-S1 | 4 | | |
| 13:37 | GP12885-D1 | 2 | | |
| 14:10 | JC64595-1 | 2 | | (sample used for QC only; not part of login JC64700) |
| 14:38 | ZZZZZZ | 1 | | |
| 15:34 | GP12901-S1 | 2 | | |

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051402.TXT

Date Analyzed: 05/14/18

Methods: EPA 300/SW846 9056A

Analyst: NV

Run ID: GN79938

Parameters: Sulfate

| Time | Sample Description | Dilution PS | | Comments |
|------|--------------------|-------------|-------|----------|
| | | Factor | Recov | |

17:18 GN79938-CCV6 1

17:46 GN79938-CCB6 1

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC64700

Account: ILINY - Parsons Engineering Science for ILI
Project: PESNYL: ILI - Region 3, Westchester County Airport Landfill

File ID: 1118051402.TXT

Date Analyzed: 05/14/18
Run ID: GN79938

Methods: EPA 300/SW846 9056A
Units: mg/l

| Sample Number | Parameter | Result | RL | IDL/MDL | True Value | % Recov. | QC Limits |
|---------------|-----------|--------|-----|---------|------------|----------|-----------|
| GN79938-ICV1 | Sulfate | 9.70 | 2.0 | 0.53 | 10 | 97.0 | 90-110 |
| GN79938-CCV1 | Sulfate | 12.2 | 2.0 | 0.53 | 12.5 | 97.6 | 90-110 |
| GN79938-CCB1 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79938-CCV2 | Sulfate | 12.1 | 2.0 | 0.53 | 12.5 | 96.8 | 90-110 |
| GN79938-CCB2 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79938-CCV3 | Sulfate | 13.6 | 2.0 | 0.53 | 12.5 | 108.8 | 90-110 |
| GN79938-CCB3 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79938-CCV4 | Sulfate | 13.5 | 2.0 | 0.53 | 12.5 | 108.0 | 90-110 |
| GN79938-CCB4 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79938-CCV5 | Sulfate | 13.7 | 2.0 | 0.53 | 12.5 | 109.6 | 90-110 |
| GN79938-CCB5 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |
| GN79938-CCV6 | Sulfate | 11.8 | 2.0 | 0.53 | 12.5 | 94.4 | 90-110 |
| GN79938-CCB6 | Sulfate | 0.53 U | 2.0 | 0.53 | | | |

(!) Outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Orlando, FL)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle



CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480

| | | | | | | | | | | | | | | | | | | | | |
|--|--|--------------------------|--|---------------------------|-------------------|--|--|---|---|---------------------------------|--|----------------------------|--|------------------|--|--|--|--|--------------|--|
| Client / Reporting Information | | | Project Information | | | | | | Requested Analysis (see TEST CODE sheet) | | | | | | | | | | Matrix Codes | |
| Company Name: SGS North America Inc. | | | Project Name: PESNYL: I/LI - Region 3, Westchester County Airport Landfill | | | | | | DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank | | | | | | | | | | LAB USE ONLY | |
| Street Address: 2235 Route 130 | | | Street: | | | Billing Information (if different from Report to) | | | | | | | | | | | | | | |
| City: Dayton State: NJ Zip: 08810 | | City: State: | | | Company Name: | | | | | | | | | | | | | | | |
| Project Contact: E-mail: michelle.jenkins@sgs.com | | Project #: | | | Street Address: | | | | | | | | | | | | | | | |
| Phone #: 732-329-0200 | | Client Purchase Order #: | | | City: State: Zip: | | | | | | | | | | | | | | | |
| Sampler(s) Name(s): PRS | | | Project Manager: | | | | | | Attention: | | | | | | | | | | | |
| Turnaround Time (Business days) | | | Data Deliverable Information | | | | | | Comments / Special Instructions | | | | | | | | | | | |
| <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other 14 Emergency & Rush T/A data available via Lablink | | | Approved By (SGS PM): / Date: _____ _____ _____ | | | | | | <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format <input type="checkbox"/> Commercial "C" <input checked="" type="checkbox"/> Other NYASPB | | | | | | | | | | | |
| Sample Custody must be documented below each time samples change possession, including courier delivery. | | | Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data | | | | | | | | | | | | | | | | | |
| Relinquished by Sampler: _____ Date Tm: 1700 4-23-18 | | Received By: 1 FEDEX | | Relinquished By: 2 Fed Ex | | Date Time: _____ | | Received By: 3 [Signature] | | Date Time: 04/24/18 | | Received By: 4 [Signature] | | Date Time: 915 | | | | | | |
| Relinquished by: _____ Date Time: _____ | | Received By: 3 | | Relinquished By: 4 | | Date Time: _____ | | Received By: _____ | | Date Time: _____ | | Received By: _____ | | Date Time: _____ | | | | | | |
| Relinquished by: _____ Date Time: _____ | | Received By: 5 | | Custody Seal # 3469 | | <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact | | Preserved where applicable <input type="checkbox"/> | | On Ice <input type="checkbox"/> | | Cooler Temp. 2.8 | | | | | | | | |

10.1 10

JC64700: Chain of Custody
Page 1 of 2
SGS Orlando, FL



SGS Sample Receipt Summary

Job Number: JC64700

Client: ALNJ

Project: PESNYL:ILI

Date / Time Received: 4/24/2018 9:15:00 AM

Delivery Method: FED EX

Airbill #s: 1001891773460003281100563393516030

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information

| | <u>Y</u> | <u>or</u> | <u>N</u> |
|-----------------------------|-------------------------------------|-----------|--------------------------|
| 1. Custody Seals Present | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 2. Custody Seals Intact | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 3. Temp criteria achieved | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |
| 4. Cooler temp verification | <u>IR Gun</u> | | |
| 5. Cooler media | <u>Ice (Bag)</u> | | |

Trip Blank Information

| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|--------------------------------|--------------------------|-----------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | <u>W</u> | <u>or</u> | <u>S</u> | <u>N/A</u> |
| 3. Type Of TB Received | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Information

| | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 2. Samples preserved properly | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 3. Sufficient volume/containers recvd for analysis: | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 4. Condition of sample | <u>Intact</u> | | | |
| 5. Sample recvd within HT | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 6. Dates/Times/IDs on COC match Sample Label | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | |
| 7. VOCs have headspace | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Bottles received for unspecified tests | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | |
| 9. Compositing instructions clear | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs? | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. % Solids Jar received? | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present? | <input type="checkbox"/> | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
 Rev. Date 05/24/17

Technician: SHAYLAP

Date: 4/24/2018 9:15:00 AM

Reviewer: SP

Date: 4/24/2018

JC64700: Chain of Custody

Page 2 of 2

10.1 10

Internal Sample Tracking Chronicle

SGS Dayton, NJ

Job No: JC64700

ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill
 Project No: 450619

| Sample Number | Method | Analyzed | By | Prepped | By | Test Codes |
|-------------------------------|----------------------------|-----------------|---------------------|-----------|----|-------------|
| JC64700-1 3-WES-002-001-01 | Collected: 19-APR-18 11:20 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-1 | EPA 537M BY ID | 01-MAY-18 03:50 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-2 3-WES-002-001-02 | Collected: 19-APR-18 11:40 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-2 | EPA 537M BY ID | 01-MAY-18 04:08 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-3 3-WES-002-001-03 | Collected: 19-APR-18 13:50 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-3 | EPA 537M BY ID | 01-MAY-18 04:27 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-4 3-WES-002-001-04 | Collected: 19-APR-18 14:50 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-4 | EPA 537M BY ID | 01-MAY-18 05:05 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-5 3-WES-002-001-05 | Collected: 19-APR-18 11:50 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-5 | EPA 537M BY ID | 01-MAY-18 06:01 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-7 3-WES-002-001-07 | Collected: 19-APR-18 11:55 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-7 | EPA 537M BY ID | 01-MAY-18 06:20 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-7 | EPA 537M BY ID | 01-MAY-18 11:57 | NG | 27-APR-18 | MB | LCID537NY21 |
| JC64700-8 3-WES-002-001-08 | Collected: 19-APR-18 12:30 | By: PRS | Received: 20-APR-18 | By: SP | | |
| JC64700-8 | EPA 537M BY ID | 01-MAY-18 06:57 | NG | 27-APR-18 | MB | LCID537NY21 |

10.2
10

MS Semi-volatiles

QC Data Summaries

(SGS Orlando, FL)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Injection Standard Area Summaries
- Isotope Dilution Standard Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-MB | 2Q13815.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

JC64700-1, JC64700-2, JC64700-3, JC64700-4, JC64700-5, JC64700-7, JC64700-8

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|------------|-------------------------------|---------|--------|--------|-------|---|
| 375-22-4 | Perfluorobutanoic acid | ND | 0.0080 | 0.0020 | ug/l | |
| 2706-90-3 | Perfluoropentanoic acid | 0.00113 | 0.0040 | 0.0010 | ug/l | J |
| 307-24-4 | Perfluorohexanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 375-85-9 | Perfluoroheptanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 335-67-1 | Perfluorooctanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 375-95-1 | Perfluorononanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 307-55-1 | Perfluorododecanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 0.00114 | 0.0040 | 0.0010 | ug/l | J |
| 375-73-5 | Perfluorobutanesulfonic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | ND | 0.0080 | 0.0020 | ug/l | |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 754-91-6 | PFOSA | ND | 0.0040 | 0.0010 | ug/l | |
| 2355-31-9 | MeFOSAA | ND | 0.020 | 0.0040 | ug/l | |
| 2991-50-6 | EtFOSAA | ND | 0.020 | 0.0040 | ug/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | ND | 0.0080 | 0.0020 | ug/l | |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | 0.0080 | 0.0020 | ug/l | |

| CAS No. | ID Standard Recoveries | Limits |
|---------|------------------------|-------------|
| | 13C4-PFBA | 92% 30-140% |
| | 13C5-PFPeA | 89% 40-140% |
| | 13C5-PFHxA | 93% 50-150% |
| | 13C4-PFHpA | 91% 50-150% |
| | 13C8-PFOA | 93% 50-150% |
| | 13C9-PFNA | 89% 50-150% |
| | 13C6-PFDA | 90% 50-150% |
| | 13C7-PFUnDA | 82% 50-150% |
| | 13C2-PFDoDA | 79% 50-150% |
| | 13C2-PFTeDA | 72% 40-150% |
| | 13C3-PFBS | 98% 50-150% |

11.1.1
11

Method Blank Summary

Job Number: JC64700

Account: ALNJ SGS Dayton, NJ

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-MB | 2Q13815.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JC64700-1, JC64700-2, JC64700-3, JC64700-4, JC64700-5, JC64700-7, JC64700-8

| CAS No. | ID Standard Recoveries | Limits |
|---------|------------------------|-------------|
| | 13C3-PFHxS | 99% 50-150% |
| | 13C8-PFOS | 93% 50-150% |
| | 13C8-FOSA | 74% 30-140% |
| | d3-MeFOSAA | 93% 50-150% |
| | 13C2-6:2FTS | 99% 50-150% |
| | 13C2-8:2FTS | 91% 50-150% |

11.1.1
11

Blank Spike Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-BS | 2Q13814.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

JC64700-1, JC64700-2, JC64700-3, JC64700-4, JC64700-5, JC64700-7, JC64700-8

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|------------|-------------------------------|------------|----------|-------|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.08 | 0.0855 | 107 | 70-130 |
| 2706-90-3 | Perfluoropentanoic acid | 0.08 | 0.0878 | 110 | 70-130 |
| 307-24-4 | Perfluorohexanoic acid | 0.08 | 0.0758 | 95 | 70-130 |
| 375-85-9 | Perfluoroheptanoic acid | 0.08 | 0.0869 | 109 | 71-130 |
| 335-67-1 | Perfluorooctanoic acid | 0.08 | 0.0853 | 107 | 74-130 |
| 375-95-1 | Perfluorononanoic acid | 0.08 | 0.0780 | 98 | 76-130 |
| 335-76-2 | Perfluorodecanoic acid | 0.08 | 0.0769 | 96 | 70-130 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.08 | 0.0827 | 103 | 70-130 |
| 307-55-1 | Perfluorododecanoic acid | 0.08 | 0.0845 | 106 | 70-130 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.08 | 0.0918 | 115 | 70-139 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.08 | 0.0790 | 99 | 70-130 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0708 | 0.0742 | 105 | 73-130 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.0728 | 0.0743 | 102 | 74-130 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.076 | 0.0831 | 109 | 74-130 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.074 | 0.0828 | 112 | 70-130 |
| 335-77-3 | Perfluorodecanesulfonic acid | 0.0772 | 0.0776 | 101 | 70-130 |
| 754-91-6 | PFOSA | 0.08 | 0.0883 | 110 | 70-131 |
| 2355-31-9 | MeFOSAA | 0.08 | 0.0844 | 106 | 70-130 |
| 2991-50-6 | EtFOSAA | 0.08 | 0.0857 | 107 | 70-130 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 0.076 | 0.0819 | 108 | 70-133 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | 0.0768 | 0.0806 | 105 | 70-130 |

| CAS No. | ID Standard Recoveries | BSP | Limits |
|---------|------------------------|------|---------|
| | 13C4-PFBA | 102% | 30-140% |
| | 13C5-PFPeA | 99% | 40-140% |
| | 13C5-PFHxA | 102% | 50-150% |
| | 13C4-PFHpA | 100% | 50-150% |
| | 13C8-PFOA | 101% | 50-150% |
| | 13C9-PFNA | 100% | 50-150% |
| | 13C6-PFDA | 102% | 50-150% |
| | 13C7-PFUnDA | 92% | 50-150% |
| | 13C2-PFDoDA | 85% | 50-150% |
| | 13C2-PFTeDA | 79% | 40-150% |
| | 13C3-PFBS | 107% | 50-150% |

* = Outside of Control Limits.

11.21 11

Blank Spike Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-BS | 2Q13814.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

JC64700-1, JC64700-2, JC64700-3, JC64700-4, JC64700-5, JC64700-7, JC64700-8

| CAS No. | ID Standard Recoveries | BSP | Limits |
|---------|------------------------|------|---------|
| | 13C3-PFHxS | 105% | 50-150% |
| | 13C8-PFOS | 104% | 50-150% |
| | 13C8-FOSA | 77% | 30-140% |
| | d3-MeFOSAA | 106% | 50-150% |
| | 13C2-6:2FTS | 111% | 50-150% |
| | 13C2-8:2FTS | 106% | 50-150% |

11.2.1
11

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-MS | 2Q13819.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |
| JC64700-3 | 2Q13818.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JC64700-1, JC64700-2, JC64700-3, JC64700-4, JC64700-5, JC64700-8

| CAS No. | Compound | JC64700-3 ug/l | Spike Q | MS ug/l | MS % | Limits |
|------------|-------------------------------|-------------------|------------|------------|---------|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.0127 | | 0.08 | 110 | 70-130 |
| 2706-90-3 | Perfluoropentanoic acid | 0.0298 | | 0.08 | 114 | 70-130 |
| 307-24-4 | Perfluorohexanoic acid | 0.0203 | | 0.0985 | 98 | 70-130 |
| 375-85-9 | Perfluoroheptanoic acid | 0.0117 | | 0.102 | 113 | 71-130 |
| 335-67-1 | Perfluorooctanoic acid | 0.0163 | | 0.105 | 111 | 74-130 |
| 375-95-1 | Perfluorononanoic acid | 0.0190 | | 0.0983 | 99 | 76-130 |
| 335-76-2 | Perfluorodecanoic acid | ND | | 0.0822 | 103 | 70-130 |
| 2058-94-8 | Perfluoroundecanoic acid | ND | | 0.0867 | 108 | 70-130 |
| 307-55-1 | Perfluorododecanoic acid | ND | | 0.0886 | 111 | 70-130 |
| 72629-94-8 | Perfluorotridecanoic acid | ND | | 0.0945 | 118 | 70-139 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.00114 J | | 0.08 | 102 | 70-130 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0117 | | 0.0708 | 109 | 73-130 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.0641 | | 0.0728 | 103 | 74-130 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.00224 J | | 0.076 | 111 | 74-130 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.0508 | | 0.133 | 111 | 70-130 |
| 335-77-3 | Perfluorodecanesulfonic acid | ND | | 0.0772 | 111 | 70-130 |
| 754-91-6 | PFOSA | ND | | 0.08 | 113 | 70-131 |
| 2355-31-9 | MeFOSAA | ND | | 0.08 | 114 | 70-130 |
| 2991-50-6 | EtFOSAA | ND | | 0.08 | 115 | 70-130 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | ND | | 0.076 | 111 | 70-133 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND | | 0.0768 | 108 | 70-130 |

| CAS No. | ID Standard Recoveries | MS | JC64700-3 | Limits |
|---------|------------------------|------|-----------|---------|
| | 13C4-PFBA | 92% | 87% | 30-140% |
| | 13C5-PFPeA | 88% | 84% | 40-140% |
| | 13C5-PFHxA | 94% | 89% | 50-150% |
| | 13C4-PFHpA | 97% | 92% | 50-150% |
| | 13C8-PFOA | 105% | 98% | 50-150% |
| | 13C9-PFNA | 104% | 95% | 50-150% |
| | 13C6-PFDA | 93% | 88% | 50-150% |
| | 13C7-PFUnDA | 85% | 79% | 50-150% |
| | 13C2-PFDoDA | 92% | 82% | 50-150% |
| | 13C2-PFTeDA | 90% | 79% | 40-150% |
| | 13C3-PFBS | 96% | 90% | 50-150% |

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-MS | 2Q13819.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |
| JC64700-3 | 2Q13818.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JC64700-1, JC64700-2, JC64700-3, JC64700-4, JC64700-5, JC64700-8

| CAS No. | ID Standard Recoveries | MS | JC64700-3 | Limits |
|---------|------------------------|------|-----------|---------|
| | 13C3-PFHxS | 98% | 93% | 50-150% |
| | 13C8-PFOS | 90% | 82% | 50-150% |
| | 13C8-FOSA | 74% | 62% | 30-140% |
| | d3-MeFOSAA | 100% | 89% | 50-150% |
| | 13C2-6:2FTS | 114% | 102% | 50-150% |
| | 13C2-8:2FTS | 101% | 87% | 50-150% |

11.3.1

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* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC64700

Account: ALNJ SGS Dayton, NJ

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-MS2 | 2Q13825.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |
| JC64700-7 ^a | 2Q13824.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |
| JC64700-7 | 2Q13842.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JC64700-7

| CAS No. | Compound | JC64700-7 ug/l | Spike Q | MS ug/l | MS % | Limits |
|------------|-------------------------------|-----------------------|------------|------------|---------|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.0191 ^b | 0.08 | 0.109 | 112 | 70-130 |
| 2706-90-3 | Perfluoropentanoic acid | 0.0600 ^b | 0.08 | 0.155 | 119 | 70-130 |
| 307-24-4 | Perfluorohexanoic acid | 0.0397 ^b | 0.08 | 0.119 | 99 | 70-130 |
| 375-85-9 | Perfluoroheptanoic acid | 0.0188 ^b | 0.08 | 0.113 | 118 | 71-130 |
| 335-67-1 | Perfluorooctanoic acid | 0.0178 ^b | 0.08 | 0.110 | 115 | 74-130 |
| 375-95-1 | Perfluorononanoic acid | 0.0261 ^b | 0.08 | 0.118 | 115 | 76-130 |
| 335-76-2 | Perfluorodecanoic acid | ND ^b | 0.08 | 0.0812 | 102 | 70-130 |
| 2058-94-8 | Perfluoroundecanoic acid | ND ^b | 0.08 | 0.0927 | 116 | 70-130 |
| 307-55-1 | Perfluorododecanoic acid | 0.00116 ^{bj} | 0.08 | 0.0929 | 115 | 70-130 |
| 72629-94-8 | Perfluorotridecanoic acid | ND ^b | 0.08 | 0.0982 | 123 | 70-139 |
| 376-06-7 | Perfluorotetradecanoic acid | ND ^b | 0.08 | 0.0838 | 105 | 70-130 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0111 ^b | 0.0708 | 0.0916 | 114 | 73-130 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.117 ^b | 0.0728 | 0.198 | 111 | 74-130 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.00530 ^b | 0.076 | 0.0943 | 117 | 74-130 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.0891 ^b | 0.074 | 0.243 | 208* | 70-130 |
| 335-77-3 | Perfluorodecanesulfonic acid | ND ^b | 0.0772 | 0.0847 | 110 | 70-130 |
| 754-91-6 | PFOSA | ND ^b | 0.08 | 0.0939 | 117 | 70-131 |
| 2355-31-9 | MeFOSAA | ND ^b | 0.08 | 0.0927 | 116 | 70-130 |
| 2991-50-6 | EtFOSAA | ND ^b | 0.08 | 0.0882 | 110 | 70-130 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 0.00681 ^{bj} | 0.076 | 0.0897 | 109 | 70-133 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | ND ^b | 0.0768 | 0.0873 | 114 | 70-130 |

| CAS No. | ID Standard Recoveries | MS | JC64700-7 | JC64700-7 | Limits |
|---------|------------------------|-----|-----------|--------------------|---------|
| | 13C4-PFBA | 79% | 41% | 42% | 30-140% |
| | 13C5-PFPeA | 76% | 40% | 42% | 40-140% |
| | 13C5-PFHxA | 83% | 43% * | 44% * ^c | 50-150% |
| | 13C4-PFHpA | 84% | 43% * | 45% * ^c | 50-150% |
| | 13C8-PFOA | 90% | 46% * | 50% | 50-150% |
| | 13C9-PFNA | 91% | 47% * | 51% | 50-150% |
| | 13C6-PFDA | 91% | 55% | 57% | 50-150% |
| | 13C7-PFUnDA | 79% | 56% | 64% | 50-150% |
| | 13C2-PFDoDA | 81% | 60% | 70% | 50-150% |
| | 13C2-PFTeDA | 74% | 51% | 59% | 40-150% |
| | 13C3-PFBS | 84% | 43% * | 43% * ^c | 50-150% |

* = Outside of Control Limits.

11.3.2
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Matrix Spike Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------------------|-----------|----|----------|----|-----------|------------|------------------|
| OP69810-MS2 | 2Q13825.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |
| JC64700-7 ^a | 2Q13824.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |
| JC64700-7 | 2Q13842.D | 1 | 05/01/18 | NG | 04/27/18 | OP69810 | S2Q256 |

The QC reported here applies to the following samples:

Method: EPA 537M BY ID

JC64700-7

| CAS No. | ID Standard Recoveries | MS | JC64700-7 | JC64700-7 | Limits |
|---------|------------------------|------|-----------|--------------------|---------|
| | 13C3-PFHxS | 88% | 43% * | 44% * ^c | 50-150% |
| | 13C8-PFOS | 85% | 48% * | 51% | 50-150% |
| | 13C8-FOSA | 57% | 43% | 43% | 30-140% |
| | d3-MeFOSAA | 95% | 65% | 70% | 50-150% |
| | 13C2-6:2FTS | 104% | 47% * | 50% | 50-150% |
| | 13C2-8:2FTS | 99% | 53% | 55% | 50-150% |

- (a) Confirmation run for internal standard areas.
- (b) Result is from Run #2.
- (c) Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

* = Outside of Control Limits.

Injection Standard Area Summary

Job Number: JC64700
Account: ALNJ SGS Dayton, NJ
Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|--------------------------------|---------------------------------|
| Check Std: S2Q256-CC256 | Injection Date: 05/01/18 |
| Lab File ID: 2Q13839.D | Injection Time: 11:01 |
| Instrument ID: GCMS2Q | Method: EPA 537M BY ID |

| | IS 1 | RT | IS 2 | RT |
|--------------------------|-------------|-----------|-------------|-----------|
| | AREA | | AREA | |
| Initial Cal ^a | 64930 | 6.97 | 39222 | 7.48 |
| Check Std ^b | 70476 | 6.96 | 40153 | 7.47 |
| Upper Limit ^c | 97395 | 7.96 | 58833 | 8.47 |
| Lower Limit ^d | 32465 | 5.96 | 19611 | 6.47 |

| Lab | IS 1 | RT | IS 2 | RT |
|------------------|-------------|-----------|-------------|-----------|
| Sample ID | AREA | | AREA | |
| OP69844-MS | 64754 | 6.96 | 36124 | 7.48 |
| JC64700-7 | | | | |
| S2Q256-ECC256 | 72173 | 6.97 | 40289 | 7.48 |

IS 1 = 13C2-PFOA
IS 2 = 13C4-PFOS

- (a) Initial Cal is: S2Q256-ICC256 2Q13778.D 04/30/18 15:58
- (b) Check Std Limit = -50 to + 50% of initial cal area.
- (c) Upper Limit = + 50% of initial standard area; Retention time + 1 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

11.4.1
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Isotope Dilution Standard Recovery Summary

Job Number: JC64700

Account: ALNJ SGS Dayton, NJ

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|-------------------------------|-------------------|
| Method: EPA 537M BY ID | Matrix: AQ |
|-------------------------------|-------------------|

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
|---------------|-------------|-----|-----|-------|-------|-----|-----|-----|----|
| JC64700-1 | 2Q13816.D | 104 | 100 | 103 | 103 | 109 | 102 | 99 | 86 |
| JC64700-2 | 2Q13817.D | 62 | 59 | 64 | 69 | 76 | 77 | 77 | 66 |
| JC64700-3 | 2Q13818.D | 87 | 84 | 89 | 92 | 98 | 95 | 88 | 79 |
| JC64700-4 | 2Q13820.D | 83 | 81 | 82 | 87 | 92 | 87 | 84 | 77 |
| JC64700-5 | 2Q13823.D | 94 | 88 | 92 | 92 | 99 | 90 | 84 | 80 |
| JC64700-7 | 2Q13842.D | 42 | 42 | 44* a | 45* a | 50 | 51 | 57 | 64 |
| JC64700-7 | 2Q13824.D | 41 | 40 | 43* | 43* | 46* | 47* | 55 | 56 |
| JC64700-8 | 2Q13826.D | 72 | 70 | 76 | 78 | 82 | 81 | 74 | 61 |
| OP69810-BS | 2Q13814.D | 102 | 99 | 102 | 100 | 101 | 100 | 102 | 92 |
| OP69810-MB | 2Q13815.D | 92 | 89 | 93 | 91 | 93 | 89 | 90 | 82 |
| OP69810-MS | 2Q13819.D | 92 | 88 | 94 | 97 | 105 | 104 | 93 | 85 |
| OP69810-MS2 | 2Q13825.D | 79 | 76 | 83 | 84 | 90 | 91 | 91 | 79 |

| Isotope Dilution Standards | Recovery Limits |
|----------------------------|-----------------|
| S1 = 13C4-PFBA | 30-140% |
| S2 = 13C5-PFPeA | 40-140% |
| S3 = 13C5-PFHxA | 50-150% |
| S4 = 13C4-PFHpA | 50-150% |
| S5 = 13C8-PFOA | 50-150% |
| S6 = 13C9-PFNA | 50-150% |
| S7 = 13C6-PFDA | 50-150% |
| S8 = 13C7-PFUnDA | 50-150% |

(a) Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

11.5.1
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Isotope Dilution Standard Recovery Summary

Job Number: JC64700

Account: ALNJ SGS Dayton, NJ

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | |
|-------------------------------|-------------------|
| Method: EPA 537M BY ID | Matrix: AQ |
|-------------------------------|-------------------|

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S9 | S10 | S11 | S12 | S13 | S14 | S15 | S16 |
|---------------|-------------|----|-----|-------|-------|-----|-----|-----|-----|
| JC64700-1 | 2Q13816.D | 84 | 82 | 106 | 104 | 91 | 82 | 102 | 112 |
| JC64700-2 | 2Q13817.D | 71 | 67 | 66 | 70 | 71 | 53 | 74 | 83 |
| JC64700-3 | 2Q13818.D | 82 | 79 | 90 | 93 | 82 | 62 | 89 | 102 |
| JC64700-4 | 2Q13820.D | 88 | 79 | 88 | 88 | 82 | 53 | 88 | 96 |
| JC64700-5 | 2Q13823.D | 82 | 78 | 98 | 95 | 82 | 68 | 92 | 102 |
| JC64700-7 | 2Q13842.D | 70 | 59 | 43* a | 44* a | 51 | 43 | 70 | 50 |
| JC64700-7 | 2Q13824.D | 60 | 51 | 43* | 43* | 48* | 43 | 65 | 47* |
| JC64700-8 | 2Q13826.D | 65 | 63 | 77 | 80 | 73 | 48 | 72 | 92 |
| OP69810-BS | 2Q13814.D | 85 | 79 | 107 | 105 | 104 | 77 | 106 | 111 |
| OP69810-MB | 2Q13815.D | 79 | 72 | 98 | 99 | 93 | 74 | 93 | 99 |
| OP69810-MS | 2Q13819.D | 92 | 90 | 96 | 98 | 90 | 74 | 100 | 114 |
| OP69810-MS2 | 2Q13825.D | 81 | 74 | 84 | 88 | 85 | 57 | 95 | 104 |

| Isotope Dilution Standards | Recovery Limits |
|----------------------------|-----------------|
| S9 = 13C2-PFDoDA | 50-150% |
| S10 = 13C2-PFTeDA | 40-150% |
| S11 = 13C3-PFBS | 50-150% |
| S12 = 13C3-PFHxS | 50-150% |
| S13 = 13C8-PFOS | 50-150% |
| S14 = 13C8-FOSA | 30-140% |
| S15 = d3-MeFOSAA | 50-150% |
| S16 = 13C2-6:2FTS | 50-150% |

(a) Outside control limits. Confirmed by reanalysis. Insufficient sample for re-extraction.

11.5.1
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Isotope Dilution Standard Recovery Summary

Job Number: JC64700

Account: ALNJ SGS Dayton, NJ

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Method: EPA 537M BY ID

Matrix: AQ

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S17 |
|---------------|-------------|-----|
| JC64700-1 | 2Q13816.D | 100 |
| JC64700-2 | 2Q13817.D | 80 |
| JC64700-3 | 2Q13818.D | 87 |
| JC64700-4 | 2Q13820.D | 85 |
| JC64700-5 | 2Q13823.D | 84 |
| JC64700-7 | 2Q13842.D | 55 |
| JC64700-7 | 2Q13824.D | 53 |
| JC64700-8 | 2Q13826.D | 80 |
| OP69810-BS | 2Q13814.D | 106 |
| OP69810-MB | 2Q13815.D | 91 |
| OP69810-MS | 2Q13819.D | 101 |
| OP69810-MS2 | 2Q13825.D | 99 |

| Isotope Dilution Standards | Recovery Limits |
|----------------------------|-----------------|
| S17 = 13C2-8:2FTS | 50-150% |

Initial Calibration Summary

Job Number: JC64700

Sample: S2Q256-ICC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13778.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Initial Calibration ReSponse Factors - D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID : Calibration File

- 1 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8 : D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

| Compound | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | AvgRF | %RSD | r^2 |
|-----------------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 1) 13C2-4:2PTS | 2.79e+3 | 3.06e+3 | 3.16e+3 | 3.18e+3 | 3.09e+3 | 3.37e+3 | 3.45e+3 | 3.84e+3 | 3.25e+3 | 9.684 | 0.0000 |
| 2) 13C2-6:2PTS | 2.52e+3 | 2.75e+3 | 2.89e+3 | 2.96e+3 | 2.90e+3 | 3.23e+3 | 3.32e+3 | 3.67e+3 | 3.03e+3 | 11.875 | 0.0000 |
| 3) 13C2-8:2PTS | 1.65e+3 | 1.84e+3 | 1.92e+3 | 2.00e+3 | 2.00e+3 | 2.26e+3 | 2.38e+3 | 2.67e+3 | 2.09e+3 | 15.717 | 0.0000 |
| 4) 13C2-PFDoDA | 1.12e+3 | 1.25e+3 | 1.32e+3 | 1.35e+3 | 1.32e+3 | 1.46e+3 | 1.50e+3 | 1.53e+3 | 1.36e+3 | 10.179 | 0.0000 |
| 6) 13C2-PFTeDA | 5.89e+2 | 6.49e+2 | 6.95e+2 | 7.01e+2 | 6.89e+2 | 7.34e+2 | 7.68e+2 | 7.72e+2 | 7.00e+2 | 8.740 | 0.0000 |
| 7) 13C3-PFBS | 4.28e+2 | 4.66e+2 | 4.82e+2 | 4.89e+2 | 4.64e+2 | 4.89e+2 | 4.89e+2 | 4.96e+2 | 4.75e+2 | 4.691 | 0.0000 |
| 8) 13C3-PFHxS | 4.89e+2 | 5.38e+2 | 5.53e+2 | 5.62e+2 | 5.40e+2 | 5.64e+2 | 5.75e+2 | 5.60e+2 | 5.48e+2 | 4.904 | 0.0000 |
| 9) 13C4-PFBA | 2.98e+3 | 3.23e+3 | 3.31e+3 | 3.30e+3 | 3.15e+3 | 3.29e+3 | 3.27e+3 | 3.28e+3 | 3.23e+3 | 3.436 | 0.0000 |
| 10) 13C4-PFHpA | 1.58e+3 | 1.70e+3 | 1.79e+3 | 1.82e+3 | 1.71e+3 | 1.76e+3 | 1.80e+3 | 1.75e+3 | 1.74e+3 | 4.404 | 0.0000 |
| 12) 13C5-PFHxA | 1.32e+3 | 1.41e+3 | 1.45e+3 | 1.45e+3 | 1.40e+3 | 1.43e+3 | 1.42e+3 | 1.43e+3 | 1.41e+3 | 2.927 | 0.0000 |
| 13) 13C5-PFPeA | 1.30e+3 | 1.41e+3 | 1.44e+3 | 1.45e+3 | 1.36e+3 | 1.44e+3 | 1.42e+3 | 1.42e+3 | 1.41e+3 | 3.668 | 0.0000 |
| 14) 13C6-PFDA | 1.83e+3 | 1.98e+3 | 2.14e+3 | 2.12e+3 | 2.06e+3 | 2.19e+3 | 2.12e+3 | 2.11e+3 | 2.07e+3 | 5.519 | 0.0000 |
| 15) 13C7-PFUnDA | 1.21e+3 | 1.34e+3 | 1.41e+3 | 1.45e+3 | 1.41e+3 | 1.50e+3 | 1.54e+3 | 1.54e+3 | 1.43e+3 | 7.821 | 0.0000 |
| 16) 13C8-FOSA | 1.87e+3 | 2.03e+3 | 2.08e+3 | 2.15e+3 | 2.00e+3 | 2.06e+3 | 2.02e+3 | 1.90e+3 | 2.01e+3 | 4.526 | 0.0000 |
| 17) 13C8-PFOA | 1.40e+3 | 1.56e+3 | 1.61e+3 | 1.64e+3 | 1.56e+3 | 1.68e+3 | 1.65e+3 | 1.66e+3 | 1.59e+3 | 5.611 | 0.0000 |
| 18) 13C8-PFOS | 3.83e+2 | 4.25e+2 | 4.44e+2 | 4.43e+2 | 4.31e+2 | 4.55e+2 | 4.54e+2 | 4.52e+2 | 4.36e+2 | 5.479 | 0.0000 |
| 19) 13C9-PFNA | 1.34e+3 | 1.47e+3 | 1.56e+3 | 1.58e+3 | 1.51e+3 | 1.57e+3 | 1.63e+3 | 1.60e+3 | 1.53e+3 | 6.004 | 0.0000 |
| 23) d3-MeFOSAA | 6.81e+2 | 7.31e+2 | 7.71e+2 | 7.72e+2 | 7.57e+2 | 7.93e+2 | 7.89e+2 | 8.32e+2 | 7.66e+2 | 5.871 | 0.0000 |
| 5) 13C2-PFOA | -----ISTD----- | | | | | | | | | | |
| 24) M2-PFOA | 1.0014 | 1.0006 | 0.9999 | 1.0000 | 1.0005 | 1.0008 | 1.0009 | 1.0006 | 1.0006 | 0.049 | 0.0000 |
| 11) 13C4-PFOS | -----ISTD----- | | | | | | | | | | |
| 46) M4-PFOS | 1.0015 | 1.0000 | 0.9984 | 0.9992 | 0.9965 | 1.0003 | 0.9981 | 0.9999 | 0.9992 | 0.155 | 0.0000 |
| 47) M4-PFBA | -----ISTD----- | | | | | | | | | | |
| 28) PFBA | 0.2259 | 0.2266 | 0.2330 | 0.2159 | 0.2359 | 0.2306 | 0.2322 | 0.2305 | 0.2288 | 2.682 | 0.9999 |
| 48) M5-PFPeA | -----ISTD----- | | | | | | | | | | |
| 41) PFPeA | 2.5621 | 2.3765 | 2.2417 | 2.0260 | 2.2327 | 2.1483 | 2.1674 | 2.1464 | 2.2376 | 7.375 | 0.9999 |
| 49) M5-PFHxA | -----ISTD----- | | | | | | | | | | |
| 35) PFHxA | 0.5412 | 0.5377 | 0.5321 | 0.5048 | 0.5412 | 0.5366 | 0.5435 | 0.5165 | 0.5317 | 2.595 | 0.9991 |
| 50) M4-PFHpA | -----ISTD----- | | | | | | | | | | |
| 33) PFHpA | 1.2149 | 1.2561 | 1.2478 | 1.1685 | 1.2906 | 1.2964 | 1.2941 | 1.3000 | 1.2586 | 3.747 | 0.9999 |
| 51) M8-PFOA | -----ISTD----- | | | | | | | | | | |
| 39) PFOA | 0.8253 | 0.7993 | 0.8117 | 0.7385 | 0.8182 | 0.7807 | 0.8099 | 0.7682 | 0.7940 | 3.711 | 0.9996 |
| 52) M9-PFNA | -----ISTD----- | | | | | | | | | | |
| 37) PFNA | 0.7830 | 0.7125 | 0.7220 | 0.6917 | 0.7663 | 0.7674 | 0.7490 | 0.7431 | 0.7419 | 4.191 | 0.9997 |
| 53) M6-PFDA | -----ISTD----- | | | | | | | | | | |
| 30) PFDA | 0.4540 | 0.4656 | 0.4814 | 0.4608 | 0.5062 | 0.4744 | 0.4922 | 0.4902 | 0.4781 | 3.704 | 0.9997 |
| 54) M7-PFUnDA | -----ISTD----- | | | | | | | | | | |
| 32) PFDS | 0.2414 | 0.2384 | 0.2385 | 0.2253 | 0.2377 | 0.2360 | 0.2331 | 0.2337 | 0.2355 | 2.091 | 0.9999 |
| 45) PFUnDA | 0.6247 | 0.6330 | 0.6604 | 0.6118 | 0.6988 | 0.6659 | 0.6803 | 0.6802 | 0.6569 | 4.668 | 0.9998 |
| 55) M2-PFDoDA | -----ISTD----- | | | | | | | | | | |
| 31) PFDoDA | 0.6805 | 0.6288 | 0.6264 | 0.5819 | 0.6420 | 0.6242 | 0.6332 | 0.6234 | 0.6301 | 4.289 | 0.9998 |
| 56) M2-PFTeDA | -----ISTD----- | | | | | | | | | | |
| 43) PFTeDA | 0.8268 | 0.7539 | 0.7135 | 0.6416 | 0.6889 | 0.7140 | 0.7034 | 0.6931 | 0.7169 | 7.579 | 0.9992 |
| 44) PFTrDA | 0.9225 | 0.9330 | 0.9474 | 0.8896 | 0.9869 | 0.9831 | 0.9858 | 0.9588 | 0.9509 | 3.666 | 0.9996 |
| 57) M8-FOSA | -----ISTD----- | | | | | | | | | | |
| 26) FOSA | 0.8222 | 0.8254 | 0.8417 | 0.7706 | 0.8562 | 0.8437 | 0.8543 | 0.8434 | 0.8322 | 3.323 | 0.9999 |

Initial Calibration Summary

Job Number: JC64700

Sample: S2Q256-ICC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13778.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | | | | | | | | | |
|----------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| 58) M3-PFBS | -----ISTD----- | | | | | | | | | | | |
| 29) PFBS | 2.2698 | 2.3378 | 2.4098 | 2.2398 | 2.4772 | 2.3936 | 2.4120 | 2.3723 | 2.3641 | 3.321 | 0.9998 | |
| 42) PFPeS | 1.7038 | 1.7451 | 1.7637 | 1.6581 | 1.8450 | 1.8077 | 1.8137 | 1.7743 | 1.7639 | 3.471 | 0.9997 | |
| 59) M3-PFHxS | -----ISTD----- | | | | | | | | | | | |
| 34) PFHpS | 1.9352 | 1.8968 | 1.8760 | 1.8131 | 1.9594 | 1.9309 | 1.9253 | 1.9554 | 1.9115 | 2.541 | 0.9999 | |
| 36) PFHxS | 2.1665 | 2.2441 | 2.3111 | 2.1410 | 2.3519 | 2.3178 | 2.3200 | 2.3222 | 2.2718 | 3.486 | 0.9999 | |
| 60) M8-PFOS | -----ISTD----- | | | | | | | | | | | |
| 38) PFNS | 1.4888 | 1.4195 | 1.4307 | 1.3357 | 1.4600 | 1.4183 | 1.4185 | 1.3834 | 1.4194 | 3.250 | 0.9996 | |
| 40) PFOS | 2.4768 | 2.5415 | 2.5485 | 2.3646 | 2.5781 | 2.5400 | 2.5791 | 2.5444 | 2.5216 | 2.809 | 0.9999 | |
| 61) M2-4:2FTS | -----ISTD----- | | | | | | | | | | | |
| 20) 4:2FTS | 0.5208 | 0.5232 | 0.5386 | 0.5013 | 0.5309 | 0.5006 | 0.4901 | 0.4317 | 0.5046 | 6.703 | 0.9999 | |
| 62) M2-6:2FTS | -----ISTD----- | | | | | | | | | | | |
| 21) 6:2FTS | 0.9469 | 0.8347 | 0.7419 | 0.6775 | 0.7165 | 0.6652 | 0.6462 | 0.5731 | 0.7253 | 16.208 | 0.9990 | |
| 63) M2-8:2FTS | -----ISTD----- | | | | | | | | | | | |
| 22) 8:2FTS | 0.8482 | 0.8951 | 0.9100 | 0.8226 | 0.8877 | 0.8185 | 0.7948 | 0.6992 | 0.8345 | 8.183 | 0.9998 | |
| 64) M3-MeFOSAA | -----ISTD----- | | | | | | | | | | | |
| 25) EtFOSAA | 0.3242 | 0.3159 | 0.3247 | 0.2954 | 0.3371 | 0.3149 | 0.3208 | 0.2968 | 0.3162 | 4.478 | 0.9974 | |
| 27) MeFOSAA | 0.4311 | 0.4110 | 0.3794 | 0.3596 | 0.3901 | 0.3949 | 0.3965 | 0.3844 | 0.3934 | 5.407 | 0.9996 | |

 *(value) - Average RF below (value)

Initial Calibration Verification

Job Number: JC64700

Sample: S2Q256-ICV256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13783.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Continuing Calibration Report

Batch: D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

Data File: 2Q13783

Type : QC

Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|-------------|-----------|------------|-------|--------|
| 13C2-4:2FTS | 20.000 | 17.143 | -14.3 | 85.7 |
| 13C2-6:2FTS | 20.000 | 18.048 | -9.8 | 90.2 |
| 13C2-8:2FTS | 20.000 | 18.019 | -9.9 | 90.1 |
| 13C2-PFDoDA | 20.000 | 18.981 | -5.1 | 94.9 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C2-PFTeDA | 20.000 | 19.160 | -4.2 | 95.8 |
| 13C3-PFBS | 20.000 | 17.873 | -10.6 | 89.4 |
| 13C3-PFHxS | 20.000 | 18.272 | -8.6 | 91.4 |
| 13C4-PFBA | 20.000 | 17.694 | -11.5 | 88.5 |
| 13C4-PFHpA | 20.000 | 18.229 | -8.9 | 91.1 |
| 13C4-PFOS | --- | --ISTD-- | | |
| 13C5-PFHxA | 20.000 | 17.929 | -10.4 | 89.6 |
| 13C5-PFPeA | 20.000 | 17.760 | -11.2 | 88.8 |
| 13C6-PFDA | 20.000 | 19.130 | -4.3 | 95.7 |
| 13C7-PFUnDA | 20.000 | 19.047 | -4.8 | 95.2 |
| 13C8-FOSA | 20.000 | 18.858 | -5.7 | 94.3 |
| 13C8-PFOA | 20.000 | 18.248 | -8.8 | 91.2 |
| 13C8-PFOS | 20.000 | 18.146 | -9.3 | 90.7 |
| 13C9-PFNA | 20.000 | 18.536 | -7.3 | 92.7 |
| 4:2FTS | 20.000 | 19.007 | -5.0 | 95.0 |
| 6:2FTS | 20.000 | 19.189 | -4.1 | 95.9 |
| 8:2FTS | 20.000 | 19.400 | -3.0 | 97.0 |
| d3-MeFOSAA | 20.000 | 17.821 | -10.9 | 89.1 |
| M2-PFOA | 20.000 | 19.975 | -0.1 | 99.9 |
| EtFOSAA | 20.000 | 21.299 | 6.5 | 106.5 |
| FOSA | 20.000 | 20.474 | 2.4 | 102.4 |
| MeFOSAA | 20.000 | 21.208 | 6.0 | 106.0 |
| PFBA | 20.000 | 20.680 | 3.4 | 103.4 |
| PFBS | 20.000 | 17.904 | -10.5 | 89.5 |
| PFDA | 20.000 | 18.610 | -6.9 | 93.1 |
| PFDoDA | 20.000 | 20.514 | 2.6 | 102.6 |
| PFDS | 20.000 | 19.390 | -3.1 | 96.9 |
| PFHpA | 20.000 | 20.240 | 1.2 | 101.2 |
| PFHpS | 20.000 | 18.762 | -6.2 | 93.8 |
| PFHxA | 20.000 | 19.267 | -3.7 | 96.3 |
| PFHxS | 20.000 | 17.394 | -13.0 | 87.0 |
| PFNA | 20.000 | 19.196 | -4.0 | 96.0 |

11.6.2
11

Initial Calibration Verification

Job Number: JC64700

Sample: S2Q256-ICV256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13783.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | |
|------------|--------|----------|------|-------|
| PFNS | 20.000 | 20.043 | 0.2 | 100.2 |
| PFOA | 20.000 | 21.083 | 5.4 | 105.4 |
| PFOS | 20.000 | 20.191 | 1.0 | 101.0 |
| PFPeA | 20.000 | 19.915 | -0.4 | 99.6 |
| PFPeS | 20.000 | 18.921 | -5.4 | 94.6 |
| PFTeDA | 20.000 | 18.668 | -6.7 | 93.3 |
| PFTrDA | 20.000 | 21.595 | 8.0 | 108.0 |
| PFUnDA | 20.000 | 20.240 | 1.2 | 101.2 |
| M4-PFOS | 20.000 | 19.905 | -0.5 | 99.5 |
| M4-PFBA | --- | --ISTD-- | | |
| M5-PFPeA | --- | --ISTD-- | | |
| M5-PFHxA | --- | --ISTD-- | | |
| M4-PFHpA | --- | --ISTD-- | | |
| M8-PFOA | --- | --ISTD-- | | |
| M9-PFNA | --- | --ISTD-- | | |
| M6-PFDA | --- | --ISTD-- | | |
| M7-PFUnDA | --- | --ISTD-- | | |
| M2-PFDoDA | --- | --ISTD-- | | |
| M2-PFTeDA | --- | --ISTD-- | | |
| M8-FOSA | --- | --ISTD-- | | |
| M3-PFBS | --- | --ISTD-- | | |
| M3-PFHxS | --- | --ISTD-- | | |
| M8-PFOS | --- | --ISTD-- | | |
| M2-4:2FTS | --- | --ISTD-- | | |
| M2-6:2FTS | --- | --ISTD-- | | |
| M2-8:2FTS | --- | --ISTD-- | | |
| M3-MeFOSAA | --- | --ISTD-- | | |

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13812.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Continuing Calibration Report

Batch: D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

Data File: 2Q13812

Type : QC

Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|-------------|-----------|------------|-------|--------|
| 13C2-4:2FTS | 20.000 | 21.431 | 7.2 | 107.2 |
| 13C2-6:2FTS | 20.000 | 22.026 | 10.1 | 110.1 |
| 13C2-8:2FTS | 20.000 | 21.213 | 6.1 | 106.1 |
| 13C2-PFDoDA | 20.000 | 21.149 | 5.7 | 105.7 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C2-PFTeDA | 20.000 | 20.028 | 0.1 | 100.1 |
| 13C3-PFBS | 20.000 | 20.828 | 4.1 | 104.1 |
| 13C3-PFHxS | 20.000 | 20.992 | 5.0 | 105.0 |
| 13C4-PFBA | 20.000 | 20.337 | 1.7 | 101.7 |
| 13C4-PFHpA | 20.000 | 20.296 | 1.5 | 101.5 |
| 13C4-PFOS | --- | --ISTD-- | | |
| 13C5-PFHxA | 20.000 | 20.111 | 0.6 | 100.6 |
| 13C5-PFPeA | 20.000 | 19.825 | -0.9 | 99.1 |
| 13C6-PFDA | 20.000 | 20.376 | 1.9 | 101.9 |
| 13C7-PFUnDA | 20.000 | 19.712 | -1.4 | 98.6 |
| 13C8-FOSA | 20.000 | 22.224 | 11.1 | 111.1 |
| 13C8-PFOA | 20.000 | 20.145 | 0.7 | 100.7 |
| 13C8-PFOS | 20.000 | 19.579 | -2.1 | 97.9 |
| 13C9-PFNA | 20.000 | 20.157 | 0.8 | 100.8 |
| 4:2FTS | 20.000 | 20.196 | 1.0 | 101.0 |
| 6:2FTS | 20.000 | 19.793 | -1.0 | 99.0 |
| 8:2FTS | 20.000 | 20.732 | 3.7 | 103.7 |
| d3-MeFOSAA | 20.000 | 22.536 | 12.7 | 112.7 |
| M2-PFOA | 20.000 | 20.036 | 0.2 | 100.2 |
| EtFOSAA | 20.000 | 20.872 | 4.4 | 104.4 |
| FOSA | 20.000 | 20.411 | 2.1 | 102.1 |
| MeFOSAA | 20.000 | 21.719 | 8.6 | 108.6 |
| PFBA | 20.000 | 19.912 | -0.4 | 99.6 |
| PFBS | 20.000 | 20.356 | 1.8 | 101.8 |
| PFDA | 20.000 | 19.691 | -1.5 | 98.5 |
| PFDoDA | 20.000 | 20.846 | 4.2 | 104.2 |
| PFDS | 20.000 | 21.991 | 10.0 | 110.0 |
| PFHpA | 20.000 | 20.325 | 1.6 | 101.6 |
| PFHpS | 20.000 | 21.110 | 5.6 | 105.6 |
| PFHxA | 20.000 | 19.575 | -2.1 | 97.9 |
| PFHxS | 20.000 | 20.334 | 1.7 | 101.7 |
| PFNA | 20.000 | 19.780 | -1.1 | 98.9 |

11.6.3

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Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13812.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | |
|------------|--------|----------|------|-------|
| PFNS | 20.000 | 20.698 | 3.5 | 103.5 |
| PFOA | 20.000 | 20.144 | 0.7 | 100.7 |
| PFOS | 20.000 | 21.137 | 5.7 | 105.7 |
| PFPeA | 20.000 | 20.819 | 4.1 | 104.1 |
| PFPeS | 20.000 | 19.496 | -2.5 | 97.5 |
| PFTeDA | 20.000 | 19.772 | -1.1 | 98.9 |
| PFTrDA | 20.000 | 21.167 | 5.8 | 105.8 |
| PFUnDA | 20.000 | 20.451 | 2.3 | 102.3 |
| M4-PFOS | 20.000 | 20.027 | 0.1 | 100.1 |
| M4-PFBA | --- | --ISTD-- | | |
| M5-PFPeA | --- | --ISTD-- | | |
| M5-PFHxA | --- | --ISTD-- | | |
| M4-PFHpA | --- | --ISTD-- | | |
| M8-PFOA | --- | --ISTD-- | | |
| M9-PFNA | --- | --ISTD-- | | |
| M6-PFDA | --- | --ISTD-- | | |
| M7-PFUnDA | --- | --ISTD-- | | |
| M2-PFDoDA | --- | --ISTD-- | | |
| M2-PFTeDA | --- | --ISTD-- | | |
| M8-FOSA | --- | --ISTD-- | | |
| M3-PFBS | --- | --ISTD-- | | |
| M3-PFHxS | --- | --ISTD-- | | |
| M8-PFOS | --- | --ISTD-- | | |
| M2-4:2FTS | --- | --ISTD-- | | |
| M2-6:2FTS | --- | --ISTD-- | | |
| M2-8:2FTS | --- | --ISTD-- | | |
| M3-MeFOSAA | --- | --ISTD-- | | |

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13821.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Continuing Calibration Report

Batch: D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

Data File: 2Q13821

Type : QC

Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|-------------|-----------|------------|-------|--------|
| 13C2-4:2FTS | 20.000 | 21.640 | 8.2 | 108.2 |
| 13C2-6:2FTS | 20.000 | 22.250 | 11.2 | 111.2 |
| 13C2-8:2FTS | 20.000 | 21.362 | 6.8 | 106.8 |
| 13C2-PFDoDA | 20.000 | 21.204 | 6.0 | 106.0 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C2-PFTeDA | 20.000 | 20.279 | 1.4 | 101.4 |
| 13C3-PFBS | 20.000 | 21.120 | 5.6 | 105.6 |
| 13C3-PFHxS | 20.000 | 20.835 | 4.2 | 104.2 |
| 13C4-PFBA | 20.000 | 20.636 | 3.2 | 103.2 |
| 13C4-PFHpA | 20.000 | 20.201 | 1.0 | 101.0 |
| 13C4-PFOS | --- | --ISTD-- | | |
| 13C5-PFHxA | 20.000 | 20.581 | 2.9 | 102.9 |
| 13C5-PFPeA | 20.000 | 19.688 | -1.6 | 98.4 |
| 13C6-PFDA | 20.000 | 20.548 | 2.7 | 102.7 |
| 13C7-PFUnDA | 20.000 | 19.800 | -1.0 | 99.0 |
| 13C8-FOSA | 20.000 | 22.242 | 11.2 | 111.2 |
| 13C8-PFOA | 20.000 | 20.666 | 3.3 | 103.3 |
| 13C8-PFOS | 20.000 | 20.022 | 0.1 | 100.1 |
| 13C9-PFNA | 20.000 | 20.686 | 3.4 | 103.4 |
| 4:2FTS | 20.000 | 19.984 | -0.1 | 99.9 |
| 6:2FTS | 20.000 | 20.080 | 0.4 | 100.4 |
| 8:2FTS | 20.000 | 20.415 | 2.1 | 102.1 |
| d3-MeFOSAA | 20.000 | 23.071 | 15.4 | 115.4 |
| M2-PFOA | 20.000 | 20.020 | 0.1 | 100.1 |
| EtFOSAA | 20.000 | 21.600 | 8.0 | 108.0 |
| FOSA | 20.000 | 20.460 | 2.3 | 102.3 |
| MeFOSAA | 20.000 | 21.082 | 5.4 | 105.4 |
| PFBA | 20.000 | 19.897 | -0.5 | 99.5 |
| PFBS | 20.000 | 20.210 | 1.0 | 101.0 |
| PFDA | 20.000 | 19.324 | -3.4 | 96.6 |
| PFDoDA | 20.000 | 20.489 | 2.4 | 102.4 |
| PFDS | 20.000 | 22.115 | 10.6 | 110.6 |
| PFHpA | 20.000 | 20.285 | 1.4 | 101.4 |
| PFHpS | 20.000 | 21.151 | 5.8 | 105.8 |
| PFHxA | 20.000 | 19.630 | -1.8 | 98.2 |
| PFHxS | 20.000 | 20.568 | 2.8 | 102.8 |
| PFNA | 20.000 | 19.534 | -2.3 | 97.7 |

11.6.4
11

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13821.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | |
|------------|--------|----------|------|-------|
| PFNS | 20.000 | 20.282 | 1.4 | 101.4 |
| PFOA | 20.000 | 20.321 | 1.6 | 101.6 |
| PFOS | 20.000 | 20.899 | 4.5 | 104.5 |
| PFPeA | 20.000 | 21.209 | 6.0 | 106.0 |
| PFPeS | 20.000 | 19.138 | -4.3 | 95.7 |
| PFTeDA | 20.000 | 20.825 | 4.1 | 104.1 |
| PFTrDA | 20.000 | 21.252 | 6.3 | 106.3 |
| PFUnDA | 20.000 | 19.826 | -0.9 | 99.1 |
| M4-PFOS | 20.000 | 20.008 | 0.0 | 100.0 |
| M4-PFBA | --- | --ISTD-- | | |
| M5-PFPeA | --- | --ISTD-- | | |
| M5-PFHxA | --- | --ISTD-- | | |
| M4-PFHpA | --- | --ISTD-- | | |
| M8-PFOA | --- | --ISTD-- | | |
| M9-PFNA | --- | --ISTD-- | | |
| M6-PFDA | --- | --ISTD-- | | |
| M7-PFUnDA | --- | --ISTD-- | | |
| M2-PFDODA | --- | --ISTD-- | | |
| M2-PFTeDA | --- | --ISTD-- | | |
| M8-FOSA | --- | --ISTD-- | | |
| M3-PFBS | --- | --ISTD-- | | |
| M3-PFHxS | --- | --ISTD-- | | |
| M8-PFOS | --- | --ISTD-- | | |
| M2-4:2FTS | --- | --ISTD-- | | |
| M2-6:2FTS | --- | --ISTD-- | | |
| M2-8:2FTS | --- | --ISTD-- | | |
| M3-MeFOSAA | --- | --ISTD-- | | |

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13827.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Continuing Calibration Report

Batch: D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

Data File: 2Q13827

Type : QC

Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|-------------|-----------|------------|-------|--------|
| 13C2-4:2FTS | 20.000 | 21.733 | 8.7 | 108.7 |
| 13C2-6:2FTS | 20.000 | 22.323 | 11.6 | 111.6 |
| 13C2-8:2FTS | 20.000 | 21.492 | 7.5 | 107.5 |
| 13C2-PFDoDA | 20.000 | 21.333 | 6.7 | 106.7 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C2-PFTeDA | 20.000 | 20.260 | 1.3 | 101.3 |
| 13C3-PFBS | 20.000 | 21.115 | 5.6 | 105.6 |
| 13C3-PFHxS | 20.000 | 20.917 | 4.6 | 104.6 |
| 13C4-PFBA | 20.000 | 20.769 | 3.8 | 103.8 |
| 13C4-PFHpA | 20.000 | 20.373 | 1.9 | 101.9 |
| 13C4-PFOS | --- | --ISTD-- | | |
| 13C5-PFHxA | 20.000 | 20.512 | 2.6 | 102.6 |
| 13C5-PFPeA | 20.000 | 20.084 | 0.4 | 100.4 |
| 13C6-PFDA | 20.000 | 20.576 | 2.9 | 102.9 |
| 13C7-PFUnDA | 20.000 | 19.635 | -1.8 | 98.2 |
| 13C8-FOSA | 20.000 | 22.669 | 13.3 | 113.3 |
| 13C8-PFOA | 20.000 | 20.553 | 2.8 | 102.8 |
| 13C8-PFOS | 20.000 | 20.337 | 1.7 | 101.7 |
| 13C9-PFNA | 20.000 | 20.249 | 1.2 | 101.2 |
| 4:2FTS | 20.000 | 20.043 | 0.2 | 100.2 |
| 6:2FTS | 20.000 | 20.036 | 0.2 | 100.2 |
| 8:2FTS | 20.000 | 20.691 | 3.5 | 103.5 |
| d3-MeFOSAA | 20.000 | 22.842 | 14.2 | 114.2 |
| M2-PFOA | 20.000 | 20.009 | 0.0 | 100.0 |
| EtFOSAA | 20.000 | 21.486 | 7.4 | 107.4 |
| FOSA | 20.000 | 20.323 | 1.6 | 101.6 |
| MeFOSAA | 20.000 | 21.423 | 7.1 | 107.1 |
| PFBA | 20.000 | 19.725 | -1.4 | 98.6 |
| PFBS | 20.000 | 20.424 | 2.1 | 102.1 |
| PFDA | 20.000 | 19.563 | -2.2 | 97.8 |
| PFDoDA | 20.000 | 20.473 | 2.4 | 102.4 |
| PFDS | 20.000 | 22.326 | 11.6 | 111.6 |
| PFHpA | 20.000 | 20.202 | 1.0 | 101.0 |
| PFHpS | 20.000 | 21.125 | 5.6 | 105.6 |
| PFHxA | 20.000 | 19.673 | -1.6 | 98.4 |
| PFHxS | 20.000 | 20.752 | 3.8 | 103.8 |
| PFNA | 20.000 | 19.792 | -1.0 | 99.0 |

11.6.5
11

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13827.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | |
|------------|--------|----------|------|-------|
| PFNS | 20.000 | 19.975 | -0.1 | 99.9 |
| PFOA | 20.000 | 19.982 | -0.1 | 99.9 |
| PFOS | 20.000 | 20.421 | 2.1 | 102.1 |
| PFPeA | 20.000 | 20.896 | 4.5 | 104.5 |
| PFPeS | 20.000 | 19.307 | -3.5 | 96.5 |
| PFTeDA | 20.000 | 19.727 | -1.4 | 98.6 |
| PFTrDA | 20.000 | 21.383 | 6.9 | 106.9 |
| PFUnDA | 20.000 | 20.293 | 1.5 | 101.5 |
| M4-PFOS | 20.000 | 20.054 | 0.3 | 100.3 |
| M4-PFBA | --- | --ISTD-- | | |
| M5-PFPeA | --- | --ISTD-- | | |
| M5-PFHxA | --- | --ISTD-- | | |
| M4-PFHpA | --- | --ISTD-- | | |
| M8-PFOA | --- | --ISTD-- | | |
| M9-PFNA | --- | --ISTD-- | | |
| M6-PFDA | --- | --ISTD-- | | |
| M7-PFUnDA | --- | --ISTD-- | | |
| M2-PFDODA | --- | --ISTD-- | | |
| M2-PFTeDA | --- | --ISTD-- | | |
| M8-FOSA | --- | --ISTD-- | | |
| M3-PFBS | --- | --ISTD-- | | |
| M3-PFHxS | --- | --ISTD-- | | |
| M8-PFOS | --- | --ISTD-- | | |
| M2-4:2FTS | --- | --ISTD-- | | |
| M2-6:2FTS | --- | --ISTD-- | | |
| M2-8:2FTS | --- | --ISTD-- | | |
| M3-MeFOSAA | --- | --ISTD-- | | |

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13839.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Continuing Calibration Report

Batch: D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

Data File: 2Q13839

Type : QC

Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|-------------|-----------|------------|-------|--------|
| 13C2-4:2FTS | 20.000 | 21.875 | 9.4 | 109.4 |
| 13C2-6:2FTS | 20.000 | 23.102 | 15.5 | 115.5 |
| 13C2-8:2FTS | 20.000 | 22.849 | 14.2 | 114.2 |
| 13C2-PFDoDA | 20.000 | 25.045 | 25.2 | 125.2 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C2-PFTeDA | 20.000 | 22.858 | 14.3 | 114.3 |
| 13C3-PFBS | 20.000 | 20.552 | 2.8 | 102.8 |
| 13C3-PFHxS | 20.000 | 21.056 | 5.3 | 105.3 |
| 13C4-PFBA | 20.000 | 20.647 | 3.2 | 103.2 |
| 13C4-PFHpA | 20.000 | 21.112 | 5.6 | 105.6 |
| 13C4-PFOS | --- | --ISTD-- | | |
| 13C5-PFHxA | 20.000 | 20.735 | 3.7 | 103.7 |
| 13C5-PFPeA | 20.000 | 20.321 | 1.6 | 101.6 |
| 13C6-PFDA | 20.000 | 21.627 | 8.1 | 108.1 |
| 13C7-PFUnDA | 20.000 | 22.895 | 14.5 | 114.5 |
| 13C8-FOSA | 20.000 | 21.591 | 8.0 | 108.0 |
| 13C8-PFOA | 20.000 | 21.271 | 6.4 | 106.4 |
| 13C8-PFOS | 20.000 | 20.616 | 3.1 | 103.1 |
| 13C9-PFNA | 20.000 | 21.670 | 8.4 | 108.4 |
| 4:2FTS | 20.000 | 20.056 | 0.3 | 100.3 |
| 6:2FTS | 20.000 | 20.542 | 2.7 | 102.7 |
| 8:2FTS | 20.000 | 20.550 | 2.7 | 102.7 |
| d3-MeFOSAA | 20.000 | 24.780 | 23.9 | 123.9 |
| M2-PFOA | 20.000 | 19.996 | 0.0 | 100.0 |
| EtFOSAA | 20.000 | 21.611 | 8.1 | 108.1 |
| FOSA | 20.000 | 19.864 | -0.7 | 99.3 |
| MeFOSAA | 20.000 | 20.693 | 3.5 | 103.5 |
| PFBA | 20.000 | 19.841 | -0.8 | 99.2 |
| PFBS | 20.000 | 20.819 | 4.1 | 104.1 |
| PFDA | 20.000 | 19.952 | -0.2 | 99.8 |
| PFDoDA | 20.000 | 20.489 | 2.4 | 102.4 |
| PFDS | 20.000 | 20.903 | 4.5 | 104.5 |
| PFHpA | 20.000 | 19.977 | -0.1 | 99.9 |
| PFHpS | 20.000 | 21.284 | 6.4 | 106.4 |
| PFHxA | 20.000 | 20.231 | 1.2 | 101.2 |
| PFHxS | 20.000 | 20.434 | 2.2 | 102.2 |
| PFNA | 20.000 | 19.334 | -3.3 | 96.7 |

11.6.6
11

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-CC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13839.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | |
|------------|--------|----------|------|-------|
| PFNS | 20.000 | 19.733 | -1.3 | 98.7 |
| PFOA | 20.000 | 20.196 | 1.0 | 101.0 |
| PFOS | 20.000 | 20.204 | 1.0 | 101.0 |
| PFPeA | 20.000 | 20.459 | 2.3 | 102.3 |
| PFPeS | 20.000 | 19.606 | -2.0 | 98.0 |
| PFTeDA | 20.000 | 20.105 | 0.5 | 100.5 |
| PFTrDA | 20.000 | 20.449 | 2.2 | 102.2 |
| PFUnDA | 20.000 | 20.288 | 1.4 | 101.4 |
| M4-PFOS | 20.000 | 20.030 | 0.1 | 100.1 |
| M4-PFBA | --- | --ISTD-- | | |
| M5-PFPeA | --- | --ISTD-- | | |
| M5-PFHxA | --- | --ISTD-- | | |
| M4-PFHpA | --- | --ISTD-- | | |
| M8-PFOA | --- | --ISTD-- | | |
| M9-PFNA | --- | --ISTD-- | | |
| M6-PFDA | --- | --ISTD-- | | |
| M7-PFUnDA | --- | --ISTD-- | | |
| M2-PFDoDA | --- | --ISTD-- | | |
| M2-PFTeDA | --- | --ISTD-- | | |
| M8-FOSA | --- | --ISTD-- | | |
| M3-PFBS | --- | --ISTD-- | | |
| M3-PFHxS | --- | --ISTD-- | | |
| M8-PFOS | --- | --ISTD-- | | |
| M2-4:2FTS | --- | --ISTD-- | | |
| M2-6:2FTS | --- | --ISTD-- | | |
| M2-8:2FTS | --- | --ISTD-- | | |
| M3-MeFOSAA | --- | --ISTD-- | | |

CC Criteria: +/- 30%

11.6.6
11

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-ECC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13843.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

Continuing Calibration Report

Batch: D:\MassHunter\Data\0430_PFC_ID_S2Q256\s2q256.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13774.d
- 2:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13775.d
- 3:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13776.d
- 4:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13777.d
- 5:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13778.d
- 6:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13779.d
- 7:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13780.d
- 8:D:\MassHunter\Data\0430_PFC_ID_S2Q256\2Q13781.d

Data File: 2Q13843

Type : QC

Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|-------------|-----------|------------|-------|--------|
| 13C2-4:2FTS | 20.000 | 22.016 | 10.1 | 110.1 |
| 13C2-6:2FTS | 20.000 | 22.649 | 13.2 | 113.2 |
| 13C2-8:2FTS | 20.000 | 22.346 | 11.7 | 111.7 |
| 13C2-PFDoDA | 20.000 | 24.474 | 22.4 | 122.4 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C2-PFTeDA | 20.000 | 22.812 | 14.1 | 114.1 |
| 13C3-PFBS | 20.000 | 20.639 | 3.2 | 103.2 |
| 13C3-PFHxS | 20.000 | 21.254 | 6.3 | 106.3 |
| 13C4-PFBA | 20.000 | 20.583 | 2.9 | 102.9 |
| 13C4-PFHpA | 20.000 | 21.407 | 7.0 | 107.0 |
| 13C4-PFOS | --- | --ISTD-- | | |
| 13C5-PFHxA | 20.000 | 21.302 | 6.5 | 106.5 |
| 13C5-PFPeA | 20.000 | 20.459 | 2.3 | 102.3 |
| 13C6-PFDA | 20.000 | 21.842 | 9.2 | 109.2 |
| 13C7-PFUnDA | 20.000 | 22.580 | 12.9 | 112.9 |
| 13C8-FOSA | 20.000 | 21.792 | 9.0 | 109.0 |
| 13C8-PFOA | 20.000 | 21.835 | 9.2 | 109.2 |
| 13C8-PFOS | 20.000 | 20.101 | 0.5 | 100.5 |
| 13C9-PFNA | 20.000 | 21.889 | 9.4 | 109.4 |
| 4:2FTS | 20.000 | 20.125 | 0.6 | 100.6 |
| 6:2FTS | 20.000 | 20.431 | 2.2 | 102.2 |
| 8:2FTS | 20.000 | 20.294 | 1.5 | 101.5 |
| d3-MeFOSAA | 20.000 | 24.949 | 24.7 | 124.7 |
| M2-PFOA | 20.000 | 19.985 | -0.1 | 99.9 |
| EtFOSAA | 20.000 | 21.269 | 6.3 | 106.3 |
| FOSA | 20.000 | 19.868 | -0.7 | 99.3 |
| MeFOSAA | 20.000 | 20.242 | 1.2 | 101.2 |
| PFBA | 20.000 | 19.928 | -0.4 | 99.6 |
| PFBS | 20.000 | 20.590 | 3.0 | 103.0 |
| PFDA | 20.000 | 19.902 | -0.5 | 99.5 |
| PFDoDA | 20.000 | 21.423 | 7.1 | 107.1 |
| PFDS | 20.000 | 20.407 | 2.0 | 102.0 |
| PFHpA | 20.000 | 20.272 | 1.4 | 101.4 |
| PFHpS | 20.000 | 20.306 | 1.5 | 101.5 |
| PFHxA | 20.000 | 19.750 | -1.2 | 98.8 |
| PFHxS | 20.000 | 20.259 | 1.3 | 101.3 |
| PFNA | 20.000 | 20.099 | 0.5 | 100.5 |

11.67
11

Continuing Calibration Summary

Job Number: JC64700

Sample: S2Q256-ECC256

Account: ALNJ SGS Dayton, NJ

Lab FileID: 2Q13843.D

Project: ILINY: PESNYL: ILI - Region 3, Westchester County Airport Landfill

| | | | | |
|------------|--------|----------|------|-------|
| PFNS | 20.000 | 20.122 | 0.6 | 100.6 |
| PFOA | 20.000 | 19.795 | -1.0 | 99.0 |
| PFOS | 20.000 | 20.777 | 3.9 | 103.9 |
| PFPeA | 20.000 | 20.658 | 3.3 | 103.3 |
| PFPeS | 20.000 | 19.822 | -0.9 | 99.1 |
| PFTeDA | 20.000 | 20.460 | 2.3 | 102.3 |
| PFTrDA | 20.000 | 20.154 | 0.8 | 100.8 |
| PFUnDA | 20.000 | 19.757 | -1.2 | 98.8 |
| M4-PFOS | 20.000 | 20.012 | 0.1 | 100.1 |
| M4-PFBA | --- | --ISTD-- | | |
| M5-PFPeA | --- | --ISTD-- | | |
| M5-PFHxA | --- | --ISTD-- | | |
| M4-PFHpA | --- | --ISTD-- | | |
| M8-PFOA | --- | --ISTD-- | | |
| M9-PFNA | --- | --ISTD-- | | |
| M6-PFDA | --- | --ISTD-- | | |
| M7-PFUnDA | --- | --ISTD-- | | |
| M2-PFDODA | --- | --ISTD-- | | |
| M2-PFTeDA | --- | --ISTD-- | | |
| M8-FOSA | --- | --ISTD-- | | |
| M3-PFBS | --- | --ISTD-- | | |
| M3-PFHxS | --- | --ISTD-- | | |
| M8-PFOS | --- | --ISTD-- | | |
| M2-4:2FTS | --- | --ISTD-- | | |
| M2-6:2FTS | --- | --ISTD-- | | |
| M2-8:2FTS | --- | --ISTD-- | | |
| M3-MeFOSAA | --- | --ISTD-- | | |

CC Criteria: +/- 30%